

# I01 - National Report: Iceland

## Introduction

The Icelandic vocational education and training (VET) system originates from the time when Iceland was still part of the Danish kingdom. At that time, apprentices learned from their masters by working beside them. Gradually, schools took over parts of the training, and more theoretical subjects were added. Workplace training is still of great importance, and the journeyman's exam is centered on demonstrating skills that learners have acquired at a workplace. Several qualification opportunities are offered at the upper secondary level (ISCED 3).

The educational system in Iceland is mainly organized within the public sector, with relatively few exceptions developed within private education institutions. The Ministry of Education, Science and Culture designs policies and national curricula for upper secondary schools which applies to education and training for the labour market such as to vocational education and general education. The Ministry is responsible for almost all public education and training. General education and training have been more popular in recent years than vocational education and training, but there are signs for improvements regarding rising students' interests in vocational education and training. This is also apparent among students holding a matriculation certificate that see opportunities in vocational education.

Iceland is in third place among 33 European countries in Lifelong learning participation among 25 to 64-year-olds. Day classes, or special adult evening classes, are available in upper secondary VET schools; eleven lifelong learning centers, training centers owned and operated by social partners for skilled workers in specific trades, and in numerous private training institutions. Two institutions owned by employers' and employees' organizations offer courses for journeymen and masters of trades in the latest technology. For the healthcare sector, retraining courses are provided by universities, and there are specific training institutions for several professions. In connection with labour agreements, from 2000, specific training funds for employees were established, into which both employees and employers pay a certain percentage of all salaries. Both parties can apply for funding for training.

## Young entrepreneurship in Iceland

### Educational system

Almost all VET is offered at upper secondary level, where studies at school and workplace training form an integral part. Study programmes vary in length from one school year to four years of combined school and workplace training. A large majority of the VET students are enrolled in combined work- and school-based programs. Workplaces responsible for training need official certification and training agreements with both the student and the school, stipulating the objectives, time period and evaluation of the training. The ratio for combined work-and school-based program's is relatively higher in Iceland than the EU average. In most cases students receive salaries close to workers' salaries during workplace training, which might explain a high drop-out rate in the first year. Companies training students can apply to the Ministry of Education, Science and Culture for a subsidy to fund training.

The main objective of VET in Iceland is to build students awareness of their talents, attitudes and interests. The guidance is meant to help students of every social status and in any circumstances to realise their strengths, interests and competences so that the available opportunities in career or educational development will become clear. Recent study regarding upper secondary learners shows that 49% believe that VET will become of their interest rather than general education regardless of their current study programme. These results differ from what has been the trend, in which 85% of students (age 15) select general education (matriculation programmes), while VET enrolment is 13% (Statistic Iceland, 2018).

Entrepreneurship as a part of VET curriculum is one of the major challenges that VET schools are currently facing. No emphasis has been put on developing special courses on entrepreneurship in VET schools. However, increased attention toward VET students as entrepreneurs has emerged leading to an initiative called Vörumessa (e. warehouse festival) where group of students gathered together to introduce their start-up ideas. Thus, this shows that despite lack of professional training and courses on entrepreneurship students still find their entrepreneur within and move forward as

entrepreneurs. However, it is believed that a proper training in the VET programme can impact young entrepreneurs to start new ventures.

## **Support programs for entrepreneurship**

The VET schools in Iceland do not offer a tailor-made program or courses on entrepreneurship. The VET system is mainly focusing on providing professional education that leads to direct participation in the industry without any particular emphasis on taking the lead as an entrepreneur. Furthermore, students seem to understand the system in a way that they graduate with a degree that enables them to develop their career out of their education. Despite the lack of knowledge on entrepreneurship, it is apparent that after students finish their degree, they become, in some cases, quite entrepreneurial and innovative in forming their businesses. This is in line with learning by doing instead of that the entrepreneurial ideas started to develop during formal education and training at VET school.

Entrepreneurial activities are supported in some of the VET schools in Iceland, despite no prior entrepreneurial education or training. Some of the schools offer students to develop their projects that, in some cases, may lead to a start-up. This can be considered a way to support students to take the lead and come up with new business ideas. However, formal education and training on entrepreneurship are much more comprehensive than instruction on how to start a new venture. Formal education thus includes personal development and horizontal skills that actuate student's creativity, self-confidence, and initiative to move forward. Furthermore, entrepreneur education and training can lead to greater understanding and knowledge of how to tackle the business environment. Moreover, VET students that are offered formal entrepreneur education and training can be of excellent value for the society, as formal approach to education and training has the potential to lead to a competitive knowledge base recognized as a significant driver for innovation and competitive advantage. Thus, entrepreneurship education is necessary and vital for VET schools and students, and the economy in a whole as one of the essential skills considered essential as a driver in a knowledge-based society.

## **Ways to entrepreneurship**

Research on VET schools in Iceland showed that enthusiastic teachers took to engage teachers interested in entrepreneurial activities to adapt strategies that apply to entrepreneurship education and training (Jonsdottir, 2007). On the other hand, general knowledge is lacking among teachers, principals, and the public. However, arising trends indicate that some schools initiate to some extent entrepreneur education, that is, entrepreneurship is given space within business education of the national curriculum. In that sense, the majority of students are in most cases from the business lines, but an only small portion of VET students attend these courses. This is, on the one hand, an opportunity for VET students to gain more insight into entrepreneurial activities, but on the other hand, it is not encouraged enough. It also does not apply to VET students credits to fulfill their required quantity of credits during their VET.

VET students can develop their entrepreneurial skills, but formal education on entrepreneurship in VET schools is still sporadic and mainly offered to business students and to a limited number of VET students. However, the definition of what entrepreneurship is and means in an educational sense is not clear in the mind of principals and teachers alike and need further clarification; thus, a clear strategy is called for on what entrepreneur education is and what it can bring to the educational system in VET schools.

## **National statistics**

Apparently, no national statistics on how many VET students become entrepreneurs exist. Until now, The Ministry of Education, Science, and Culture puts little emphasis and or support to VET schools to designs policies and national curricula, which applies to entrepreneurial education and training. However, some trends are arising that may further opportunities for VET students to develop their entrepreneurial skills. For example, Reykjavik University, in collaboration with The Ministry of Education, Science, and Culture and VET schools in Iceland formed an agreement to support VET students into higher education with an emphasis on innovation and entrepreneurship. Furthermore, school principals have not shown many interests in putting a focus on entrepreneurship

## I01 - National Report: Iceland

education and training. However, in some cases, they offer courses that apply to innovation and creativity but only talk about entrepreneurship as an integrated part of innovation and creativity. Even though innovation and creativity have a tight connection to entrepreneurship, it is still somewhat unfortunate that no tailormade entrepreneurship programs exist in VET schools. A well-defined strategy on how to develop courses that introduce entrepreneurship and activities that are important to VET students to acquire their entrepreneurial mindset is called for. An approach in which leads to further development of entrepreneurship in VET schools that support new start-ups and or ideas that serve VET students' needs and interests and the economy in a whole.

### Findings from the survey

#### Students

Survey for students was sent out late spring after all VET schools had been closed, which lead to issues about distributing on the survey to students and lack of responses. In the end, the survey was sent to the graduate student from this spring and last fall. The response rate was low or little under 16%, so probably it is not liable to take the result as a fact about how students experience entrepreneurship in classes.

The results of the survey, all possibility which was not marked was skipped.

#### Student Profile

##### Age group:

**100%** 19+, **Gender: 100%** Male

##### Which vocational subject[s] are you currently studying?

Please choose one or more from the list below:

60% *Services Industries*

40% *Technology*

##### What educational level are you currently studying at?

Please choose from the list below:

# I01 - National Report: Iceland

20% *Secondary*

20% *Post-Secondary*

60% *University*

**Have you covered the concept of entrepreneurship or entrepreneurial skills during your vocational education?**

100% No

**Would you like your vocational education to incorporate more aspects of entrepreneurship or entrepreneurial activities?**

60% Yes 40% No

If yes, how would you like this to be achieved?

Please choose one or more from the list below: (got vote)

- *Compulsory lessons*
- *Extra-curriculum activity*
- *EU programme*
- *Work-based training/Internship*

**Do you have any aspirations to become an entrepreneur in your chosen area of vocational study?**

60% Yes 40% No

If yes, what actions to plan on undertaking to achieve this goal?

Please choose one or more from the list below: (got vote)

- *Create a new start-up company*
- *Begin a collaboration with others*
- *Start a Social Enterprise*

# I01 - National Report: Iceland

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.

<b>Ideas and Opportunities</b>	<b>Rank (1-5)</b>
Creativity - Develop creative and purposeful ideas	1
Spotting opportunities - Use your imagination to identify/create opportunities	2
Vision - Work towards your vision of the future or an identified goal	2
Valuing ideas - Make the most of ideas and opportunities	2
Ethical and sustainable thinking - Assess the consequences/impact of your actions	3

<b>Resources</b>	<b>Rank (1-5)</b>
Self-awareness and self-efficacy - Believe in yourself and keep developing	1
Motivation and perseverance - Stay focused and overcome difficulties	2
Mobilising others - Inspire, enthuse and get others to share your vision	3
Mobilising resources - Gather and manage the required resources	4
Financial and economic literacy - Develop your financial and economic knowledge	5

<b>Into Action</b>	<b>Rank (1-5)</b>
Taking the initiative - Be pro-active and make things happen	1
Learning through experience – Take lessons from your successes and failures	2
Working with others - Team-up, collaborate and network	2
Coping with ambiguity, uncertainty and risk - Make decisions and stand by them	3
Planning and management - Prioritise, organise and follow-up	4

**Would you be interested in being mentored by an Entrepreneur?**

90% Yes 10% No

**Define what entrepreneurship means to you in one sentence**

- Be open for the big game, thinking out of the box

# I01 - National Report: Iceland

- Creating something new or better
- As I see it, the entrepreneur is the one who performs

The result shows that VET students have not been introduced and/or gained experience and knowledge about entrepreneurship as a part of their education, but 60% aspires to become an entrepreneur. The result also shows that 90% of students would be interested in being mentored by an Entrepreneur. But as mentioned earlier, the response rate was only 16%.

## **Entrepreneurs**

A business association for journeyman was asked to send out the survey for entrepreneurs. The association was willing to help, and the survey was sent to them. When no responses came back, the organization was contacted again; they answered that they didn't send the survey out to members. When that was clear, few entrepreneurs were contacted directly because the time was running out.

Those entrepreneurs who were contacted gave a little sense of which path they took to get understanding and knowledge about being an entrepreneur. They all agreed that vocational education didn't provide them with proper training and knowledge about entrepreneurship. The entrepreneurs mentioned that some education about entrepreneurship is important because they had to develop their entrepreneurial skills on their own, that is re-discover the wheel. Some of them joined universities or other unofficial, educational institution that help entrepreneurs to gain skills and understanding of what entrepreneurship is, but most of them learned it the hard way by making mistakes and start again. The unanimous opinion was that it would have been easier for them to start their business if VET schools would have provided them with formal education.

## **Vocational professionals**

The survey for vocational professionals was sent out late spring after all VET schools were closed, which is an issue because it is difficult to reach out and have them to sit with their computers and do the survey. To gain some responses, the survey was sent to teachers by e-mail finding addresses on homepages of the VET schools. The response rate was rather low, similar to the student survey, little under 12%, so probably



## I01 - National Report: Iceland

it is not liable to take the result as a fact about how teachers experience entrepreneurship in classes.

The results of the survey, all possibility who was not marked was skipped.

### Educator Profile

Age group:

11% 25 – 34    11% 35 – 44    33% 45 – 54    44% 55+

Gender:

78% Male    22% Female

### Which vocational subject[s] do you deal with?

Please choose one or more from the list below:

33% *Services Industries*

11% *Social Sciences*

55% *Technology*

11% *Other* [marine, mechanical and electrical engineering, "Technology"]

### What educational level[s] do you deal with?

Please choose one or more from the list below:

11% *Post-Secondary*

66% *College*

33% *University*

### Have you introduced the concept of entrepreneurship or entrepreneurial skills to your vocational students?

66% Yes    34% No

If yes, in what context and how have you presented the concept?

## I01 - National Report: Iceland

Please choose one or more from the list below:

11% *Compulsory lessons*

22% *Extra-curriculum activity*

22% *EU programme*

11% *Summer school*

44% *Work-based training/Internship*

**Would you like to incorporate more aspects of entrepreneurship or entrepreneurial activities into your work, curriculum or teaching practices?**

100% Yes 0% No

If yes, how would you like achieve this?

Please choose one or more from the list below:

33% *EU programme*

88% *Work-based training/Internship*

**Do you consider yourself as entrepreneurial and/or do you have practical experience as an Entrepreneur?**

55% Yes 45% No

If yes, in what way and what practical experience do you have?

- Workshop
- 15 years as an entrepreneur
- Electrical.

Have you received any training or professional development relating to the concept of entrepreneurship or entrepreneurial skills?

33% Yes 67% No

# I01 - National Report: Iceland

If yes, then what format did the training take and was it certified?

- Electrician and engineering

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.

<b>Ideas and Opportunities</b>	<b>Rank (1-5)</b>
Vision - Work towards your vision of the future or an identified goal	1
Spotting opportunities - Use your imagination to identify/create opportunities	2
Creativity - Develop creative and purposeful ideas	3
Valuing ideas - Make the most of ideas and opportunities	4
Ethical and sustainable thinking - Assess the consequences/impact of your actions	5

<b>Resources</b>	<b>Rank (1-5)</b>
Self-awareness and self-efficacy - Believe in yourself and keep developing	1
Mobilising resources - Gather and manage the required resources	2
Mobilising others - Inspire, enthuse and get others to share your vision	3
Motivation and perseverance - Stay focused and overcome difficulties	4
Financial and economic literacy - Develop your financial and economic knowledge	5

<b>Into Action</b>	<b>Rank (1-5)</b>
Working with others - Team-up, collaborate and network	1
Planning and management - Prioritise, organise and follow-up	2
Learning through experience – Take lessons from your successes and failures	3
Taking the initiative - Be pro-active and make things happen	4
Coping with ambiguity, uncertainty and risk - Make decisions and stand by them	5

**Do you think your learners would benefit from being mentored by an Entrepreneur?**

90% Yes    10% No

Defining Entrepreneurship

- On hand work is important

## I01 - National Report: Iceland

- Getting work knowledge by doing things
- Future

It seems that teachers think they are guiding more about entrepreneurship than students notice. Teachers are very interested in giving more teaching in this field.

### Conclusion

Like mentioned before the lack of responses of the survey, unfortunately, resulted in weak results. Despite that, it gives us a glimpse of the situation and how important it is to start developing course material, training and other activities that are important to increase understanding of the importance of entrepreneurial education in vocational schools in Iceland. The results from the surveys indicate that entrepreneurial training and education is lacking and that the need to act toward educating young entrepreneurs is clear.

According to the answers we received, however, there is a difference between what teachers and students say about entrepreneurship teaching. This can be explained by the fact that student assignments are presented in such a way that they have to show particular pioneering effort in completing tasks without the teacher having the initiative to assist. If a teacher submits a project without specifying that he/she is getting students to show initiative, then the student can be expected to fail and not be instructed or given any training in entrepreneurship or innovation.

It is clear, however, from conversations with entrepreneurs that they consider entrepreneurship education in VET schools profoundly lacking. Furthermore, conversation in meetings with people working in the Ministry of Education, Science, and Culture indicate that vocational education is becoming more and more important to the economy in whole and that teaching and training entrepreneurship in VET schools is very important. This reflects the answers from the students and teachers survey in which they attach importance to further greater emphasis on education that focuses on entrepreneurship and entrepreneurial activities in vocational schools.