Please cite this publication as:

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This VET in Europe report is part of a series prepared by Cedefop’s ReferNet network. VET in Europe reports provide an overview of national vocational education and training (VET) systems of the EU Member States, Iceland and Norway. The reports help to understand VET’s main features and role within countries’ overall education and training systems from a lifelong learning perspective, and VET’s relevance to and interaction with the labour market.


The opinions expressed here do not necessarily reflect those of Cedefop.

VET in Europe reports are cofinanced by the European Union and ReferNet national partners.

ReferNet is a network of institutions across Europe representing the 28 Member States, plus Iceland and Norway. The network provides Cedefop with information and analysis on national vocational education and training. ReferNet also disseminates information on European VET and Cedefop’s work to stakeholders in the EU Member States, Iceland and Norway.
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Chapter 1. External factors influencing VET

1.1 Demographics, economic structure and international perspective

With only 348,450 (1) inhabitants and relatively large area of 103,000 km², Iceland is one of Europe’s smallest economies with correspondingly small educational landscape in Vocational Education and Training (VET). The Icelandic population was for the longest time very homogeneous but has in recent times become ever more international with the proportion of foreign citizens standing at 12.2% of the population in late 2018, the largest group coming from Poland (2). Today, with a continuous urbanisation for the past 100 years, more than half of the population lives in and around the capital area, the latter half on the coast line around the island.

The Icelandic economy has grown very rapidly the past decades, from being one of the poorer countries of Europe to ranking among the highest economic performers.

Today, the Icelandic economy can be defined as small but open economy with GDP growth 3.6% in 2017. That same year GDP per capita measured in USD at 53,102 and GDP volume per capita stood at 130, well above the EU28 where the EU28 baseline is set at 100 (3).

In 2011, after the 2008 banking and financial crisis, the economy slowly started to turn around. Unemployment rates gradually decreased and for the last 3-4 years unemployment rates have reached as low as under 2% at a point. A recent boom in tourism has contributed to a sharp economic growth and contributed to an already high employment rate, which in 2018 measured 80.1%, with a correspondingly low unemployment rate 2.8% in 2017 (4). To put the increased tourism in perspective, it may be noted that the number of tourists has

(1) Eurostat, tps00001 and proj_15ndbims, provisional data as of 1 January [Extracted on 28.01.2019 and 24.01.2019]
(4) Eurostat, tps00203 [Extracted on 25.01.2019]
risen from 566 000 in the year 2011 to 2 225 000 in 2017 \(^{(5)}\). The low exchange rate of the ISK following the 2008 crisis was a large contributing factor in the increase in tourism, but also the governmental efforts to advertise Iceland as an interesting tourist destination.

In the very near-term, it can be said that the wheels of economy have been on a fast spin until around the end of 2017 when signs of a slowdown could be detected. A decline in the steep rise of number of tourists, and a weakening of the small Icelandic currency (ISK), especially towards the end of 2018.

Iceland’s access to abundant energy and natural resources underpin a high GDP as revenues from aluminium production and seafood export together with revenues from tourism constitute the largest part of the economy. The economy of Iceland, alike most European economies, can by characterised by its large service sector. This can be largely attributed to the increased tourism in the country. The table below presents a picture of how employment is divided by two main sectors:

<table>
<thead>
<tr>
<th>Table 1. Percentage of employed people according to sectors, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture and fisheries</strong></td>
</tr>
<tr>
<td><strong>Industry</strong></td>
</tr>
<tr>
<td><strong>Service</strong></td>
</tr>
</tbody>
</table>

*Source: Statistics Iceland (Hagstofa Islands)*

<table>
<thead>
<tr>
<th>Table 2. Key statically figures</th>
</tr>
</thead>
</table>

*Source: Statistics Iceland (Hagstofa Islands)*

\(^{(5)}\)Icelandic Tourist Board. (no date.). *Total number of foreign tourists (Heildarfjöldi erlenda ferdamanna).* [https://www.ferdamalastofa.is/is/tolur-og-utgafur/fjoldi-ferdamanna/heildarfjoldi-erlenda-ferdamann](https://www.ferdamalastofa.is/is/tolur-og-utgafur/fjoldi-ferdamanna/heildarfjoldi-erlenda-ferdamann)
Iceland is not a member of the European Union. Since 1994 Iceland has been a member of the European Union's single market via the Agreement on the European Economic Area (EEA). The EEA Agreement provides full access to EU's education programmes, Erasmus+ and Horizon 2020, the framework programme for research and innovation. Since 2002, Iceland has been participating in the peer-learning activities and reporting system of the EU's Open Method of Coordination (OMC) on education and develops its policies in this field in line with European standards.

Through the EEA Agreement, Iceland extends the application of EU Internal Market law, the so-called ‘four freedoms’, i.e. the free of movement of goods, services, capital and persons, into the Icelandic legal framework.

Furthermore, Iceland has a well-established and regulated system of cooperation between social partners and government. On VET, the social partners play a particularly big role. They negotiate through collective bargaining to control wage levels and influence prices. Labour Unions are strong in Iceland, which is a necessity when bearing in mind the small size of Icelandic companies. Small and medium-sized enterprises (SMEs), defined as enterprises with less than 250 employees, constitute more than 99 per cent of all enterprises in the country. These numbers indicate that apprenticeship training in Iceland’s upper secondary VET in most cases takes place in SMEs.

Iceland has two administrative levels: state and municipality (Isveitarfélög). In Iceland there are 74 municipalities, only nine of which have more than 5,000 inhabitants. It is important to bear in mind the small size of some municipalities when examining the VET landscape. Six municipalities have in fact fewer than 100 inhabitants. Local autonomy is a strong political principle in Iceland and one of the largest responsibilities the municipalities have is to be in charge for primary and lower secondary education. The state is responsible for public upper secondary education and training, which includes VET.

A wide variety of education and training options are available to people in and around Reykjavik but in more rural areas, educational options, not least within VET education tend to be more limited.

Central to the Icelandic VET education and training system is the framework legislation on upper secondary education; The Upper secondary school Act 92/2008 (6). The legislation covers upper secondary general education and VET, including apprenticeship training, for young people and adults, delivered by both public and private institutions. It states that the Ministry of Education and Culture has overall responsibility for national policy development

https://www.althingi.is/lagas/nuna/2008092.html
and administration of all levels of education and training. Generally, it furthermore states that upper secondary schools shall impart knowledge and train students in a way that provides them with the skills required for specialised occupations and the prerequisites to pursue further education.

1.2 Employment, overall and in VET
Iceland’s overall registered unemployment rate in July 2018 was 2.2%, up from 1.8% the year before (1). Longer term employment rates as percentage of the total labour force from 2001-2017 cast even a better picture on the growth of the economy, especially in the service sector, see figure 1.

Figure 1. Registered unemployment rate as a % of the total labour force in Iceland 2001-2017

![Unemployment Rate in Iceland 2001-2017](source: Statistics Iceland (Hagstofa Íslands))

Reflecting well the ‘growing-pains’ of the Icelandic labour market, as number of hours worked is the most common measure of economy-wide labour input, it is worth noting that according to preliminary data, year-on-year annual increase in total employed persons and total hours worked in Iceland between

the years 2016 and 2017, measured at 4.8%, 3.4% respectively(8). These growing pains have had an impact on VET. In many VET professions, especially in the ‘certified trades’ of VET a journeyman’s exam is a necessary precondition for being hired. For most VET graduates, getting a job is relatively easy. But as with many other countries where the economy has been growing too fast, there is also demand for VET skilled labour. Unfortunately, this has been a reality in Iceland during the latest boom in tourism, much to concern of the certified trades’ unions.

As for salaries, it can be seen in the table 3 below that VET professionals on average receive salaries only slightly lower than technical graduates and other specialised people, considerably lower than what specialists receive.

Table 3. Gross monthly medium salaries for employees in the private sector, 2017

<table>
<thead>
<tr>
<th></th>
<th>IKR</th>
<th>EUR*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All groups</td>
<td>730 000</td>
<td>6 015</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1 313 000</td>
<td>10 819</td>
</tr>
<tr>
<td>Specialists</td>
<td>924 000</td>
<td>7 614</td>
</tr>
<tr>
<td>Technical and specialised people</td>
<td>782 000</td>
<td>6 444</td>
</tr>
<tr>
<td><strong>VET professionals</strong></td>
<td>762 000</td>
<td>6 279</td>
</tr>
<tr>
<td>Office workers</td>
<td>551 000</td>
<td>4 540</td>
</tr>
<tr>
<td>Unskilled workers</td>
<td>496 000</td>
<td>4 087</td>
</tr>
<tr>
<td>Service, sales and other expedients</td>
<td>537 000</td>
<td>4 425</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland (Hagstofa Islands). "Exchange rate at 22.11.2017, 1 EUR 121,36 ISK.

During the 12-month period from May 2017 to April 2018, the average total number of employers in Iceland was 17 866 and the average number of employees was 191 000. This is an increase of 3.7% for employers and 4.4% for employees, compared with the year before. Figure 2 captures well the steady increase in the service sector, mostly attributed to booming tourism.

As for longer-term unemployment, there is evidence that Iceland’s (comparatively very low but existing) long-term unemployment has come to a halt. After the increase in the years 2009 to 2012 the long-term unemployment is now reduced to what it was before that period and very little change is measured between quarters, see figure 3 below:

Source: Statistics Iceland (Hagstofa Íslands)
1.3 Educational challenges in VET
In June 2014, a White Paper on educational reform (9) was published by the Ministry of Education Science and Culture.

The reform focused mainly on identifying the status of Iceland’s education system in the context of high equity but decreasing student performance and low enrolment in VET and slow (and low rates of) study completion. The White Paper proposed priorities of actions, establishing two main strategic goals for 2018: 1) boosting minimum reading literacy standards 79% to 90% by the end of 2018 and 2) increasing the graduation rate in upper secondary education from 44% to 60% by 2018 with the complimentary objective of reducing dropout.

Today, at the time of writing of this report in November 2018, the necessary reforms introduced by the 2014 White Paper, including on VET are either underway or starting. None can be said to be completed. Furthermore, most challenges described in the White Paper still hold today, although much is being done to remedy the challenges described, not least that relatively few students enrol in vocational programmes and those who do are less likely to graduate on time.

The White Paper also explains the need to restructure and shorten vocational education in Iceland and to develop a tertiary vocational education level. By the end of 2018, no major progress can be reported regarding establishing a tertiary vocational education level.

Worth highlighting however is that a committee was commissioned in 2016 to examine the need for and the experience of other countries regarding tertiary vocational education. The committee examined several cases in Europe and highlighted that of Germany and Poland, but also how the Nordic country’s approaches to ‘bridging education’. The committee also examined professional higher education (PHE) in a European context, noting that the PHE in many European countries has been in a flux. The committee took note of the many possible approaches to establishing a tertiary vocational education, having some of the major EU approaches and guidelines in mind, including the Berlin Communiqué of 2003 and other pan-European methodologies of harmonizing approaches to professional higher education. One of the main conclusions was that a strong need is for a policy and a strategy for the next step to be taken and recommended that a good starting point could be establishing some pilot-

projects. Some of the pilot-projects have been commenced in cooperation with the social partners and with programmes starting in January 2019.

The education sector in general is also experiencing human resource management difficulties. The teaching profession is also aging rapidly, not least for teachers in secondary schools, including VET teachers where majority of teachers are past 50 years of age. That is linked to the fact that VET teachers acquire instructor training and teachers diploma when they are at the end of their career.

Another factor influencing VET has roots in economic developments. The rapid growth of the tourism sector and shifts in policy strengthening of the green economy has attributed to a growing pressure on the VET to modernise.

Iceland’s contribution towards the greening of the economy has been in the development of renewable energy. Homes and industries use either geothermal or hydroelectric energy. Several experiments are under way in developing new sources of green energy also for cars and ships. For students of marine mechanics must learn to deal with new engines driven by methane gas. In September 2018, the Icelandic government announced a ban on new registration of fossil fuel cars by 2030. This will further sharpen the focus on environmentally friendly approaches in education in the automotive and transport industry.

As explained above, the beneficial exchange rate for tourists has contributed to Iceland being a popular place for tourists to visit. Subsequently this has increased the demand for accommodation for tourists, and Iceland, like other countries, has seen a trend in centrally located apartments being rented out for tourists rather than domestic residents. This has increased the demand for new residential apartments, as well as commercial housing in Reykjavík and the surrounding areas.

Because of increased construction and a boom in tourism in Iceland, the need for skilled labour has grown as recognition of professional qualifications. The need is met with labour migrants which is apparent in the large number of validations of foreign vocational qualifications being issued in sectors related to construction, such as builders and electricians. In the beginning of 2018, the rate of labour migrants was 8.9% in Iceland (10).

1.4 Educational attainment

Many attainment indicators in Iceland are below relevant OECD and EU averages. A major challenge, as described in most Icelandic policy papers (including the White Paper on Education) is the high upper secondary school level drop-out rate. In 2012 OECD published a report, Towards a strategy to prevent dropout in Iceland \(^{(11)}\) where the OECD experts divided the causes of early school leaving into two groups: institutional causes, those which concern the organisation of the school system and the work carried out in schools, and personal causes, such as learning progress, social background and participation in the labour market.

Another structural problem, much relating to the former is the high proportion of adults who have not completed upper secondary education, see figure 4 below, one of the highest ratios in the OECD.

This comes in contrast with the high proportion of the population having tertiary education. This should be explained further: There is still a considerable mismatch in the educational attainment levels of the Icelandic population; around 23% of the population has only completed compulsory education but at the same time, the percentage of people with tertiary education is higher than in most other European countries and gradually increasing. The percentage of people with VET and additional education is therefore lower than in most other European countries, see table 4 and figures 4 and 5 below:

Figure 4. Educational attainment 2003 - 2017

![Figure 4. Educational attainment 2003 - 2017](image)

Source: Statistics Iceland (Hagstofa Íslands)

\(^{(11)}\)OECD (2012), *Towards a strategy to prevent dropout in Iceland*.  
Another and possibly even more concerning trend in Iceland during the past decade is the sharp difference in the educational attainment between males and females. If the upper secondary and tertiary education is examined, the picture presents a shocking trend. The past 2-3 decades the ratio between the two sexes, regarding educational attainment in the post-compulsory stages upper secondary and tertiary degrees has changed significantly. In 2003 the difference between the genders was only 5% with 24.5% of males holding a tertiary degree, compared with 30% of females (12). Today, this gap has widened significantly, see table 4 and figure 5 below:

Table 4. Educational attainment of people aged 25-64, 2017

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education</td>
<td>23.2%</td>
<td>22.5%</td>
<td>22.9%</td>
</tr>
<tr>
<td>Upper secondary education</td>
<td>42.1%</td>
<td>27.0%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>34.7%</td>
<td>50.5%</td>
<td>42.4%</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland (Hagstofa Íslands)

Figure 5. Educational attainment 2009 – 2017

Source: Statistics Iceland (Hagstofa Íslands)

Chapter 2. Provision of VET

Figure 6. VET in Iceland’s education and training system

NB: ISCED-P 2011.
Source: Cedefop and ReferNet Iceland.
2.1 Introduction

The education system in Iceland entails: pre-school, compulsory education (a single structure primary and lower secondary school structure), upper secondary education including VET, and higher education. The Icelandic school system is inclusive and free of charge, except for minor registration fees at the upper secondary level, including VET where minor material fees may also apply (see more detail in Section 2.3.7.). Children and young people have an equal right to education, regardless of where they live, their gender, social or cultural background or any special needs. There are a few private, education institutions but they also receive public funding.

Municipalities are responsible for pre-primary and compulsory education – primary and lower secondary schools. The central government steers upper secondary schools including VET education. The state partially finances various forms of continuing and adult education, such as evening classes in upper secondary school, distance learning and lifelong learning centres but central to funding of VET are grants made from state financed funds for VET in business and industry. Iceland also allocates funds for continuing education and lifelong learning courses for civil servants and university educators, including school teachers.

Education is steered centrally by the Ministry of Education, Science and Culture. The ministry oversees and provides curriculum for all school levels, including VET but the VET institutions have a large say in shaping the content of each study line. Established in 2015, the Directorate of Education, Menntamálastofnun, advises on educational policy relating to school development and curricula and is the focal point for several international cooperation projects, for example for OECD and the European Commission, including PISA, TALIS, Eurydice and ReferNet.

In higher education, the degree structure is in line with the Bologna Process, with 3-year (180 ECTS) Bachelor, 2-year Master and 3-year PhD as the main model. Higher VET is mostly at post-secondary but non-tertiary level, but certified tradesmen (with a journeyman’s exam) can enter (90 ECTS) diploma studies in construction, mechanical or technical engineering at tertiary level, earning them the professional title of a certified technician. Otherwise, VET graduates have several other options for progression to tertiary level studies. Bifröst and Reykjavik universities run one-year university preparatory programmes as well as Keilir Educational Institute. Some schools at the upper secondary level offer distance learning or evening school options and Mimir adult education centre offers bridging options popular with those who have undergone validation of informal learning.
Since 2007, a qualifications framework for higher education has been in place. Since autumn 2016 the Icelandic Qualification Framework (ISQF) has been in place (Mennta- og menningarmálaráðuneytið - The Ministry of Education and Culture, 2016). The Icelandic qualification framework has been aligned to the European Qualification Framework (EQF), with some differences nevertheless in the numbering of the qualification levels (13).

Table 5. Reference process of the Icelandic proposed NQF (ISQF) and the EQF

<table>
<thead>
<tr>
<th>ISQF</th>
<th>EQF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISQF 1</td>
<td>EQF 1 and 2</td>
</tr>
<tr>
<td>ISQF 2</td>
<td>EQF 3</td>
</tr>
<tr>
<td>ISQF 3</td>
<td>EQF 4</td>
</tr>
<tr>
<td>ISQF 4</td>
<td>EQF 5</td>
</tr>
<tr>
<td>ISQF 5.1</td>
<td>EQF 6</td>
</tr>
<tr>
<td>ISQF 5.2</td>
<td></td>
</tr>
<tr>
<td>ISQF 6.1</td>
<td>EQF 7</td>
</tr>
<tr>
<td>ISQF 6.2</td>
<td></td>
</tr>
<tr>
<td>ISQF 7</td>
<td>EQF 8</td>
</tr>
</tbody>
</table>

Source Ministry of Education

For details of how the ISQF and the EQF differ, a reference is made to an official reference report of 2014, providing a comprehensive reference of the Icelandic National Qualifications Framework (ISQF) to the European Qualifications Framework for Lifelong Learning (EQF) (Ministry of Education and Culture, 2014). In the report, all Icelandic specificities in the European context are explained in detail.

At upper secondary level, only a very few out of Iceland’s 37 upper secondary schools, offer no form of VET. The most common form of education at this level is a comprehensive upper secondary school which offers both general academic studies and VET. Almost all VET takes place at upper secondary school level (ISQF 3 / EQF 4, ISCED 353,351 or beyond). A few possibilities exist at post-secondary non-tertiary level (ISQF 5 / EQF 5, ISCED 453,454), e.g. tour guides, creative photography, health care assistants’ specialisation in elderly care, digital design, script writing and film direction. Most importantly this level

includes masters of crafts, where journeymen (14) with at least one year working experience can learn how to start a company and train apprentices. The highest ISQF VET levels are captains and marine engineers (ISQF 5 / EQF 5, ISCED 453,454).

2.2. Lifelong learning

Regarding adult and lifelong learning it is also useful to reflect on the situation as described in the 2014 White paper. Some challenges described in the White Paper still hold true, despite improvements in lifelong learning in recent years and the good situation compared to many European peers:

In April 2018, Statistics Iceland published new figures on the general population’s participation in lifelong learning in the period of 2003-2017. The figures show that participation in lifelong learning has decreased in the last two years after an increase between 2014 and 2015. Almost 23% of the 25-64-year-old population participated in lifelong learning, either in school or through other learning with an instructor in 2017, 39,600 persons in total.

Figure 7. Lifelong learning of 25-64-year olds by education level 2003 - 2017

With support from the European Commission, Icelandic authorities underwent a voluntary review of the state of play of its lifelong learning strategy against the backdrop of EU’s Agenda for Adult Learning in 2012-2013 as well as

(14) See Section 2.3.5.
on the implementation status concerning this matter. Some of the core findings were that the adult education system in Iceland was functioning relatively well and that promoters of adult education in Iceland have similar overarching goals and face similar challenges as their colleagues in other European countries.

Adult education organizations played an especially important role in addressing the post-2008 economic challenges, including by getting people into employment and fighting social exclusion. A special ‘Adult education fund’, along with other funding relating to the economic crisis in Iceland, clearly strengthened the work of lifelong learning centres in the countryside.

2.3. Government-regulated VET provision

Almost all Initial VET in Iceland are ‘certified trades’ and built on an apprentice system, where most of the education takes place in school but workplace training is also necessary (see Section 2.3.3. on apprenticeship contracts). The duration of the school time and the time spent at the workplace varies between programmes and branches. In addition there is a small number of VET programmes where all the education and training take place in the school and are not certified trades, e.g. in computer technology and various arts (see Section 2.1, final paragraph, on VET studies at post-secondary level).

2.3.1. Duration

The duration of VET study programmes varies between two semesters and four years. Study programmes’ vary at the upper secondary school level and at ISQF qualification levels (see Section 2.1, table 5), regardless of the programme being academic, artistic or vocational. The duration is mostly a function of these levels. The most common duration of VET studies in certified trades is four years. An example would be the level three electrician programmes which are either six semesters in school and 48 weeks in apprenticeship, or seven semesters at school and 30 weeks in apprenticeship, after which time the pupil is ready to complete a journeyman’s examination. An example of a shorter level two programme is a cook programme with two semesters at school and 34 weeks in work-based training, or a social care assistant programme with five semester duration, out which the last 2-3 take place in work-based training.

New study programmes are proposed by the upper secondary schools, in cooperation with the occupational councils and often at the latter’s initiative who also define the quality, competence, skills and knowledge requirements and work descriptions. The Directorate of Education liaises between the two and the
Ministry of Education, Science and Culture, which confirms new study programmes.

School time is often divided into a basic part, which is common for several studies in similar sectors, and specialisation in several trades. To take an example, training for the building sector starts with combined courses for house builders, furniture makers, painters, masons, wall-papering professionals and technical drawing students. After the first term of such common studies, students specialise. In other words, students can start with taking only general subjects which are more or less the same for all trades, they can start at a broad basic part or they can enter straight into a specialised field of their choice. The entry points are many, but their number varies from year to year. In programmes where there are only few students enrolled, it may not be possible to enter every year, thus some students must wait for a semester or two to enter their trade of choice. This is also because demand for several of the more specific trades is on a sharp decline, some trades are only more sporadically on offer (15).

Access to VET taught at post-secondary non-tertiary level depends on the completion of an upper secondary level certificate in the relevant subject and requires work experience, the length of which differs much.

2.3.2. Curricula

All upper secondary schools must have 'school curriculum' where educational aims, intended learning outcomes, assessment, content, learning interactions and the connections between these elements are listed.

Individual schools are responsible for all study programs they offer but can use study program from other schools as well. According to the Icelandic national curriculum guide for upper secondary schools (16), educational institutions may develop new study programs, although subject to an approval and validation by educational authorities after consultation with the relevant occupational council, in case of a VET program.

The directorate for education on behalf of the education ministry validates the study programs for all upper secondary education and training which become

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(15) Examples include rare trades such as stone making, saddle making and hat making, but also until recently more popular trades such as printing and book-binding which are facing a sharp decline in demand in the Icelandic labour market.

part of the curricula for upper secondary schools when published in the legislator’s legal journal.

The study programs for all trades are developed in cooperation with members of each occupation’s association through twelve occupational councils. Job descriptions, knowledge, skills and competences are gradually revised by the occupational councils.

In all upper secondary schools, it is obligatory to pass several core subjects, namely in Icelandic, English and mathematics. There is a great variation between study programmes as to how many of the core courses the student needs to finish. In the VET curricula, the core subjects remain the same although the number of credits (17) may vary. Therefore, learners in vocational education can be enrolled in a VET programme while taking a study path leading to matriculation examination at the same time.

2.3.3. Apprenticeship contracts

According to the framework legislation on upper secondary schooling (Stjórnarráð Íslands - Government offices of Iceland, 2008)(18), a prerequisite for doing a qualified VET workplace training is having a contract with a company which is willing and able to offer training in a VET subject. Many prerequisites for such a contract to be signed are at force, including that of the workplace having a certified master in the trade in question.

(17) A secondary school credit is defined as the standard for the work effort of upper secondary school students, whether their studies are vocational or academic, and whether they take place at school or elsewhere. Each secondary school credit equals 18 to 24 hours of work, corresponding to pupils working an average of three days, six to eight hours a day. Each study programme is composed of a certain number of credits and is assigned a level in the ISQF based on the expected learning outcomes. A minimum number of credits for the matriculation exam is 200, but some schools / study programmes demand up to 240 credits. Study programmes with final learning outcomes at EQF 4 are generally 150 to 240 secondary school credits. Minimum 17 per cent of the studies are defined as general education at EQF 2 but are never to exceed 33 per cent. One third (33%) up to half of the studies is specialisation at EQF 3. Minimum 17% of the studies are defined at EQF 4 but this is never to exceed 33 per cent. Within VET, the number of credits required for professional rights can vary from 120 credits at EQF 3 (health care assistants e.g.) up to 290 credits at EQF 4 (some journeymen's exams) and even further with additional VET studies at EQF 5, such as study for a master of craft, film direction, creative photography and health care assistants’ specialisation in elderly care.

(18) Article 28.
Two types of contracts are possible:

- a contract between the school and the company on the training content must be made as per regulation issued by the Minister for Education, Science and Culture (Stjórnarráð Íslands - Government offices of Iceland, 2011), which contains detailed provision concerning contracts for on-the-job training.

- a traditional apprenticeship contract between the company and the learner, stipulating the rights and obligations of the workplace and the learner respectively as well as the objective of the training, quality control and the handling of possible disputes. The learner becomes an employee and receives a marginal salary during the training, in line with labour market agreements where the number of working hours is also set.

For several trades, the Ministry of Education, Science and Culture has allocated the overall management of the training contracts to a common education centre portal hosted by (IDAN education centre- IDAN fræðslusetur ), which offers continuous education for several VET sectors, where contracts have been streamlined and modularised and guidelines have been issued to the workplaces. Still in the making in 2018 is an educational VET logbook where the student in question as well as the trainer marks all details of the teaching process and the knowledge, skills and competence acquired for the job at workplace, into the logbook. In the end, the teacher or the institution must certify each step of the teaching process and that specific competences have been achieved.

The length of the workplace training varies from 3 to 126 weeks, depending on the VET study programme (19). The reasons for this difference are first and foremost two: the overall length of the programme on the one hand and the tradition in each sector on the other. Similar training takes place for professionals in electricity and electronics at Rafment – VET centre for electricians (Rafmennt - fræðslusetur rafiðnaðarins).

2.3.4. Innovation

Teaching methods and material are under constant development. In the pipeline there are efforts to further innovate the VET curricula, both for general and for specific skills. This is an ongoing task where the VET councils are constantly trying to consider changes in their respective environment, both regarding

(19) See Section 2.3.1.
teaching and other external changes such as ITC. Progress has been made in
access to education for adults who need to update their skills.

2.3.5. Assessments

Each course or workplace training module finishes with some sort of an
assessment, either theoretical or hands-on. Students complete their overall
studies with a VET exam. They can also opt for a path toward Matriculation
exam, in which case the studies may take longer, because they must add general
subjects to their list of VET courses.

For those who do not opt for the Matriculation exam path may take
bridging courses, should they later want to opt for matriculation. This is a route
commonly taken. With the upper secondary school Act 92/2008 the state aims at
making VET students’ access to university more on par with general students,
but it remains to be seen how this will work in reality; at present most universities
faculties limit their access to students with the Matriculation exam.

The most common VET exam is the journeyman’s exam, in which
students demonstrate their hands-on skills and receive exclusive formal rights to
work in the chosen trade. In the health care sector, there is also a formal exam at
the end of the training period, which takes place at a hospital or other centre of
health.

2.3.6. Statistics

As displayed below, the participation rates of young people in VET in Iceland
compared with OECD countries is among the lowest and very much below
OECD’s average
This trend can also be seen in Figure 9, displaying the proportion of first-time entrants to ISCED 3 to IVET programmes of 16-24-year olds in Iceland over a period of 12 years where the enrolment rate average measures at 15.5%.

Source: Statistics Iceland (Hagstofa Íslands)
Figure 10 in contrast to Figure 9 shows the student rate proportion average for students enrolled in VET at ISCED 3 level over a 12-year period as programme types; vocational vis-à-vis general programmes, VET being on average 32.5%. The difference between the two figures’ average rates (15.5% average for first-time enrolment rate and 32.5% general enrolment rate) can be explained by the fact that many students, when measured over time, they have registered at some point in general programmes but have moved over to VET at some point later on. Here it is worth noting that many students who have dropped out of general programmes return to the same upper secondary school for VET programmes after having worked in a trade for some years, determined to finish their study and getting validation on prior learning.

![Figure 10. Students enrolled at ISCED 3, by programme type](source: Statistics Iceland (Hagstofa Islands))

Figure 11 displays the proportion of students in VET and general programmes sorted by age where the high proportion of older students in VET is apparent. A likely explanation is that many who have not finished upper secondary education chose later in life to return to school to finish their studies and to get a validation of prior learning in VET.
Table 6. Number of students in upper secondary education and training 2017

<table>
<thead>
<tr>
<th>ISCED classifications (and total)</th>
<th>Total</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>23 706</td>
<td>12 336</td>
<td>52.0</td>
<td>11 370</td>
<td>48.0</td>
</tr>
<tr>
<td>General studies 3AG</td>
<td>13 587</td>
<td>6 063</td>
<td>44.6</td>
<td>7 524</td>
<td>55.4</td>
</tr>
<tr>
<td>General studies 3CG</td>
<td>1 873</td>
<td>1 004</td>
<td>53.6</td>
<td>869</td>
<td>46.4</td>
</tr>
<tr>
<td>Pre-vocational studies 3BP</td>
<td>209</td>
<td>96</td>
<td>45.9</td>
<td>113</td>
<td>54.1</td>
</tr>
<tr>
<td>Pre-vocational studies 3CP</td>
<td>486</td>
<td>332</td>
<td>68.3</td>
<td>154</td>
<td>31.7</td>
</tr>
<tr>
<td>VET 3AV</td>
<td>31</td>
<td>10</td>
<td>32.2</td>
<td>21</td>
<td>67.8</td>
</tr>
<tr>
<td>VET 3CV</td>
<td>6 344</td>
<td>4 047</td>
<td>63.8</td>
<td>2 297</td>
<td>36.2</td>
</tr>
<tr>
<td>VET 4CV</td>
<td>1 176</td>
<td>784</td>
<td>66.7</td>
<td>392</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland (Hagstofa Íslands).

Table 7. Explanation to table 6: ISCED-07 classifications for education and training used in Iceland

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3AG</td>
<td>General preparatory studies for further studies at tertiary level</td>
</tr>
<tr>
<td>3CG</td>
<td>General preparatory studies for further upper-secondary studies or for general labour market competence</td>
</tr>
<tr>
<td>3BP</td>
<td>Preparatory studies for further VET or practical studies at tertiary level</td>
</tr>
<tr>
<td>3CP</td>
<td>Preparatory studies for further VET</td>
</tr>
<tr>
<td>3AV</td>
<td>VET leading to certain professional qualifications and providing access to certain studies at tertiary level</td>
</tr>
<tr>
<td>3CV</td>
<td>VET leading to certain professional qualifications or preparing for further studies at upper-secondary level</td>
</tr>
<tr>
<td>4CV</td>
<td>Post upper-secondary VET leading to certain professional qualifications</td>
</tr>
</tbody>
</table>

Source: ReferNet Iceland
As can be seen from the two tables, above there is still a much greater interest in general studies than VET. This is especially the case among female students where interest in VET has been limited for a long time (63.5% of all university students in 2017 are female according to Statistics Iceland). Other possible explanations for this may include that general education has a higher social esteem than VET and that some of the more traditional female dominated occupations (e.g. nursing and social care) have been moved from upper secondary to tertiary level. However, new VET pathways have been created e.g. for assistant nurses and social service assistants, where the student body is still mainly female.

Table 8. Graduation from upper secondary school, 2015-2016, percentages

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic examination</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Vocational basic examination</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Certified trade basic examination</td>
<td>1.5%</td>
<td>2.7%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Upper secondary school leaving certificate</td>
<td>0.7%</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Diploma of competence</td>
<td>13.3%</td>
<td>9.3%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Vocational certificate</td>
<td>9.5%</td>
<td>8.4%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Certified trade, school certificate</td>
<td>10.5%</td>
<td>16.5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Journeyman’s examination</td>
<td>9.9%</td>
<td>15.9%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Matriculation vocational education</td>
<td>10.8%</td>
<td>11.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Matriculation general</td>
<td>43.5%</td>
<td>35.3%</td>
<td>52.0%</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland (Hagstofa Islands)

It comes as no surprise that the greatest number of graduates has completed the Matriculation exam for general students. This is more apparent among females than males.

2.3.7. Funding of IVET

The main principle for funding the school system and of VET is that the Ministry of Education, Science and Culture makes a contract with each school concerning number of student and then pays a certain amount, based on a specific calculation – a formula which considers the actual cost per student in the relevant subject per term. The amount differs between study programs and is higher for VET student than academic study. This applies both to public and private schools. The Ministry is working on a new financial scheme wherein the actual cost of the VET in question will be calculated into the allocation formula. Students pay a small fee for enrolling each semester (6,000 IKR, around EUR 40) and,
according to temporary article number V of the Upper Secondary School Act, also pay for the material they use during their class hours. This amount varies between subjects (e.g. goldsmiths must pay more than e.g. carpenters) but can never exceed 50 000 IKR (around EUR 300) per school year.

On-the-job training is funded by the companies which train students, but they can apply for a subsidy from the newly established Workplace Training Fund (RANNÍS), financed by the State. All apprentices are entitled to salaries during their training periods, which are a certain percentage of the salaries of fully qualified staff. The costs of training apprentices tend to be the biggest in the beginning but as students become better skilled, they will gradually contribute to the income of the company.

Table 9. Funding for initial vocational education and training

<table>
<thead>
<tr>
<th>Types of IVET</th>
<th>Institutions responsible for funding</th>
<th>Pay for*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified professions</td>
<td>Ministry of Education, Science and Culture (mennta- og menningarmálaráðuneyti)</td>
<td>Education and training at schools and a subsidy towards workplace training</td>
</tr>
<tr>
<td></td>
<td>Employers who train apprentices at workplaces</td>
<td>Apprentices' salaries</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>School fees and study material</td>
</tr>
<tr>
<td>Health and welfare professionals</td>
<td>Ministry of Education, Science and Culture</td>
<td>Education and training at schools</td>
</tr>
<tr>
<td></td>
<td>Ministry of Welfare (velferðarráðuneyti)</td>
<td>Salaries for trainees at hospitals</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>School fees and study material</td>
</tr>
<tr>
<td>Police officers</td>
<td>Ministry of the Interior (innanrikisráðuneyti)</td>
<td>Education and training at schools plus salaries of trainees</td>
</tr>
<tr>
<td>Pilots</td>
<td>Individuals</td>
<td>Pay almost all costs</td>
</tr>
<tr>
<td>Non-certified professions</td>
<td>Ministry of Education, Science and Culture</td>
<td>Education and training at schools</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>School fees and study material</td>
</tr>
</tbody>
</table>

*Precise information is not available on each partner's share of funding contribution.

Compilation from different sources by ReferNet Iceland.
2.3.8. Teachers and trainers

Teachers in schools are responsible for selecting teaching material, giving lessons and carrying out assessments of learning outcomes according to the curricula of each course.

Teachers in VET schools mainly have two different backgrounds:

- general subject teachers (for e.g. languages, mathematics, etc.) have an M.Ed. degree from a university;
- teachers of vocational subjects are masters of craft in the relevant profession and have taken minimum 60 ECTS in pedagogy at a university.

Trainers at workplaces, who are responsible for training apprentices, must be masters of craft in the relevant profession. The trainers at the workplace are responsible for making sure that the apprentices learn the correct use of material, working technique and working culture and competence required for the job.

An important challenge the VET system in Iceland is going to face in the upcoming years is a shortage of qualified teachers. In 2015 teachers got a substantial salary increase in the hope that more young people would see the teaching profession as a tempting one and thereby reversing the trend of a rising age of teaching professionals. So far, this has not produced the desired results and with the boom in available jobs for many VET professionals in recent years, the teaching profession cannot compete. Therefore, the average age of teachers (including VET teachers) continues to rise and in the next 5-10 years more than half of them will retire. With a view to further strengthening the incentive to study for a teacher’s profession the Minister for Education, Science and Culture plans to introduce a bill before Parliament in autumn 2019, making the final year of study a salaried training period for future teachers.

Teachers can receive various scholarships to finance further university studies along with work, school visits home or abroad, conference fees, study leaves etc. The official funds are financed by the schools / employers but managed by the teachers' unions. According to the upper secondary school Act 92/2008 teachers can apply to the Ministry for Education, Science and Culture for up to a year’s study leave on full salaries, but most teachers are not granted such a leave more than once and then usually after more than twenty years at work. Various other options are available, such as scholarships to finance part-time studies or shorter study leaves. Teachers are also expected to spend two weeks per year in continuous education, outside the school year, and have access to various other funds and options for continuous education on the basis of their wage agreements with the state.
2.4. Other forms of training

2.4.1. Adult learning

Even though adult learning is classified here as other forms of training (as opposed to government regulated education and training), some regulations apply to most of it, i.e. courses which give formal credits, which are recognised in the formal system and give study points, which can be used for further training at upper secondary schools. In order to obtain a licence to teach such courses, training providers must be formally accredited by the Directorate of Education on behalf of the Ministry of Education, Science and Culture. According to article 7 of the Adult Education Act number 27/2010, ‘[t]he accreditation shall be based on evaluation of the following:

a. teaching and learning facilities,

b. organisation and supervision of studies,

c. curricula or course descriptions,

d. the competences of adult education providers, with regard to their knowledge and experience,

e. financial issues and insurance, and

f. the existence of a quality control system focused on adult education.

The Directorate of Education accreditation cf. paragraph 2 entails a confirmation that the operation of the relevant education and training provider fulfils the requirements of this act and regulations thereof, at the time when the accreditation is granted.

The accreditation does neither entail commitment for public funding to the education provider in question nor responsibility for the education and training provider’s liabilities’

Participation in all forms of adult education and training has multiplied in the past decades. Numerous private education and training institutions and non-profit institutions owned by social partners have been established, aiming specifically at adults. The main training providers of adult education are:

http://eng.menntamalaraduneyti.is/media/MRN-PDF-Althjodlegt/Adult-Education-Act.pdf
• upper secondary schools where adults can either enrol in regular classes with younger students or in evening classes aimed specifically at adults. In the latter case, the number of teaching hours is only half of the regular school hours;
• the state co-fines nine Lifelong Learning Centres, which offer a wide scope of training possibilities, such as Icelandic for foreigners, university degrees through distance studies in cooperation with universities and courses found to be relevant to their local communities (e.g. in tourism or fisheries). In many cases they offer the possibility of adding on to qualifications through distance learning and a combination of on-campus and distance learning;
• institutions owned by social partners which offer upgrading of skills (see below);
• private institutions which offer e.g. language learning, hobby classes or IT training. These courses normally do not give study points which can be used for upper secondary schools;
• workplaces where employees are trained in e.g. safety measures or the utilization of new equipment.

2.4.2. Upgrading of skills

Each of twelve sectors sets its own demands for the continuous upgrading of skills which vary a lot. Mostly, the market regulates the supply of training, where courses on e.g. new technology, materials and tools are regularly on offer. Each training course leads to award of a diploma. It is possible for VET professionals to get financial support from the social partners’ training funds for these courses so there is a strong encouragement to do so.

The two main training centres are operated by social partners, with some funding from the state:

• the Idan VET centre (IDAN) (www.idan.is is the largest continuous training institution in Iceland. It offers courses for a variety of sectors (food and catering; metal and machines; building and construction; printing technology; auto mechanics; computer supported design and hair styling). Each year, IDAN contacts representatives from each of the sectors and asks about training needs for the following semesters and the courses are planned accordingly;

(22)www.idan.is
• The Retraining and technical training centre for electric and electronic technicians (*Rafðnaðarskólinn*) offers continuous training for electricians and electronic specialists. Other continuous training centres are much smaller and offer a more specialised training:
  • The private company *Sýni* research centre offers various job-related courses for people working in the food industry
  • The Icelandic innovation centre, a public institution under the ministry of industries and innovation, offers courses in e.g. project management or personal leadership. Students at these courses tend to be university graduates who seek continuous education or qualifications.

Special vocational schools, offering both initial VET and continuous training, are e.g.
  • The National police college was an independent institution at upper secondary level under the interior minister but was changed in 2017 to tertiary level education. Police training is now offered by the University of Akureyri.
  • The Iceland fire authority runs the fire service technical college responsible for CVET for fire fighters;
  • School for air traffic controllers is operated by the Icelandic civil aviation administration;
  • The Icelandic flight academy (*Flugskóli Íslands*) and Keilir, (Keilir, the atlantic centre of excellence) offer training for pilots but the airlines are responsible for their own CVET and that the training of personnel follows European standards;
  • The Icelandic college of fisheries offers CVET in fish processing;
  • Ice-Sar (*Slysavarnarfélagið Landsbjörg*) operates a special school for seamen with the aim of teaching them various security measures. It is

(23) http://www.raf.is/
(24) http://syni.is/
(25) http://www.nmi.is/english
(26) http://www.logreglan.is
(27) http://english.unak.is/about/about-unak
(28) http://www.brunamal.is/forida/brunamalaskolinn/
(29) http://vedur.isavia.is/?PageID=39
(30) http://www.tskoli.is/flugskoli-islands/
(31) https://aviationacademy.is/is/
(32) http://fiskt.is/
(33) http://www.icesar.com/.
obligatory for all registered seamen to take a course there before being registered on a boat/ship and at least once every five years.

As can be expected from the variety of these training institutions, the curricula vary a lot. In most cases, the focus is on new technology and hands-on training is very common, even though the studies may require the reading of e.g. manuals. The duration of training is equally different but, in most cases, courses are short and concentrated. Distance training is usually not on offer.

2.4.3. Training at workplaces

Annually the Statistics Iceland (Hagstofa Íslands) carries out a survey among employees where they are e.g. asked about their participation in lifelong learning. Respondents in the labour force survey are asked if they were registered at school or on an apprenticeship, or if they attended a course, conference, seminar, lecture or other taught activity in the last four weeks. The labour force survey is a continuous survey all year, so responses are distributed throughout the year.

Around 35% of all employees seem to participate in some form of training in 2017. According to Starfsafi, the social partners’ training fund for low skilled people, an increasing part of the training takes place at the workplace. This training can be on security, environmental protection, new working techniques or other aspects, which involve all employees at a certain workplace.

Table 10. Percentage of people having undergone some kind of education and training in the last 4 weeks selected years 2012-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Labour market participation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Total</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>34</td>
</tr>
<tr>
<td>2012</td>
<td>Total</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>33</td>
</tr>
<tr>
<td>2014</td>
<td>Total</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>34</td>
</tr>
<tr>
<td>2016</td>
<td>Total</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>37</td>
</tr>
<tr>
<td>2017</td>
<td>Total</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Statistics Iceland (Hagstofa Islands)
2.4.4. Education for immigrants

Immigrants from the European Economic Area have all the same rights to education and training in Iceland as does the rest of the population. Individuals who seek permanent residence permits must prove that they have attended some courses in Icelandic (34). Immigrants from areas outside the EEA must have an Icelandic residence permit before applying for upper secondary or tertiary education. Icelandic for foreigners is offered at:

- upper secondary schools, which, according to the Upper Secondary School Act, must all have a plan on how to receive non-Icelandic speaking people;
- the Lifelong Learning Centres; and
- non-governmental institutions, sometimes related to different municipalities.

There is a big variety of offers, from the most elementary up to a university degree in Icelandic. Immigrants who have been working on the Icelandic labour market for at least six months can apply to their social partners’ training fund for funding of Icelandic lessons. Some companies also pay the training costs directly.

2.4.5. Specific training measures for the unemployed

In recent years, two mayor initiatives have been launched to assist unemployed people improving their education and training. These initiatives are:

- Youth to action (Ungt fólk til athafna) which started in 2010. People aged 16-24 could apply to take part in both formal and informal training, both in schools and at workplaces(35).
- Education can work (Nám er vinnandi vegur) which commenced in 2011. There was no age limit, anyone who was registered as being unemployed could apply and use his or her unemployment benefit to study at upper secondary school or university. On-the-job training was also offered.

The latter initiative is still on-going and therefore statistics on participation in the two initiatives is not complete. The main results of all the initiatives are

(35)Further information on the initiative where there are online slides both in Icelandic and English can be found at: http://www.vinnualastofnun.is/atvinnuleitandi/urraedi/ataksverkefni/ungt-folk-til-athafna/
summarized in a report published by the directorate of labour just before the completion of this report:

Table 11. Participation in initiatives offered by the Directorate of Labour 2014-2017

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment %</td>
<td>3.5%</td>
<td>2.8%</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Number of registered unemployed people</td>
<td>6 474</td>
<td>5 342</td>
<td>4 324</td>
<td>4 170</td>
</tr>
<tr>
<td>Unemployed people who participated in some initiative</td>
<td>5 579</td>
<td>4 400</td>
<td>3 060</td>
<td></td>
</tr>
<tr>
<td>Percentage of participation</td>
<td>86%</td>
<td>82%</td>
<td>71%</td>
<td></td>
</tr>
<tr>
<td><strong>Type of resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic resources</td>
<td>3 380</td>
<td>2 754</td>
<td>1 866</td>
<td></td>
</tr>
<tr>
<td>Coerces</td>
<td>1 855</td>
<td>1 737</td>
<td>1 424</td>
<td></td>
</tr>
<tr>
<td>Study paths</td>
<td>1 015</td>
<td>570</td>
<td>337</td>
<td></td>
</tr>
<tr>
<td>Job related</td>
<td>294</td>
<td>355</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>1 036</td>
<td>676</td>
<td>390</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7 580</td>
<td>6 092</td>
<td>4 233</td>
<td></td>
</tr>
</tbody>
</table>

Source: Directorate of Labour (Vinnumálastofnun).

When individual initiatives are analysed, it turns out that the best results are from training at workplaces. Up to 76% of those who have participated in that initiative are no longer registered as being unemployed. Studying gives the second best result, there up to 64% of people are no longer unemployed.

2.4.6. Funding mechanisms

There are basically four main mechanisms for funding adult education and training, training for immigrants and training for unemployed people:

- the state pays for parts of or the whole training. This applies to training for the unemployed and the training of immigrants where the state subsidises courses in Icelandic;
- learners pay all costs. This applies when the training is not directly related to the learner’s work and is in no way requested by the employer;
- employers pay all costs. This applies when the training is deemed necessary for the workplace, e.g. when new technology is introduced or working procedures changed;
- learners and employers share costs. This can be done directly, so that learners spend some of their free time in work-related training, which is paid by the employer. The more usual form is that either the company or the employee applies to the social partners’ training fund for a subsidy to the training. In several labour market agreements between labour unions
and employers signed since 2000. It has been decided that each employee on the labour market is obliged to pay 0.05% of his/her brutto salaries towards an education and training fund and all employers must pay 0.15% of the same amount. The state contributes to these funds through the Unemployment Security Fund (Atvinnuleysistryggingarsjóður). Several such funds exist, classified according to occupations and/or skills. Employees can apply for training funds according to certain rules and employers can also apply for funds to give specific courses at the workplace.

Table 12. Overview of social partners’ training funds

<table>
<thead>
<tr>
<th>Name</th>
<th>For whom</th>
<th>Web address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landsmennt</td>
<td>Unskilled workers outside the capital area</td>
<td><a href="http://www.landsmennt.is">www.landsmennt.is</a></td>
</tr>
<tr>
<td>Starfsafl</td>
<td>Unskilled workers in the capital area</td>
<td><a href="http://www.starfsafl.is">www.starfsafl.is</a></td>
</tr>
<tr>
<td>Starfsmenntasjóður verslunarskrifstofufólks</td>
<td>Office and shop employees</td>
<td><a href="http://www.starfsmennt.is">www.starfsmennt.is</a></td>
</tr>
<tr>
<td>Starfsmennt fræðslusetur</td>
<td>State employees in the capital area</td>
<td><a href="http://www.smennt.is">www.smennt.is</a></td>
</tr>
<tr>
<td>Sjómennt</td>
<td>Seamen</td>
<td><a href="http://www.sjomennt.is/">www.sjomennt.is/</a></td>
</tr>
<tr>
<td>Ríkismennt SGS</td>
<td>State employees outside the capital area</td>
<td><a href="http://www.rikismennt.is">www.rikismennt.is</a></td>
</tr>
<tr>
<td>Sveitamennt SGS and LN</td>
<td>Municipalities’ employees outside the capital area</td>
<td><a href="http://www.sveitamennt.is">www.sveitamennt.is</a></td>
</tr>
</tbody>
</table>

Compilation from different sources by ReferNet Iceland.

Table 13. Funding for CVET and adult learning

<table>
<thead>
<tr>
<th>Types of CVET</th>
<th>Institutions responsible for funding</th>
<th>Pay for*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publicly provided CVET</td>
<td>Ministry of Education, Science and Culture (mennta- og menningarmálaráðuneyti)</td>
<td>Education and training at schools.</td>
</tr>
<tr>
<td></td>
<td>Social Partners</td>
<td>Subsidies towards training offered at their own training centres.</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>School fees and study material.</td>
</tr>
<tr>
<td></td>
<td>Social partners (employers or social partners’ training funds)</td>
<td>Subsidies for employees towards training and employers’ courses.</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>Pay the remaining costs.</td>
</tr>
</tbody>
</table>

Compilation from different sources by ReferNet Iceland.
Chapter 3. Shaping VET qualifications

When assessing future skills needs the twelve occupational councils (Starfsgreinaráð) are the strongest link with the industry. Article 27 of the upper secondary school Act no. 92/2008 (36) stipulates that: 'The role of the occupational council is to advise the Minister of Education, Science and Culture regarding policy making and implementation of vocational education, to serve as platform for collaboration and coordination for the occupational councils, and to provide opinion of categorisation and division of occupations between the twelve occupational councils'. The occupational councils often initiate new study programmes and define the quality, knowledge, competence and skills requirements, and work descriptions, while the study programmes are developed by the upper secondary schools and the Directorate of Education liaises between the two and the Ministry of Education, Science and Culture, as discussed in Section 2.3.1.

Table 14. Roles and responsibilities in designing and developing VET qualifications

<table>
<thead>
<tr>
<th>Body</th>
<th>Roles and responsibilities</th>
</tr>
</thead>
</table>
| Ministry of Education, Science and Culture| • Appointment of representatives to Occupational councils  
• Formal liaisons with schools and training centres  
• Formal approval of pathways and curricula                                                |
| Schools                                   | Initiatives to establish new pathways                                                     |
| Individuals                               | Seek (necessary) training                                                                 |
| Labour market                             | Indicating to occupational councils and schools the need for new or changed training      |
| Occupational councils                    | • Give formal opinions on drafts for new pathways suggested by schools  
• Suggest and approve changes for certified trades  
• Liaise with the Ministry of Education, Science and Culture                                |

Compilation from different sources by ReferNet Iceland.

Due to the small size of the labour market, most trades are based on a broad level of competences so that graduates have a wider possibility of employment. The exams at the end of each study validates whether this is indeed the case. Thus, the studies can rather be termed output based than input based, even though studies are defined in the hours it takes to complete them.

Table 15. Types of VET qualifications

<table>
<thead>
<tr>
<th>Name of qualification</th>
<th>Awarding body</th>
<th>Necessary conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>The journeyman’s certificates, NQF 3, EQF 4. ISCED 3.</td>
<td>Ministry of Industries and Innovation</td>
<td>School based and workplace training and the journeyman’s exam.</td>
</tr>
<tr>
<td>Other VET certificates at upper secondary level, NQF 3, EQF 4. ISCED 3.</td>
<td>VET schools</td>
<td>School based and workplace training and passing of necessary exams.</td>
</tr>
<tr>
<td>VET qualification at post-secondary, non tertiary level, NQF 5, EQF 6. ISCED 4.</td>
<td>Specialised VET schools</td>
<td>School based and workplace training and passing of necessary exams.</td>
</tr>
</tbody>
</table>

Compilation from different sources by ReferNet Iceland.

Real competence validation/accreditation of prior learning (Raunfærnimat) is a good example of an initiative to validate non-formal and informal learning. People who have acquired some skills at e.g. workplaces can get them validated

(37) No statistical data exists on skills forecasting at any level.
through a formal process, which may shorten their study periods towards e.g. a journeyman’s exam in a trade. They also get valuable assistance (counselling and study aid) if they e.g. deal with dyslexia or other learning problems. Real competence validations are available in several trades and social partners and the Ministry of Education, Science and Culture are working on expanding the offers.

3.1 Quality assurance
The Ministry of Education, Science and Culture validates the study programmes for all upper secondary education and training which become part of the curricula for upper secondary schools when published in the legislator's legal journal. The study programmes for all trades are developed in cooperation with members of each occupation’s association through twelve occupational councils and proposed by the upper secondary schools. Job descriptions, knowledge, skills and competences are gradually revised by the occupational councils.

Even though adult learning is classified here as other forms of training (as opposed to government regulated education and training), some regulations apply to most of it, i.e. courses which give formal credits, which are recognised in the formal system and give study points, which can be used for further training at upper secondary schools. In order to obtain a licence to teach such courses, training providers must be formally accredited by the Directorate of Education on behalf of the Ministry of Education, Science and Culture. According to article 7 of the Adult Education Act number 27/2010, '[t]he accreditation shall be based on evaluation of the following:

- teaching and learning facilities;
- organisation and supervision of studies;
- curricula or course descriptions;
- the competences of adult education providers, with regard to their knowledge and experience;
- financial issues and insurance; and
- the existence of a quality control system focused on adult education.

Accreditation entails a confirmation that the operation of the relevant education and training provider fulfils the requirements of this act and regulations thereof, at the time when the accreditation is granted.

The accreditation does neither entail commitment for public funding to the education provider in question nor responsibility for the education and training provider’s liabilities.'
Chapter 4. Promoting participation in VET

4.1 Incentives for VET learners

Several incentives are in regular use to promote participation in VET. The list below is only on initiatives which exist on a permanent basis, but several ad-hoc initiatives have also been initiated in recent years:

- the Icelandic student loan fund (Lánasjóður íslenskra námsmannna) offers loans with subsidised interest rates to VET learners after the first two years of studies while learners of general education at this level are not entitled to such loans which are otherwise designed for students at tertiary level. The loans are subject to the student / pupil making due progress in a recognized full-time study programme(38);

- the education ministry has operated closely with the education and training service centre (Fræðslumiðstöð atvinnulífsins) and Idan training centre in both the development of new study paths and in the validation of prior learning;

- in recent years, increased emphasis has been put on vocational and educational counselling to help students choose their study paths and thus drawing the attention to often less visible VET options where applicable;

- the education ministry has an ongoing contract with Skills Iceland (Verkiðn)(39) charging this organization with the responsibility of supervising the Icelandic skills competition every other year, as well as to enable participation in Euro skills by Icelandic VET learners.

4.2 Incentives for enterprises

- Work-place training fund (Vinnustaðanámsþjóður) offers companies that train students a subsidy towards their wages. This makes a big difference, especially for small companies which would otherwise not be able to afford training costs;

- all the schools offering VET use a variety of methods to draw potential learners’ attention. They hold open houses, inviting students who are about to complete primary schools and even go so far as inviting them to participate in a few lessons in hands-on VET. Enterprises have

(38) The basic amount for a subsistence loan is (in 2018-19) ISK 492 900 per semester, around EUR 3 650, but additional amounts are granted based on e.g. housing situation and the number of dependants. See further details at https://www.lin.is/library/Skrar/Enska/LI%CC%81N_Rules_EN__2018__2019.pdf.

(39) http://verkidn.is/
participated in many such activities, hoping to attract more learners into VET study programmes;

4.3 Guidance and counselling
In recent years, increased emphasis has been put on vocational and educational counselling to help students choose their study paths, i.a. at grammar school level in order to better introduce VET study paths, as described below in Section 4.4 on a policy White Paper.

4.4 Key challenges and development opportunities
In its White Paper on Improvements in Education, the education ministry concentrates on two main challenges: decreasing ability of compulsory school students to read and process information (as is apparent from the latest PISA study) and the high dropout rate from upper-secondary school. Two main goals are put forward, to be reached by 2020:

- 90% of compulsory school students are to reach the minimum level of reading instead of the present 79%; and
- 60% of upper secondary school students are to complete their studies on time, instead of the present 44%.

To reach these goals several measures are recommended. Concerning VET, the following measures were emphasised:

1. re-structuring VET with simpler basic studies, study programmes built on different steps and learning outcomes as well as cutting study time;
2. all VET should include workplace learning, but the quality assessments, responsibilities and financing should be revised;
3. the legal and institutional framework for VET after upper secondary school should be revised and it should be investigated whether a special VET university (Fagháskól) should be established;
4. the governance and administration of VET should be improved by evaluating the functions of committees and councils and defining the roles of each of them;
5. guidance and counselling should be enhanced, both in the last classes of compulsory schools and the first in upper-secondary schools and it encouraged that more students choose VET.

These measures have commenced and do have the status of a work-in-process - but in November 2018, it is doubtful that the goals will have been met by 2020, at least in all cases.
List of references

Legislation

Statistics
Icelandic Tourist Board (s.d.). Heildarfjöldi erlenda ferðamanna [Total number of foreign tourists]. https://www.ferdamalastofa.is/is/tolur-og-utgafur/fjoldi-ferdamanna/heildarfjoldi-erlenda-ferdamann
Statistics Iceland (2018e). Landsmönnum fjölgaði um 2.560 á þriðja ársfjöð röðung [National staff increased by 2 560 in the third quarter]. https://hagstofa.is/utgafur/frettasafn/mannfjoldi/mannfjoldinn-a-3-arsfjordungi-2018/
Statistics Iceland (2018f). *Participation in lifelong learning continues to decrease.*

Statistics Iceland (2018g). *Slower growth in number of employees.*

Statistics Iceland (2018h). *Unemployment 3.9% in May.*

Statistics Iceland (2018i). *Unemployment rate 2.9% in the 1st quarter.*

Statistics Iceland (s.d.). *Educational attainment.*
https://www.statice.is/statistics/society/education/educational-attainment/

Statistics Iceland (s.d.). *Universities.*
https://www.statice.is/statistics/society/education/universities/

*Publications*


doi system. (n.d.). https://doi.org/10.1787/888933801449


https://www.stjornarradid.is/media/menntamalaraduneyti-media/media/frettir2015/Hvitbok_ENSKA_04.pdf


RANNÍS. (no date). *Workplace Training Fund.*
https://en.rannis.is/funding/education/workplace-training-fund/
