

Republic of Estonia Ministry of education and research

# Education strategy 2021–2035

### Education Strategy 2021-2035

#### **GENERAL OBJECTIVE:**

To equip the population of Estonia with the knowledge, skills and attitudes that prepare people to fulfil their potential in personal, occupational and social life and contribute to promoting the quality of life in Estonia as well as global sustainable development.

#### **INDICATORS:**

- 18 to 24-year-olds with low educational attainment not in education or training
- Adults with professional qualification

- · Adults in lifelong learning
- Top performing students in the PISA test



Learning opportunities and the organisation of education

Learning opportunities are diverse and accessible and the education system enables smooth transitions between levels and types of education

#### Action trajectories

Inclusive and sustainable network and infrastructure of educational institutions providing high-quality education

Flexible learning opportunities, high-quality education and supported learning

Internationalisation and learning mobility

#### Indicators:

Participation of children from 3 years old to school age in pre-school education

Share of 20 to 24-year-olds with at least secondary education

Share of 25 to 34-year-olds with tertiary education attainment

Short-term outgoing learning mobility in vocational and higher education

18 522 MEUR €



motivated teachers and heads of schools, a diverse learning environment and a learnercentred approach to learning and teaching

#### Action trajectories

Contemporary approach to learning and teaching

Curricula, smart learning resources and methodology based on the principles of contemporary approaches to teaching and learning

Shared space of culture and values, high-quality Estonian-language instruction and learning of Estonian

Next generation of teachers and support specialists

Next generation of leaders of educational institutions

#### Indicators:

Share of 16-24 year olds with digital skills above the basic level

Subjective wellbeing of students and teachers

Proficiency of Estonian among basic school graduates

#### 6 032 MEUR €

833 MEUR €

Education, society and the

labour market

Learning options are

responsive to the development

needs of society and the

labour market

Action trajectories

System of forecasting and monitoring

labour and skills needs

Competences that create more

added value, continuing training and

retraining opportunities

Indicators:

Employment rates among 20 to 34-year-

olds with professional education

Digital competences above base level

among 16 to 74-year-olds

Entrepreneurial activity of graduates

Budget for years 2021-2035

#### **BIGGEST CHANGES**

- Learner-centered learning and teaching
- Microqualifications and learning bites
- Skills based professional qualification system
- Integrated general and vocational upper secondary education

## Contents



Introduction

Overall objective and strategic goals

The current situation

Overall objective and strategic goals

Action trajectories for achieving the strategic goals

**Strategic Goal 1:** Learning opportunities are diverse and accessible and the education system enables smooth transitions between levels and types of education

**Strategic Goal 2:** Estonia has competent and motivated teachers and heads of school, a diverse learning environment and learner-centred approach to learning and teaching

**Strategic Goal 3:** Learning options are responsive to the development needs of society and the labour market

Management and implementation of the strategy

Links with key EU and international policies and other sectoral development plans

Estimated cost of the strategy

Glossary



## Introduction

The Education Strategy 2021–2035, which sets out key educational goals for the next 15 years, is the follow-up to the Estonian Lifelong Learning Strategy 2020. The strategy is based on studies and analyses, vision documents prepared by experts, the Estonia 2035 Strategy, the UN Sustainable Development Goals (SDGs), the results of the work of the education strategy working groups, feedback and input gathered through public consultations and engagement events, and the results of the Estonian Lifelong Learning Strategy 2020 and its mid-term evaluation.

Looking ahead, we should take account of demographic change, people's changing preferences and lifestyles, climate change, globalisation, technological progress, as well as the development of democracy and civil society. These developments change the nature of work and people's lives and imply changes in education. In a rapidly changing world, the education system should ensure equal access to high-quality education irrespective of social and cultural backgrounds, age, gender, etc. The need to increase coherence between, and the flexibility of, different levels and types of education has gained greater importance.

Teachers are and will remain key actors in planning, providing feedback and supporting the teaching and learning process in general, including vocational and higher education, as well as non-formal learning. Heads of schools should create a learning culture and environment that supports learning and well-being, skilfully managing and implementing changes, and upgrading the role of support specialists and their cooperation with teachers. It is therefore essential that the professions of teacher, vocational teacher, university teacher and support specialist, as well as that of school head, are more highly regarded and attractively remunerated. The design of the learning environment in educational institutions should take into account the principles of spatial quality and ensure that learners and staff are provided with an environment and learning arrangements that are mentally and physically safe and supportive of health and well-being.

In formal education, as well as in non-formal and informal learning, we need to do more to promote the development of the general and future competences required to become a citizen, along with subject-related and professional knowledge and skills. We need to notice and value everyone in education and to guarantee opportunities for all learners to acquire the knowledge, skills and attitudes that enable individuals to cope and succeed in ever-changing circumstances and make the most of their potential in personal and collective prosperity.

In anticipation of upcoming challenges, it is important to acknowledge the wider role of education and to understand the personal, cultural and societal value of education, which was also the starting point for the *Estonian Lifelong Learning Strategy 2020* and was emphasised in the vision documents. For individuals, education provides an opportunity to discover and develop their capacities and skills in order to become healthy and active members of society. Education helps to preserve culture, develop identity and connect the past, present and future. One of the weaknesses of Estonian society is the gap between declared and actual values, i.e. the extent to which people are guided in their daily lives by the values and beliefs accepted and agreed-upon by society. The societal value of education should be reflected in greater coherence, safety, flexibility, creativity and the regenerative capacity of society, which enable individuals to cope with a rapidly changing world, including crisis situations.

WORMHITE BLACK

# Underlying principles and values of the strategy



## The current situation

The situation of education in Estonia has been described in the context of the three strategic goals of the *Education Strategy*, through strengths and challenges highlighted in studies and analyses, vision documents, education strategy working groups and stakeholder consultations. We are guided by the principle that to achieve the future goals of education in Estonia, it is necessary to maintain and further develop its strengths and to address bottlenecks.

#### Learning opportunities and the organisation of education

In order to ensure that by 2035 **learning opportunities are available and accessible, and that learners are able to move smoothly between levels and types of education**, it will remain important that education be highly valued in society, that as many children as possible attend kindergarten, that education be of high quality and diverse, and that educational institutions are autonomous. It is crucial to find solutions to the remaining bottlenecks: how to increase accountability and cooperation between actors in the education system; how to validate knowledge and skills, such as those acquired through work-based learning, in formal education, without compromising the quality of education; how to organise learning in a learner-centred way and support different types of learners, taking into account their gender, special needs, etc.; how to bring those adults whose participation in lifelong learning is currently modest into learning programs.

#### Strengths

- 1. Education is highly valued by both the state and members of society.
- 2. Estonia is among the world's best in terms of equal learning opportunities and the quality of education.
- 3. Estonian universities are internationally competitive and open.
- 4. Early childhood education is available and the vast majority of children in this age group attend kindergarten. This creates a good basis for a smooth transition to school life.
- 5. Non-formal learning is well-developed and diverse.

- 6. Adult participation in lifelong learning is high.
- 7. School administrators, heads of school, school and university teachers have a high degree of autonomy in performing their tasks, including allocating resources. Higher education institutions have a strong degree of autonomy.
- 8. Civil society is a growing contributor to education, e.g. the Teach First, the Back to School initiative and the substitute teacher system; the creation of innovative educational solutions (cooperation with the start-ups); the promotion of adult learning.
- 9. The state uses an evidence-based approach to developing education policy, increasingly involving researchers in strategic decision-making.

#### Challenges

- 1. The distribution of responsibilities between the government, local authorities and the private sector within the education system is obscure. This hampers the reorganisation of the school network and management of the education system.
- 2. Collaboration and coherence between different levels and types of education is limited. Competition between educational institutions in providing basic, upper-secondary and higher education is not always productive. Occasional unnecessary duplication results.
- 3. Differing paths in secondary education are not equally valued. The choice of educational path can be influenced by the learner's place of residence, gender, origin and numerous other factors that hamper social mobility and exacerbate educational and socio-economic inequalities, resulting in segregation both in the labour market and in society at large.
- 4. The drop-out rate for boys from basic education is twice as high as for girls. At the end of basic school, the share of low-achievers is much higher among boys than girls and fewer boys complete secondary education. The lower performance of boys in basic school is not due to differences in ability but to attitudes towards learning, etc.

- 5. Due to resource constraints, vocational and higher education are becoming less diverse, and regional accessibility of education is declining.
- 6. There is no comprehensive approach to supporting learners with special educational needs that embraces the scopes of different ministries and different age groups. The existing support systems are not effective enough to implement inclusive education and ensure access to education.
- 7. Recognition of prior learning and work experience has not taken root in society at the desired level. Knowledge and skills acquired through non-formal and informal learning and work experience are not sufficiently recognised in formal education and awarding professional qualifications.
- 8. Quality assessment of pre-school and general educational institutions is not systemic. External and internal evaluations are not coherent with one another. The flexible quality framework applied in the field of continuing training does not give desired certainty as to the quality of the training.
- 9. Although the participation of adults in lifelong learning has increased significantly over the last decade, not all target groups (e.g. men, people with a mother tongue other than Estonian, people with lower levels of education, etc.) are willing to upgrade their skills. Employers are not sufficiently motivated to develop their employees' skills, including digital skills.
- 10. Participation of Estonian students in learning mobility has increased less rapidly than expected.
- 11. The share of instruction in English has increased rapidly in higher education, while the share of instruction in Estonian has decreased.

To ensure that in 2035 there will be a sufficient number of competent and motivated teachers, university teachers, support specialists and school leaders, and to guarantee that learning environments are diverse and learning is learner-centred, increasing teachers' salaries must remain a national priority. In addition, initial teacher training and professional development opportunities must remain at a high level. We need to continue the development of digital competences and support the diversification of learning, including through digital solutions. It is crucial to find solutions to the bottlenecks: how to achieve a systematic implementation of the contemporary approach to teaching and learning; how to ensure sustainable development for teachers, support specialists and school leaders; how to improve the efficiency of doctoral studies in order to ensure a sufficient supply of new university teachers; how to ensure that teachers and learners with a mother tongue other than Estonian have adequate knowledge of the Estonian language and how to develop a common cultural and value space.

#### Strengths

- 1. Raising teachers' salaries is a national priority.
- 2. Society has trust in the teaching profession.
- 3. Networks linking and supporting educators (associations and unions) operate efficiently.
- General education teachers' and vocational teachers' qualifications are defined within the professional qualification system at multiple levels. The specification of qualifications for adult education teachers has been implemented.
- 5. Initial teacher training in the universities ensures high-level professional preparedness. Teachers, voca-

tional teachers, support specialists and university lecturers have diverse professional development opportunities.

- 6. Pupil and student associations in educational institutions are actively involved in developing a learner-centred school culture.
- 7. Digital solutions and the increasing level of digital competence have improved the accessibility, diversity and efficiency of education. General education schools and vocational schools have a high-level digital infrastructure.

#### Challenges

- The contemporary approach to learning and teaching<sup>1</sup> has not been adopted to the desired extent. Teaching is not sufficiently learner-centred – a research-based approach to the personalisation and support of learning throughout life, for example, is not well established. The current subject-centred learning in general education and professional studies in vocational and higher education do not sufficiently support the development of learners' general competences and future skills. Focusing on progress means that not enough attention is paid to the welfare of learners and teachers in formal education.
- 2. The supply of the next generation's qualified teachers, vocational teachers and support specialists is insufficient, with teacher shortages particularly acute for some subject areas and varying from region to region. The retainment rate of new pre-school, general and vocational teachers is low.
- 3. Doctoral studies are not particularly attractive, especially to local students, and their effectiveness is low. Therefore there promises to be a shortage of next generation lecturers teaching in Estonian. Salaries of university teachers remain low.
- 4. There is no career model for teachers that takes into account professional qualification levels.
- 5. Educators' skills in diversifying the learning process and environment are uneven; the potential of digital

solutions is not fully exploited.

- 6. In Russian-medium schools, teachers' poor knowledge of the Estonian language and language teaching methods are a concern.
- 7. Smart-learning resources required for the implementation of learner-based teaching and learning, as well as an assessment system supporting learning, are not systemically developed and implemented and, furthermore, learning materials are not always relevant and up-to-date.
- 8. Heads of schools and school managers are not equally prepared for educational innovation.
- 9. School managers, heads of school and teachers lack the skills of analysing and using data and managing their work in an evidence-based and effective way. The user-friendliness and interoperability of information systems do not meet expectations and do not support the introduction of data-based teaching and learning.
- 10. There is no comprehensive plan for the development of Estonian-language education, starting from the pre-school level, that would provide sufficient language proficiency to continue education at the next level of education and in lifelong learning.
- 11. There is no comprehensive information about the qualifications of adult educators and the quality of adult education.

<sup>1</sup> The contemporary approach to learning and teaching [link]

To ensure that learning opportunities meet the needs of society and the labour market, it remains important that employers contribute to education and skills forecasting, and that growth areas and areas of national importance are prioritised. It is crucial to address bottlenecks such as: how to reduce the proportion of people with no or outdated qualifications; how to better match training and retraining opportunities to labour market needs, with a stronger focus on increasing added value; how to ensure that the digital literacy of all age groups is sufficient; how to change professional qualification standards faster and more flexibly.

#### Strengths

- 1. Society is characterised by shared values and the population possesses a high level of functional literacy and numeracy, which will support continuous self-development.
- 2. A well-functioning system for monitoring, forecasting and providing feedback on the needs for labour and skills provides a good basis for connecting education and the world of work.
- 3. The worlds of education and work are systemically linked through the professional qualification system and professional standards.
- 4. Employers have an important role in the main educational processes (e.g. development of curricula, orga-

nisation of work placement) as well as in forecasting skill needs.

- 5. Professional higher education curricula correspond to the needs of the labour market and employers value graduates from professional higher-education institutions.
- 6. In higher education, the share of IT students has been doubled over ten years and there are one third more students in the health professions.
- 7. Modern VET and higher education infrastructure have created excellent conditions for cooperation with the world of labour, as well as within the education system.

#### Challenges

- Incentives and conditions for collaboration between educational institutions and the labour market are insufficient and the potential of work-based learning is not fully exploited. Employers' contribution to vocational and higher education as well as to in-service training is inadequate.
- 2. Fewer people continue their education after finishing general secondary school. To a significant degree, the population's labour market potential is not fulfilled due to high drop-out rates from vocational and higher education, as well as from adult upper secondary schools. The proportion of people without professional qualifications and with low educational attainment is high.
- 3. A systematic approach to at-risk groups (people with low levels of education, the elderly, people with special educational needs, etc.) is lacking, including readiness for possible changes in economic sectors. The transition of people with special educational needs to the labour market is not systemically supported.
- 4. Formal education, in-service training and retraining

do not adequately match the development needs of the labour market. Few in-training and retraining opportunities are provided to people with both lower and higher levels of professional skills and education in the growth areas of smart specialisation and in society at large.

- 5. The level of development and acquisition of digital skills is uneven in all age groups.
- 6. The level of career and entrepreneurship education and opportunities to learn about the world of labour and the full spectrum of professions are uneven.
- 7. The process of amending professional qualifications is inflexible and does not permit sufficiently rapid and efficient responses to the changes in the labour market and society.
- 8. The proportion of low value-added jobs is too high, a situation which is not conducive to professional education. The career paths offered by vocational education and training are not valued by society. Employers place uneven value on qualifications and professions. Acquired skills and knowledge are not translated into productivity gains and wages.

# Overall objective and strategic goals

#### **GENERAL OBJECTIVE:**

To equip the population of Estonia with the knowledge, skills and attitudes that prepare people to fulfil their potential in personal, occupational and social life and contribute to promoting the quality of life in Estonia as well as global sustainable development.

Overall objective indicators	2019	2035	
18 to 24-year-olds with low educational attainment not in education or training (%)			
men	12,7	9	
women	6,9	б	
total	9,8	7,5	
2. Adults with professional qualification (25 to 64-year-olds) (%)	73,1	80	
3. Adults in lifelong learning (%)			
formal and non-formal education	20,1	25	
informal education	New indicator,	, methodology	
	is being c	leveloped	
<ol> <li>Employment rates of graduates in growth areas of smart specialisation one year after graduation (%)</li> </ol>	12	20	
Self-directed learner	New indicator, methodology		
	is being developed		
б. Top performing students (Level 5 or 6 in the PISA test) (%), includi	ng (2018)		
reading	13,9	20	
mathematics	15,5	25	
science	12,2	20	
7. Average teachers' pay compared to average pay in Estonia (%)			
pre-school teacher	86	100	
general education teacher	112	120	
vocational education teacher	108	120	

The overall objective is underpinned by three strategic goals:



 Learning opportunities are diverse and accessible and the education system enables smooth transitions between levels and types of education



2. Estonia has competent and motivated teachers and heads of schools, a diverse learning environment and a learner-centred approach to learning and teaching.



**3.** Learning options are responsive to the development needs of society and the labour market.

In order to achieve these goals, the responsibilities and roles of all actors need to be clear but not rigid. It is important for everyone to notice and care, assume responsibility for the tasks they are best suited to perform, and to be willing to cooperate.



#### Parents

support minor learners, create conditions that are conducive to learning and contribute to school life.



#### Educators

create a development-supportive, healthy, safe and cooperative learning environment and organisational culture.



#### **School owners**

create conditions for the proper functioning of their schools and ensure the necessary resources to maintain their schools.



#### Learners

take responsibility for their education and make informed choices of their educational paths in order to acquire the knowledge, skills and abilities that will allow them to fulfil their potential and succeed in life.



#### Labour market participants

contribute actively to the development of a learning system that is relevant to labour market needs, and participate in the development of curricula related to their specific areas of activity. Employers take greater responsibility for the development of education and the skills of their employees, including the provision of work-based learning and work placement opportunities.



#### **Civil society**

acts as an important partner of the state, local governments and social partners, and participates in the strategic development of education.



### The government and local authorities

ensure a wide range of high-quality learning opportunities, accessibility and high-quality learning environments, including an optimal network of educational institutions.

# Strategic goals, objectives and action trajectories

#### Strategic goal 1:

Learning opportunities are diverse and accessible, and the education system enables smooth transitions between different levels and types of education.

The key words for the next 15 years will be lifelong learning and flexible learning pathways in a seamless learning environment<sup>2</sup> that enables personalisation. The dividing lines that prevent mobility between formal, non-formal and informal learning, as well as between general and vocational education, will be reduced. To make learning opportunities more flexible, it is important to take a holistic approach to extracurricular education by designing it as a life-long process. Learners can design their learning path according to their needs and abilities, for example by learning in smaller modules or learning bites that can be taken into account as part of the formal curriculum. In the future, learning will take place in a wide variety of settings and forms – in addition to educational institutions, learning will also extend to workplaces, cultural institutions, youth centres, digital environments, nature, etc. The education system is also affected by changing demographics. Population decline means that the school network needs to be adapted while ensuring access to high-quality compulsory education in all regions of Estonia. Increasing migration entails risks and puts an additional pressure on support services, while increased learning mobility creates opportunities to improve the quality of education.

-ir:	st strategic goal indicators	2019	2035
1.	Participation of children from 3 years old to school age in pre-school education (%)	91,1	95
2.	Share of 20 to 24-year-olds with at least secondary education (%)	84,8	90
3.	Share of 25 to 34-year-olds with tertiary education attainment (%)	<b>40,8</b> (2020)	45
4.	International learning mobility		
	vocational education	New indicator, methodo is being developed	
	share of holders of bachelor's and master's degrees who have participated in short-term learning mobility (%)	<b>8,3</b> (2020)	15

<sup>2</sup> In the vision documents, the term seamless learning environment is used to describe the open educational space of the future. [link]

### Targets for 2035

#### Right to high-quality and inclusive education:

accessible and available education; supported learning, and learning opportunities that meet the capabilities and needs of learners; the organisation of education in a way that contributes to the development of a cohesive society; a wide choice of learning opportunities available in all Estonian counties.

#### Education system:

learner-centered learning and teaching, diverse learning opportunities, smooth transitions between levels and types of education; funding models support the quality of education as well as collaboration within the education system; the development of the education system is evidence-based; researchers in different fields are better involved in the development of educational processes and policies.

#### School network:

learning environments support the accessibility of high-quality and forward-looking education; infrastructure that meets the principles of spatial quality; better sharing of the education infrastructure and more efficient use of resources.

#### **European Education Area:**

all learners have the opportunity to participate in learning mobility without barriers.

#### Estonia as an Education Nation:

skillful education marketing enhances the attractiveness of Estonia as a country of education and a promoter of educational technology; Estonia's contribution to promoting education that supports sustainable development has grown.

#### **Regional development:**

special solutions for regions that need a boost to development; solutions taking into account the region's cultural environment and development context.

#### Increased level of education:

the majority of learners successfully complete their education; an increase in the proportion of people with professional qualifications that meet labour market expectations.















#### Action trajectory 1

1.1. Ensuring an inclusive and sustainable network and infrastructure of educational institutions providing high-quality education to ensure access to education for different target groups and a learning environment that supports contemporary approaches to learning and teaching.

#### To this end:

- · local authorities must ensure that early childhood education is provided close to home
- the division of responsibilities at secondary level needs to be clarified, cooperation between national and local authorities in consolidating and organising secondary education needs to be strengthened by the state taking more responsibility where justified and through cooperative solutions

Optimising the school network

• Developing and implementing the

Developing and implementing the

concept of regional education

centres

- the funding system as well as the performance and quality framework for early childhood, basic, upper secondary and higher education levels need to be restructured; funding of research and higher education should be based on a holistic view of the education, research and development systems
- local authorities responsible for the organisation of basic education must ensure the provision of education close to home, at least in the case of grades 1-6 in basic education. In areas with a declining population, lower secondary education must be provided at least in the larger centres of the municipality, including, where necessary, by ensuring support services such as transport

#### the concept of regional education centres needs to be developed and implemented to create new forms of learning and new opportunities for linking general, vocational and higher education and non-formal learning, including youth work, and for facilitating transitions

- a model for centres of vocational excellence that brings together top expertise for the development of the relevant professional field should be developed and implemented in cooperation with different educational institutions and employers
- ensure optimal number of vocational and higher-education institutions
- infrastructure needs to be brought into line with the contemporary approach to teaching and learning, taking into account the principles of spatial quality, including timeliness and relevance, accessibility, adaptability, sustainability and efficiency, environmental friendliness, safety, health, etc.

**1.2.** Ensuring flexible learning opportunities, accessibility of high-quality education and supported learning to reduce drop-out and early school-leaving rates and to exploit every individual's potential to the fullest.

#### To this end it is necessary to:

- improve the capacity of kindergarten managers to identify special educational needs early and to provide highquality support services to children under school age;
- create conditions for smooth and flexible transitions between different levels and types of education as well as to the labour market; develop and implement a common standard for secondary education to integrate general and vocational upper secondary education and training; create the conditions and opportunities for learners to benefit from a learning pathway consisting of smaller modules (e.g. micro-credentials, learning bites) and meeting their needs and abilities;
- develop a comprehensive solution for taking non-formal and informal learning into account in formal education in order to give more consideration to the knowledge and skills acquired in various environments (digital environment, workplaces, youth centres and programmes, hobby schools, environmental education centres, etc.);
- develop and implement a quality assessment framework for pre-school and general education and develop a quality management framework for continuing education;
- develop and implement a holistic approach to supporting learners with a migrant background on a case-by-case basis;
- develop a comprehensive approach to supporting learners with a migrant background on a case-by-case basis;
- review learners' own responsibility and the conditions of free studies in vocational and higher education as well as educational support mechanisms, including by ensuring access to vocational and higher education regardless of the socio-economic situation

- the development of a common standard for secondary education in order to integrate general and vocational upper secondary education
- greater recognition of non-formal and informal learning in formal education, including opportunities to pursue education in smaller modules (micro-credentials, learning bites)
- developing a holistic approach to support learners with special educational needs
- to vocational and higher education regardless of the socio-economic situation of learners;
- reinforce entrepreneurship and career education and continue the development of the career services system, including a comprehensive system to discover and develop individuals' capabilities; develop learners' capacities to analyse their knowledge and skills and to plan their educational path and career (inter alia, through digitisation of the educational path);
- improve collaboration between different parties for the prevention of dropping out from education and making
  note of and supporting those who discontinue their education; to develop additional measures to prevent dropping
  out and to bring those who have discontinued their education back to formal education (including people with low
  educational attainment);
- improve conditions and opportunities for continuous self-development of adults, including the development and implementation of a combined funding model that takes into account the responsibilities of different parties;
- mandate the government to create opportunities for low-skilled and low-educated adults to develop learning habits and for self-development, including digital inclusion<sup>3</sup>;
- ensure that local authorities take greater responsibility for ensuring access to information and support for adults' participation in lifelong learning.

<sup>3</sup> Digital inclusion means access to digital services as well as the relevant attitudes and skills required for using digital services.

**1.3.** Promoting **internationalisation and learning mobility** in order to diversify learning opportunities, improve the quality of education and promote wider awareness of the Estonian language and culture.

#### For this end it is necessary to:

- develop additional measures to increase the mobility of teachers, vocational teachers, support specialists and university teaching staff, in particular within the European Union;
- develop measures for greater inclusion of international academic staff;
- create opportunities for short-term mobility of Estonian pupils/ students;
- ensure the recognition of periods of learning mobility at all levels of education by improving the international comprehensibility and transparency of certificates and diplomas;
- promote long-term international strategic cooperation in policymaking in the field of education and training;
- provide foreign language learning and education in foreign languages in order to support internationalisation and learning mobility;

- increasing the mobility of teachers, vocational teachers, support specialists and university teachersharidusturunduse arendamine
- •developing education marketing
- promoting long-term strategic cooperation in education and training
- systematically market Estonian education and its success story, and increase education marketing capacity in order to increase Estonia's contribution to promoting education for sustainable development.

#### **Strategic Goal 2:**

#### Estonia has competent and motivated teachers and heads of school, a diverse learning environment and learner-centred approach to learning and teaching

By 2035, Estonia will have an open educational space allowing for personalised learning. Learning tailored to the learner's needs and abilities supports each learner's self-fulfillment and coping in different roles, and the development towards becoming a responsible and proactive member of a democratic society. Learner-centred learning is successful when learners are self-directed and able to choose a learning pathway based on their interests and abilities, unhindered by barriers in the educational landscape. Family-school cooperation is important for learners' personality development. While at the beginning of a learning pathway, the development process requires adult guidance and the role of the family in education is paramount, over time the role of the teacher becomes more important, and the responsibility of the learner increases.

Changes in society, the labour market and education are diversifying expectations of the teaching profession. In the future, the teacher will increasingly be a supporter and mentor, as well as a educator of values, who consciously shapes the learner's attitudes and supports the development of self-directed learners. Universities have a key role to play, both in terms of ensuring the next generation of school and university teachers as well as developing the research, development and innovation required for educational progress. By 2035, parents, the local community, employers and civil society will be more actively involved in education. In order to create a supportive environment conducive to effective learning, it is important for educational institutions to have a value-based, democratic and inclusive organisational culture that supports the development of self-management and cooperation skills and attitudes that value learning among all stakeholders. The joy of learning – the subjective well-being of both learners and teachers – is valued more than before. The role of the education system in developing values, embracing scientific thinking and developing (source) critical thinking is growing.

Sec	ond strategic goal indicators	2019	2035
1.	Low-performing students (Level 1 or 2 in the PISA test, 2018) (%), in	cluding *	
	reading literacy	32,0	27,0
	mathematical literacy	31,0	26,0
	scientific literacy	30,2	25,0
	Percentage of 16-24 year olds with digital skills above the basic level (%)	76,2	90
3.	Subjective wellbeing of participants in the education process		
	percentage of students who are fairly or completely satisfied with school (Year 8)	24,5	growing
	percentage of students who are fairly or completely satisfied with school (Year 11)	33,6	growing
	percentage of students who are fairly or completely satisfied with school (vocational students)	52,4	growing
	percentage of teachers who are fairly satisfied or completely satisfied with their job	83,7 (2018)	growing
4.	Proficiency of Estonian as a second language among basic school graduates		
	percentage of those achieving at least B1 level (%)	67,8	95
	percentage of those achieving at least B2 level (%)	New indicator, methodology is being developed	
5.	Teachers retention		
	percentage of graduates from teacher training who, after completing their training, worked as a teacher for five consecutive years	54	60
	percentage of first-time teachers who have worked as a teacher for five consecutive years after taking up their teaching post	50	55

### Targets for 2035

The contemporary approach to learning and teaching is applied at all levels and in all types of education. Education empowers learners, teachers and academic staff, supports choices, responsibility and the cohesion of society.

**Language proficiency:** a plan for the development of Estonian-language education has been developed, starting from the pre-school level, that provides sufficient language proficiency to continue studies in Estonian at the following levels of education. Estonian and foreign languages are taught so that all Estonians would speak Estonian and at least two other languages.

**General and future competences** can be acquired and developed by all individuals throughout their lives.

The new generation of qualified school and university teachers and heads of schools is ensured. The teaching profession, including teaching at universities, is highly valued and prestigious. Teaching staff has a strong identity and safeguards the reputation and dignity of the teaching profession. The sector provides good opportunities for professional development and self-fulfillment. The role of a teacher as a coach and mentor is becoming more important.

**Curricula** support a learner-centered approach; the volume and content of education are better aligned with the development needs of society and the labour market. The development and implementation of curricula is evidence-based and inclusive.

**Digital pedagogy** – Educators are familiar with trends, opportunities, risks and methodologies related to new technologies, and apply the technologies in a purposeful way. Smart learning resources and methodology support captivating and effective learning and teaching, and help to give and receive immediate and substantial feedback.

**The organisational culture of educational institutions** is caring, collaborative and democratic, supports the development of general competences and the well-being of all, including better physical and mental health, diversity of views and constructive resolution of disagreements and crises.















#### Action trajectory 2

2.1. The principles of contemporary approach to learning and teaching are implemented at all levels and in all types of education in order to ensure that the process and content of learning support the development of self-directed learners, empowering both learners and teachers, including vocational teachers, university teachers and trainers. The implementation of contemporary approaches to learning supports the acquisition of knowledge of various disciplines, together with the skills of using the knowledge in practice, as well as the development of learning, cooperation and self-direction skills. As a result of better physical and mental health, subjective wellbeing improves.

#### For this end it is necessary to:

- continue the implementation of contemporary approaches to teaching and learning at all levels and in all types of
- education and to support educational institutions in applying the principles of contemporary approaches to teaching and learning;
- develop within the quality-control system a system of monitoring the implementation of the contemporary approach to learning and teaching;
- increase learners' responsibility for their studies from shaping attitudes and values at an early age to informed choices and responsibilities in higher education and in lifelong learning;
- create a mentally and physically safe learning environment that is conducive to physical activity and supports all participants in the learning process;
- provide support and opportunities for parents to develop their role as a supportive and informed parent.

#### **Essential actions:**

- Systematic implementation of a contemporary approach to teaching and learning
- Creating a learning environment and arrangements that are mentally and physically safe and conducive to physical activity
- Generating activities to raise
   parental awareness
- 2.2. In order to increase the effectiveness of learning and to continuously support the development of learners, curriculum development and implementation as well as the assessment of learners is based on the principles of contemporary approaches to teaching and learning and the development of smart learning resources and methodology.

#### For this end it is necessary to:

- modernise the process and content of learning and develop, in cooperation between the parties, science and data-based curricula based on the principles of sustainable development<sup>4</sup> in order to devote increased attention to the development of general and future competences, including the development of self-directed learners and citizens, in addition to providing subject-related knowledge and skills;
- increase the use of practical learning (e.g. problem solving and project-based learning) to make assignments more meaningful for learners and to develop the capacity to solve any issues related to personal life, learning, local community and society

- a stronger focus on the development of general and future competences in addition to subject knowledge and professional skills
- personalisation and diversification of learning and supporting learning through digital solutions
- greater emphasis on practical learning

<sup>4</sup> UNESCO. Education for Sustainable Development Goals: learning objectives (2017). [link]

in a creative, collaborative and innovative way;

- provide all people with more contact with the world of work and opportunities for civic participation already during
  the course of their studies by providing more practical vocational and technology-related skills starting from basic
  school and by creating opportunities for civic participation, including by linking formal and non-formal learning;
  promote practical teaching of science, technology and engineering subjects in general education and extend
  integrated teaching of science, technology and creative subjects to develop creativity as well as problem-solving
  and critical thinking skills;
- change the assessment system so that it supports the development of learners, including taking the knowledge
  and skills acquired through non-formal and informal learning into account in formal education; create conditions
  and opportunities to make the development and assessment of practical skills and general competences a
  standard part of learning at all levels and in all types of education;
- promote the development and implementation of diverse methods of learning and teaching (including digital pedagogy);
- develop and use digital solutions as tools for educational innovation that enable the diversification and
  personalisation of education, including assessment for learning; raise awareness among participants in the
  learning process of the opportunities and risks of the information society; adopt a systematic approach to the
  introduction of new solutions;

## 2.3. Promoting the development of a shared space of culture and values, ensuring high-quality Estonian-language instruction and learning of Estonian as well as promoting foreign language learning.<sup>5</sup>

#### For this end it is necessary to:

- make teaching the Estonian language and culture a national priority, by placing more value on learning Estonian as a mother tongue and the official language;
- increase the capacity to provide high-quality instruction in Estonian in pre-school education;
- ensure that students whose native or home language is other than Estonian have a sufficient level of linguistic competence for continuing their education and succeeding in the labour market; ensure that, where necessary, additional or compensatory Estonian language training is provided after basic school, so that as many graduates from basic school as possible achieve the B2 level;

- Creating a common cultural and value space
- Ensuring adequate proficiency in Estonian among basic school graduates whose mother tongue is other than Estonian
- Supporting the development of Estonian as a language of higher education and research
- promote the development of a shared space of culture and values in the course of the learning process in order to increase the cohesiveness of society;
- promote the development of Estonian as a language of higher education and research, including developing and introducing Estonian terminology; support the maintenance and development of Estonian-language higher education curricula;
- reinforce the learning of Estonian by international students and academic staff;

<sup>5</sup> Regarding language issues, the education strategy deals with the development of the provision of Estonian-language education as well as teaching and learning of Estonian and foreign languages in formal education; the language strategy deals with Estonia's language policy as a whole (including the provisions of the Constitution and the Language Act).

- develop and study the methodology of teaching Estonian as a second language; strengthen educators' willingness to work in a multilingual classroom;
- improve access to Estonian-language education and learning of Estonian by introducing digital solutions;
- expand the teaching and knowledge of foreign languages.
- 2.4. Ensuring that the next generation of qualified school and university teachers, educators, and support specialists have flexible opportunities to enter the profession, as well as providing support for new teachers and professional development opportunities throughout the career.

#### For this end it is necessary to:

- consistently analyse and modernise the content of the profession of teacher, vocational teacher, university teacher and support specialist;
- develop and implement a coherent research-based model of initial and continuing training for teachers and support specialists that takes into account professional standards;
- promote the introduction of professional standard-based career models<sup>6</sup> established by institutions or school managers;
- encourage school owners to link career models and professional development of teachers with their salaries and continuing training opportunities;
- improve cooperation between school and university teachers, vocational teachers, support specialists and trainers, both within and between educational institutions, as well as their mobility into different types of educational institutions in Estonia and abroad; promote short-term work placements of academic staff, vocational teachers and general education teachers in companies;

- Analysing and rethinking the content of the professions of teacher, vocational teacher, university lecturer and support specialist
- Introducing career models based on professional standards and linking them to teachers' pay and further training opportunities
- Flexible opportunities to study to become a teacher, vocational teacher, university lecturer or support specialist, and/or to take up a career in the profession
- Increasing the effectiveness of doctoral studies
- review the content and organisation of doctoral studies and develop measures to increase the effectiveness of doctoral studies;
- · continue promoting the teaching profession and increasing its visibility;
- create flexible opportunities to train as a teacher, vocational teacher, university lecturer or support specialist and/ or to enter the profession; include more people from outside the education sector to introduce more practical skills and work experiences to the learning process;
- offer educators a safe and motivating work environment and competitive pay that takes into account the level of wages in other sectors;
- ensure high-quality support services by implementing both the professional qualification system and quality management for services, including reliable and research-based assessment instruments, methodology and methodical resources;
- support the capacity of adult educators to develop learners' general and social competences within their field

<sup>6</sup> The career model for academic staff is provided in the development plan for research, development, innovation and entrepreneurship.

of study and to develop an assessment and feedback environment for educators which helps to improve and harmonise the quality of training and encourages them to assume greater responsibility for the quality of teaching and learning;

- continue the development of a central information system for continuing training; introduce self-assessment tools based on the competence models of teachers and heads of schools; create self-assessment opportunities for support specialists and adult educators to support their professional development;
- diversify work placement opportunities for teachers, academic staff and support specialists and ensure work placement and support systems (including induction year) for both new and experienced teachers as well as for support specialists.
- 2.5. Ensuring a new generation of heads of schools, supporting their professional development, and developing and implementing an assessment system for heads of schools in order to promote educational innovation and create a safe learning environment that supports the physical and mental health and wellbeing of all.

#### For this end it is necessary to:

- create career opportunities for individuals with high management and leadership potential working in the education sector; promote the profession outside the education sector;
- ensure that the recruitment of heads of schools, support for their professional development and feedback delivery on their performance be based on the competence model of the heads of schools;

- Creating career opportunities for people with good leadership skills working in the education sector and promoting the profession of school leader outside the sector
- Developing a competency model for school leaders
- Enhancing the capacity of school owners to recruit school leaders, support their professional development, and monitor and evaluate their performance
- enhance the capacity of school managers to recruit heads of schools, support their professional development and monitor and assess their performance;
- offer high-quality and effective continuing training at the beginner, intermediate and advanced levels in order to support professional development of heads of schools throughout their career and to ensure that their competences are up to date;
- promote cooperation between heads of schools to share best evidence-based practices and use the resources more efficiently.



#### Strategic Goal 3:

## Learning options are responsive to the development needs of society and the labour market

Rapidly changing societies and evolving labour markets, including new fields and professions and new forms of work, require the upgrading of existing skills. This implies that individuals must be prepared for career transitions and for continuous learning – retraining and further training throughout their lives – and that the education systems is able to respond quickly to changing skills needs. By providing skills, the education system creates the preconditions for entrepreneurship and innovation, for economic growth that takes into account the specific characteristics of Estonia, and for a balanced and cohesive society. An ageing population will create new challenges for the labour market and the social sector, changing the way work is done and the expectations of future employees. Demand for technology-related skills will continue to grow until 2035. In a society based on new technologies, education plays an increasing role in the cultural and ecological survival of society. General and future competences, and at least a few in-depth competences in specific fields (the 'T-shaped skills model'), help people to adapt in the labour market. Flexible and practical upskilling opportunities and work-based learning are becoming increasingly important in education.

Thir	d strategic goal indicators	2019	2035
	Employment rates among 20 to 34-year-olds with professional education (%)		
	one year after graduation	78	85
	five years after graduation	74	80
2.	Digital competences above base level among 16 to 74-year-olds (%)	37	60
3.	Entrepreneurial activity of graduates		, methodology leveloped



### Targets for 2035

#### Lifelong learning and career change opportunities:

valuing competences which create more added value; giving all Estonian people an opportunity to acquire through continuing training and retraining the knowledge and skills they need to be successful in the labour market. Creating support measures to help people with special needs enter the labour market and to adapt to the changes.

#### Estonia as a talent centre:

the education system, legal space and tax system facilitate the development of skills for smart enterpreneurship and, if necessary, attract talents from other countries to Estonia. Estonia is an attractive environment both for the Estonians who have completed their education abroad and for foreign nationals who have completed their education in Estonia.

#### Professional qualification system:

collaboration between the worlds of education and work is based on the monitoring of skills; the monitoring of skills needs and people's skills and development of personal learning and career paths is based on big data.

#### **Educational choices:**

prioritisation of economic growth areas and sectors which are important for preserving the Estonian nation, language and culture and are involved in the provision of public services.

#### IT education:

the digital content development skills in all age groups create equal opportunities for all learners and conditions for increased competitiveness.

Meaningful and open **collaboration between educational institutions and employers;** cooperation in the implementation of career and entrepreneurship education throughout basic and upper secondary education; expanding opportunities for work-based learning and work placements.













#### Action trajectory 3

3.1. Developing and implementing a sustainable system of forecasting and monitoring labour and skills needs which takes into account the needs of all target groups and of coordinating actions between different actors in order to promote the acquisition of knowledge and abilities that serve the labour market and to better link education to the labour market.

#### For this end it is necessary to:

- develop co-creation models that ensure the active and meaningful involvement of social partners in linking education and training with the world of work;
- develop further and implement the needed skills, monitoring, forecasting and feedback system; to improve the capacity and update the method of analysing big data in order to make it possible to forecast the need for skills in particular, as opposed to the need for professions and to make the results more widely usable;
- carry out the reform of the professional qualification system, including shifting from professional standards to profiles, developing a skills matrix and classification system, criteria and tools for assessing skills for different target groups, and recognition of general and professional competences and partial qualifications;
- develop a digital solution for the management of individual educational paths and careers and assessment of skills (digital education history);

- Developing a system for monitoring, forecasting and providing feedback on skills needs for wider use of results
- Creating a digital solution for managing individual learning pathways and careers, and for skills assessment (digital education history)
- develop vocational certification based the principles agreed upon within Estonia and internationally;
- ensure the implementation and interoperability of instruments for comparison and recognition of EU qualifications and prior learning and work experiences by promoting exchange of experiences with other Member States and prioritising the development of mechanisms for recognising prior learning and work experience.



3.2. Supporting the development of competences that create more added value; improving continuing training and retraining opportunities, including work-based learning, to respond swiftly to the development needs of the world of labour and ensure that people are equipped with the right knowledge and skills for employment.

#### For this end it is necessary to:

- provide more vocational training, higher education as well as continuing training and retraining opportunities in growth areas of smart specialisation, in areas where society needs priority development and in the provision of essential public services (e.g. teachers, health professionals, internal security staff);
- Strengthen the role of vocational and higher education in providing high quality continuing training, including curriculum development, training of trainers, etc;
- support career change opportunities by determining training needs and implementing support measures;
- promote continuous self-development and participation in learning by paying more attention to the target groups not in education or training;
- promote more efficient exploitation of the employment potential of the adult population by providing continuing training and flexible learning opportunities, including opportunities to start a business and combine studies and work;
- promote STEM fields;
- raise awareness of the opportunities and risks of the information society and develop digital skills in all age groups for the purpose of digital involvement;
- develop entrepreneurship skills at all levels and in all types of education;;
- develop measures (scholarships, repayment of study loan, etc., including for studying abroad) to promote professions that are not attractive for learners but are highly required and create more added value in society;

- Expanding learning opportunities in the growth areas of smart specialisation, in areas where society needs priority development and in the provision of essential public services
- Expanding and developing the system of work-based learning and work placements
- Increasing cooperation between educational institutions and the labour market on innovative development; developing doctoral and master's programmes in entrepreneurship
- Developing digital literacy across all age groups to increase digital inclusion and develop skills in creating information technologies
- develop a comprehensive talent policy that helps to keep talent in Estonia and attract new talent to Estonia and integrate them into our society;
- promote the inclusion of international school and university students in Estonian society as well as the transition of graduates to the labour market; to improve support measures (including learning Estonian beyond level A2) to ensure that international students and graduates with excellent skills stay in Estonia;
- increase openness to innovation and improve national and international cooperation between educational
  institutions and the labour market in relation to innovative development activities; promote, through education and
  R&D, the participation of companies in global value chains, including developing and introducing state-of-the-art
  technologies; develop industrial doctoral and master's studies.
- continue the development and expansion of the work-based learning and work placement system (quality, broadening the scope of learning mobility, promotion), based on the needs of society and the world of labour.

# Management and implementation of the strategy

The *Education Strategy* is implemented in accordance with the State Budget Act and Regulation No 117 of the Government of the Republic as of 19 December 2019, concerning the procedure for the preparation, implementation, reporting and evaluation of the sectoral development plan and the programmes and the amendments thereto. The implementation of the Education Strategy is coordinated by the Ministry of Education and Research. The implementation of and reporting on the Strategy is supported by a broad-based steering committee. It advises the Minister, supports the implementation of the Strategy by taking into account cross-sectoral links and impacts, as well as analyses reports and evaluates progress towards the objectives of the Strategy. The Steering Committee makes recommendations for the initiation, modification and termination of programmes, relying in these decisions on the performance reports linked to the Strategy, and assesses the modification and termination of the Strategy. The Steering Committee is composed of representatives of the Ministry of Education and Research, the Ministry of Finance, the Ministry of Culture, the Ministry of Economic Affairs and Communications, the Ministry of Social Affairs, the Ministry of the Environment, the Ministry of Rural Affairs, the Ministry of the Interior, the Government Office, the Estonian National Youth Council, the Estonian Language Council, the Estonian Chamber of Disabled People, the Association of Estonian Cities and Municipalities, the Estonian Employers' Confederation, the Estonian Chamber of Commerce and Industry, the Estonian Unemployment Insurance Fund, the Estonian Trade Union Confederation and up to seven experts in the field.

In order to achieve the overall objective and strategic goals of the Strategy, a specific programme is drawn up and amended as part of the budgetary strategy and the preparation of the state budget. At the programme level, ministries, local authorities, organisations representing employers and employees, professional and trade associations, school and university teachers, learners, education NGOs and interest groups, etc. will contribute to the implementation of the Strategy in accordance with the Strategy and its programme.

The implementation of the Strategy will be reported on a programme-by-programme basis within the framework of performance reporting and through needs-based evaluations. The achievement of the goals of the Strategy is evaluated at least twice during the period of implementation of the Strategy, including a final mid-term evaluation not later than three years before the end of the Strategy.



### Links with key EU and international policies and other sectoral development plans

The Education Strategy is closely linked to:

- 1. The objectives of the European Pillar of Social Rights7, which states that everyone has the right to quality and inclusive education, training and life-long learning in order to maintain and acquire skills that enable them to participate fully in society and successfully manage transitions in the labour market;
- 2. The UN Sustainable Development Goals (SDGs)<sup>8</sup> to ensure access for all to inclusive and quality education and lifelong learning opportunities, to reduce inequalities, and to promote environmental sustainability and energy efficiency (see Annex 1 for details);
- З. The European Green Deal<sup>9</sup>, which promotes, inter alia, the development of knowledge, skills and attitudes for sustainable development, the provision of retraining and continuing education for the ecological transition, and the channelling of additional investment into school infrastructure;
- 4. A shared EU vision of a European Education Area that promotes cooperation and exchange of best practice between Member States to foster inclusive, lifelong and innovation-based learning in education and training systems, and to support seamless learning mobility across levels and types of education.

- 20 Principles of the European Pillar of Social Rights [link]
- National Strategy on Sustainable Development Sustainable Estonia 21 [link] Communication from the Commission: The European Green Deal [link]

The Education Strategy also draws on the following documents:

- 1. Council Recommendation on high-quality early childhood education and care systems<sup>10</sup>;
- 2. Council Recommendation on policies to reduce early school leaving<sup>11</sup>;
- Council Recommendation on key competences for lifelong learning<sup>12</sup>;
- 4. Council Recommendation on a comprehensive approach to the teaching and learning of languages<sup>13</sup>;
- 5. Council Recommendation on the validation of non-formal and informal learning<sup>14</sup>;
- Council Recommendation on Upskilling Pathways: New opportunities for adults<sup>15</sup>;
- 7. Decision of the European Parliament and of the Council on a common framework for the provision of better services for skills and qualifications (Europass)<sup>16</sup>;
- 8. Communication from the Commission **A new skills agenda**<sup>17</sup>;
- 9. Council Recommendation on the European Qualifications Framework for lifelong learning<sup>18</sup>;
- 10. Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training<sup>19</sup>;
- 11. Council Recommendation on tracking graduates<sup>20</sup>;
- 12. Council Recommendation on promoting automatic mutual recognition of higher education and upper secondary education diplomas and the outcomes of learning periods abroad<sup>21</sup>;
- 13. Council Recommendation on the establishment of a European Credit System for Vocational Education and Training (ECVET)<sup>22</sup>;
- 14. Convention on the Recognition of Qualifications concerning Higher Education in the European Region (Lisbon Recognition Convention)23;
- 15. The Bologna Declaration<sup>24</sup>.

 $<sup>\</sup>label{eq:council Recommendation on high-quality early childhood education and care systems [link] Council Recommendation on policies to reduce early school leaving [link]$ 10

Council Recommendation on key competences for lifelong learning (2018) [link] Council Recommendation on a comprehensive approach to the teaching and learning of languages (2019) [link] 12 13

<sup>14</sup> Council Recommendation on the validation of non-formal and informal learning (2012) [link]

<sup>15</sup> 

Council Recommendation on Upskilling Pathways: New Opportunities for Adults (2016) [link] Decision (EU) 2018/646 of the European Parliament and of the Council on a common framework for the provision of better services for skills and qualifications (Europass) (2018) [link] 16 17

Communication from the Commission A new skills agenda (2016) [link] Council Recommendation on the European Qualifications Framework for lifelong learning (2017) [link] 18

<sup>19</sup> Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training (2009) [link]

Council Recommendation on tracking graduates (2017) [link] 20

<sup>21</sup> Council Recommendation on promoting automatic mutual recognition of higher education and upper secondary education diplomas and the outcomes of learning periods abroad [link] Council Recommendation on the establishment of a European Credit System for Vocational Education and Training (ECVET) (2009) [link]

<sup>22</sup> 23 Convention on the Recognition of Qualifications concerning Higher Education in the European Region [link]

The Bologna Declaration [link]

The Education Strategy contributes to the achievement of the objectives of the strategy Estonia 2035. The strategy is linked to all the Estonia 2035 strategic goals: Estonia's people are smart, active and care about their health; Estonian society is caring, cooperation-minded and open; Estonian economy is strong, innovative, and responsible; the living environment of Estonia takes into account everyones' needs, is safe and of high quality; Estonia is an innovative, trustworthy, and people-centred state. Of the thematic areas created to achieve the strategic goals, the Education Strategy contributes most to the skills and labour market area of the Estonia 2035 Strategy, which aims to develop an education system that is learner-centred, flexible and forward-looking. The Education Strategy supports the development of people's knowledge and skills to match the needs of the labour market and respond to changes in the economic structure, as well as migration and integration policies.

Of the objectives of the **Welfare Development Plan 2016-2023**, the Education Strategy mainly relates to ensuring that learning opportunities are in line with the evolving needs of the labour market and to creating equal opportunities for lifelong learning, including by promoting a more efficient use of adults' labour market potential. Ensuring children's mental and physical well-being (including the development of general skills and support for parents) and preventing abuse are also common themes.

Of the objectives of the **National Defence Development Plan 2017-2026**, the Education Strategy contributes primarily to increasing the cohesion of Estonian society, which is clearly supported by the general objective of the Education Strategy: to equip the population of Estonia with the knowledge, skills and attitudes that prepare people to fulfil their potential in personal, occupational and social life and contribute to the promotion of quality of life in Estonia, as well as global sustainable development.

The Education Strategy, together with the **Energy Sector Development Plan 2030**, contributes to improving the state of the environment (environmental awareness, sustainable development, energy efficient infrastructure, etc.). Strengthening energy education is also a common element, encouraging closer cooperation between businesses and educational institutions and supporting the training of the professionals needed.

The Estonian Environmental Strategy 2030 stresses the importance of sustainable development of the natural environment and aims to ensure that people value nature highly, regardless of their level of education or whether they live in urban or rural areas. Socially and environmentally sustainable development is also one of the guiding principles of the Education Strategy. Learning should take place in a wide variety of environments, including nature. Infrastructure and classrooms should comply with energy efficiency principles.

One of the objectives of the **Estonian Foreign Policy Strategy 2030** is to improve people's well-being. People's well-being and security is also a fundamental principle of the Education Strategy. Another important link is the role of education and research in internationalisation and in building Estonia's image.

As regards the objectives of the **Agriculture and Fisheries Development Plan 2030**, the Education Strategy is linked both to the preparation of specialists in the field of agriculture and fisheries and to regional development, i.e. the development of comprehensive solutions for regions in need of development in cooperation with other ministries (transport, education, health, entrepreneurship).

The overarching goal of the **Public Health Development Plan 2030** 2030 is to ensure that Estonia's people are as healthy as possible throughout their lifespan and that their health and well-being are maintained and supported. People's well-being, including mental and physical health and safety, is also one of the guiding principles of the Education Strategy. The learning environment must be safe in all respects and support physical and mental well-being. An important part of the Education Strategy is the development of general competences, including self-determination skills, which include the ability to recognise and solve problems related to one's own mental and physical health and

to human relationships. Moreover, one of the actions of the Public Health Development Plan is to build the capacity of staff by strengthening leadership and accountability to ensure that the health sector has a motivated and competent workforce, trained to meet the needs of the population and the healthcare system.

Both the **Forestry Development Plan to 2030** (under preparation) and the Education Strategy have sustainable development of society and the natural environment as a cross-cutting principle. Energy efficiency principles are important in the construction and development of infrastructure and classrooms. The education strategy supports the development of general competences and values that are a prerequisite for ensuring sustainable development of society and the natural environment.

Of the objectives of the **Transport and Mobility Development Plan 2030**, transport management is linked to the development of the education sector, which is essential to ensure access for learners to both formal and non-formal education.

The Education Strategy contributes to the following focal themes of the **R&D**, **Innovation and Entrepreneurship Development Plan 2035:** evidence-based approach; ensuring the next generation of university teachers; increasing international cooperation; greater cooperation between educational institutions and the world of work; and priority development of growth areas.

The overarching objective of the Estonian Language Development Plan 2035 is to ensure the vitality and functioning of Estonian as the first language in all areas of life, to guarantee the right of everyone to use Estonian in Estonia, to preserve and strengthen the status and reputation of the Estonian language and the Estonian-speaking cultural space, and to value proficiency in other languages. The Estonian Language Development Plan and the Education Strategy have a number of common themes. The development of teaching Estonian as a second language to adults is supported in the Estonian Language Development Plan through increasing language learning opportunities and organising practical language learning, and in the Education Strategy through supporting lifelong learning for adults. As regards the development of learning resources, the Estonian Language Development Plan provides for linguistic support for the development and use of learning materials, the integration of language technology into learning materials and the development of materials for adults for learning Estonian as a second language, while the Education Strategy includes the development of learning materials and methodologies across educational levels, the development of Estonian-language textbooks for higher education, Estonian-medium education and the use of digital solutions for Estonian language learning. Initial and in-service teacher training is more broadly included in the Education Strategy, while the Estonian Language Development Plan focuses on improving the subject competence of language teachers and on developing teachers' Estonian language skills. The broader framework of the Estonian language (curriculum organisation, curricula, assessment) is included in the Education Strategy, while the Estonian Language Development Plan includes the methodology for teaching Estonian. The organisation of foreign language learning (curricula, external assessment) is included in the Education Strategy, and activities supporting multilingualism and foreign language learning are included in the Estonian Language Development Plan.

The common focus of the Education Strategy and the **Youth Strategy 2035** is on supporting diverse learning pathways and using an approach that empowers young people. Through formal and non-formal learning activities, young people will develop a more comprehensive picture of their potential (abilities and needs) and awareness of the opportunities available. The Education Strategy provides a framework for taking into account both informal and non-formal learning in formal education, while the Youth Development Plan supports informal and non-formal learning. Smart youth work supports the development of young people's digital competences. Moreover, youth work services and activities support young people's smoother entry into the labour market and create the conditions for success.

The common cross-cutting theme of the **Internal Security Strategy 2030** and the Education Strategy is the well-being and security of people, supported in the Education Strategy through the development of general competences, a common cultural space and values, and high-quality Estonian-medium instruction. The Education Strategy also

supports the Internal Security Strategy 2030 by creating a mentally and physically safe learning environment. Preventing and reducing violence is also an important part of the Internal Security Strategy 2030.

The **Key Principles for Estonian Sport Policy until 2030** are linked to the Education Strategy by ensuring people's mental and physical well-being, including through promoting healthy and active lifestyles.

The **Cultural Development Plan 2021-2030**, which is currently being prepared, is linked to education through the objectives of lifelong learning and the integration of non-formal and formal education. The cultural policy also emphasises the diversity and openness of the Estonian culture (including to foreign students), the importance of digital competences and creativity in all curricula at all levels of study.

The **Development Plan for a Cohesive Estonia 2021-2030** is linked to the Education Strategy through the Estonian-medium education system, which contributes to a more cohesive society. Similar to the Education Strategy, the Population and Cohesive Society Development Plan contributes to the preservation and development of the Estonian language and culture.

The **General Principles of Earth's Crust Policy 2050** are linked to the Education Strategy in a broader sense through the protection of the environment and resource efficiency. In the General Principles of Earth's Crust Policy 2050, one of the priority areas for development of the sector is education, research and development to ensure the science-based management and use of natural resources in an environmentally sound manner that contributes to national growth and resource efficiency and safeguards human health.

The **General Principles of Climate Policy until 2050** are linked to the Education Strategy through the protection of the environment and sustainable development. According to Guideline No 4 of the Climate Policy, society's awareness of mitigation of and adaptation to climate change will be raised to develop climate-friendly attitudes and choices of both consumers and businesses. A knowledge-, skills- and attitude-based approach to climate change will also be introduced at all levels of education and in non-formal environmental education.

The **Climate Change Adaptation Development Plan until 2030** is linked to the Education Strategy through the protection of the environment and sustainable development. The vulnerability of society and its adaptation to climate change are also strongly affected by the level of science and education in a country, which determine how prepared people are for climate change and how accurately they are able to predict its impacts.



## Estimated cost of the strategy

Year	Description of costs		Total	
Tedi	Baseline and Strategic Goal 1	Strategic Goal 2	Strategic Goal 3	(EUR millions)
2021	882	65	29	976
2022	976	87	60	1122
2023	1011	153	58	1222
2024	1045	220	64	1330
2025	1099	291	68	1457
2026	1153	331	71	1556
2027	1206	371	72	1649
2028	1221	410	70	1701
2029	1264	445	62	1771
2030	1280	481	45	1807
2031	1342	529	46	1917
2032	1407	580	46	2033
2033	1474	633	47	2153
2034	1544	688	47	2280
2035	1618	747	48	2412

The forecast shows the expected cost in millions of euros. The forecast is based on the population projection of Statistics Estonia and the long-term economic forecast of the Ministry of Finance. Baseline and Strategic Goal 1: Costs of providing formal education, including operating costs, subsidies and investments; means to maintain teachers' salaries at the 2020 reference level; continued restructuring of the school network in line with the principles of spatial quality. Strategic Goal 2: Costs to increase adaptability and flexibility in education (learners with special educational needs, learners from migrant backgrounds); development of teaching resources and curricula and teacher training costs; increasing teachers' salaries to 120% of the national average by 2025 and maintaining this level until the end of the period. Strategic Goal 3 includes investment in the activities of Action Trajectory 3, i.e. vocational systems, OSKA, adult learning, apprenticeships, work-based learning, etc.

## Glossary

A learner with a migrant background is a learner who has immigrated to his/her country of residence and/or has had a nationality other than that of the current country of residence and/or has at least one parent who has immigrated to the current country of residence.

Areas of smart specialisation<sup>25</sup> means areas of activity where organisations could have better-than-average opportunities for development and where investing in R&D would give them a competitive advantage.

Contemporary approach to learning means an approach to learning and teaching according to which learning is an active process that continues throughout life, in which a learner learns to learn and assumes responsibility for their education. In the course of the learning process, the learner's knowledge and skills are developed and their behaviour and values change. The role of teacher is to support the learner and create an environment and conditions which enable each learner to maximise their development potential.

Digital competences means the skills of using information technology and creating digital content. Digital competences are divided into three: digital competence<sup>26</sup>; professional digital skills; the skill of developing information technology solutions<sup>27</sup>.

Digital pedagogy means supporting the development of digital skills and targeted and methodically meaningful use of digital solutions, learning resources and content in teaching and learning.

Educational institution means a pre-school, basic school, upper secondary school, vocational school, institution of professional higher education or university and adult continuing education institution.

Entrepreneurship competence means a comprehensive set of knowledge, skills and attitudes required for implementing value-creating ideas and sustainable coping with work as an entrepreneur or a paid employee as well as in everyday life. According to the Entrepreneurship Competence Model<sup>28</sup>, entrepreneurship is divided into four competence areas: self-management, solving social situations, value-creating thinking and solutions, and realising business ideas. The first three support entrepreneurship<sup>29</sup> and the fourth covers entrepreneurial knowledge and skills.

Entrepreneurship education means education that supports the development of entrepreneurship competence. Entrepreneurship education as a method of developing entrepreneurial mindset means integrated development of competences that support entrepreneurial mindset in general and specialised subjects. Entrepreneurship education as a specialty (e.g. curriculum, subjects or modules of enterprise education) deals with the process of establishing or developing a business in an integrated manner, providing learners with understanding of entrepreneurs, entrepreneurial mindset and enterprises as well as their functioning in the business environment.

Formal education means purposeful learning that takes place within a planned setting in pre-school, general education, vocational or higher education institutions and is delivered by trained and gualified teachers or academic staff.

<sup>25</sup> Estonian Development Fund, "Smart Specialisation - Qualitative Analysis", 20.02.2013, [link] Based on an analysis carried out by the EDF in cooperation with business and research institutions, the growth areas are (1) ICT horizontally across other sectors (e.g. industrial applications including automation and robotics, cyber security, software development); (2) health technologies and services (e.g. biotechnology, e-health - use of information technology for the development of medical services and products); (3) more efficient use of resources (e.g. materials science and industry, innovative construction or "smart houses", health-enhancing food, chemical industry – more efficient use of oil shale). A national curriculum definition of digital competence, which is also in line with the European Commission's DigComp framework: digital competence the ability to use developing digital technology for coping in a quickly changing society for learning, acting as a citizen as well as communicating in communities; to use digital means for finding and preserving

<sup>26</sup> information and to evaluate the relevance and trustworthiness of the information; to participate in creating digital content; including creation and use of texts, images, multimedia; to use suitable digital cools and methods for solving problems, to communicate and cooperate in different digital environments; to be aware of the dangers of the digital environment and know how to protect one's privacy, personal information and digital identity; to follow the same moral and value principles as in everyday life. Purposeful use of information technology to create new services and products and to support automation and digitisation of sectors.

<sup>27</sup> 

Entrepreneurship Competence Model [lin

<sup>29</sup> Ettevõtlikkus on isiksuseomadustele tuginev hoiak, mida iseloomustavad loov ja uuenduslik mõtlemine, saavutusvajadus, tahtekindlus ja võime ideid teostada

**Future skills** means skills and attitudes that enable coping in a rapidly changing world, including social intelligence, novel and adaptive thinking, learning and giving sense (ability to determine the deeper meaning or significance of what is being learned), cross-cultural competency (ability to operate in different cultural settings), computational thinking (ability to work with vast amounts of data, data handling skills, data-driven action), new-media literacy, transdisciplinarity, design thinking, cognitive load management and virtual collaboration.<sup>30</sup>

**General competences** means the **key competences** defined by the Council of the European Union<sup>31</sup> (literacy competence; multilingual competence; mathematical competence and competence in science, technology and engineering; digital competence; personal, social and learning to learn competence; citizenship competence; entrepreneurship competence; cultural awareness and expression competence) as well as the **general competences defined in the national curriculum for basic schools**<sup>32</sup> (cultural and value competence, social and civic competence, self-determination competence, learning competence, communication competence, mathematical competence, competence in science and technology, entrepreneurship competence and digital competence).

**Inclusive education** means a systematic approach to the provision of high-quality education in mainstream schools that effectively meets the academic and social learning needs of all students in the local community.<sup>33</sup>

**Informal learning**, from the learner's point of view, can mean both intentional and unintentional learning that takes place in everyday situations.

**Learner-centeredness** means the consideration of the individual differences and development needs of the learner in order to empower the learner. Empowering education supports the development of the learner's self-reflection, agency, learning skills and other general and future skills,<sup>34</sup> social and emotional well-being, and readiness for lifelong learning.

**Learning environment supportive of wellbeing** means a combination of mental, social and physical conditions supporting the development of self-efficacy and self-esteem, life skills and social competences in learners as well as mental and physical health more generally.

**Non-formal learning** means purposeful, voluntary learning, based on a specific learning programme and targeting specific interest groups in different settings. Non-formal learning opportunities are provided through youth work, extracurricular education, informal education and continuing training for adults.

**Personalised learning**<sup>35</sup> is based on the interests, needs, capabilities, learning style and pace of the learner; the learner has an active role in shaping their learning experiences and educational path. While the learner has the leading role in personalised learning, individualised and differentiated learning is planned and guided by the teacher. **Individualised learning** pmeans that the teacher adapts tasks to each learner based on their learning needs. In the case of **differentiated learning** the teacher adapts tasks according to the average level of the group.<sup>36</sup>

**Smart learning resources** allow personalised and adaptive learning by means of technology. Smart learning resources enable the empowerment of learners and the addition of value to the learning process through the use of technology (learning analytics, AI, etc.).

Social partners means employers, professional associations, trade unions and others.

OECD Learning Compass 2030: Skills for 2030. [link]; Future Work Skills 2020 [link]
 Council Recommendation on key competences (2018) [link]

National curriculum for basic schools [link]

<sup>33</sup> European Agency for Special Needs and Inclusive Education

Vision documents and suggestions by expert groups for the development of Estonian education, research, language and youth fields in years 2021-2035. [link]

To implement the comtemporary approach to teaching and learning it is important to apply both individualised, personalised and differentiated learning as needed. Basye, D. (2018). Personalized vs. differentiated vs. individualized learning. [link]