

## Questionnaire: early school leaving in ICT

### I Introductory questions

**0.** Where are you from?

- a) Estonia
- b) Europe
- c) Elsewhere

**1.** In which school did you study ICT?

- a) Estonian IT College
- b) Tallinn University of Technology (incl Virumaa College)
- c) University of Tallinn (incl Haapsalu College)
- d) University of Tartu
- e) Other

**2.** At which level did you discontinue your study of ICT?

- a) Bachelor's study
- b) Master's study
- c) Professional higher education
- d) Doctoral study

**3A/3B/3C/3D** Which curriculum did you follow?

**4.** Which form of study did you follow?

- a) daytime study
- b) evening courses
- c) distance/cyclical study
- d) individual curriculum

**5.** In which study year did you discontinue your studies in this curriculum?

- a) 2011/2012 or earlier
- b) 2012/2013
- c) 2013/2014
- d) 2014/2015

**6.A** In which study year did you start your studies in this curriculum?

- a) 2008/2009 or earlier
- b) 2009/2010
- c) 2010/2011
- d) 2011/2012
- e) 2012/2013
- f) 2013/2014
- g) 2014/2015

**6.B** Did you study on a study place for a tuition fee or for no tuition fee? (several options)

- a) study place with no tuition fee (state budget financed study place)
- b) study place with tuition fee (not state budget funded), paid for study myself
- c) study place with tuition fee (not state budget funded), employer paid for study
- d) started on a study place with tuition fee, then moved to a study place with no tuition fee

- e) started on a study place with no tuition fee, then moved to a study place with tuition fee

**7.A** How much of the curriculum did you complete?

- a) Almost all of it
- b) More than half
- c) About half
- d) Less than half
- e) A few courses
- f) Didn't complete any course

**7B** Why didn't you complete any course? (free text)

**7C** How many ICT subject courses did you complete during your study?

- a) None
- b) A few
- c) Many
- d) Most
- e) Can't say

**8.** How were your grades during your studies?

- a) Very good
- b) Good
- c) Satisfactory
- d) Unsatisfactory
- e) Very different, depending on the course

## II Subject choice

**9.A** What was your highest completed level of education at admission?

- a) secondary education
- b) vocational secondary education or vocational education on the basis of secondary education
- c) professional higher education
- d) Bachelor's degree
- e) Master's degree
- f) Doctoral degree

**9.B** Was this curriculum Your first choice when entering an institution of higher education

- a) Yes
- b) No, I would have preferred another ICT subject
- c) No, I would have preferred another, non-ICT subject
- d) I had no preference with regard to the curriculum

**10.A** What influenced most your decision to study in this curriculum? (*choose up to three*)

- a) Real interest in the subject
- b) The curriculum matched my strengths
- c) The stipends offered to students
- d) Career opportunities (including pay) after completion
- e) Suggestions by friends/family
- f) Suggestion or requirement by the employer
- g) Low threshold or competition for admission

**10.B** Did you enter with intention to complete the full curriculum?

**11. How did you rate the suitability of this curriculum for yourself, in view of your skills, interests, personality and aims, before starting your studies, and how do you rate it today?**

	Very suitable	Rather suitable	Rather unsuitable	Completely unsuitable	Cannot say
Before starting studies					
Today					

**12** How did your understanding of the subject and the curriculum change during the studies? What did you imagine studying and what were studies actually like? (free text)

**13.A1** Did you have career counselling before making the decision to apply for study?

- Yes, I went to a career counsellor at an institution of higher education
- Yes, I went to the Rajaleidja career centre
- Yes, I attended career counselling at an event (e.g. Teeviit, Intellektika, etc)
- Yes, at a high school
- No

**13.A2** What kind of information did you get at the career counselling?

	Got	Partially got	Didn't get but would have liked to	Didn't get and didn't consider necessary
Which subjects suit me (professional suitability) / how to find a suitable subject				
How to find more information about specific curricula				
More precise understanding of ICT occupations				
More precise understanding of ICT study opportunities				
What the difference is between professional and academic higher education in ICT studies				

**13.A3** Why didn't you attend career counselling?

- I didn't know where to get it
- I didn't know enough about it to want it
- I didn't need career counselling
- I thought they wouldn't be able to give me the information I need

**13B** What was your connection with ICT before entry into the institution of higher education?

- Programming class in high school
- ICT classes offered by universities to high school students
- robotics or other ICT-related club or training camp
- lecture or presentation of IT subjects

- e) online course(s) on IT
- f) independent or professional experience in programming or suchlike
- g) no prior deeper contact with the IT field

**14A** Prior to starting studies, did you know in which occupations you would be able to work after graduation your major?

- a) I knew fairly well
- b) I knew, more or less
- c) I knew of a small number of possibilities
- d) I had a mistaken idea of the possibilities

**14B** Which of the following occupations did you hope to work in after graduation?

- a) **Software programmer** (work consisting in understanding the client's needs and translating them both into the various programming languages as well as to other team members, together with whom smart IT solutions are created.)
- b) **IT tester** (work consisting in finding errors and inconsistencies in IT equipment and solutions under development.)
- c) **Software planner** (work consisting in designing, developing and checking new IT systems, based on the client's needs and the IT team's capabilities.)
- d) **Multimedia specialist** (work consisting in working with text, voice and images in designing apps, web layouts, navigation in smartphones or tablets, etc.)
- e) **IT business consultant** (work consisting in turning technological capabilities into money, bringing together the knowledge of the nuts and bolts of information technology with understanding of business.)
- f) **Technical support specialist** (work consisting in quickly solving ICT-related problems, assisting and consulting end users.)
- g) **Computer systems specialist** (work consisting in evaluating clients' needs, analysing the technical possibilities and proposing optimal hardware or software solutions; also ensuring smooth operation of equipment and software.)
- h) **Mobile communications specialist** (work consisting in enabling convenient and fast communication through mobile phones, their base stations and/or different radio communication systems.)
- i) **Communication networks specialist** (work consisting in ensuring the functioning of communication between different nodes (e.g. surveillance cameras, ATM machines, electricity meters etc) and developing relevant solutions.)
- j) **IT project manager** (work consisting in leading an IT team, assigning tasks, managing risks, making operative changes and preparing reports.)
- k) **IT manager** (work consisting in managing an organisation's IT area and proposing new technological solutions in order to contribute to the development of the organisation.)
- l) **IT teacher or education technologist** (work consisting mainly in giving IT-related knowledge to pupils and/or teachers of general education schools and updating learning environments.)
- m) No particular preference

**15.** To what extent were you familiar with the content of the curriculum prior to starting study?

- a) I had thoroughly familiarized myself with the curriculum and knew which courses were taught and to which extent
- b) I had a general overview of the curriculum

- c) I hadn't familiarized myself with the curriculum, but had a general overview of the content of study
- d) I had no idea either of the curriculum or the content of study

### III Satisfaction with studies

**16.1** How often did you encounter situations in which ...

	Often	A few times per semester	Rarely or never
a) inadequate lab and classroom use possibilities			
b) limited possibilities of using other teaching aids			
c) insufficient study materials			
d) out of date study materials			
e) out-of-date lab and classroom equipment (incl. software)			

**16.2** How common were situations in which You had difficulties with...

	Often	A few times per year	Rarely or never
a) uneven study load			
b) excessive study load			
c) too little study load			

**16.3** How common were situations in which You had difficulties with...

	Weekly	A few times per month	Rarely or never	Can't say
a) holes in timetables				
b) lectures/seminars held on workdays				
c) lectures/seminars held too late in the evening or on weekends				
d) rigid timetables / lack of alternative times when choosing courses				
e) changes in lecture/seminar times over semesters				

**16.4** How would you assess the balance of different courses in the curriculum? Please choose all responses you agree with.

- a) The curriculum was well-balanced
- b) Too few practical courses / too little practice
- c) Too few major-related courses
- d) Too few elective courses
- e) Too few optional courses
- f) Too many courses involving math/physics
- g) Too few courses involving math/physics

**16.5A** With the courses, how common was it that ...

*Abiinfo: Please rate only ICT courses in your response to this question.*

	Never	A few specific courses	Many courses
a) too little new material / overlapped with other courses			
b) contained much material that was unnecessary in relation to the major			
c) connections with other subjects of the major were weak			
d) study materials or contents of the course were out of date			
e) theory and practice were out of balance			
f) untrue information was given			

**16.5B** Which courses suffered from low quality the most?

**16.6A** With regard to teachers' subject competence, how common were situations in which ...

	Never	A few specific courses	Many courses
a) the teacher was not aware of newest developments in his or her field			
b) the teacher couldn't answer subject-related questions well enough and didn't also make efforts to find the answer			
c) the teacher lacked sufficient practical experience in his or her field			
d) the teacher lacked sufficient theoretical knowledge about his or her field			
e) the teacher was competent only in the study materials of his or her course and couldn't relate it to other courses or answer questions requiring knowledge of other fields			

**16.6B** If you wish, you can specify which kind of problems you had with which teachers:

**16.7A** With regard to teachers' teaching competence, how common were situations in which ...

	Never	A few specific courses	Many courses
a) the teacher used the lecture format when it was unsuitable for teaching the course			
b) the teacher couldn't relate theory and practice			
c) the teacher employed the teaching methods in an inexperienced or ineffective			

manner for delivering the contents of the course			
d) the teacher couldn't accommodate the study group's proposals or special requests			
e) the teacher's grading method wasn't transparent			
g) the teacher's language skills were not good enough for successfully deliver the contents of the course			
h) the teacher didn't treat students as adults			
i) the teacher discriminated against students by sex, age, origin or other characteristics			

**16.7B** If you wish, you can specify which problems you had with which teachers:

**16.8A** Did you attend lectures by a teacher from outside Estonia?

**16.8B** With the foreign lecturer, how common were situations in which...

	Often	A few times	Rarely or never
a) the subject competence was insufficient			
b) the teaching skill was insufficient			
c) the English language skills were insufficient			

**17A** How satisfied were you with study counselling offered by a peer tutor?

- a) Satisfied
- b) Rather satisfied
- c) Rather dissatisfied
- d) Dissatisfied
- e) I had no tutor in my major or school

**17.B** You expressed dissatisfaction with study counselling offered by a peer tutor – what exactly was the cause of your dissatisfaction?

- a) The tutor's communication skills
- b) The tutor's incompetence in study counselling
- c) The tutor's availability

**18.A** How satisfied were you with study counselling offered by the school employees?

- a) Satisfied
- b) Rather satisfied
- c) Rather dissatisfied
- d) Dissatisfied

**Abiinfo:** This question concerns all school employees whose tasks include study counselling, including study coordinators, head of studies, study counsellor, mentor, group leader (job titles may vary by schools, faculties, colleges and institutes).

**18.B** You expressed dissatisfaction with study counselling offered by school employees – what exactly was the cause of your dissatisfaction?

- a) Communication skills

- b) Incompetence in study counselling
- c) Availability of counselling

**19.** What kind of support or services would you have needed during your studies?

#### **IV Study and work**

**20A** Did you work during your studies (including as entrepreneur or freelancer)?

- a) Yes, mostly full time
- b) Yes, mostly part time
- c) Yes, mostly occasionally
- d) No

**20B** Did you work mostly in ICT?

**20C** Did you start working in your main job already before starting your studies?

**21.** What was the impact of working on your study performance (grades and progression)?

- a) Positive
- b) Rather positive
- c) No impact
- d) Rather negative
- e) Negative

**22.A** Did you have difficulties in reconciling study and work?

- a) Yes, a great deal
- b) Yes, a little
- c) No

**22.B** What exactly caused difficulties in reconciling study and work?

- a) Excessive workload
- b) Time-related conflicts
- c) Different fields of work and studies
- d) Other

**23.** What was the employer's (employers') attitude with regard to your studies?

- a) Very supportive, the employer wanted me to continue studies and ensured possibilities for me to attend school
- b) Rather supportive, the employer wanted me to continue but didn't offer flexibility for attending school
- c) Neutral
- d) Rather unsupportive, the employer's attitude with regard to studies was negative
- e) Not supportive at all, the employer wanted me to quit
- f) No supervisor at work / I was self-employed

**24.A** Should the organisation of studies support working during studies more?

- a) Yes, subject-related work should be support
- b) Yes, any work should be support
- c) No

**24B** Please specify: why would work during studies be supported?

**24C** What could be done so that it would be easier to work during studies? (free text)



## V Discontinuation of studies

25. Did you take academic leave during your studies and if yes, for how long?

- Didn't take academic leave
- 1 semester
- 2 semesters
- 3 semesters
- 4 semesters
- 5 or more semesters

26. To what extent were the following factors behind the discontinuation of your studies?

	A great deal	To some extent	A little	Not at all	Cannot say
A Wrong choice of major					
B Economic difficulties / Need to work					
C Wish to work					
D Family reasons					
E Organisation of study					
F Difficulties with specific courses					
G Difficulties with the thesis					
H My language skills					
I Difficulties in adapting to studies, school or environment					
J Lack of motivation					
K Other					

26A Please specify what you mean by wrong choice of major:

- I was wrong to think that work in the field of ICT suits me
- I was wrong to think that studies in the chosen curriculum suit me
- I was wrong to think that studies at the chosen school suit me
- I had a mistaken idea of the contents of the study (curriculum and knowledge delivered)
- I had a mistaken idea of the academic or practical orientation of the studies

26C Please specify why you wanted to work:

- To get general work experience
- To get professional work experience
- To provide for myself
- To provide for my family

26E Were there also other problems in addition to those treated above?

26F Please specify why some courses caused you problems.

- They were too hard
- They were too theoretical
- They were unimportant with regard to the major
- The study materials were insufficient
- I didn't get enough new knowledge
- Because of teachers

- g) My own modest interest for the courses

**26G** Please specify why you had problems with the thesis:

- a) I had no subject for the thesis
- b) I had no supervisor
- c) The guidance materials were insufficient
- d) The supervisor didn't really supervise
- e) Work on the thesis was too time-consuming
- f) Didn't have motivation

**26K** Please specify what you meant by other reasons.

**27.** What role did living in Estonia play in the discontinuation of your studies?

- a) An important role
- b) Some role
- c) Little role
- d) Didn't play a role

**28.** What is/was your activity after discontinuation of studies?

- a) Work in the same field as the major in which you discontinued your studies
- b) Work in a different field from the major in which you discontinued your studies
- c) Continuing studies in some other ICT subject in higher education
- d) Continuing studies in some other subject in higher education
- e) Continuing studies in vocational education
- f) Labour market inactivity (including caring for children or other family members, conscription, a year off)
- g) Unemployment, i.e. actively looking for work

**29.** Subsequent to discontinuing your studies, have you started or continued studies in an ICT subject?

- a) Yes, in the same curriculum
- b) Yes, in some other higher education ICT curriculum
- c) Yes, in a vocational education ICT curriculum
- d) No

**30.** Are you interested in continuing studies in the future?

- a) Yes, in the same curriculum
- b) Yes but in some other ICT curriculum
- c) Yes but in a curriculum in some other field
- d) Yes but on a different level of education
- e) No

**31.** Is there anything that could motivate you to continue studies in ICT in the near future?

**32.** What would motivate you to continue studies in an ICT curriculum?

**33.** Please specify which of the following changes, in your opinion, would reduce early school leaving in ICT subjects?

	Yes, would reduce	No, wouldn't reduce	Cannot say
a) Better general informedness of the			

subject before entry			
b) Better career counselling before entry			
c) Better study counselling (tutor, mentor, study counsellor) in the institution of higher education			
d) Better system of support services (e.g. dormitory) in the institution of higher education			
e) Changes in curriculum			
f) Changes in general organisation of study			
g) Greater share of foreign teachers			
e) Changes in the timetable			
f) Free part-time study			

**34.** When exactly should lectures/seminars be held so that it would be more convenient for the students?

- a) Daytime on workdays
- b) Nights on workdays
- c) Weekends
- d) As cycles (e.g. three days once a month)

**35.** In your opinion, would more widespread awarding of **€160** monthly stipends reduce early school leaving in ICT subjects?

- a) Yes, it would reduce it
- b) No, it wouldn't reduce it
- c) Cannot say

**36.** In your opinion, would more widespread awarding of **€160** monthly stipends reduce early school leaving in master's studies in ICT subjects?

- a) Yes, it would reduce it
- b) No, it wouldn't reduce it
- c) Cannot say

## **VI Background information**

*In the following, we ask you to describe your present situation.*

**41.** Year of birth:

**42.** What is your main activity at present?

- a) study
- b) work
- c) looking for work
- d) at home
- e) other

**43.** Do you work mainly in the field of ICT?

**44.** In case you would like to add comments to your responses or to share some other additional information with us, please do this here.