

SUMMARY MEASURING SPIRIT OF STUDENTS BEFORE PILOT FOR SOCIAL INNOVATION / ENTREPRENEURSHIP AS COLLECTED FROM FILLED IN IMPACT QUESTIONNAIRES GATHERED PER EACH TERRITORY

WP T2 PILOT – D.T2.2.1

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Summary

The InnoSchool project responds to the need to change the system - to improve the weak entrepreneurial culture and low commitment to social innovation and entrepreneurship. Its main goal is to strengthen social innovation and entrepreneurship among high school students by developing and implementing a highly innovative education system - ILS.

ILS is an innovative learning system specially designed to create awareness about social needs and improve the abilities and entrepreneurial skills of the upper secondary schools' students. It combines traditional classroom-based learning methods with digital elements and online simulation, thus helping build the next generation of social entrepreneurs and innovators.

ILS has a fun-educational character and combines the educational process with a fun environment, which ensures greater motivation of students.

Serious Game (SG)	- SG is the core ILS element. It is a digital learning tool, which provides opportunity to leaners to gain experience and generate social business idea through online simulation.
	SG is designed as responsive web-based app, which to be used both in class and out of class by students' teams to learn, play and accomplish their educational tasks.
	Innovative aspects like social media and final interschool competition are incorporated in the SG.
Guidance for Teachers on Using ILS	- The current handbook is a practical guide to support teachers in applying the InnoSchool pedagogy.
	It includes step-by-step teaching guidance, which comes along with a set of offline activities, Serious Game manual both for playing and administrating, methodological and theoretical input to fully equip teachers for their work with ILS.
Training Materials to Train Teachers	- Training materials for teachers are specially developed to be used at Training workshops for teachers.
Impact Questionnaires for Students	- Impact questionnaires are intended for assessment of students' progress.

InnoSchool Learning System comprises of the following key elements:

To verify the real impact of our education system, we carry out Pilot, which implements more than 100 schools from the Danube region. However, the Pilot also includes measuring the impact of the education system. The measurement takes place in two phases, before implementation and after implementation,



with students filling out an online questionnaire in most cases, which is used to compare the results. The questionnaire focuses on several areas and sub-areas:

- 1. The Social Entrepreneurial Mindset
 - Action-orientation/proactivity
 - Innovativeness (presumably discontinuous)
 - Resilience to adversity/optimism
 - Persistence at goal-directed behaviours
 - Self-efficacy
 - Tolerance for ambiguity and uncertainty
 - Future orientation (ability to delay gratification)
 - Lower risk-aversion
 - Entrepreneurial intentions

2. Social Entrepreneurial Skills

- Creativity, brainstorming; and competitive thinking:
- Pro-activity, initiative; teamwork
- Risk-taking; decision making; analysing, reflection skills
- Perseverance; determined working moral

3. The Social Entrepreneurial Behaviours

- Opportunity recognition and needs assessment
- Business planning, data gathering and data analysis
- Finance
- HR
- Project management and leadership

Students answered these questions on a scale from 0 to 10 in all questions in the questionnaire.

Strongly	0	1	2	3	4	5	6	7	8	9	10	Strongly
disagree												agree

This document summarizes the most interesting results and outputs that were obtained based on the first measurement - measurements before the pilot's start in all participating schools.

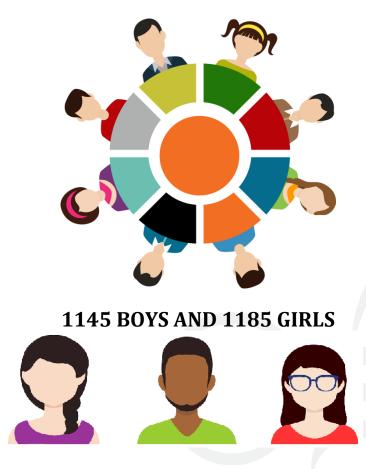


Summary of the most interesting measurement outputs before the start of the Pilot

2330 STUDENTS FROM 9 COUNTRIES



38% OF STUDENTS IN THIS SAMPLE HAVE AN ENTREPRENEUR IN THE FAMILY





63% OF PARTICIPATING STUDENTS ARE FAMILIAR WITH ENTREPRENEURSHIP AND SOCIAL ENTREPRENEURSHIP



29% OF STUDENTS KNOW A SOCIAL ENTREPRENEUR



Students from Moldova and Romania had the best social entrepreneurial skills before Pilot





Who was involved?

In our first survey, we received responses from 2,330 students from 9 different countries in the Danube region, the location of the schools is highlighted in the following figure. Even more schools and also more students were originally enrolled in the Pilot, but in connection with the coronavirus pandemic, the number of schools and students decreased. The number of schools and especially the cities where it comes from can be seen on the map.



What was the goal of the measurement?

Our goal was to obtain data that will be evaluated before the Pilot and which will also be compared with data after the completion of the pilot project. Thanks to this, it will be possible to get a real example of the impact of the InnoSchool education system on students in these areas. It is possible to obtain very interesting data from our measurements before the Pilot. Especially in the case of comparisons between individual states, but also in correlations between selected variables.



	Vocational school	Business schools	Grammar school	Secondary/high school	Medical schools	Lyceum	College
Czech Republic	0	3	3	0	1	0	0
Austria	0	3	0	0	0	0	0
Slovakia	5	3	2	0	0	0	0
Romania	0	0	0	3	0	7	
Hungary	8	2	1	0	0	0	0
Bulgaria	8	0	1	2	0	0	0
Serbia	3	2	4	0	1	0	0
Bosnia and Hercegovina	8	2	0	0	0	0	0
Moldova	0	0	11	9	0	0	1

What types of schools are involved in the project?

Pilot in 9 countries

The pilot deployment at selected schools took place from September 2020 to the end of February 2021. The schools were in various situations, but most of them implemented the majority of the program only remotely, online. The aim was mainly to test the impact of the education system during this time. Teachers and students were given not only an online educational tool to develop their social entrepreneurial skills, but also a teacher's guide, worksheets, activity guides and more. The goal for students and teachers was to create a social business plan. Subsequently, the next report/summary will explain and show the impact of the education system, its results, success and based on these outputs it will be possible to create an update of the entire education system InnoSchool.

From the obtained data we got to obtain several very interesting facts:

- ✤ 2330 students from 9 countries participated in the Pilot
- ✤ 1145 boys and 1185 girls from the Danube region
- 63% of participating student is familiar with entrepreneurship and social entrepreneurship
- * 38% of students in this sample have an entrepreneur in the family
- 48% know the difference between an enterprise and a social enterprise
- only 29% know any social entrepreneur
- Students from Romania shows the highest score in questions regarding The Social Entrepreneurial Mindset, and students from Slovakia shows the lowest score
- Moldova and Romania has the highest rating in all evaluated variables within the Social Entrepreneurial Skills and Slovakia and Czech Republic lowest rating
- Moldova shows the highest rating within the Social Entrepreneurial Behaviours and Slovakia and Czech Republic lowest rating
- There is a strong correlation among all three researched areas The Social Entrepreneurial Mindset, The Social Entrepreneurial Skills and The Social Entrepreneurial Behaviours
- Austria, Bosnia and Herzegovina, Bulgaria, Czech Republic and Hungary shows the strong correlation among having an entrepreneur in family and Entrepreneurial intentions



- Hungary and Romania show a strong correlation among Entrepreneurial intentions and gender (man) and Bulgaria the same but in favour of a woman.
- Sulgaria and Moldova shows the strongest correlation of variables within the country



Results of the first round of the impact questionnaire Entrepreneurial Capabilities

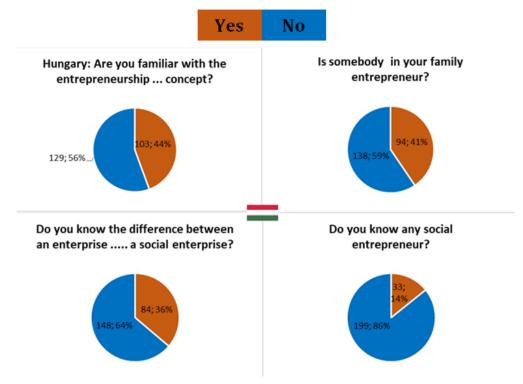
The first section of the Impact questionnaire was devoted to the basic distribution of respondents and their background and experience. The data are adjusted in the table according to individual countries, gender and the total number of respondents.

R	esponden	ts	Items								
Country	Gender	No Respondent s	Are you familiar with the entrepreneurshi p / social entrepreneurshi p concept?		Is somebody in your family entrepreneur ?		Do you know the difference between an enterprise and a social enterprise ?		Do you any so entrepr ?	cial	
		1	Yes	No	Yes	No	Yes	No	Yes	No	
Austria	Male	64	40	24	28	36	22	42	18	46	
	Female	101	58	43	35	66	22	79	21	80	
	Sum	165	98	67	63	102	44	121	39	126	
Bosnia and Herzegovin a	Male Female	103 114	84	<u>19</u> 44	29 28	<u>74</u> 86	45 31	<u>58</u> 83	26 16	<u>77</u> 98	
	Sum	217	154	63	57	160	76	141	42	175	
Bulgaria	Male	150	121	29	36	114	83	67	46	104	
	Female	196	183	13	35	161	150	46	67	129	
	Sum	346	304	42	71	275	233	113	113	233	
Czech Republic	Male Female Sum	60 99 159	41 68 109	19 31 54	27 51 83	33 48 81	29 47 79	31 52 83	7 22 31	53 77 130	
Hungary	Male	107	52	55	49	58	34	73	17	90	
	Female	125	51	74	45	80	50	75	16	109	
	Sum	232	103	129	94	138	84	148	33	199	
Moldova	Female	127	84	43	13	114	61	66	41	86	
	Male	253	183	70	29	224	153	100	90	163	
	Sum	380	267	113	42	338	214	166	131	249	
Romania	Male	133	40	93	100	33	69	64	96	37	
	Famale	172	44	128	140	32	79	93	110	62	
	Sum	305	84	221	240	65	148	157	206	99	

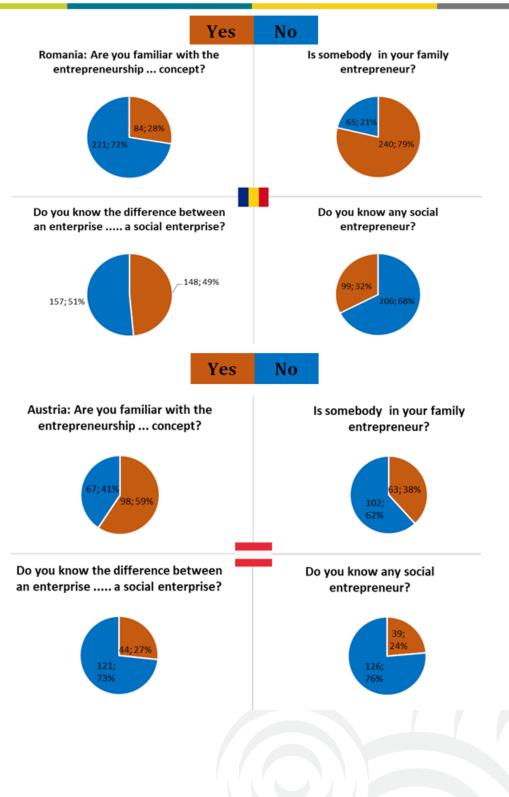


Serbia	Male	182	149	33	50	132	110	72	72	110
	Female	160	121	39	42	118	94	66	58	102
	Sum	342	270	72	92	250	204	138	130	212
Slovakia	Male	93	63	30	47	46	47	46	17	76
	Female	94	61	33	47	47	61	33	10	84
	Sum	187	124	63	94	93	108	79	27	160

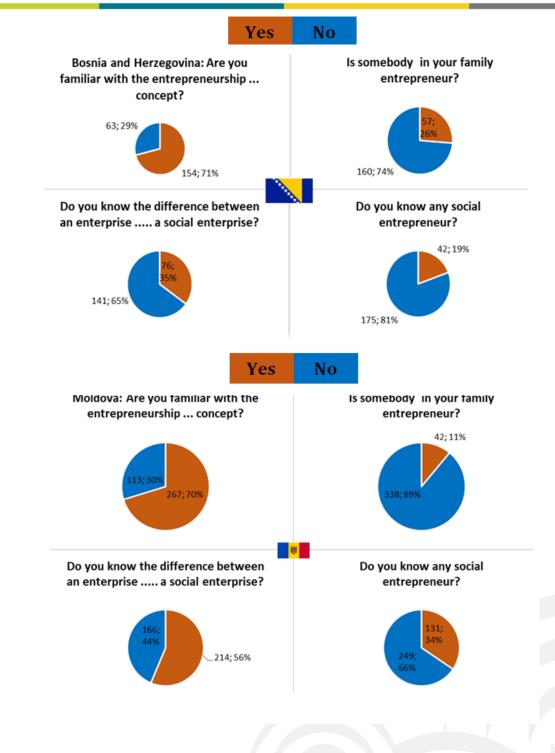
The introductory questions are also arranged in graphs, for better clarity of the answers for individual countries (The numbering in the graph is given as follows - number of students; percent):



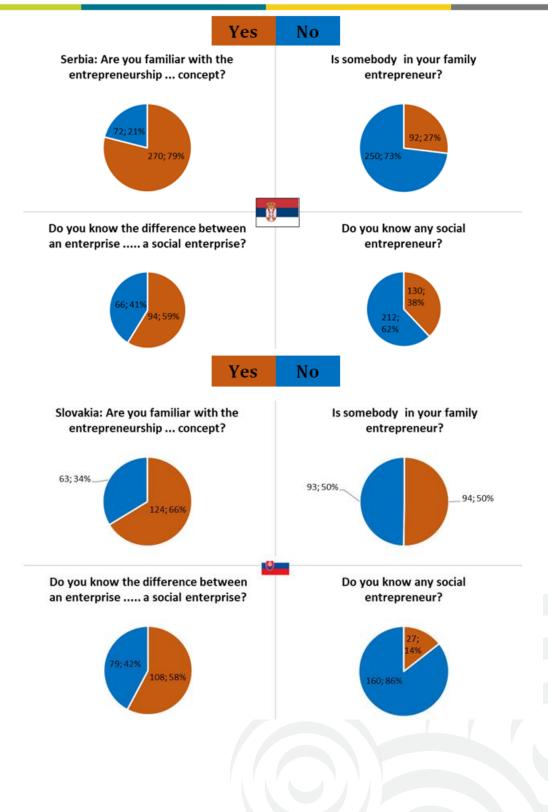










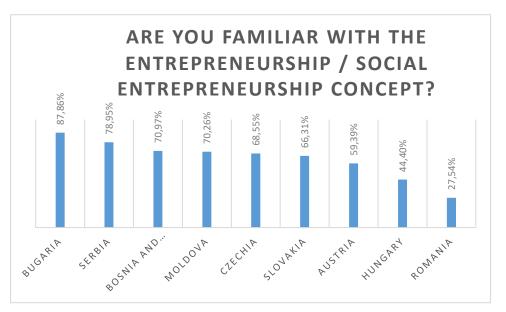




Countries compared according to the percentage of positive answers to the following questions:

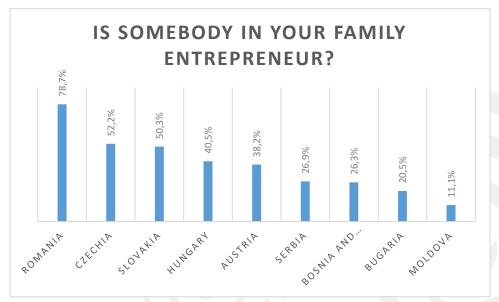
Are you familiar with the entrepreneurship / social entrepreneurship concept?

78,95%
70,97%
70,26%
68,55%
66,31%
59,39%
44,40%
27,54%



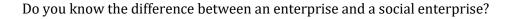
Is somebody in your family entrepreneur?

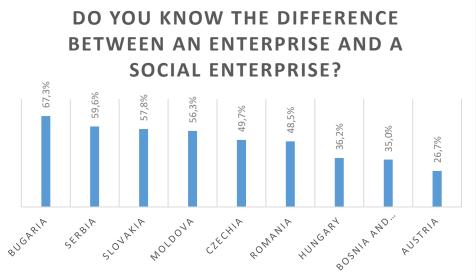
78,7%
52,2%
50,3%
40,5%
38,2%
26,9%
26,3%
20,5%
11,1%





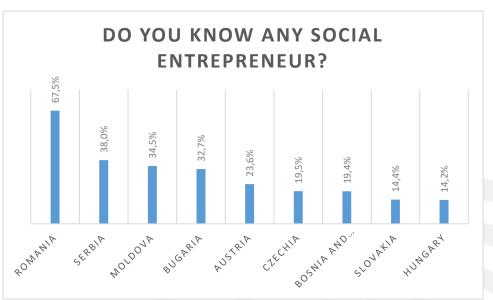
Bulgaria 67,3% Serbia 59,6% Slovakia 57,8% Moldova 56,3% Czech Republic 49,7% Romania 48,5% Hungary 36,2% Bosnia and Herzegovina 35,0% Austria 26,7%





Do you know any social entrepreneur?

67,5%
38,0%
34,5%
32,7%
23,6%
19,5%
19,4%
14,4%
14,2%





1. The Social Entrepreneurial Mindset

In Section 1 of the questionnaire we are assessing the following variables:

- Action-orientation/proactivity: item 1
- Innovativeness (presumably discontinuous): item 2
- Resilience to adversity/optimism: item 3
- Persistence at goal-directed behaviours: items 4, 5
- Self-efficacy: item 6
- Tolerance for ambiguity and uncertainty: item 7
- Future orientation (ability to delay gratification): item 8
- Lower risk-aversion: items 9, 10
- Entrepreneurial intentions: item 15
- Social –awareness: items 11, 12, 13 and 14

In the following section, we evaluate a total of 4 basic values: **Mean, Standard Deviation, Mode, and Median**

What is what?

- The mean value is the arithmetic mean of the values.
- The standard deviation is a measure of the rate of change or variance of a set of values. A low standard deviation indicates that the values tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the values are spread over a wider range.
- Mode is the most likely value of the dataset.
- The median is the value in the middle of the dataset.



Country	V1 Action- orientation/proactivity	V2 Innovativeness (presumably discontinuous)	V3 Resilience to adversity/optimism	V4 Persistence at goal- directed behaviours	V5 Self-efficacy	V6 Tolerance for ambiguity and uncertainty	V7 Future orientation (ability to delay gratification)	V8 Lower risk-aversion	V9 Entrepreneurial intentions	V10 Social –awareness
Austria	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	6,90	7,46	6,95	7,48	7,92	6,62	6,71	7,76	6,66	8,14
Standard d.	2,28	2,20	2,19	1,81	1,80	2,14	2,41	1,45	3,12	1,29
Mode	8	10	7	7,5	9	7	8	8	10	9,25
Median	7	8	7	7,5	8	7	7	8	7	8,25
Bosnia and Herzegovina	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	6,57	7,10	7,52	7,68	7,92	6,62	6,71	7,76	6,66	8,14
Standard d.	2,54	2,66	2,55	1,83	1,80	2,14	2,41	1,45	3,12	1,29
Mode	5	10	10	10	9	7	8	8	10	9,25
Median	6	7	8	8	8	7	7	8	7	8,25
Bulgaria	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	7,29	7,55	7,70	7,89	7,66	6,82	7,27	8,13	7,56	7,94
Standard d.	2,80	2,79	2,70	2,33	2,56	2,85	2,90	2,02	2,87	2,10
Mode	10	10	10	10	10	10	10	10	10	10
Median	8	8	9	9	8,5	7	8	9	9	8,75
Czech Republic	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	7,21	6,57	7,37	6,84	7,22	5,90	7,13	7,65	6,59	7,56
Standard d.	2,29	2,28	2,11	2,01	2,27	2,63	2,54	1,54	2,74	1,60
Mode	10	7	8	7	8	5	10	7,5	10	8
Median	8	7	8	7	8	6	8	7,5	7	7,75
Hungary	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	6,59	7,37	6,51	7,26	6,43	6,63	6,78	7,90	7,17	7,80
Standard d.	2,09	2,20	2,41	1,82	2,08	2,49	2,40	1,57	2,78	1,51
Mode	7	8	5	7,5	7	10	10	8	10	8,5
Median	7	8	7	7,5	7	7	7	8	8	8,25
Moldova	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	7,31	8,50	8,45	8,10	8,29	7,44	8,07	8,48	8,40	8,20
Standard deviation	2,32342 6	2,10	2,10	1,84	2,01	2,02	2,17	1,62	2,072	1,52
Mode	10	10	10	10	10	8	10	10	10	10
Median	8	9	9	8,5	9	8	9	9	9	8,5
Romania	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	7,82	8,60	8,36	8,46	8,56	7,49	7,93	8,69	7,62	8,48



Standard d.	1,94	1,64	1,81	1,46	1,63	2,11	2,31	1,23	2,48	1,27
Mode	10	10	10	9	10	9	10	10	10	9,25
Median	8	9	9	9	9	8	9	9	8	8,75
Serbia	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	8,26	7,93	8,50	7,89	8,20	7,40	6,90	8,64	7,90	8,44
Standard d.	2,03	2,32	2,09	1,81	1,99	2,63	2,88	1,48	2,74	1,66
Mode	10	10	10	10	10	10	10	10	10	10
Median	9	8,5	9	8,5	9	8	8	9	9	9
Slovakia	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10
Mean	5,98	7,44	6,40	6,38	6,94	5,16	7,01	7,32	6,27	7,45
Standard deviation	2,63	2,21	2,69	2,17	2,20	2,62	2,84	1,79	2,95	1,70
Mode	5	10	8	7	8	5	10	8	10	8,5
Median	6	8	7	7	7	5	8	7,5	7	7,75

Country score according to the mean in evaluated variables

Country	V1 Action- orientation/proact ivity	V2 Innovativeness (presumably discontinuous)	V3 Resilience to adversity/optimis m	V4 Persistence at goal-directed behaviours	V5 Self-efficacy	V6 Tolerance for ambiguity and uncertainty	V7 Future orientation (ability to delay gratification)	V8 Lower risk- aversion	V9 Entrepreneurial intentions	V10 Social – awareness
Austria	6,90	7,47	6,96	7,48	7,92	6,62	6,72	7,76	6,67	8,14
Bosnia and Herzegovina	6,58	7,11	7,53	7,68	7,92	6,62	6,72	7,76	6,67	8,14
Bulgaria	7,29	7,55	7,71	7,90	7,66	6,83	7,27	8,13	7,56	7,94
Czech Republic	7,21	6,57	7,38	6,85	7,22	5,91	7,13	7,65	6,60	7,56
Hungary	6,60	7,37	6,52	7,27	6,43	6,64	6,79	7,91	7,18	7,80
Moldova	7,31	8,50	8,46	8,11	8,30	7,44	8,07	8,49	8,40	8,20
Romania	7,83	8,60	8,37	8,47	8,56	7,49	7,93	8,69	7,63	8,48
Serbia	8,27	7,93	8,51	7,90	8,20	7,41	6,91	8,65	7,90	8,45
Slovakia	5,98	7,44	6,40	6,39	6,95	5,17	7,02	7,32	6,27	7,46



Country score according to the mean values from the previous table

Romania	8,21
Moldova	8,13
Serbia	8,01
Bulgaria	7,59
Bosnia and Herzegovina	7,27
Austria	7,26
Hungary	7,05
Czech Republic	7,01
Slovakia	6,64



2. Social Entrepreneurial Skills

In Section 2 of the questionnaire we are assessing the following variables:

- Creativity, brainstorming; and competitive thinking: items 1, 2 and 3
- Pro-activity, initiative; teamwork: items 4, 6, 11 and 15
- Risk-taking; decision making; analysing, reflection skills: items 7, 8, 9, 10 and 12
- Perseverance; determined working moral: items 5, 13, and 14

Comparison of medians among the countries.

	Skills		Skills Risk-	Skills
Country	Creativity	Skills Proactivity	taking	Perseverance
Austria	6,66	7,5	6,8	7,33
Bosnia and				
Herzegovina	6,66	7,25	7,4	7,33
Bulgaria	7,33	8	7,8	8
Czech				
Republic	6,33	6,75	6,8	6,33
Hungary	7	7,12	6,8	7
Moldova	8	8,5	8,4	8,66
Romania	7,66	8,25	8,2	8,33
Serbia	7,33	7,75	7	8
Slovakia	6	7	6,4	6,66

Moldova and Romania have surprisingly highest rating in all evaluated variables.



3. Social Entrepreneurial Behaviours

In Section 3 of the questionnaire we are assessing the following variables:

- Opportunity recognition and needs assessment: items 1,2,3
- Business planning, data gathering and data analysis: items 4,5,6,7,8
- Finance: items 9, 10
- HR: items 11, 13
- Project management and leadership: items 12, 14, 15

Comparison of medians among the countries.

		Behaviours			
	Behaviours	Business	Behaviours	Behaviours	
Country	Opportunity	Plan	Finance	HR	Behaviours PM
Austria	6,66	6,8	6	7,5	7,66
Bosnia and					
Herzegovin					
а	7	6,6	7	7,5	7,33
Bulgaria	7,66	7,6	7	8	8
Czech					
Republic	6,33	6	5,5	6,5	7
Hungary	6,33	6,6	6,5	7,5	7,16
Moldova	8,33	8	7,5	8,25	8,66
Romania	7,33	7,4	7	8	8,33
Serbia	7,66	7,6	7,5	8,5	8,66
Slovakia	6	6	5,5	7	7

Again Moldava is almost best in almost all variables among the countries.



Correlation within countries

Statistically significant correlation among variables is marked in green.

Austria

Social Entrepreneurial Skills

Bivariate correlation matrix							
Section 2		Pro-	Risk-				
Variables	Creativity	activity	taking	Perseverance			
Creativity							
Pro-activity	0,613						
Risk-taking	0,508	0,541					
Perseverance	0,624	0,754	0,582				

The Social Entrepreneurial Behaviours

Bivariate correlation matrix							
Section 3	Opportunity	Business			Project		
Variables	recognition	planning	Finance	HR	management		
Opportunity recognition							
Business planning	0,772						
Finance	0,620	0,656					
HR	0,578	0,608	0,518				
Project management	0,589	0,534	0,473	0,774			

Bosnia and Herzegovina

Social Entrepreneurial Skills

Bivariate correlation matrix

Section 2		Pro-	Risk-	
Variables	Creativity	activity	taking	Perseverance
Creativity				
Pro-activity	0,603			
Risk-taking	0,512	0,676		
Perseverance	0,502	0,658	0,708	

The Social Entrepreneurial Behaviours

Section 3	Opportunity	Business			Project
Variables	recognition	planning	Finance	HR	management
Opportunity recognition					
Business planning	0,674				
Finance	0,525	0,802			
HR	0,505	0,694	0,691		
Project management	0,584	0,681	0,630	0,731	



Bulgaria

Social Entrepreneurial Skills

Bivariate correlation matrix

Section 2		Pro-	Risk-	
Variables	Creativity	activity	taking	Perseverance
Creativity				
Pro-activity	0,762			
Risk-taking	0,747	0,865		
Perseverance	0,730	0,854	0,861	

The Social Entrepreneurial Behaviours

Bivariate correlation matrix Section 3 Opportunity Business Project Variables recognition planning Finance HR management Opportunity recognition **Business** planning 0,843 0,745 Finance 0,853 HR 0,701 0,794 0,777 Project management 0,745 0,821 0,810 0,836

Czech Republic

Social Entrepreneurial Skills

Section 2		Pro-	Risk-	
Variables	Creativity	activity	taking	Perseverance
Creativity				
Pro-activity	0,569			
Risk-taking	0,454	0,688		
Perseverance	0,535	0,787	0,621	



The Social Entrepreneurial Behaviours

Bivariate correlation matrix							
Section 3		р. :			D		
Section 5	Opportunity	Business			Project		
Variables	recognition	planning	Finance	HR	management		
Opportunity recognition							
Business planning	0,591						
Finance	0,453	0,710					
HR	0,567	0,584	0,588				
Project management	0,630	0,582	0,418	0,723			

Hungary

Social Entrepreneurial Skills

Section 2		Pro-	Risk-	
Variables	Creativity	activity	taking	Perseverance
Creativity				
Pro-activity	0,573			
Risk-taking	0,594	0,742		
Perseverance	0,556	0,701	0,627	

The Social Entrepreneurial Behaviours

Bivariate correlation matrix

Section 3 Variables	Opportunity recognition	Business planning	Finance	HR	Project management
Opportunity recognition					
Business planning	0,728				
Finance	0,534	0,673			
HR	0,569	0,681	0,568		
Project management	0,616	0,695	0,538	0,751	

Moldova

Social Entrepreneurial Skills

Section 2		Pro-	Risk-								
Variables	Creativity	activity	taking	Perseverance							
Creativity											
Pro-activity	0,840		-								
Risk-taking	0,788	0,885									
Perseverance	0,806	0,894	0,868								



The Social Entrepreneurial Behaviours

Bivariate correlation matrix										
Section 3	Opportunity				Project					
Variables	recognition	Business planning	Finance	HR	management					
Opportunity recognition										
Business planning	0,874									
Finance	0,722	0,822								
HR	0,807	0,835	0,733							
Project management	0,811	0,819	0,695	0,880						

Romania

Social Entrepreneurial Skills

Bivariate correlation matrix

Section 2			Risk-	
Variables	Creativity	Pro-activity	taking	Perseverance
Creativity				
Pro-activity	0,695			
Risk-taking	0,598	0,765		
Perseverance	0,623	0,771	0,694	

The Social Entrepreneurial Behaviours

Bivariate correlation matrix

Section 3 Variables	Opportunity recognition	Business planning	Finance	HR	Project management
Opportunity recognition					
Business planning	0,761				
Finance	0,581	0,777			
HR	0,687	0,742	0,693		
Project management	0,672	0,701	0,553	0,831	

Serbia

Social Entrepreneurial Skills

Bivariate corre	Bivariate correlation matrix											
Section 2		Pro-	Risk-									
Variables	Creativity	activity	taking	Perseverance								
Creativity												
Pro-activity	0,662											
Risk-taking	0,631	0,692										
Perseverance	0,665	0,763	0,656									

The Social Entrepreneurial Behaviours



Bivariate correlation matrix

Section 3	Opportunity	Business			Project				
Variables	recognition	planning	Finance	HR	management				
Opportunity recognition									
Business planning	0,830								
Finance	0,693	0,781							
HR	0,651	0,727	0,609						
Project management	0,657	0,707	0,613	0,765					

Slovakia

Social Entrepreneurial Skills

Bivariate correlation matrix

Section 2		Pro-	Risk-	
Variables	Creativity	activity	taking	Perseverance
Creativity				
Pro-activity	0,634			
Risk-taking	0,488	0,749		
Perseverance	0,657	0,788	0,733	

The Social Entrepreneurial Behaviours

Section 3 Variables	Opportunity recognition	Business	Financa	HR	Project
variables	recognition	planning	Finance	пк	management
Opportunity recognition					
Business planning	0,755				
Finance	0,576	0,730			
HR	0,581	0,625	0,578		
Project management	0,628	0,670	0,600	0,803	



Statistical conclusion

According to Spearman's Rho there is a statistically significant correlation among variables in all three sections. Spearman's Rho is a non-parametric test used to measure the strength of association between two variables, where the value r = 1 means a perfect positive correlation and the value r = -1 means a perfect negative correlation. In general, this means that the larger (closer to 1) the value of "rs", the more students answered in the same areas in the same way.

Social awareness and Skills

The value of rs is: 0.78487

rs = 0.78487, p (2-tailed) = 0.01223.

Social awareness and Behaviours

The value of rs is: **0.83551.**

rs = 0.83551, p (2-tailed) = 0.00504.

Skills and Behaviours -

The value of rs is: **0.93333.**

rs = 0.93333, p (2-tailed) = 0.00024.

By current standards, the association between the two variables would be considered statistically significant. It is clear from the results that the data show that the compared areas of education are significantly interconnected. It follows that it is not possible to have knowledge in one area without the student having knowledge in other areas.



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Annex

The Impact Questionnaire

Theoretical Background of the Impact Questionnaire

According to Krueger (2015), the assessment of the impacts of an educational intervention must focus on outputs, throughputs and inputs. Regarding *throughputs*, ILS is based on experiential learning, learning how to think/act like a social entrepreneur lead to deep cognitive change and to life-skills acquirement. At the *input* level, teacher training activity will help teachers to implement ILS and assure an experiential learning environment. It is also important to measure if students are already entrepreneurial. ILS teach students about social entrepreneurship, but most important, it teach them to do social entrepreneurship. ILS *outputs* are both the knowledge about social entrepreneurship and the social entrepreneurial mindset, skills and Behaviours.

The Impact Questionnaire intend to measure the outputs of ILS according with **ILS Learning Goals** (**ILS Advanced Concept)**.

The Impact Questionnaire structure:

Starting from the definition bellow:

"An entrepreneurial attitude is characterized by initiative, pro-activity, independence and innovation in personal and social life, as much as at work. It also includes motivation and determination to meet objectives, whether personal goals or aims held in common with others, including at work."

ILS (Social) Entrepreneurial Competencies									
	Entrepreneurial Capabilities								
Mindset	Skills	Behaviours							
1.	1.	1.							
2.	2.	2.							
3.	3.	3.							

1. The Social Entrepreneurial Mindset

The scientific approaches of the entrepreneurial mindset's definition has been to focus on specific psychological traits linked to entrepreneurial intentions or success (Davis, Hall & Mayer, 2015). In the opinion of Krueger (2015), the entrepreneurial mindset consists of non-cognitive life skills. Following



the model of the entrepreneurial mindset proposed by Krueger (2015), The Impact Questionnaire aim to assess in Section 1:

- Action-orientation/proactivity: item 1
- Innovativeness (presumably discontinuous): item 2
- Resilience to adversity/optimism: item 3
- Persistence at goal-directed behaviours: items 4, 5
- Self-efficacy: item 6
- Tolerance for ambiguity and uncertainty: item 7
- Future orientation (ability to delay gratification): item 8
- Lower risk-aversion: items 9, 10
- Entrepreneurial intentions: item 15

One of the social and emotional competencies very important for social entrepreneurship is *social-awareness* defined as understanding other people, different social contexts and norms. Social – awareness is measured by items 11, 12, 13 and 14 of the first section.

2. Social Entrepreneurial Skills

The impact questionnaire within the 3rd section – Social Entrepreneurial Skills – aims to assess the following skills and attitudes:

- Creativity, brainstorming; and competitive thinking: items 1, 2 and 3
- Pro-activity, initiative; teamwork: items 4, 6, 11 and 15
- Risk-taking; decision making; analysing, reflection skills: items 7, 8, 9, 10 and 12
- Perseverance; determined working moral: items 5, 13, and 14

To create the list of items to be assessed, we have followed the suggestions and recommendations of the Kumar (1997), Greenglass et al. (2014) and Faber et al. (2013). Their insights for measuring the above mentioned broader dimensions of skills and attitudes were followed and items were adopted.

3. The Social Entrepreneurial Behaviours

In the third part of the questionnaire, which deals with knowledge in the field of social entrepreneurship, the questionnaire was elaborated by Kickul and D'Intino (2005). Kickul and D'Intino (2005) examine various components of entrepreneurial self-efficacy within the entrepreneurship literature using perspective measurement. Self-efficacy may play an important role in uncovering the essential skills set needed throughout the various stages of the entrepreneurial life-cycle. That is why we decided to reflect on this approach in our questionnaire.

- Opportunity recognition and needs assessment: items 1,2,3
- Business planning, data gathering and data analysis: items 4,5,6,7,8
- Finance: items 9, 10
- HR: items 11, 13
- Project management and leadership: items 12, 14, 15



IMPACT QUESTIONNAIRE

						* * *					
This questionnaire includes 45 statements, and will take about 10 minutes to complete. There are no right											
or wrong answers. Your honest opinion is what counts. For each statement, choose the number that best describes your opinion. Use the entire scale as much as											
For each state possible.	ement, cl	hoose t	he num	ber that	t best de	escribes	your op	pinion. U	se the e	entire sc	cale as much as
possible.											
Strongly	0	1	2	3	4	5	6	7	8	9	10
Strong	ly										
Disagree											Agree
			-								
Your <mark>ID Code</mark>				_		ntered b		ent)			
<mark>Gender</mark> : masc	uline, fen	ninine,	other (d	rop-dov	vn menu	ı selecti	on)				
School:	School	1 (sele	ction. dr	op-dow	n menu:	for each	country	. selectio	on of Pilo	ot partici	pating schools
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country.	Austria	a (selec	uon, ur	Jp-uowi	i menu,	Ulliy Ulle	option	avallable	per cou	iiiti y j	
1. Are you fai	<mark>niliar w</mark> i	ith the							oncept?		
0.1	•				o, drop-	down n	nenu sel	lection)			
<mark>2. Is somebod</mark>	y in you	r famil				.down r	16NII CO	lection)			
<mark>3. Do you kno</mark>	w the di	ifferen							se?		
			Yes	s (Yes/N	lo, drop-			-			
<mark>4. Do you kno</mark>	<mark>w any so</mark>	ocial er	-								
			Yes	s (Yes/N	lo, drop-	down n	ienu se	lection)			

	Questions	Strongl y disagre e					Undecide d						Strongly agree
		0	1	2	3	4	5	6	7	8	8	9	10
1.	When I am facing a big project that has to be done I don't have any problems getting started.												
2.	I am fairly curious and I am continually												

Section 1 of 3



	in search of						
	discovery		 			 	
3.	I am always optimistic about my future.						
4.	When I have a lot of important things to do, I find it easy to make a plan and stick with it.						
5.	I always give the best of myself in everything I do.						
6.	When I take on a project I have confidence that I will carry it out successfull y.						
7.	I manage my stress well in ambiguous and uncertain situations.						
8.							



9. I can learn from my mistakes.						
10. I can easily adapt to changing situations.						
11. I pay attention to the needs of others.						
12. I usually know how to help others who need that.						
13. I offer help to those who need me.						
14. I like to show interest in other people.						
15. I intend someday to start my own company or business.						



Section 2 of 3

Questions	Strongly disagree					Un- decided					Strongly agree
	0	1	2	3	4	5	6	7	8	9	10
1. I can come up with creative ideas for certain problems											
2. I usually record my ideas on a phone or in a notebook											
3. I like challenges and beating the odds											
4. I feel in charge of making things happen											
5. I spend time identifying long-term goals for myself											
6. I am confident I can lead others to accomplish a goal											
7. I am confident I can make changes when things do not go as planned.											
8. I keep track of all mistakes											
9. Before tackling a											



difficult task I imagine success scenarios.						
10. I act only after thinking carefully about a problem.						
11. I can work well with a wide range of people						
12. I am quick at making decisions						
13. I am a person who is fully dedicated to solving a problem						
14. I always try to find a way to work around obstacles; nothing really stops me.						
15. When I experience a problem, I take the initiative in resolving it.						



Section 3 of 3

Questions	Strongly disagree					Undecided					Strongly agree
	0	1	2	3	4	5	6	7	8	9	10
 I can originate new ideas and products. 											
2. I can come up with ideas that respond to current issues.											
3. I can describe the need and propose its theoretical solutions.											
4. I can assess the potential and risks of my business idea.											
5. I can formulate a set of activities in pursuit of opportunities.											
6. I can see new market opportunities for new products and services.											
7. I can set real goal and go for it.											
8. I can create a business model and work with auxiliary tools to help me evaluate the potential of my intention.											
9. I can identify potential sources of funding for investment.											
10. I can estimate all the financial resources and costs of a project.											
11. I can estimate what is the greatest potential of people on the											



team.						
12. I can convince others to join me and work together on my vision.						
13. I can articulate the vision and values of the team.						
14. I can provide constructive feedback to other team members						
15. I can work with others' ideas and use them for the benefit of the whole team.						



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