



Education at a turning point



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1.0 Introduction

Education at a turning point

Maaja Vadi

KEY MESSAGES

- **The will to pursue education is deeply rooted in Estonian society. It reflects society's belief in the value of education and the aspiration to strive for high-quality learning.** Education is predominantly discussed in positive terms – it is more often associated with something elevated and beneficial than with something inferior or inadequate. To sustain this educational drive, it is important to address shortcomings in the education system while also recognising its strengths that support further development.
- **Educational indicators should be used to assess development rather than to compile and monitor rankings, as rankings may deepen educational inequality.** Tracking and stratification are matters of concern in Estonia. For example, pupils' mathematics examination results are associated with their mother's income: higher maternal income correlates with better grades. Performance is also influenced by the language of instruction and the pupil's place of residence. Reducing stratification within the education system requires ensuring access to education throughout the life course.
- **High-quality education builds trust and strengthens society.** Education opens positive future prospects for both pupils and the country as a whole. Education exports reinforce Estonia's international position. There is a growing need to develop social and learning skills so that young people are prepared not only for current jobs but also for those that will emerge in the future.
- **Education is a continuous, experiential process in which each life stage brings new learning experiences.** It is essential to ensure a supportive school climate and the mental well-being of pupils and teachers in order to create an education system that fosters development throughout the entire journey, connecting formal schooling with learning through life.

INTRODUCTION

Education is a bridge to the future – but what happens when its supports begin to shift and the destination recedes beyond the horizon? Estonian education is undergoing a period of transition. Traditional approaches to learning and institutional arrangements may no longer fully meet the increasingly diverse expectations of the labour market, society and learners. Schools are expected simultaneously to deliver academic excellence, foster values and support well-being. Pupils seek greater agency in shaping their learning pathways, while parents expect meaningful cooperation. These are not temporary

deviations but signs of a deeper transformation that requires a clear vision and collaboration from all stakeholders – from policymakers to teachers, pupils and parents.

The will to pursue education continues to play a significant role in Estonia and forms one of the central messages of this chapter. Tõnis Lukas, however, draws attention to the contrast between willingness and unwillingness to pursue education. The predominantly positive connotations associated with education are also evident in an analysis of the Estonian language

Figure 1.0.1 Frequency of the word *haridus* ('education') in the Estonian language corpus

omadussõnaga			keskvõrdes omadussõnaga			objektina			subjektina		
hea	4,266	7.0 ***	kõrgem	2,058	9.2 ***	saama	1,616	5.7 ***	andma	780	5.0 ***
hea hariduse			kõrgema haridusega			saada haridust			haridus annab		
• concentrated in: education ?			• concentrated in: Academic Texts ?			• concentrated in: politics & government ?			• concentrated in: education ?		
• concentrated in: periodicals:newspaper ?			• concentrated in: Balanced Corpus 1990–2008 ?			• concentrated in: education ?			• concentrated in: periodicals:newspaper ?		
• concentrated in: non-fiction:Popular science ?			• concentrated in: sex ?			• concentrated in: periodicals:newspaper ?					
kaasav	3,570	11.0 ***	show more (4)			show more (1)			ütlema	631	5.1 ***
kaasava hariduse			parem	910	7.1 ***	omandama	861	10.1 ***	ütles haridus- ja teadusminister		
• concentrated in: Academic Texts ?			parema hariduse			omandada haridust			• concentrated in: Timestamped 2014–2023 ?		
• concentrated in: science ?			• concentrated in: science ?			• concentrated in: education ?			• concentrated in: education ?		
• concentrated in: education ?			• concentrated in: politics & government ?			• concentrated in: law & justice ?			• concentrated in: periodicals:newspaper ?		
show more (2)			• concentrated in: education ?			• concentrated in: politics & government ?			show more (1)		
erialane	1,725	10.0 ***	show more (2)			show more (1)			osalema	465	7.3 ***
erialase hariduse			madalam	793	8.9 ***	andma	581	5.3 ***	osaleb haridus- ja sotsiaalosakonna		
• concentrated in: education ?			madalama haridusega			anda haridust			• concentrated in: Web 2017 ?		
• concentrated in: science ?			• concentrated in: science ?			• concentrated in: education ?			• concentrated in: politics & government ?		
• concentrated in: periodicals:newspaper ?			• concentrated in: economy, finance & business ?			• concentrated in: periodicals:newspaper ?			• concentrated in: education ?		
eestikeelne	1,582	9.4 ***	• concentrated in: politics & government ?			• concentrated in: encyclopedia ?			show more (1)		
eestikeelse hariduse			väiksem	95	4.5 ***	väärtustama	390	9.3 ***	pidama	452	3.6 ***
• concentrated in: Timestamped 2014–2023 ?			väiksema haridusega			väärtustada haridust			haridus peab		
• concentrated in: education ?			• concentrated in: Web 2013 ?			• concentrated in: Web 2013 ?			• concentrated in: education ?		
• concentrated in: politics & government ?			• concentrated in: Reference Corpus 1990–2008 ?			• concentrated in: education ?			• concentrated in: politics & government ?		
show more (2)			kehvem	83	7.6 ***	pakkuma	205	4.7 ***	tegema	400	3.8 ***
kvaliteetne	1,124	8.6 ***	kehvema hariduse			pakkuda haridust			teeb haridus-		
kvaliteetse hariduse			• concentrated in: Timestamped 2014–2023 ?			• concentrated in: education ?			• concentrated in: law & justice ?		
• concentrated in: politics & government ?			• concentrated in: politics & government ?						• concentrated in: education ?		
• concentrated in: science ?			vähem	67	6.9 ***	toetama	189	6.0 ***	vastama	390	5.7 ***
• concentrated in: education ?			vähema haridusega			toetada haridust			haridus vastab		
show more (2)			varasem	35	3.8 ***	• concentrated in: Reference Corpus 1990–2008 ?			• concentrated in: politics & government ?		
akadeemiline	977	8.7 ***	varasema hariduse			• concentrated in: politics & government ?			• concentrated in: law & justice ?		
akadeemilise hariduse			suurem	28	1.1 ***	• concentrated in: education ?			• concentrated in: education ?		
• concentrated in: Reference Corpus 1990–2008 ?			suurema hariduse			pidama	173	4.3 ***	saama	380	2.4 ***
• concentrated in: Wikipedia 2023 ?			kvaliteetsem	26	6.8 ***	haridust peetakse			saab haridus-		
• concentrated in: education ?			kvaliteetsema hariduse			edendama	145	7.7 ***	• concentrated in: politics & government ?		
show more (4)			mitmekülgsem	20	7.0 ***	edendada haridust			• concentrated in: education ?		
venekeelne	784	8.5 ***	mitmekülgsema hariduse			• concentrated in: politics & government ?			tähendama	307	5.2 ***
venekeelse hariduse			halvem	18	6.0 ***	puudutama	143	6.2 ***	haridus tähendab		
• concentrated in: politics & government ?			halvema hariduse			puudutab haridust			• concentrated in: education ?		
• concentrated in: periodicals:newspaper ?			vähesem	15	6.5 ***	• concentrated in: politics & government ?			toetama	306	6.0 ***
• usually in: periodicals ?			vähesema haridusega			hindama	129	5.2 ***	toetab haridus- ja		
korralik	655	6.8 ***				haridust hinnatakse			• concentrated in: education ?		
korraliku hariduse						• concentrated in: Web 2013 ?			• concentrated in: periodicals:journals ?		
• concentrated in: Reference Corpus 1990–2008 ?						kasitlema	92	6.0 ***	puuduma	285	5.0 ***
• concentrated in: education ?						kasitleb haridust			haridus puudub		
• concentrated in: periodicals:newspaper ?						• concentrated in: politics & government ?			• concentrated in: Web 2013 ?		
mitteformaalne	650	9.0 ***				vajama	80	3.6 ***	tulema	265	2.7 ***
						vajavat haridust			haridus tuleb		

SOURCE: Sketch Engine analysis²

corpus conducted using Sketch Engine,¹ which identifies the semantic contexts in which the word *haridus* ('education') appears (Figure 1.0.1).

The collocation good education is the most frequent combination (4,266 occurrences), although it accounts for only about one per cent of all instances of the word *haridus* in the Estonian language corpus (422,175 occurrences as of 21 May 2025). The distribution of collocations suggests that education is discussed more often in positive than in negative terms – it is more frequently associated with something higher and better than with something lower or inadequate. To ensure that this remains the case, we must understand which shortcomings must be addressed. The challenges facing education are analysed from the perspectives of input (investment), process and output, with illustrative examples drawn from the discussions presented in this chapter.

INVESTMENT IN EDUCATION IS ESSENTIAL, AS EDUCATION SHAPES SOCIETY

This chapter examines the role of education from both domestic and international perspectives. Outward-oriented educational activities hold considerable potential. In his reflection, Erkki Raasuke notes that if Estonia succeeds in creating an integrated solution that encompasses study, living and working in the country, education could become the next engine of growth – an export sector that brings revenue, skills and new international connections. Eero Loonurm and Heli Aru-Chabilan provide numerous examples of how education exports elsewhere contribute to both economic development and social life. In Finland, for example, learning materials are an important export product. This inevitably raises questions: Why should Estonia not follow a similar path, and what would need to change for it to do so more effectively?

From a domestic perspective, several contributions in the chapter engage with the influence of neoliberal principles that have shaped the content and form of education in recent decades. Aune Valk argues that educational success should not be assessed solely through economic returns

but also through human values. She proposes counterbalancing neoliberal approaches with humanistic indicators.

The chapter devotes significant attention to the causes and manifestations of educational inequality among both school-age children (in the article by Sandra Haugas and Eve Mägi) and adults (in the article by Kirsti Melesk and Märt Masso). These barriers must be addressed, as otherwise social inequality will deepen and frustration will increase, reducing motivation and willingness to cooperate across social groups.

Several examples of educational tracking and related stratification are presented in the chapter. Evidence shows that Estonian pupils' mathematics final examination results are associated with their mother's income: the higher the mother's income, the higher the child's mathematics grade, and vice versa. The language of instruction is also associated with differences in pupil achievement across several domains. It is therefore understandable that Eve Kikas calls for the abolition of first-grade entrance tests to reduce early tracking. To reduce educational inequality among adults, Anneki Teelahk recommends supporting vulnerable target groups and strengthening self-esteem, as well as increasing the flexibility of education. This is crucial, as Kirsti Melesk and Märt Masso note that adults with lower levels of education, people with reduced work capacity and older men participate in continuing education far less frequently. Maintaining and supporting the will to pursue education must therefore be ensured across the entire life course.

LEARNING IS A JOURNEY, NOT A DESTINATION

'The substance of education is shaped not only by formal schooling but also by the experiences of everyday life.' This idea, drawn from Jüri Allik and Maaja Vadi's discussion of the foundations of education, underlines that the educational process is, on the one hand, planned and regulated, and on the other shaped by everyday experience. The interplay between these dimensions can be better understood through the perspectives of different stakeholder groups, which help explain



why some voices are at times more vocal or influential than others. Yet all voices connected to education should resonate together and form a functional whole. The meaning of education therefore emerges through collaboration among multiple stakeholders, where formal learning and lived experience intertwine and diverse viewpoints help shape the substantive development of the educational process. Tõnis Lukas illustrates the importance of such cooperation by remarking that a child's daily journey to and from school should not become so long that it shapes the child more than family and school together are able to do.

When considering what is currently taught – and what should be taught – a growing need for social and learning skills becomes evident. It is important not to focus solely on existing occupations and fields of study but also to prepare young people for professions that do not yet exist. The effectiveness of learning often depends on who teaches and with whom one learns – for example, in the development of digital skills.³ This highlights a potential tension in educational aims: should education primarily prepare young people for the labour market, or should it more broadly foster human development and the formation of critically minded citizens?

Schools are the most extensive and numerous educational institutions, and the chapter also examines school climate and patterns of interaction. There are positive examples, including the development of new state upper secondary schools, yet shortcomings also require attention. Eneli Kindsiko, Maaja Vadi and Urmo Uiboleht point out that physical conditions in educational institutions can at times be unhealthy. In large school cafeterias, for example, noise levels during lunch breaks may reach 100 decibels, and elsewhere in the school they are not always much lower. In a kindergarten group of up to 20 children with one teacher, the teacher manages around 210 interactions per day. When parents are included, the number of communication situations increases further. In a general education school where 21 contact hours per week are recommended and classes include 24 pupils, a teacher may manage up to 300 potential interactions per lesson and approximately 6,300

communication situations per week. In light of these and other pressures, the mental well-being and health of both pupils and teachers warrant serious attention.

At the same time, working in a school and in the teaching profession offers elements that support job satisfaction and may contribute to teachers tending to live longer and remain professionally active for longer than many other occupational groups.

ESTONIA'S EDUCATIONAL OUTCOMES REFLECT BOTH SUCCESS AND STRAIN

High-quality education is visible and has tangible effects. Jüri Allik and Maaja Vadi show that there is a strong association between a country's economic prosperity and the average intelligence score of its population. Educational attainment is also linked to a greater willingness to trust others. From a global perspective, the high level of Estonian education is reflected in indicators of scientific impact, and it is notable that Estonia ranks among the five most successful countries in the world in terms of citation rates of research articles. Estonia's strong performance in international PISA comparisons is also widely recognised. However, global recognition of pupils' achievements also compels discussion of the other side of this success story – burnout, discouragement, anger and other negative emotions and conditions experienced by nearly all participants in the education system. The chapter outlines several ways in which plans could – and should – be shaped to ensure that high performance does not come at the cost of joy in learning within a free and intelligent society.

A positive perspective on educational outcomes is offered in the article by Kirsti Melesk and Märt Masso, which notes that in recent years some progress has been made in reducing inequalities between population groups in adult education.

Several contributions in the first chapter stress that the aim of education is to teach the art of being human. At the same time, the importance of critical thinking and factual knowledge cannot be underestimated. If we assume that artificial

intelligence can fully replace these functions, we risk reaching a dead end: while AI may serve as a useful tool, human intellect remains central to forming a coherent and comprehensive understanding.

The same conclusion emerged during the preparation of this chapter's introduction, when we asked ChatGPT to use the Sketch Engine language analysis tool to compile a list of the words most frequently co-occurring with the term 'haridus' ('education'). Comparing the two analyses – one

based on corpus data generated by specialist software (see Figure 1.0.1) and the other produced by AI – showed that the latter did not include the adjective good. When asked why this word was absent from the list of frequent collocates, the AI responded that good was so self-evident in connection with education that it did not register as a distinctive co-occurrence.

This response leaves an open question: Was the AI mistaken, or was it in fact correct? The chapter explores this and other related questions.

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