

# The Estonian educational system and the ISCED-97

Ellu Saar<sup>1</sup>

## 1 Short historical overview

In the Republic of Estonia, from 1920 to 1934, primary school of six grades was compulsory for all children from 8 to 16 years of age. In 1934 to 1940, the age limit of compulsory school attendance was age 14.<sup>2</sup> In 1940, the Republic of Estonia was incorporated into the Soviet Union where a different school system existed. Although the assimilation of the Estonian with the Soviet Union school system was set as the main objective, differences remained for some time.

During the socialist period, the Estonian educational system was a part of the Soviet educational system, which was constructed as an integral part of the party-state institutional structure and organised on the basis of the following main principles: centralisation, standardisation, utilitarian and egalitarian goals. The educational system was highly centralised and state controlled. The linkage between each level of education and the future job was clearly defined (Helemäe et al., 2000).

In 1944, age 7 was enacted as the age for beginning compulsory school education (before it had been age 8). Basic education (*põhiharidus*) became compulsory in 1949; in 1958 the former seven-grade basic education was changed to eight grades. Almost 100% of the post-war birth cohorts acquired basic education. At the end of the 1950s and the beginning of the 1960s, the reforms undertaken during Khrushchev's time in power had an important effect on education. Great emphasis was put on combining work and studies. During the last years of secondary school, pupils were supposed to spend 10–12 hours a week on production training and work in industrial enterprises. The existing secondary school with 10 years duration was replaced by a secondary school where compulsory industrial training was provided (with a duration of 11 years). In order to pass the industrial training course, pupils had to take exams. The network of evening schools and correspondence schools was significantly expanded. In 1964 (after the fall of Khrushchev), compulsory industrial training was abolished. In the 1960s, having graduated from secondary school also meant being a member of the more educated part of the genera-

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<sup>2</sup> As a result of this, there was a large number of people who did not graduate from elementary school (duration of 6 years). For example in the academic year 1938/39, 41% of children who left elementary school did not actually graduate (Kera, 1998: 16).

tion.<sup>3</sup> Secondary education was one of the main channels for intergenerational social mobility.

In the second half of the 1960s, universal secondary education was proclaimed the goal. The secondary education enrolment increased steadily in the 1970s. In the 1970s the network of vocational schools was developed, too. At the end of the 1970s and the start of the 1980s, general secondary school (*üldhariduslik keskkool*) continued to dominate as the place to attain secondary education, but the share of that school type in the structure of secondary education decreased somewhat (mainly due to the rapid development of vocational schools). In the 1970s, general secondary schools with special streams were established. From the 9<sup>th</sup> grade onwards, several schools were allowed to put a special emphasis on the instruction of a specific subject (foreign languages, mathematics, natural sciences etc). Schools where such curricula were applied were mostly situated in bigger towns: they had better teachers, and the pupils came from the more educated strata of society (Kenkmann and Saarniit, 1994). The transition to compulsory secondary education was completed by 1980. However, the principle of compulsory secondary education was never fully achieved: by various estimations, in the mid-1980s the percentage of young people graduating from institutions of secondary education in Estonia constituted approximately 80% of the corresponding birth cohort (Saar, 1997: 140).

This transition to universal secondary education resulted in further differentiation within secondary education. After graduating from basic school (8 years duration), students were tracked into one of three types of secondary education: general secondary schools (the traditional academic track, *üldhariduslik keskkool*), vocational schools (*kutsekeskkool*), training skilled workers for industry and other branches of economy, and specialised (professional) secondary schools (*keskeriõppeasutused*), combining vocational training with academic subjects and originally intended to educate semi-professionals. Vocational schools and to a lesser extent also specialised secondary schools were oriented to young people of a lower social status (Titma and Saar, 1995).

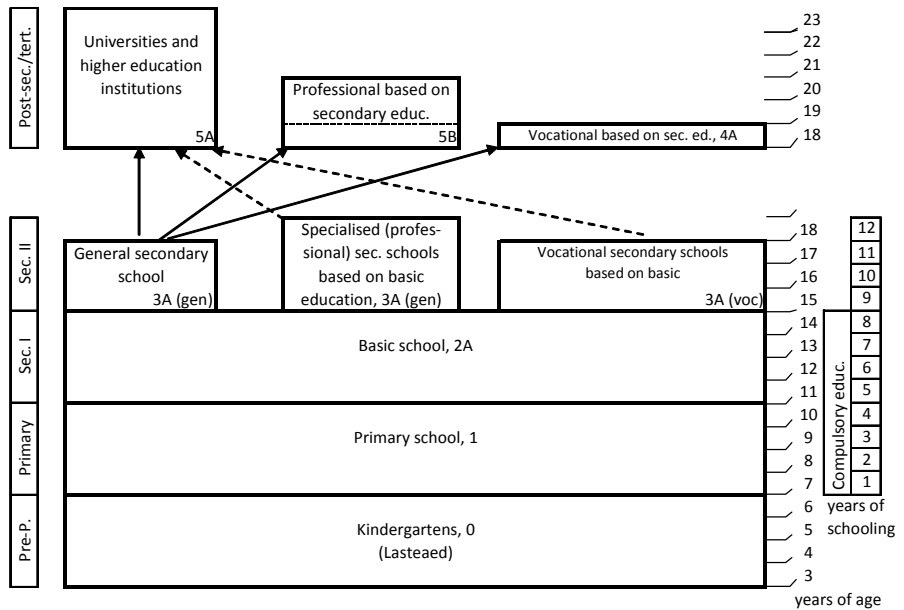
The transition of graduates from vocational and specialised secondary schools to the labour market was directed by various ministries; graduates were required to work for three years in their first workplace. Officially, 10% of graduates from vocational and specialised (professional) secondary schools were allowed to go into higher education; in reality never more than 1% of graduates of vocational schools and 5% of graduates of specialised secondary schools did so (Helemäe et al., 2000). Although the three types of secondary schools were considered formally equal, the level of general teaching was considerably lower in vocational and specialised sec-

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<sup>3</sup> Secondary education was attained by approximately half of the cohort (Helemäe and Saar, 1999: 86).

ondary schools. Despite various reforms, general secondary schools gave their graduates the best chance of continuing their studies at university, while vocational schools were educational dead ends (Saar, 1997). The vocational track was dominated by negative selection in the sense that those who had been denied admission to other educational tracks usually went on to vocational schools.

**Figure 1. The educational system in Soviet Estonia**



The normal age for choosing tertiary education was 18. The Soviet tertiary education was closely linked to the secondary education system. It should be noted that in Soviet Estonia, secondary school graduates could attain another type of secondary education: vocational or specialised education. Tertiary education consisted of the following forms: vocational school for 1 year of study; specialised schools, which typically took 1 to 3 years of study; universities and other institutions of higher education, involving 4 to 6 years of study. Vocational and specialised schools provided a continuation of studies primarily for young people who had graduated from general secondary schools.

**2 Changes in the 1990s**

The Estonian education system has been undergoing major changes since 1987. While the high level of standardisation from the socialist period was reduced in the early 1990s, the second half of the 1990s witnessed an increase in standardisation

in basic and secondary education, most notably in the form of standardised graduation exams at the end of the secondary school called 'state exams'. Another direction was characteristic for higher education, where the standardisation substantially decreased.

The current system of education in Estonia covers pre-school education in kindergartens, basic schools, upper secondary general schools, vocational schools, and higher education at universities and institutions of professional higher education. 90% of secondary and basic schools are municipally owned, 5% are state schools and 5% private schools. 73% of vocational schools (*kutseõppeasutus*) are state schools, 1% municipal schools and 26% private schools.

According to the Law on Education, a child is obliged to attend school if he or she turns seven by the 1<sup>st</sup> of October of the current year. The law requires compulsory education until the student reaches the age of 17, or graduation from basic school is achieved. Persons who have passed the minimum permitted school-leaving age and have not acquired basic education may acquire education in the form of evening courses or distance learning, and graduate from school as external students. Acquisition of basic education in state and municipal schools is free of charge. Basic education (*põhiharidus*) covers categories 1 and 2 in the ISCED scale. The acquisition of basic education gives the right to continue studies in secondary education.

As the dropout rate from basic schools has increased in the 1990s (over 10% of 16-year-olds have not graduated from basic school) the Parliament (*Riigikogu*) adopted an amendment to the Vocational Educational Institutions Act, providing for preliminary vocational training for young people, up to 25 years of age, who have not completed basic education. These young people can now acquire basic education parallel to vocational education.<sup>4</sup>

After graduating from basic school, a young person has the opportunity to choose between general secondary schools (*gümnaasium*), vocational schools (*kutsekool*) and vocational secondary schools (*kutsekeskkool*). Up to 1999 they could also opt for secondary specialised education (*keskeriharidus*). Students at the upper secondary level of education (whether vocational or general) are typically between the ages of 15 and 19.

General secondary education is acquired in upper secondary school; the upper secondary level covers grades 10 to 12. An upper secondary school is a comprehensive school where each subsequent academic year (grade) is directly based on the previous one and allows for a smooth transition from one school to another. Admission to upper general secondary schools is based on basic school (*põhikool*) gradua-

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<sup>4</sup> Until 2001, basic school dropouts had no place in the education system. They could not get even minimal vocational training, because the previous Vocational Educational Institutions Act restricted access to such schools to persons with basic or secondary education.

tion results. Schools that are obliged to offer their services to an entire town or to the whole country establish additional criteria for admission in order to ensure that the limited number of study places are filled by students with best qualifications to fulfil the requirements of the curriculum. In most cases, supplementary tests are taken in basic subjects or in the subjects of the chosen field, which are followed by interviews with all students. A final standardised examination across schools is organised for graduating from an upper secondary school. Upper secondary school final examinations include state and school examinations. Those who graduate from an upper secondary school are issued a graduation certificate and a state examination certificate.

The differentiating role of the secondary education track did not substantially decrease during the 1990s. General secondary schools provide for a classical academic track giving their graduates the best preparation for further studies at the university level. The internal differentiation of general secondary education even increased. Regional differences between schools also increased, as well as the clear differentiation between common schools and 'elite' schools that select their pupils on the basis of their own criteria.

Although there are no legal restrictions for graduates of vocational secondary schools to apply for higher education, vocational schools remained dead ends. The initiation of labour market reforms also meant that the earlier well-established links between schools and enterprises were dismantled.<sup>5</sup> Vocational secondary education could be acquired on the basis of both basic education (*põhikool*) and secondary education, with the duration of study of at least 3 years and 1 year, respectively. Graduates of vocational secondary education institutions who would like to continue their studies at the level of higher education usually need to take additional examinations – the requirements depend on the specific education institution.

The vocational education opportunities offered in the framework of the formal education system are as follows:

- Vocational education for people who do not have basic education and who have exceeded the age of compulsory school attendance (ISCED 2C).
- Vocational education based on basic education (without acquiring upper secondary education) (ISCED 3C, *kutseharidus*) can be obtained by people with basic education. In this case, the choice of professions and specialities would be nar-

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<sup>5</sup> Further analyses indicate the contradictions and inherent dissonance of the institutional rules operating in the education system and labour market in Estonia: the education system is characterised by a relatively high degree of standardisation and stratification, while school-to-work linkage is de-coupled with weak market signals (Helemäe and Saar, 2001).

lower than for secondary vocational education, depending on the needs and demands of employers.

- Secondary vocational education on the basis of basic education (ISCED 3A).
- Vocational training based on upper secondary education (ISCED 4A).

After Estonia regained independence in 1991, higher education was reformed step by step. Due to the liberal higher education policies, the number of private institutions offering higher education grew very fast. In 2005/06, 20% of students were studying in private universities and institutions of professional higher education. Starting from 1999, also some vocational schools (*kutseõppeasutus*) were given the right to offer professional higher education curricula. The number of higher education institutions reached the maximum in 2002 (49 institutions offering higher education), now this number is somewhat lower (39 institutions). The percentage of students paying tuition fees has increased in recent years: in 2005/06, more than half of all students paid fees.

In the end of the 1990s, the Bologna Declaration was implemented, thus the 3+2 curriculum was adopted and provisions for applied higher education studies were drafted. Higher education is now divided into:

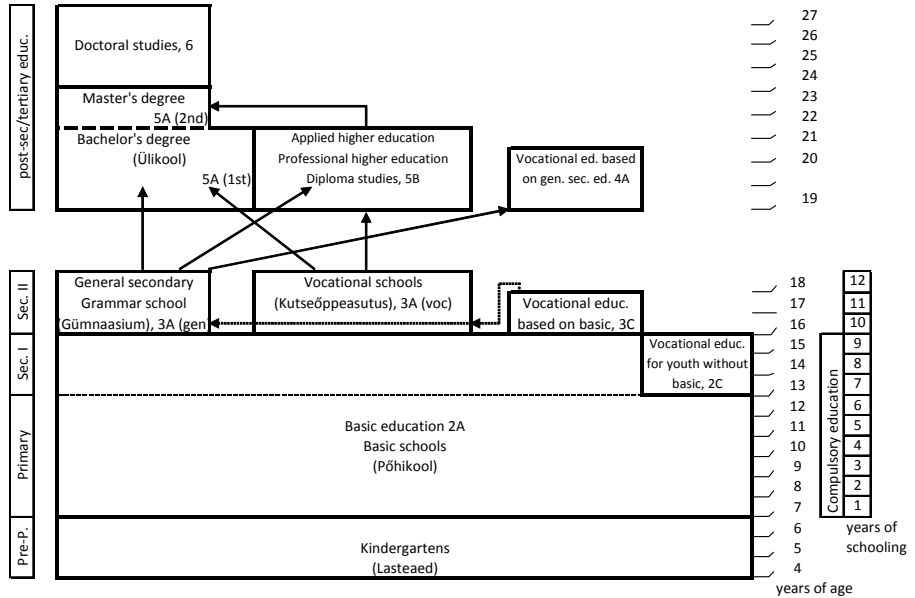
- *applied* higher education (*rakendus kõrgharidus*) (3 years of study, ISCED 5B)
- academic higher education
  - Bachelor's degree (*bakalaureusekraad*) (3 years of study, ISCED 5A, 1st)
  - Master's degree (*magistrikraad*) (2 years of study, ISCED 5A, 2nd)
  - Doctor's degree (*doktorikraad*) (4 years of study, ISCED 6).

At an institution of applied higher education, higher education is acquired following an applied higher curriculum and starting from year 2003, also Master's study as well as studies according to secondary vocational education curricula conducted on the basis of secondary education may be undertaken. Vocational schools (*kutsekool*) that offer studies according to secondary vocational curricula on the basis of secondary education may also offer applied higher curricula.

At a university, higher education is acquired at three levels – Bachelor's study, Master's study and Doctoral study, which are carried out in various fields of study. In an educational institution that is part of the structure of a university, higher education may be acquired by following a applied higher curriculum of one level.

According to the Law of Education, everyone who has a diploma which confirms that he or she has graduated from an upper secondary level programme, a specialised secondary level programme or a vocational secondary level programme, has the right to compete for admission to universities and institutions of applied higher education.

**Figure 2. The Estonian education system since the mid-1990s**



### 3 Validation of the ISCED-97 classification for Estonia

In Estonia, primary education (ISCED level 1) is part of basic education. Primary education consists of a varying number of grades for different periods: it includes 4 grades in 1929 or earlier, in 1945–71 and 1991–96; 3 grades in 1972–1990 and 6 grades in 1930–44 and in 1997 or later.

Basic level (ISCED level 2) consists of incomplete secondary school or 7 grades in 1961 or earlier, at least 8 grades in 1962–1989, basic school or at least 9 grades in 1990 or later. Preliminary vocational training for young people who have not completed basic education is also classified as level 2 because graduates acquire basic education parallel to vocational education. All basic school graduates have direct access to level 3A. This means that all programmes at this level are classified as ISCED 2A.

The upper secondary level (ISCED level 3) begins after the end of compulsory basic education. It currently includes two programmes (tracks) with different orientations: general secondary education and vocational secondary education. Until 1997 this level included also specialised (professional) secondary education based on basic education. As graduates of all three school types formally give direct access to higher education (ISCED level 5A), these three secondary education tracks are classified as ISCED 3A.

Post-secondary non-tertiary education level (ISCED level 4) captures vocational school graduation after attaining general secondary education. These programmes give access to level 5. It means that they would be classified as ISCED 4A programmes.

Level 5 is heterogeneous and the distinction between types 5A and 5B is quite difficult due to recent reforms in Estonia, and the different treatment of the Bachelor's degree in the national classification, where it is matched with professional/applied higher education, and in the ISCED-97. Higher vocational education covers applied higher education (*rakenduskõrgharidus*), higher professional education and diploma studies, all classified as ISCED 5B. Higher academic education includes university education attained during the Soviet period with a typical duration of 5 years, Bachelor's and Master's degree attained in the 1990s with a respective duration of 4 years and 6 years, as well as Bachelor's degree and Master's degree attained after the implementation of the Bologna Declaration with a duration of 3 and 5 years. All of them are classified as ISCED level 5A programmes. Bachelor's and Master's are further distinguished within level 5A because there is a qualitative difference between the two degrees: following the approach in the EUROSTAT mappings of the Estonian education categories to the ISCED-97, they are classified as 5A (first degree) and 5A (second degree) respectively.

Level 6 is coded for persons who have obtained a candidate of sciences or doctor's degree. Persons who have completed a residency are also included.

The main problem of application of the ISCED-97 to Estonia is that it indicates relative openness of Estonian education system because there are only few programmes at different levels not giving direct access to the advanced next level. Indeed, there are no legal restrictions, but in reality the different programmes are strongly differentiated according to student ability, social background and outcomes. The contrast is especially stark at the secondary level between general and vocational schools (both coded as ISCED 3A). Figure A1 indicates that outflow from different types of secondary education into higher education institutions is unequal.

#### 4 Educational attainment in Estonia

The best surveys for validating the ISCED-97 are the Estonian Labour Force Surveys as well as the Estonian Social Survey,<sup>6</sup> as a very detailed classification of educa-

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<sup>6</sup> The Estonian Social Survey is a panel survey, i.e. one survey cycle lasts four years. The same group of persons is interviewed each year over four years. There is a separate part providing an overview of the events in the person's life, such as studies, family, working life and changes in the place of residence. The sampling unit of the social survey is the household. On the person level, members of the household aged 15 and older are inter-



tional qualifications, also considering the educational reforms, has been used in both of them. There are two questions regarding the level of education attained: one about the highest completed *vocational or professional education* at the moment of the survey and the year of attainment of this education, i.e. the year of receiving the respective leaving certificate or diploma, and another about the highest level of *general education* attained and the year of attainment, i.e. the year of receiving the document certifying the completion of the respective studies. The level of general education should be recorded for all persons (incl. those who have completed higher education). School of general education refers to basic school (of 9 grades), secondary school and gymnasium. The scale for completed vocational or professional education includes 14 categories and the scale for the highest level of general education includes four categories (see Table A2). The interviewer manual contains a very detailed description of all categories (see Annex). Table A2 presents the official coding scheme for the ISCED-97.

The distribution of the population in the age range of 25–64 years by educational level in the three surveys (EU Labour Force Survey 2004, Estonian Labour Force Survey 2004 and Estonian Social Survey 2004) is presented in Table 1. Two different classification schemas have been used (national detailed classification and the ISCED-97). Differences between the three surveys (ISCED scale) are minimal. Differences between the two scales are to be found at levels 3 and 5. The national scale differentiates between four types on the upper secondary level, while the ISCED scale includes only two types, 3A and 3C (ISCED 3A aggregates three types of upper secondary education: general secondary, vocational secondary and specialised secondary education). Classification on level 5 is also different because the national scheme differentiates between specialised secondary education based on secondary education, aggregates applied higher education, diploma studies and Bachelor's degree to one level and collapses Master's and Doctor's degree as the second level of tertiary education. The ISCED scale classifies the first three types together, combines Bachelor's and Master's degrees and allocates Doctor's degree separately. However the differences between the two schemas on level 5 are not substantial, as professional higher education, applied higher education and diploma study are rather rare. More significant are the consequences of collapsing different types of upper secondary education into one category. It seems that in the ISCED classification, a central criterion is the distinction between programmes that award formal access to higher level programmes and those that do not. The general/vocational distinction is only secondary, although it is more meaningful in some countries (for example in Estonia and in Italy) than the first dimension.

The ISCED-97 therefore does not work well in Estonia at the upper secondary level. The national scale separating level 3A into three types (general secondary, voca-

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viewed. The survey is conducted all over Estonia. The first round of the survey was conducted in 2004.

tional secondary and specialised secondary education) is optimal. I therefore suggest to classify vocational secondary education as level ISCED 3B.

**Table 1. Educational attainment in Estonia, 25–64 year-olds; in per cent**

National scheme, corresponding school de- grees	ISCED scale, corresponding school degrees	EU-LFS 2004	Estonian LFS 2004		Estonian Social Survey 2004	
			National	ISCED	National	ISCED
0 no primary education	0	0.6	0.4	0.4	0.4	0.4
1 primary education	1 primary education	1.1	0.9	0.9	1.4	1.4
2 basic education	2 lower secondary education	13.7	12.7	12.7	11.8	11.8
3 basic education + vocational courses	3C upper secondary education	8.0	8.6	8.6	6.8	6.8
4 vocational secondary education based on basic education	3A upper secondary education	43.4	8.1	41.8	11.2	43.7
5 specialised (professional) secondary education based on basic education			12.2		11.7	
6 general secondary education			21.5		20.8	
7 vocational education based on secondary education	4A post-secondary non-tertiary education	7.6	7.9	7.9	8.9	8.9
8 specialised (professional) secondary education based on secondary education	5B first stage of tertiary education	10.3	10.7	11.7	9.7	11.5
9 professional higher educa- tion, applied higher educa- tion, diploma study			16.0		16.4	
9 Bachelor's degree	5A first stage of tertiary education	15.1		15.7		15.4
10 Master's degree				0.9		0.9
10 Candidate of sciences/ Doctor's degree	6 second stage of tertiary education	0.2		0.3		0.2

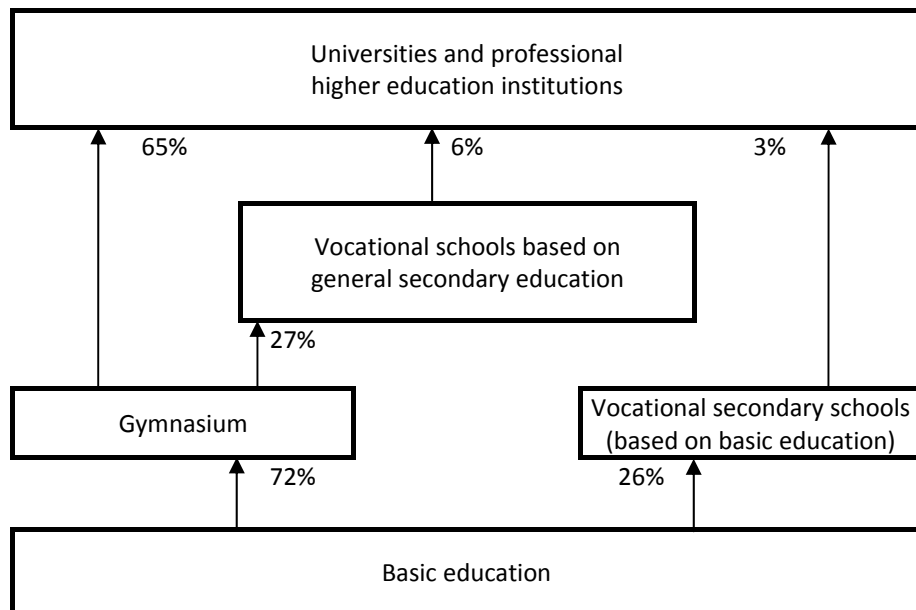
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**Annex**

**Figure A1. Transitions in Estonian education system in 1999 (outflow percentages)**



**Table A1. Questions about educational level in Estonian Labour Force Surveys and Estonian Social Survey**

In English	In Estonian
What is your highest completed vocational, occupational or professional education?	Milline on Teie kõrgeim lõpetatud kutse-, ameti- või erialaharidus?
01 No vocational, occupational or professional education	01 Ei oma kutse-, ameti- ega erialaharidust
02 Vocational education, study time less than 3 years	02 Kutseharidus, õppeaeg alla 3 aasta
03 Vocational education, study time 3 years or more	03 Kutseharidus, õppeaeg 3 aastat või rohkem
04 Vocational education together with basic education	04 Kutseharidus koos põhihariduse omandamisega
05 Vocational education together with secondary education	05 Kutseharidus koos keskhariduse omandamisega
06 Vocational secondary education after basic education	06 Kutsekeskharidus põhihariduse baasil
07 Vocational secondary education after secondary education	07 Kutsekeskharidus keskhariduse baasil
08 Professional secondary/technical education after basic education	08 Keskeri-/tehnikumiharidus pärast põhiharidust
09 Professional secondary/technical education after secondary education	09 Keskeri-/tehnikumiharidus pärast keskharidust
10 Professional higher education	10 Kutsekõrgharidus
11 Applied higher education (diploma study)	11 Rakenduskõrgharidus (diplomiõpe)
12 Bachelor's degree (higher education)	12 Bakalaureus (kõrgharidus)
13 Master's degree	13 Magister
14 Candidate of sciences/doctor's degree	14 Teaduste kandidaat/doktor
Year of attainment of this education  _ _ _ _	Omandamise aasta  _ _ _ _
What kind of education did you attain in the school of general education (or in any other educational establishment in the framework of the general education curriculum)?	Millise hariduse omandasite üldhariduskoolis (või teist liiki õppeasutuses üldhariduse õppekava raames)?
1 Secondary education	1 Keskharidus
2 Basic education (uncompleted secondary education)	2 Põhiharidus (mittetäielik keskharidus)
3 Primary education	3 Algharidus
4 No primary education	4 Alghariduseteta
Year of attainment of this education  _ _ _ _	Omandamise aasta  _ _ _ _

### **Extract from the Interviewer's Manual**

The aim of the question is to record the highest completed vocational, professional or occupational education at the moment of the survey and the year of attainment of this education, i.e. the year of receiving the respective leaving certificate or diploma. It should be noted that the educational level of the person is the highest educational institution or class that has been completed within the formal educational system (i.e. in a school of general, vocational or higher education), uncompleted education is not taken into account. Educational level of persons who have completed vocational, professional or occupational education in a foreign country should be determined pursuant to the procedure used in determining the educational level acquired in Estonia.

No vocational, occupational or professional education is recorded for persons who have not received a vocational, occupational or professional education (for example, persons who have completed basic or secondary school but have not received in addition a vocational, occupational or professional education). Included are also secondary school graduates who in addition to secondary education received a speciality.

Person, who has received a document on vocational training from vocational secondary school, vocational school, trade school, industrial school, factory-and-workshop school, technical school etc (for example, professional certificate, leaving certificate), is considered to have received vocational education (variants 2–4).

Vocational education is recorded for persons who, after completing some level of education in a school of general education, have received a document on vocational training (from vocational school, technical school etc.) without having acquired at the same time basic or secondary education. In-service training, refresher courses, retraining and courses for own interest (language courses, adult education courses) should be excluded.

Vocational education together with basic education is recorded for persons who together with vocational education received basic education in the framework of the same curriculum.

Vocational education together with secondary education is recorded for persons who together with vocational education received secondary education in the framework of the same curriculum (for example, persons who received both a professional certificate and a secondary school graduation certificate from the vocational secondary school). Excluded are persons who in addition to secondary education received a document on vocational training from a school of general education (secondary school, gymnasium, etc.).

Vocational secondary education after secondary education is recorded for persons who have completed a vocational secondary school curriculum in some educational institution after having attained secondary education (there are persons who have this type of education starting from 1999).

Professional secondary/technical education after basic education is recorded for persons who have completed a professional secondary school curriculum in a technical school, commercial school, higher agricultural or horticultural school, naval school or in any other educational institution after having attained basic education.

Professional secondary/technical education after secondary education is recorded for persons who have completed a professional secondary school curriculum in a professional secondary school or in any other educational institution after having attained secondary education.

Applied higher education (diploma study) is recorded for persons who have completed an institution of professional higher education or completed a diploma course starting from 1995.

Bachelor's degree (higher education) is recorded for persons who have obtained a diploma or a bachelor's degree from an institution of higher education (institute, academy, university, excl. adult education courses, University of Marxism-Leninism).

Excluded are persons who have obtained a master's or higher academic degree (incl. equivalent professional or research degree).

Master's degree (incl. equivalent professional or research degree) is recorded for persons who have obtained a master's degree. Included are also persons who have completed an internship.

Candidate of sciences/doctor's degree (incl. equivalent professional or research degree) is recorded for persons who have obtained a candidate of sciences or doctor's degree. Included are also persons who have completed a residency.

Uncompleted education does not raise the level of education of the respondent. For example, if the respondent has studied in the university but has not completed the studies, his or her educational attainment will be secondary education or vocational secondary education, etc.

The aim of this question is to record the highest level of general education attained in the school of general education. The level of general education should be recorded for all persons (incl. those who have completed higher education). School of general education refers to basic school (of 9 grades), secondary school and gymnasium.

Secondary education is recorded for persons who have finished

- 10-, 11- or 12-grade secondary school or
- gymnasium or
- secondary science school or
- college of general education (excl. progymnasium or secondary science school in 1934–1940) or
- received secondary education in a school for children with special needs (in a school for disabled children or in a closed special school for juvenile delinquents).

Excluded are persons who have attained secondary education in a vocational education institution or vocational secondary education after completing basic education, “basic education” will be recorded for them.

Basic education (uncompleted secondary education) is recorded for persons who have finished

- incomplete secondary school or 7 grades in 1961 or earlier or
- at least 8 grades in 1962–1989 or
- basic school or at least 9 grades in 1990 or later, and have not completed general secondary education.

Included are also those who

- completed professional secondary education after basic education or
- finished secondary science school or progymnasium until 1940 or
- finished vocational secondary school in 1920–1944 or
- completed basic education in special schools.

Primary education is recorded for persons who have finished

- 4 grades in 1929 or earlier
- 6 grades (including evening elementary schools for adults) in 1930–1944 or
- 4 grades in 1945–1971 or 1991–1996 or
- 3 grades in 1972–1990 or
- 6 grades in 1997 or later,

but have not attained basic education (including those who left school at the time of attaining basic education).

No primary education is recorded for persons who have not completed the level of education corresponding to primary education. It makes no difference whether the person is literate or illiterate.

For those who have not obtained vocational, occupational or professional education, the year of attainment of general education, i.e. the year of receiving the document certifying the completion of the respective studies.



**Table A2. Coding of ISCED-97 according to EUROSTAT**

<b>Level of general education</b>	<b>Level of professional or vocational education</b>	<b>National classification</b>	<b>ISCED-97</b>
4 No primary education		0	0
3 Primary education	01 No vocational or professional education	1	1
3 Primary education	02 Vocational education, study time less than 3 years	2	2
3 Primary education	03 Vocational education, study time 3 years or more	2	2
3 Primary education	04 Vocational education together with basic education	2	2
2 Basic education	01 No vocational, occupational or professional education	2	2
2 Basic education	02 Vocational education, study time less than 3 years	3	3C
2 Basic education	03 Vocational education, study time 3 years or more	4	3A
2 Basic education	05 Vocational education together with secondary education	4	3A
2 Basic education	06 Vocational secondary education after basic education	4	3A
2 Basic education	08 Professional secondary/technical education after basic education	5	3A
1 Secondary education	01 No vocational, occupational or professional education	6	3A
1 Secondary education	02 Vocational education, study time less than 3 years	7	4A
1 Secondary education	03 Vocational education, study time 3 years or more	7	4A
1 Secondary education	07 Vocational secondary education after secondary education	7	4A
1 Secondary education	09 Professional secondary/technical education after secondary education	8	5B
	10 Professional higher education	9	5B
	11 Applied higher education (diploma study)	9	5B
	12 Bachelor's degree (higher education)	9	5A
	13 Master's degree	10	5A
	14 Candidate of sciences/doctor's degree	10	6