Leaving education early:

putting vocational education and training in centre stage



Introduction

This is one of the 15 country fiches that have been developed as background material to the Cedefop study:

Leaving education early: putting vocational education and training centre stage.

Volume I: investigating causes and extent

Volume II: evaluating policy impact

The publication was produced by Cedefop, Department for learning and employability, under the supervision of Antonio Ranieri.

Irene Psifidou, Cedefop expert, was responsible for the publication and research conducted under the 'Early leaving from education and training' project from October 2013 to July 2016.

Country fiches have been developed and drafted on the basis of desk research and interviews conducted between 2014-15 by ICF consulting services with national stakeholders, social partners, companies, VET providers and practitioners as well as learners who provided country-specific information. They have been validated by selected interviewees (1).

Country fiches are available for: Austria, Belgium-Fr, Germany, Denmark, Estonia, France, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal and United Kingdom.

Work was carried out under Cedefop's framework contract 2013-FWC25/AO/ECVL/IPS-ARANI/EarlyLeaving/OO5/1 3

Please note that this is an unedited version.

rena.psifidou@cedefop.europa.eu

⁽¹) The detailed methodology as well as an anonymous list of all interviewees, including information on country, organisation and job position/role, is available on request. Please contact Cedefop expert in charge Irene Psifidou:

Table of contents

1.	Defii	nitions applying in national and regional context	3
2.	Rate	s of early leaving from VET during last five years	4
3.	Natio	onal and regional strategy to tackle ELET	9
4.	Rece	ent policy initiatives	11
5.	Stak	eholder cooperation	14
6.	Mon	itoring systems	15
7.	Effe	ct of the economic crisis	19
8.		ors positively contributing to the effectiveness of VET in cing ELET	20
	8.1.	National/regional policy factors	20
	8.2.	Systematic features of the (VET) education system	21
	8.3.	Features of the labour market	21
9.	Fact	ors constraining the effectiveness of VET to reduce ELET	22
	9.1.	National/regional policy factors	22
	9.2.	Systematic features of the (VET) education system	23
	9.3.	Features of the labour market	24

1. Definitions applying in national and regional context

Questions	Answers
What is the national definition(s) of early leavers from education and training: who are classified as early leavers from education and training?	 In Estonia early leavers from education and training refers to: (a) young adults (aged 18-24) with at most lover secondary education who are not in further education and training; (b) young people who leave basic education (²) without a certificate; (c) young people who leave school without obtaining an upper secondary level certificate.
What is the national definition of early leaving from VET?	Early leaving from VET is defined as students who were registered as VET students for at least 31 days and who interrupted their studies during the study year (3).
(Does it include those in apprenticeships?)	Students are not considered early leavers if they were in the list of VET school students less than 31 days and did not participate in studies or if they changed their speciality in the same study field in the same VET school (⁴). In 2006 the apprenticeship learning i.e. workplace based learning was legalised as a new study form and in 2007 the regulation of 'Policies and conditions for implementing workplace based learning' (⁵) was adopted by Minister of Education and Research. There is no national definition for those leaving early from apprenticeships, but they are included in the definition of early leaving from VET.
What are the data used to inform this definition and who is responsible for it? (i.e. which data set(s) provide information that is used to compute ELET indicators and who sponsors the collection	The Ministry of Education and Research is responsible for the Estonian Education Information System's (6) (EHIS – Eesti hariduse infosüsteem) register-based data, validated by each school and aggregated once a year. Educational institutions have access to all of the information contained in EHIS concerning the institutions themselves and their students and teachers. Educational institutions also have the obligation to enter information into EHIS and to check and

⁽²) Nine-year comprehensive school during which school attendance is mandatory (*põhikool*). Basic compulsory education comprises primary school (*algkool*) – first three grades – and basic school – grades 4-6.

⁽³⁾ Kutsehariduse valdkonna statistika põhinäitajad 2012/13 õppeaastal, Estonian Ministry of Education and Research. http://dspace.utlib.ee/dspace/bitstream/handle/10062/40731/Kutsehar_Stat12_13.pdf ?sequence=1 (in Estonian) [accessed 2.5.2017].

⁽⁴⁾ Õpingute katkestamise põhjused kutseõppes, University of Tartu Centre for Applied Social Research RAKE. https://www.hm.ee/sites/default/files/opingute_katkestamise_pohjused_kutseoppes.pdf (In Estonian) [accessed 2.5.2017].

⁽⁵⁾ Regulation of 6 April 2007. https://www.riigiteataja.ee/akt/12810050 (in Estonian) [accessed 2.5.2017].

⁽⁶⁾ http://www.ehis.ee/ (in Estonian) [accessed 2.5.2017].

and collects these data).

amend the entered information. The register keeps track of each student's education career. It is also visible if the student has dropped out of school and if he/she continued in evening school, vocational school etc. The register does not provide data about entry into the labour market. This source of information is also used by Statistics Estonia for education statistics, including indicators related to early leaving. Entered data about drop-outs is available by VET institution, curricula, study field and type, gender, age, study year, and study language.

Other indicators related to participation in education (e.g. share of young people with below upper secondary education not in education or training; number of students, graduates and early leavers in different levels of education, Estonian student's PISA performance scores, proportion of adults in lifelong learning) are published mainly in the Development Plans issued yearly by the Ministry of Education and Research. The Ministry also publishes statistics on 'drop-out' on their web site.

Rates of early leaving from VET during last five years

Different statistics regarding early leaving from education and training (ELET)/early leaving from VET (ELVET) rates are presented in tables below. The following three tables on:

- (a) the drop-out rate from school-based VET;
- (b) the drop-out rate from apprenticeships; and
- (c) the drop-out rate from general education show that early leaving is much higher from VET (20.2% in 2012/13) and apprenticeships (25.8% in 2012/13) than from general education (0.4%). Also, drop-out rates are higher from apprenticeships than from VET.

Drop-out rate from school-based VET at upper and lower secondary level as well as VET where compulsory basic education is not required as a prerequisite to start the studies

School-based VET (7)	2008/09	2009/10	2010/11	2011/12	2012/13
Vocational (upper) secondary	2 920	3 090	3 224	3 052	2 857
education	14.7%	15.5%	17.9%	17.7%	18.1%
Vocational education based on	2 225	2 325	2 446	2 724	2 792
(upper) secondary education	22.6%	21.1%	21.2%	22.1%	22.0%
Vocational education based on	166	286	250	228	354
basic education	23.6%	33.9%	27.2%	22.3%	24.2%
Vocational education without the	254	182	216	209	210
requirement for basic education	47.8%	31.9%	42.7%	39.3%	34.7%
Total	5 565	5 883	6 136	6 213	6 213
i Oldi	17.90%	18.10%	19.5%	19.8%	20.2%

Source: Estonian education information system (EHIS); Ministry of Education and Research.

Drop-out rate from apprenticeships

Type of study	2009/10	2010/11	2011/12	2012/13	2013/14
Apprenticeship	592	564	566	551	583
Number of drop-outs	218	177	165	142	144
(%)	36.8%	31.4%	29.2%	25.8%	24.7%

Source: Estonian education information system (EHIS).

(⁷) The vocational education system in Estonia includes:

⁽a) second level vocational education – vocational education and training where basic education (grades 1 to 9) is not required as a prerequisite to start the studies (põhihariduse nõudeta kutseõpe) (ISCED 2C);

⁽b) third level vocational education – vocational training after basic education (kutseõpe põhihariduse baasil) (ISCED 3C);

⁽c) fourth level vocational education, including VET combined with uppersecondary education (*kutsekeskharidusõpe*), and vocational education after upper secondary education (*kutseõpe keskhariduse baasil*) (ISCED 3B);

⁽d) fifth level vocational education (ISCED 4B) (kutseeriharidusõpe).

Drop-out rate from general education

		2010/11		2011/12		2012/13			2013/14				
	Education level	Number of dropouts	Dropout rate	Average dropout age	Number of dropouts	Dropout rate	Average dropout age	Number of dropouts	Dropout rate	Average dropout age	Number of dropouts	Dropout rate	Average dropout age
Men	Basic education	128	0.2%	16.6	144	0.3%	16.8	183	0.3%	16.3	156	0.3%	16
	Secondary education	200	1.7%	18.7	211	1.9%	18.7	117	1.1%	18.5	121	1.2%	18.4
Women	Basic education	79	0.1%	16.9	69	0.1%	16.3	94	0.2%	15	74	0.1%	15.6
	Secondary education	169	1.1%	18.6	148	1.0%	18.4	117	0.9%	18.6	123	1.0%	18.7
Total	Basic education	207	0.2%	16.7	213	0.2%	16.6	277	0.2%	17.1	230	0.2%	15.9
	Secondary education	369	1.4%	18.6	359	1.4%	18.6	234	1.0%	18.5	244	1.1%	18.5
Total		576	0.4%	18	572	0.4%	17.9	511	0.4%	17.1	474	0.4%	17.2

Source: Estonian education information system (EHIS).

(a) Drop-out rates from specific types of programmes at upper secondary school-based VET including VET based on upper secondary education.It is important to note that these are only the main types of programmes.Programmes that have a smaller intake are not included.

The following table shows that the drop-out rate is highest from natural sciences (28.2% in 2012/13) and social sciences, business and law (28.6% in 2012/13). Drop-out rate is the lowest from agriculture (18.8% in 2012/13) and humanitarian sciences and arts (20.1% in 2012/13).

Specific types of programmes		2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Humanitarian	Number of students	1 080	1 225	1 295	1 380	1 373	1 442
sciences and arts	Dropout rate	232 21.4%	237 19.3%	237 18.3%	265 19.2%	276 20.1%	
Network	Number of students	1 459	1 894	2 215	2 468	2 344	2 314
Natural sciences	Dropout rate	372 25.4%	527 27.8%	549 24.8%	651 26.4%	662 28.2%	
Acricultura	Number of students	1 898	1 867	1 764	1 721	1 732	1 818
Agriculture	Dropout rate	360 19%	379 20.3%	356 20.2%	338 19.6%	326 18.8%	
Social sciences,	Number of students	3 372	3 288	2 960	2 638	2 610	2 503
business and law	Dropout rate	849 25.2%	770 23.4%	762 25.7%	717 27.2%	747 28.6%	
On wife o	Number of students	6 337	7 088	7 162	7 003	6 525	6 656
Service	Dropout rate	1 158 18.3%	1 278 18%	1 410 19.7%	1 471 21%	1 469 22.5%	
Engineering,	Number of students	12 491	12 334	11 819	10 976	10 701	10 227
manufacturing and construction	Dropout rate	2 439 19.5%	2 606 21.1%	2 725 23%	2 608 23.8%	2 535 23.7%	
Health care and	Number of students	602	667	797	860	887	739
social welfare	Dropout rate	155 25.7%	86 12.9%	97 12.2%	163 19%	198 22.3	
Total drop out	Dropout rate	5 565 20.4%	5 883 20.7	6 136 22%	6 213 23%	6 213 23.7%	

Source: Estonian education information system (EHIS); Ministry of Education and Research.

(b) The drop-out rates of particular groups (by gender, by age, by study language) from lower and upper secondary school-based VET.

The following three tables on: the drop-out rate by gender, by age, and by study language show that male students (23.4% in 2013/14) tend to discontinue their studies more than female students (19.8% in 2013/14). The drop-out rate is highest among the age groups of 20-24 (25.2% in 2013/14) and 25-29 (25.4% in 2013/14). The rate is lowest among the age group of 30+ (19.3% in 2013/14). The drop-out rate by study language is highest in English (36.4% in 2013/14), then followed by Russian (23.4% in 2013/14) and Estonian (21.3% in 2013/14).

Drop-out rates by gender from lower and upper secondary VET

	2009/10	2010/11	2011/12	2012/13	2013/14
Male	16 054	15 850	15 020	14 357	13 912
(%)	19.4%	21.0%	21.1%	21.7%	23.4%
Female	12 309	12 162	12 026	11 815	11 787
(%)	16.4%	17.6%	18.3%	18.4%	19.8%
Total number of drop-outs	28 363	28 012	27 046	26 172	25 699

Source: Estonian education information system (EHIS).

Drop-out rates by age from lower and upper secondary VET

Age		2009/10	2010/11	2011/12	2012/13	2013/14
Up to 19	Total number of students enrolled	17 855	16 076	14 564	13 519	12 907
	Drop-out rate	15.6%	17.7%	18.0%	18.9%	20.3%
20-24	Total number of students enrolled	6 160	7 169	7 112	6 552	6,022
	Drop-out rate	22.4%	22.6%	23.4%	22.9%	25.2%
25-29	Total number of students enrolled	1 358	1 652	1 930	2 185	2 381
	Drop-out rate	27.9%	24.0%	22.7%	22.3%	25.4%
30+	Total number of students enrolled	2 990	3 115	3 440	3 916	4 389
	Drop-out rate	19.90%	19.30%	18.80%	19.00%	19.30%
Total dro	p-out rate	18.1%	19.5%	19.8%	20.2%	21.8%

Source: Estonian education information system (EHIS).

Drop-out rates by study language from lower and upper secondary VET

	2009/10	2010/11	2011/12	2012/13	2013/14
Estonian	21 236	20 994	20 471	20 015	19 789
(%)	17.3%	18.7%	18.5%	19.0%	21.3%
English				16	22
(%)				12.5%	36.4%
Russian	7 127	7 018	6 575	6 130	5 860
(%)	20.6%	22.1%	23.9%	24.1%	23.4%
Total	28 363	28 012	27 046	26 172	25 699

Source: Estonian education information system (EHIS).

3. National and regional strategy to tackle ELET

Currently, there is no direct strategy in Estonia to tackle ELET. There are various strategies and initiatives that contribute to reducing early leaving although it is not their direct aim. These strategies are and have been part of different national level development plans. Most of the new strategies to be launched are part of The Estonian lifelong learning strategy 2020 (*Eesti elukestva õppe strateegia 2020*). All aim at reducing ELET and ELVET either directly or indirectly.

One development plan (finished) and one strategy particularly relevant in the reduction of early leaving from VET, are described in the boxes below.

Scope	Description
National and/or regional strategy/action plan to reduce ELET	Name and year: development plan for the Estonian vocational education and training system (<i>Eesti kutseharidussüsteemi arengukava 2009-13</i> (⁸)); 2009 Brief description: there are four main objectives: ensuring the VET system's flexibility and correspondence to the needs of learners; guaranteeing the high quality of education and competitiveness level of the country as well as professional competitiveness; ensuring the system's coherence with society, labour market needs and economy; and finally organising the VET system in a purposeful, effective and most suitable way.
Elements of the strategy are explicitly linked to VET	It aims at, among others: (a) increasing the proportion of VET learners from all learners in secondary education, increasing the participation rates of 25-64 year-olds in lifelong learning and assuring that at least 1 000 students participate in workplace-based training; (b) reducing the interruption of studies in formal VET by

⁽⁸⁾ www.hm.ee/index.php?popup=download&id=10227 [accessed 2.5.2017].

Scope	Description
	 among others, modernising dormitory places, reevaluating the study programmes and curricula, and increasing the proportion of modernised practical training places in various enterprises; (c) increasing the proportion of VET teachers who have participated in continuing education; (d) improving the quality of VET education through increased public expenditure, updated competence-based professional standards and encouraging the taking of professional examinations by graduates i.e. obtaining a professional certificate during VET studies.

Scope	Description
National and/or regional strategy/action plan to reduce ELET	Name and year: the lifelong learning strategy's vocational education and training programme 2015-18 (<i>Elukestva õppe strateegia kutseharidusprogramm 2015-18</i> (⁹)).
	Brief description: the main aim is to ensure the high quality, flexibility and diversity in VET so that the VET offer meets the labour market needs and tackle ELVET. The programme supports the set of goals of the Estonian lifelong learning strategy (<i>Eesti elukestva õppe strateegia</i> (¹⁰)) and the Estonia 2020 (<i>Eesti 2020</i> (¹¹)).

⁽⁹⁾ https://www.hm.ee/sites/default/files/ministri_kaskkiri_kutseharidusprogramm_2015-2018.pdf (in Estonian) [accessed 2.5.2017].

⁽¹⁰⁾ http://www.kogu.ee/wp-content/uploads/2014/05/Lifelong-Learning.pdf [accessed 2.5.2017].

⁽¹¹⁾ Additional information available at: https://riigikantselei.ee/en/supporting-government/national-reform-programme-estonia-2020 [accessed 2.5.2017].

Elements of the strategy are explicitly linked to VET

The main aims of the strategy are:

- (a) reducing the share of early leavers from VET among young adults (18-24) (the number of early leavers should be less than 20% by the year 2020). It is important to note that the lifelong learning strategy's early leaving indicator measures early leaving from the first schoolyear:
- (b) increasing the participation rate in lifelong learning among adults (25-64);
- (c) reducing the share of adults (25-64) without any professional education or vocational training;
- (d) tackling early leaving from VET through implementing counselling and support schemes for students, optimising the VET curricula, developing up-to-date learning environments and renewing the financing model (in order to increase the efficacy of VET institutions and place greater value on quality);
- (e) secondary VET institutions will provide 60% of all courses/study programmes in Estonian by the study year 2019/2020. VET institutions will guarantee the quality of learning Estonian or another language in study programmes provided in other languages.

4. Recent policy initiatives

Scope and questions

New policy initiatives being undertaken that include a role for VET to reduce ELET either:

- (a) reduce ELET from VET;
- (b) reduce ELET (in general) through VET

Various types of policy initiatives, strategies and development plans have been developed in EE. These do not aim specifically at reducing ELET and ELVET but nevertheless contribute to reduce early leaving in EE. The Ministry of Education and Research will implement the following programmes and initiatives, based on the Estonian lifelong learning strategy 2020:

(a) labour market and education cooperation programme 2015-2018 (*Tööturu ja õppe tihedama seostamise programm 2015-18* (¹²)). One of the main aims is to develop a coordination system for monitoring and forecasting labour market needs (OSKA system) in order to match the demand side with education/training offered by the educational system. The OSKA system (¹³) is linked to the provision of VET lifelong learning opportunities mirroring the labour market and skills

⁽¹²⁾ Additional information available at: https://www.hm.ee/et/tooturu-ja-oppe-tihedama-seostamise-programm (in Estonian) [accessed 2.5.2017].

⁽¹³⁾ Additional information is available under the ministerial directive of 8th April 2015: Ministerial directive available at https://www.hm.ee/sites/default/files/ministri_kaskkiri_tooturu_ja_oppe_tihedama_se ostamise_programm_2015-2018.pdf (in Estonian) [accessed 2.5.2017].

Scope and questions

- needs, so as to reduce the number of people without professional qualifications
- (b) study and career counselling programme 2014-18 (Õppe- ja karjäärinõustamise programm 2014-18 (¹⁴)). The programme is designed to support students to make informed choices, raise their responsibility whilst making the choice and contribute to the creation of supportive and individual learning environment. The programme also ensures the quality standard of support scheme such as the counselling and career services for different target groups. Different services are provided for children and young adults from 1.5 to 26 years of age (career guidance for young people up to 26 years of age and special education services for children and youth between 1.5 and 18 years of age);
- (c) adult education programme 2015-18 (Täiskasvanuhariduse programm 2015-18 (15)). A concept for adults to return to high-quality VET is developed. The program's main aims regarding VET include raising awareness and possibilities of lifelong learning, improving the conditions of the recognition of prior knowledge gained through non-formal or informal learning, and improving as well as developing the conditions for adults to enter training, informal training and retraining. The programme also pays attention to the flexibility of learning in VET, for instance, by providing courses divided by modules, or changing the study organisation, e.g. teaching takes place either two to three times a week and/or in weekends (tsükliõpe) or similar subjects are taught during one intense period of time (perioodõpe);
- (d) school network programme 2015-18 (*Koolivõrgu programm 2015-18* (¹⁶)). One of the aims regarding VET is to distribute VET places and improved learning conditions in line with the demographic change, based on the principle of inclusive education and providing high-quality VET in all regions in Estonia. The programme also foresees investments in VET buildings and other facilities (e.g. building a compound school for music and dance disciplines in Tallinn). Also there is a need to update and renovate the dormitories of Rakvere

⁽¹⁴⁾ Additional information available at https://www.hm.ee/et/oppe-ja-karjaarinoustamise-programm (in Estonian) [accessed 2.5.2017].

⁽¹⁵⁾ Additional information available at https://www.hm.ee/sites/default/files/taiskasvanuharidusprogramm_2015-2018.pdf (in Estonian) [accessed 2.5.2017].

⁽¹⁶⁾ Additional information is available under the ministerial directive of 8th April 2015: Ministerial directive available at: https://www.hm.ee/sites/default/files/ministri_kaskkiri_kutseharidusprogramm_2015-2018.pdf (in Estonian) [accessed 2.5.2017].

Scope and questions

vocational school, Võru county vocational education Centre, Luua forestry school and Tallinn school of service, also the building and dormitory of Järva county vocational education centre's campus in Särevere.

Other initiatives:

- (a) extending workplace-based VET (*Töökohapõhise õppe laiendamine*). The project headed by SA Innove in cooperation with different companies and medium-sized enterprises resulted in an increase of workplace-based VET i.e. apprenticeships, regulated by law in 2007 (¹⁷). By the year 2020, additional 8000 workplace-based study places are created as part of the labour market and education cooperation programme 2015-18;
- (b) pathfinder guidance centres (Rajaleidja õppe- ja karjäärinõustamise keskused (¹⁸)). In cooperation with the Ministry of Social Affairs, the Ministry of Education and Research will guarantee the functioning of a holistic, sustainable and user-friendly study and career counselling system that will help those who want to supplement their education, learn a new speciality or change career. Access to career counselling will be guaranteed for youth as well as adults. Initiative is part of the study and career counselling programme 2014-18;
- (c) KiVa Bully-free school programme (*Programm Kiusamisvaba Kool* (¹⁹)). KiVa is a research-based antibullying programme to prevent school bullying funded by the Finnish Ministry of Education and coordinated by local Anti-Bullying Foundation (²⁰). The programme entails two types of actions targeting mainly primary and secondary education institutions: universal actions (e.g. KiVa curriculum directed at all students to prevent bullying) and indicated actions (e.g. when a bullying case has emerged). It has helped to significantly reduce school bullying and school drop-out rates in Finland and is believed to have effects also in Estonia. KiVa can also be implemented in VET education.

Is the role of VET in reducing ELET assuming greater or lesser importance? Why?

The role of VET in reducing ELET has assumed greater importance mainly because the whole system of VET is developed to be more flexible and in concordance with the labour market needs. Several initiatives have been implemented in order to promote lifelong learning opportunities and encourage adult VET. Conditions for re-entrance into

⁽¹⁷⁾ Regulation of 6 April 2007, available at https://www.riigiteataja.ee/akt/12810050 (in Estonian) [accessed 2.5.2017].

⁽¹⁸⁾ Additional information available at http://www.rajaleidja.ee/ [accessed 2.5.2017].

⁽¹⁹⁾ http://www.kivaprogram.net/ [accessed 2.5.2017].

⁽²⁰⁾ Founded by the Estonian Good Deed Foundation (*Heateo Sihtasutus*), Union of Estonian School Psychologists (*Eesti koolipshühholoogide Ühing*), Estonian Schools with Distinction Development Centre (*Omanäolise kooli arenduskeskus*)

Scope and questions

VET as well as into general education have been revised and changed towards being more student-friendly and encouraging. Although there is no initiative specifically targeting early leaving, there are various initiatives implemented in Estonia that will probably have an impact on reducing early leaving.

Another important trend is the increased cooperation with employers and stakeholders in order for training offers to match the labour market needs. Cooperation involves revising the study curricula and ensuring that the curricular objectives and content are up-to-date.

Access to VET courses has also been made available for unqualified youth. Several financial incentives are opening up VET as a possibility for some early leavers to return to VET. Main focus is also on increasing the attractiveness and popularity of VET providing more learning opportunities and activities to foreign-language speaking population. Although most of the initiatives are quite recent, they demonstrate that tackling ELVET and ELET have become an important issue and been assuming greater importance.

Stakeholder cooperation

Questions

What are, and have been, the main influences of stakeholders in the development and implementation of VET related policies specifically to reduce ELET:

- (a) employers,
- (b) trade unions social partners,
- (c) VET institutions,
- (d) other learning providers.

Answers

As seen above, the Estonian lifelong learning strategy guides not only the most important developments and programmes, but also is a result of extensive collaboration between different stakeholders. There were three main stages:

- (a) in cooperation with the civil society organisations, the Estonian Cooperation Assembly and the Estonian Education Forum, the Ministry of Education and Research initiated the project 'Five challenges in Estonian education – education strategy for 2012-20 during the period of 2009-11. This document was a starting point for discussions in the task force that included experts (²¹) from the fields of education and the labour market who were responsible for compiling the current strategy;
- (b) during the development of the strategy, an advisory body, mainly composed of the experts who had created the original document on the five challenges in Estonian education, was consulted:
- (c) to monitor the application of the strategy, a 15 member lifelong learning steering committee will be formed,

⁽²¹⁾ Members of the steering committee: http://www.kogu.ee/wp-content/uploads/2013/02/Juhtkomisjon.pdf [accessed 2.5.2017]. Members of the advisory board. http://www.kogu.ee/wp-content/uploads/2013/02/N%C3%B5ukoda-kk.pdf [accessed 2.5.2017].

Questions	Answers
	which will include experts from the field of education (including representatives of the Estonian Association for Advancement of Vocational Education, <i>Eesti kutseõppe edendamise ühing</i> EKEÜ) and employment (including representatives of employers and employees). Every two years, the steering committee will revise the implementation of the strategy and if needed, will make proposals.
	Other: (a) the Ministry of Education and Research, the Ministry of Economic Affairs and Communications and the Ministry of Social Affairs in cooperation with employers and representatives from other ministries, will launch a regular and well-ordered system for the forecasting, monitoring and feedback of labour market needs (Tööturu koolitusvajaduse, prognoosi ja seire süsteem OSKA). Collaboration is important in order to ensure the concordance of curricula with labour market needs.

6. Monitoring systems

Question	Answers
What specific early leavers monitoring systems exist?	There is one main monitoring tool/system used in EE: Name/descriptor: Estonian education information system (EHIS – Eesti hariduse infosüsteem (²²)).
	Aims: to collect statistical data, about (1) pre-school, basic and secondary education, (2) higher education and (3) vocational education, via an online database that consolidates all the information concerning the education system.
	 (a) Educational institutions are obligated to insert data about their school including the registration and dropping out of students twice a year. They also have the obligation to check and amend the entered information on a monthly basis (which allows ad hoc extractions of data); (b) the ministry aggregates and analyses the data (including ELET and ELVET rates) once a year (in the beginning of the school year, 10th November). Year introduced: 2005 Coverage: all schools of the formal education system.
What information is monitored/collected?	Numbers of drop outs: yes Reasons for dropping out: yes. Reasons officially used by EHIS entail:
	(a) lagging behind (non-compliance with partial study load; other reasons);(b) not starting one's studies (i.e. being in the list of students for 31 days but not participating in studies);

^{(&}lt;sup>22</sup>) Available at: http://www.ehis.ee/ [accessed 2.5.2017].

Question	Answers
	 (c) not taking part in studying/not appearing in class (²³); (d) passing the due date for important submission/homework;
	(e) not paying the tuition;
	(f) leaving voluntarily (studying abroad; financial reasons; mismatch of chosen study field; other reasons);
	(g) other reasons.
	However, analysing the reasons for dropping out is complicated because in several cases there are more than one reason involved. In that case and unfortunately most often the category remains 'other' without further details.
	Background characteristics of drop-outs/those at risk include among others gender, age, study year, study language, study field and type, curricula, nationality, reasons for dropping out, graduation rates, special education needs and all types of educational institutions listed above. Data is also gathered on graduation documentation (examination results), textbooks and curricula.
	The national level stakeholders interviewed noted that information has mainly been gathered on drop-out rates in general. In recent years, the Ministry of Education and Research has also started to monitor the reasons for dropping out. Special attention has been drawn to those entering and discontinuing their studies during the first year of VET. A clear link has been identified between the grades from finishing basic education and the probability of dropping out during the first year of VET studies i.e. the lower the grades, the higher the probability of discontinuing one's studies (²⁴).
	Regarding the issues noted by interviewees was that even though it is the role of schools and VET institutions to insert the necessary information to EHIS, the reason for dropping out is not always clear nor is there just one explanation i.e. it could be a combination of several reasons. EHIS has listed the most

(²³) Truancy or being absent for a certain number of days does not necessarily conclude in being a drop-out. It is rather the question of student's capability to cope with the studyload and perform the curricula. However, the critical limit is being absent wihtout a cause for 20% of more lessons during one semester.

(²⁴) For additional information please see:

(a) Aru-Raidsalu (2014). Õpiedutute ja akadeemiliselt edukate õpilaste hinnangud põhikoolist väljalangevuse riskiteguritele ühe maakonna näitel, University of Tartu

http://dspace.utlib.ee/dspace/bitstream/handle/10062/41778/aru_raidsalu_aive.pd f?sequence=1 and

(b) Mündi (2006). *Põhikoolist väljalangenud ja lõpetanud õpilaste riskikäitumine, haigestumine, sotsiaalmajanduslik taust ja toimetulek koolis*, University of Tartu. https://dspace.utlib.ee/dspace/bitstream/handle/10062/34036/mundi_ma_2006.pd f [accessed 2.5.2017].

	T -
Question	Answers
	common reasons but these may not always be suitable. But because teacher/head of school is in charge of inserting the reason and has the opportunity to choose only one, he/she might not find the most suitable one or might not be thoroughly acknowledgeable of the student's situation, it is often referred as discontinuing for 'other reasons'.
What are the data used for? How it is used by VET institutions/ providers?	Data is collected for persons acquiring general, vocational, higher or hobby education, as well as teachers and academic staff working on the same level. The information entered into the register includes information on educational institutions and individual information on students, teachers, graduation documents and curricula. Data is used for informative purposes e.g. educational institutions can take a look at the number of ELET and ELVET in order to take internal actions as well as to assess the quality and performance of VET (e.g. accreditation of study programmes which is one of the key measures in assessing the quality of VET). Data is also used at ministerial level for developing educational policies. The service allows to request personal data and returns the data in three blocks: (1) general personal data, (2) data on studies and (3) data on working as a teacher/academic. The use of data is divided into two: personal data and statistical data. (a) local governments can use EHIS to access information concerning the students living in their territory as well as information on the transfer of students to a school located in the territory of another local government. (b) educational institutions have access to all of the information contained in EHIS concerning the institutions themselves and their students and teachers. (c) students and teachers can see the education-related information concerning themselves. Data is used by the National Statistics Office, by ministries, for research and monitoring and also for specially designed data opening web environment HaridusSilm (EducationEye) (www.haridussilm.ee [accessed 2.5.2017]). This is a service for parents, learners, schools, local municipalities, decision makers and contains data about all educational levels i.e. pre-school, basic and secondary education, higher education and vocational, education (e.g. age, number of students entering school, dropping out, obtaining a certificate).
How is the monitoring system linked with offering support measures? (i.e. is it being used to contact those who have dropped out to provide support to find employment, education or further training?)	The data helps to identify early leavers and those at risk of dropping out. Schools and VET institutions have therefore a clearer picture of the situation of their school and can amend/compare the data twice a year. Actions taken by educational institutions vary strongly. Some may not act until the share of drop-outs reaches a critical limit or until certain patterns are noticed (e.g. high drop-out rates from certain study programmes). Some implement new initiatives and reforms on school level and reach out to pathfinder guidance centres (<i>Rajaleidja keskused</i>) to provide trainings for their

	-
Question	Answers
	educational staff and/or provide counselling for their students. All everyday data is entered into eKool environment (²⁵) which is an online school management tool bringing together pupils, their families, schools and supervisory bodies. Students can access to study related information (e.g. grades, absences, timetables, home-works, etc.), parents can keep up with their child's progress (grades, absences, communication with teachers and other parents etc.), teachers can manage study related information (grades, home assignments, absences etc.), schools can manage activities and communication, and local governments can gather statistics. Therefore, schools and school leadership can first and foremost take internal actions themselves (offer counselling and guidance, class repetition, change in field of study). The previous data is entered into EHIS on formal education, and it is collected and processed by the Ministry of Education and Research and Statistics Estonia. Data is being used as the main pillar for the official education policy. Educational indicators and international comparison are used to compare policy trends and set different targets (including reducing ELET and ELVET). Therefore EHIS provides the necessary data to frame the situation of educational institutions.
What role is/ has the monitoring system played in the design, development or implementation of the policies, strategies and initiatives?	EHIS stores data entered from year 2005 and the information provided is either directly or indirectly used as the main pillar to design the Estonian education policy (e.g. Ministry of Education and Research annual reports, the Estonian Lifelong Learning Strategy 2020). Therefore the data gathered shows the areas and elements of education where the policies must be reformed or improved. Several policies have been designed while using the EHIS database. Data like the share of drop-outs, most popular and unpopular study programmes, number of graduates etc. is used by the Ministry of Education and Research in order to conduct annual reports on the key statistical figures of VET (<i>Kutsehariduse valdkonna statistika põhinäitajad</i> (²⁶)). These statistical figures reflect changes during that one particular school year. Continuing issues such as the high drop-out rate is addressed by policies and initiatives, either directly (like the KUTSE programme) or indirectly (e.g. labour market and education cooperation programme 2015-18, Adult

⁽²⁵⁾ There are several different eKool (e-school) environments or platforms (e.g. Stuudium). Additional information is available at http://ekool.company/en/#opportunities [accessed 2.5.2017].

education programme 2015-18, vocational education and

^{(&}lt;sup>26</sup>) For example the annual report of 2012/13 is available at http://dspace.utlib.ee/dspace/bitstream/handle/10062/40731/Kutsehar_Stat12_13.pdf ?sequence=1 [accessed 2.5.2017].

Question	Answers
	training programme 2015-18) i.e. contributing at reducing early leaving indirectly. EHIS database also enables schools to evaluate their own internal situation and take action if needed (as mentioned in the previous section). Schools have access to all the necessary information and can draw their conclusions on their particular situation. Additionally the Ministry of Education and Research publishes annual reports about different statistical indicators (e.g. statistical indicators on vocational education/adult education).

7. Effect of the economic crisis

Question	Answers
In what ways has the role of VET in reducing ELET been influenced by the economic crisis: (please consider): (a) supply of VET places; (b) demand for VET places; (c) qualifications of VET students (increasing decreasing); (d) popularity and perception of VET; (e) increase/decrease in public resources for VET; (f) access to 'second chance' VET opportunities.	The national level stakeholders interviewed noted that the economic crisis had some positive effects in terms of the role of VET in reducing ELET but only in the timeframe of the crisis itself. During the economic crisis period of 2009-2010 the number of students entering VET increased and the number of drop-outs decreased i.e. students tended to stay in school. Training provision for the unemployed (adult education) as well as focusing on people with low educational levels or poor/out-dated qualifications rose. Some positive effects are listed below: (a) the number of VET students rose up to 28 363 during the crisis. However, during the economic recovery period the number of students in academic year 2011/12 declined to pre-crisis level: the number of students in 2008/09 was 27 239 and 2011/12 27 046; (b) the drop-out rate was18.10% and after the crisis started to rise again: 2010/11 – 19.5% up to 20.2% in 2012/13; (c) demand for VET places and apprenticeships increased during the crisis period; (d) the Ministry of Education and Research opened additional state commissioned study places in VET for working adults who were contemplating career change or wanted to raise their qualification level; (e) the number of students who did not change their study field was higher than during the crisis recovery years. Because of economic crisis big changes took place on the Estonian labour market. Unemployment increased specially among people with a lower educational level (²⁷). (a) in that perspective crisis brought along the population's active participation in lifelong learning. In 2009, 10.6% of people aged 25-64 attended different courses (²⁸).

 $(^{27})$ Additional information available at

www.hm.ee/index.php?popup=download&id=10227 [accessed 2.5.2017].

Question	Answers
	(b) VET popularity increased strongly among adults.

Factors positively contributing to the effectiveness of VET in reducing ELET

Stakeholders interviewed highlighted several factors that positively contribute to the effectiveness of VET in reducing ELET. Some are pre-identified factors drawn from different development plans and strategies.

8.1. National/regional policy factors

- (a) Several strategies to tackle ELET/ELVET have been implemented such as the programme KUTSE, providing counties with the Pathfinder guidance centres, making apprenticeship a new legal form of education and continuously addressing the issue in different development plans (e.g. development plan for the estonian vocational education and training system 2009-13) and strategies (e.g. vocational education and training programme, estonian lifelong learning strategy 2020).
- (b) Introducing workplace-based form of study in VET system resulted in the introduction of law of 'Policies and conditions for implementing workplace based learning' in 2007 making apprenticeship part of the formal vocational education. This has helped to reach the concordance with labour market needs and skills.
- (c) New policies and development plans address the need to tackle ELET/ELVET, reduce the drop-out rates, improve the concordance of meeting the labour market needs and increase the overall attractiveness of VET. Overall political attention has encouraged school actors to act and prevent ELVET (e.g. reach to the Pathfinder guidance centres). However, reducing ELET/ELVET per se is not their direct aim. The majority of the new policies and development plans contribute to reducing early leaving through indirect aims (e.g. establishing new counselling and guidance centres for both students as well as educational staff).
- (d) 15 regional youth guidance centres, called Pathfinder centres (Rajaleidja keskused) were created as part of the education and career counselling

⁽²⁸⁾ Additional information available at www.cedefop.europa.eu/files/2011_cr_ee.pdf [accessed 2.5.2017].

- programme, 2014-18). Centres provide career information, career counselling, psychological, socio-pedagogical, special education counselling and speech therapy. Career guidance is provided for young people (age up to 26 years) in 15 counties.
- (e) The Estonian lifelong learning strategy 2020 (Eesti elukestva õppe strateegia 2020) has set several general goals and strategies that either directly or indirectly help to tackle ELET/ELVET (vocational education and training programme 2015-18). Since the scope is getting wider (VET institutions, adult education, lifelong education, guidance centres, trainings for teachers), the policy initiatives are more and more present and stress the need to address ELET and ELVET related issues.
- (f) The national policy targets to significantly reduce drop-out rates from VET (less than 20%) and general education by 2020 (both compulsory and upper-secondary less than 1%).
- (g) The collaboration between different stakeholders and education actors has increased (companies, enterprises, guidance canters, teachers, ministries).

8.2. Systematic features of the (VET) education system

Several VET system reforms will improve the quality of VET as well as make vocational education more attractive. Some were introduced in 2014 (e.g. Pathfinder guidance centres); most are being implemented in 2015.

- (a) Implementing new vocational education and training programme 2015-18;
- (b) Improving digital focus in learning;
- (c) Assuring the concordance of learning opportunities with the needs of labour market.
- (d) Improving the competence and motivation of teachers and school leaders (by providing in-service trainings and counselling).
- (e) Improving and modernising learning and working conditions in VET schools.
- (f) Offering grants to develop curricula and study modules.
- (g) Improving funding and grants system for students.

8.3. Features of the labour market

(a) Developing a system for assessing the needs of the labour market i.e. launching regular and well-ordered system for forecasting, monitoring, and feedback of labour market needs (The Estonian lifelong learning strategy 2020).

- (b) Organising studies according to the needs of the labour market i.e. developing the curricula and learning content according to needs of the labour market. This helps to reach the concordance between labour market needs and skills needed. For example, workplace-based VET programme aims at attracting employers to take part in the process of learning in order to ensure the compliance between gained knowledge/skills and requirements within the real workplace.
- (c) Establishing a more efficient system to gain work experience by raising the awareness of employers and educational institutions regarding the significance and organisation of work experience, and by increasing the interest of business towards offering internships.
- (d) Preparing employees for the labour market in areas of economic growth. This would have an overall positive effect on both the economic situation as well as the reputation of VET (e.g. graduates find speciality-related work etc.).

Factors constraining the effectiveness of VET to reduce ELET

There are several factors constraining the effectiveness of VET to reduce ELET highlighted by the stakeholders interviewed.

9.1. National/regional policy factors

- (a) Monitoring system(s) need to be improved in order to track the specific reasons for dropping out and those who re-enter the VET system. Interviewees stressed that data tends to show the high drop-out rates but does not consider or highlight the share of people who have re-entered the VET.
- (b) Stakeholders interviewed stressed the need to ascertain the reasons of absenteeism. There is no sufficient tracking system and thus, the core reasons cannot be properly dealt with.
- (c) Stakeholders interviewed noted that the share of students entering and studying in VET system is considerable and stable. Yet, because the system is flexible and offers the opportunity to re-enter VET every year, there is a high share of students who tend to change their study field rather easily or leave school without obtaining a certificate because they found a job. This increases the risk of becoming unemployed whilst being formally unqualified

- at the same time (without a certificate). It is much more complicated to bring them back to the education system than to keep them in.
- (d) Interviewees noted that because the VET system is flexible (which mostly is seen as positive), it is not clear how or to what extent VET institutions implement some policies or guidelines (e.g. assuring support schemes such as career counselling and guidance). Even though schools have a duty to provide students with necessary support services (after enacting the Vocational Educational Institutions Act in 2013), there is no unified system in place. It is also not monitored how support services are implemented or what is the quality. Additional resources in order to provide these services have not been allocated for VET institutions.
- (e) Interviewees noted that VET schools are not promoted enough. In terms of VET reducing ELET, manual or practical activities inherent to VET should be provided or integrated into basic school curricula. Accompanied with active learning methods and in some cases implementing apprenticeships and/or practical training would popularise VET education. This way the students in basic school with no clear vision about their educational future would be more acknowledgeable about the possibilities in VET institutions.

9.2. Systematic features of the (VET) education system

- (a) Stakeholders interviewed noted that in addition to the fact that drop-out rates are high, there are other worrying trends e.g. some enter VET institutions because they failed university admission and therefore use studying in VET school as a gap year to try again next year. Another growing phenomena is the share of highly educated and successful adults who enter VET system to learn specific skills in terms of personal hobbies. Even though it can be seen as positive (especially in terms of lifelong learning and adult education), vocational education cannot be equated as hobby education.
- (b) Regarding some regions or specific VET institutions, VET is not recognised as an opportunity for good quality studies (e.g. some VET institutions accept students with low grades; some students with low performance enter VET because parental coercion). Yet, it is important that everyone find suitable learning opportunities, including those with weaker results. Even though they are in a greater risk for interrupting their studies (especially those with weak results in primary education), these students cannot be excluded from the education system even if it may have a negative impact on the VET institutions' reputation.

- (c) Teaching as a profession is not attractive i.e. it is difficult to find new, especially young teachers who would like to teach in VET institutions.
- (d) Stakeholders interviewed stressed the shortcomings of the support systems i.e. teachers and heads of schools need to be more attentive and supportive, especially about the students who lack motivation or are at risk of dropping out.
- (e) It was also noted that individual approach to students is of key importance i.e. teachers and head of schools need to support and guide students, especially those at risk.

9.3. Features of the labour market

- (a) There is a substantial mismatch of skills. There is still a considerable difference what is offered by the education and training system and what the labour market needs.
- (b) Labour market continuously lacks skilled workers with the appropriate qualifications.
- (c) Approximately on third of the working age population in Estonia does not have a professional or vocational education. The participation rate in lifelong learning among those with low levels of qualifications is limited.
- (d) Interviewees noted that Estonian case is in many ways exceptional i.e. those with VET certificate tend to have higher probability of earning a low wage and are often facing the same difficulties in terms of entering the labour market as general secondary education graduates.