



Project Reference: 2018-1-DE02-
KA202-005130



ENTRE

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Erasmus+ KA2 Strategic Partnership for VET

IO1 – Comparative
Report: Questionnaire
Analysis

Comparative Report: Questionnaire Analysis

In all six countries questionnaires were distributed among VET students, entrepreneurs and vocational professionals. Hence, we can derive potentially 18 different groups from our survey. The group size was between 10 and 54 individuals, but overwhelmingly between 20 and 30 participants. The participants came from various professional backgrounds, different school forms and diverse entrepreneurial experiences.

The core of the questionnaire is the EntreComp conceptual model.¹ The model consists of two main dimensions. *Firstly*, the 3 competence areas (Ideas and Opportunities, Resources, Into Action) that directly reflect the characterisation of entrepreneurship as the ability to turn ideas into action that generate value for someone other than oneself; and *secondly* the 15 competences that, make up the building blocks of the entrepreneurship as a competence. For the details of the competences compare Table 1.

The evaluation of the questionnaires showed little or very little variance throughout almost all groups. This means the different categories were similarly often ranked or located to the same level. Often there was only a small gap between the average of more important and less important categories. But the results were pretty consistent, i.e. the ranking of the categories within our country sample was quite similar in most cases.

Cross-comparing the groups was very helpful. The results of our survey are very valuable for this project and generally the advancement of entrepreneurship education (EnEd). This is because the results emphasize how manifold the requirements for entrepreneurship are. Even though there is small variance within the outcomes, the results also show insightful patterns from the rankings, especially from the contrast between competences VET Students and entrepreneurs. We show the details in Tables 2-5. Furthermore, the general view at the outcomes gives the important insight that competence to gain competence is more important for entrepreneurship than existing knowledge.

All three investigated groups, VET students, entrepreneurs and vocational professionals were summoned to rank the five competencies, assigned to three competence areas: “Ideas and Opportunities”, “Resources” and “Into Action”. The introduction text on that part of the questionnaire reads as follows:

The following competencies have been identified as being vital to potential entrepreneurs. Please rank the competencies within each area on a scale of 1 – 5, with 1 being the most important and 5 being the least important.

¹ <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework>

Table 1. EntreComp conceptual model: Vital Competencies for (potential) Entrepreneurs	
Ideas and Opportunities	
Spotting opportunities - Use your imagination to identify/create opportunities	
Creativity - Develop creative and purposeful ideas	
Vision - Work towards your vision of the future or an identified goal	
Valuing ideas - Make the most of ideas and opportunities	
Ethical and sustainable thinking - Assess the consequences/impact of your actions	
Resources	
Mobilising resources - Gather and manage the required resources	
Mobilising others - Inspire, enthuse and get others to share your vision	
Financial and economic literacy - Develop your financial and economic knowledge	
Self-awareness and self-efficacy - Believe in yourself and keep developing	
Motivation and perseverance - Stay focused and overcome difficulties	
Into Action	
Learning through experience – Take lessons from your successes and failures	
Working with others - Team-up, collaborate and network	
Planning and management - Prioritise, organise and follow-up	
Taking the initiative - Be pro-active and make things happen	
Coping with ambiguity, uncertainty and risk - Make decisions and stand by them	

VET Students

According to the data available we provide the most important competence for the questioned VET students in each country in Table 2. This happens in two different ways: Either as the average from the cumulative ranking or the frequency. The first means, the lower the number, the more important is the competence, the second means most mentioned competence (frequency).

Table 2: Students		
Ideas and Opportunities		
Country	Most important Competence	Average/(f)requency
Cyprus	Spotting opportunities – Use your imagination and abilities to identify opportunities for creating value	1.8
Germany	Vision - Work towards your vision of the future or an identified goal	2.6
Greece	Spotting opportunities – Use your imagination and abilities to identify opportunities for creating value	2.6
Romania	Valuing ideas - Make the most of ideas and opportunities	2.3
United Kingdom	Spotting opportunities – Use your imagination and abilities to identify opportunities for creating value	(f)
Iceland	Creativity - Develop creative and purposeful ideas	(f)

Resources		
Cyprus	Financial and economic literacy - Develop your financial and economic knowledge	2.3
Germany	Mobilising resources - Gather and manage the required resources	2.2
Greece	Mobilizing resources - Gather and manage the resources you need	2.5
Romania	Mobilising resources - Gather and manage the required resources	1.7
United Kingdom	Motivation and perseverance - Stay focused and overcome difficulties	(f)
Iceland	Self-awareness and self-efficacy - Believe in yourself and keep developing	(f)
Into Action		
Cyprus	Learning through experience – Take lessons from your successes and failures	2.0
Germany	Learning through experience – Take lessons from your successes and failures	2.2
Greece	Coping with uncertainty, ambiguity and risk - Make decisions dealing with uncertainty, ambiguity and risk; Working with others - Team up, collaborate and network; Learning through experience - Learn by doing; Taking the initiative - Go for it	All four competencies 2.7
Romania	Learning through experience – Take lessons from your successes and failures	2.2
United Kingdom	Taking the initiative - Be pro-active and make things happen	(f)
Iceland	Taking the initiative - Be pro-active and make things happen	(f)

VET students show indifferent preferences in the first competence area “Ideas and Opportunities”. In three countries “Spotting Opportunities” was considered as most important competence. Less significant competences for most VET students seem to be: “Ethical and Sustainable Thinking” and “Valuing Ideas”. These two categories reached the lowest average and were rarely ranked into a high position. Overall the top categories are: “Spotting Opportunities” and “Creativity”.

Within the item “Resources” the category “Financial and economic literacy” is a comparatively weak category for VET students, while “Mobilising Resources” is the strongest in Germany, Greece and Romania with a good third place in Cyprus. The competence “Mobilising resources” is important for VET Students in all countries. Iceland is the only exception with a relatively weak fourth place, “Self-awareness and Self-efficacy” is the leading category here. But the most

important category for students in this competence area is “Mobilising Resources” with Motivation and “Perseverance - Stay focused and don't give up” in the second place.

Our data for the third item “Into Action” shows that “Learning through Experience” is the leading category in Cyprus, Germany, Romania and Greece, in the United Kingdom and Iceland it is “Taking the Initiative”. Overall these two competencies are the most important in this competence area.

A very important finding of our primary research for the project is the popularity of entrepreneurship. For a significant number of VET students taking part in our survey in all countries starting their own business is an option. 50% of the VET-students questioned in the UK (n=26) said they are interested in becoming an entrepreneur. In Romania the rate was over 60% (n=22), in Germany over 40% (n=25) stated they had aspirations starting their own enterprise.

In most countries a significant number of VET students have covered the concept of entrepreneurship and/or entrepreneurial skills during their vocational education. In Iceland the rate was 100%, in Romania 32% and in Germany 24%, in Cyprus the number was 61% but all of the 26 students from that country taking part in the survey wished more aspects from entrepreneurship in their education.

In Romania and in Germany the number of students who would like to incorporate more aspects of entrepreneurship or entrepreneurial activities is even higher than the number who experienced EnEd in school. 60% of the VET students in Iceland wish to have more EnEd in their classes. Nevertheless, the results tell us indirectly that there are still many students for whom opening a business could be a realistic choice do not have this option in mind by themselves. Therefore, it seems necessary to find new ways bringing the possibility of entrepreneurship to the students' attention.

Entrepreneurs

In the same way we analysed VET students in Table 2 we look at entrepreneurs in Table 3. Under the competence area “Ideas and Opportunities” the option “Spotting opportunities” was ranked as the most important category in three countries (Cyprus, Germany and the United Kingdom). This is the case for “Vision” in two countries (Greece and Romania). “Ethical and sustainable thinking” had been ranked on the last place in all countries participating. “Valuing Ideas” had the fourth place in all countries, “Creativity” had either a second or a third place.

Hence for entrepreneurs in the first competence area “Spotting Opportunities” and “Vision” are the leading competencies.

Table 3. Entrepreneurs		
Country	Ideas and Opportunities	Average/(f)requency
Cyprus	Spotting opportunities - Use your imagination to identify/create opportunities	1.6
Germany	Spotting opportunities - Use your imagination to identify/create opportunities	1.8
Greece	Vision - Work towards your vision of the future or an identified goal	1.8
Romania	Vision - Work towards your vision of the future or an identified goal	2.4
United Kingdom	Spotting opportunities - Use your imagination to identify/create opportunities	(f)
Iceland	-	(f)
Resources		
Cyprus	Mobilising resources - Gather and manage the required resources	2.0
Germany	Motivation and perseverance - Stay focused and don't give up	1.9
Greece	Self-awareness and self-efficacy - Believe in yourself and keep developing	1.7
Romania	Mobilising resources - Gather and manage the required resources	2.2
United Kingdom	Motivation and perseverance - Stay focused and don't give up	(f)
Iceland	-	(f)
Into Action		
Cyprus	Learning through experience – Take lessons from your successes and failures	1.5
Germany	Taking the initiative - Go for it	1.8
Greece	Taking the initiative - Go for it	1.6
Romania	Planning and management - Prioritise, organise and follow-up	1.9
United Kingdom	Taking the initiative - Go for it	(f)
Iceland	-	(f)

The item “Resources” is compared to “Ideas and Opportunities” slightly more inconsistent between the countries having a low variance within the most groups. “Motivation and Perseverance” and “Mobilising Resources” are the leading categories, while “Mobilizing Others” is overall the weakest category.

In the competence area “Into Action” “Taking the initiative” is the most important category for the entrepreneurs taking part in our survey in three countries; “Coping with uncertainty, ambiguity and risk” is in the last place three times. “Learning through Experience” seems to be important, since it is the most important category in Cyprus and taking the second place in Greece and Romania and a good third place in Germany.

Have entrepreneurs participating in our survey covered the concept of entrepreneurship or entrepreneurial skills during their vocational education? In Greece 46% of participating entrepreneurs have been taught elements of entrepreneurship or entrepreneurial skills during their education. In Romania (65%) and Germany (50%) the share was even higher. In all countries a majority of the participants stated that they would have liked their education to incorporate more entrepreneurial aspects. Popular ways to do that was compulsory lessons and work-based training.

In all countries, a majority of entrepreneurs participating in our survey is open to mentoring a young person who has aspirations to become an entrepreneur. This tells us that the idea of mentoring programs for VET students supported by entrepreneurs has a high potential.

The results indicate a combination of curricula based EnEd and extra-curriculum entrepreneurial activities is a good solution. Integrating mentoring programs might be the most efficient way to awake entrepreneurial mindset.

Vocational Professionals

The third group questioned within the project were vocational professionals. Vocational professionals who took part in the survey in Cyprus and Greece identified the ability of “Spotting Opportunities” as the most important within the item “Ideas and Opportunities”. German and Romanian vocational professionals ranked “Creativity” into the first place. “Creativity” took in both countries the second place. Hence “Creativity” and “Ideas and Opportunities” are the two most important competencies in the first competence area.

Table 4: Vocational Professionals		
Ideas and Opportunities		
Country	Most important Competence	Average/(f)requency
Cyprus	Spotting opportunities - Use your imagination to identify/create opportunities	2.4
Germany	Creativity - Develop creative and purposeful ideas	2.2
Greece	Spotting opportunities – Use your imagination and abilities to identify opportunities for creating value	2.6
Romania	Creativity - Develop creative and purposeful ideas	2.2
United Kingdom	-	(f)
Iceland	Vision - Work towards your vision of the future or an identified goal	(f)
Resources		
Cyprus	Mobilising resources - Gather and manage the required resources	2.0
Germany	Mobilising resources - Gather and manage the required resources	2.1
Greece	Mobilizing resources - Gather and manage the resources you need	1.9

Romania	Mobilising resources - Gather and manage the required resources	2.1
United Kingdom	-	(f)
Iceland	Self-awareness and self-efficacy - Believe in yourself and keep developing	(f)
Into Action		
Cyprus	Learning through experience – Take lessons from your successes and failures	2.1
Germany	Taking the initiative - Go for it	2.2
Greece	Taking the initiative - Go for it; Coping with uncertainty, ambiguity and risk - Make decisions dealing with uncertainty, ambiguity and risk	Both competencies 1.7
Romania	Learning through experience – Take lessons from your successes and failures	2.2
United Kingdom	-	(f)
Iceland	Working with others - Team-up, collaborate and network	(f)

The item “Resources” is less controversial with all countries ranking “Mobilizing Resources” on the first place, with Iceland as the exception where that category is the second, while “Self-awareness and Self-Efficacy” is the leading category. Other categories within this competence area do not show a clear pattern. When we look at “Into Action” in two countries “Taking the Initiative” is the leading category (Germany and Greece) and in two it is “Learning through Experience” (Cyprus and Romania). In Iceland the leading category is “Working with others”.

Most of the questioned vocational professionals are supporting the idea to incorporate more aspects of entrepreneurship in their teaching practices. In this regard they agree with the other two groups of whom a majority wishes more of EnEd in VET education. Furthermore the vast majority of vocational professionals agrees that VET students would benefit from the support of a mentoring entrepreneur.

Conclusion

There is a lot of evidence that the capability to gain competence is more important for entrepreneurship than existing knowledge and skills. In Table 5. we summarize the three groups irrespective from the nationality only looking at their status (students, entrepreneurs, vocational professionals). We assign the most important competence of each competence area to each of the three groups in the first line. In Table 5. we underline the most important competencies with bold letters. The second important competencies are written in cursive letters.

Between the three groups we see a high congruence. This means that all competence areas show a comparatively clear picture.

For all three competence areas we identified out of the five categories a leading and a second competence: for “Ideas and Opportunities” the leading category is “Spotting opportunities”, the

second is “Creativity”; for “Resources” it is “Mobilising resources”, the second category is “Motivation and perseverance”; “Into Action” it is “Taking the initiative”, with the second category “Learning through experience”.

We assign the competencies according to the EntreComp conceptual model to the groups and competence areas in Table 5:

Table 5: Most important competencies				
Competence Area	Group	Students	Entrepreneurs	Vocational Professionals
Ideas and Opportunities		Spotting opportunities - Use your imagination to identify/create opportunities	Spotting opportunities - Use your imagination to identify/create opportunities	Spotting opportunities - Use your imagination to identify/create opportunities
		Creativity - Develop creative and purposeful ideas	Vision - Work towards your vision of the future or an identified goal	Creativity - Develop creative and purposeful ideas
Resources		Mobilising resources - Gather and manage the required resources	Motivation and perseverance - Stay focused and don't give up	Mobilising resources - Gather and manage the required resources
		Motivation and perseverance - Stay focused and don't give up	Mobilising resources - Gather and manage the required resources	Self-awareness and self-efficacy - Believe in yourself and keep developing
Into Action		Learning through experience – Take lessons from your successes and failures	Taking the initiative - Go for it	Taking the initiative - Go for it
		Taking the initiative - Go for it	Learning through experience – Take lessons from your successes and failures	Learning through experience – Take lessons from your successes and failures

A general insight of our primary project research is that there is a significant number of VET students in all six countries for whom starting their own business is an option. This finding is indicating a higher potential for entrepreneurship which could be reached. The results further indicate that for most students – as potential entrepreneurs – becoming aware what it means to become an entrepreneur is a process and not a moment of perception.

This aspect should be considered in any EnEd program integrated in national curricula or in less formal contexts. I.e. such a program ought to focus on calling the attention of students for the opportunities of entrepreneurship, strengthening their self-assurance concerning their competences to improve their chances to capture their entrepreneurial opportunities.

Some outcomes indicate that mentoring programs for VET students willing to become entrepreneurs could rise the incidence of entrepreneurship. Among entrepreneurs there was an overwhelming majority having interest in mentoring young people with aspirations to become entrepreneurs. The number of VET students showing interest in being mentored by an entrepreneur is even higher than the share of students with plans of opening their own business. The support of potential entrepreneurs by experienced business men and women seems to be a good option. A mentoring program should not fail due to the lack of will.

In all countries a majority of the participating entrepreneurs stated that they would have liked to have had incorporated more entrepreneurial aspects in their education. This idea is also strongly supported by vocational professionals. Integrating mentoring programs might be the most efficient way to awake entrepreneurial mindset.

When it comes to stepping into action it seems useful to develop proposals for students with case example-enterprises within the project, or integrate existing case examples. This can be practised under the condition of collaborative working groups within project-based learning or similarly active learning approaches. One approach could be the implementation of subject-specific example-enterprises.