



## Estonia Learning System Brief

### Overview

Estonia emerged as a top performer on PISA 2012, ranking in the top tier in science and close to that in reading and mathematics among all PISA participating countries and regions. Among European Union countries, Estonia ranked close to the top in all three subjects. By 2018, two PISA administrations later, Estonia had risen to among the top performers in the world in all three subjects and the highest performer in Europe. In addition, Estonian performance is relatively equitable with respect to socioeconomic background. Estonia has the highest percentage of resilient students in the OECD, defined as students in the lowest quartile of socioeconomic status who perform in the highest quartile on PISA within their own country. And its share of low-performing Estonian students in reading on PISA 2018 was less than half the OECD average.

This is a remarkable achievement for a country that gained independence only in 1991. Since that year, the Estonian economy has grown nearly eightfold, with a well-developed information technology sector central to that growth. Part of its growth strategy was the development of an education system equipped to support a high-tech, high-skill, high-wage economy. Since independence from the Soviet Union, key reforms in Estonia have included developing a new national curriculum and incrementally adapting it to the needs of a new economy; revamping teacher education to focus more on innovative teacher practices, expanding mentorships and requiring all teachers to have a master's degree; and strengthening vocational education and training.

### Learning System

#### *Pre-school*

Estonian municipalities guarantee a place in a public preschool for all children between ages 4 and 7, when compulsory school begins. Enrollment is voluntary, but almost all children—94 percent of children ages 4 to 7—are enrolled. Almost all of these children attend public preschools, in which fees are capped at 20 percent of the national minimum wage. Additional financial support to attend public preschools varies by municipality.

Preschool is based on a national curriculum and is designed to support the physical, mental, social, and emotional development of the child. The National Curriculum for Preschool Child Care Institutions outlines the skills that children should develop by age 7, when primary school begins, in five broad areas: general skills; play skills; cognitive and learning skills; social skills; and self-management skills. It also sets developmentally appropriate educational goals for progress in areas like language and speech, mathematics, art, music, and movement. In collaboration with parents and

teachers, preschools are responsible for developing their own school curricula within the guidelines set at the national level to help children develop these skills. Prior to grade 1, there is a short school readiness assessment. This is used to communicate children’s developmental progress to their primary school teachers and identify those who need additional support in the early grades.

### *Primary and Secondary School*

Compulsory education in Estonia starts at age 7 and is required until students graduate from grade 9 or reach age 17. Basic school, which includes both primary and lower secondary education in Estonia, is from grades 1-9. Upper secondary school is from grades 10-12, and students choose either an academic or a career technical program.

### *Curriculum*

Estonia’s national curriculum for basic education includes eight compulsory subjects: language and literature, foreign languages, mathematics, natural science, social studies, art and music, technology, and physical education. It also includes elective subjects: religious studies, informatics, career education, and entrepreneurship. The national curriculum for upper secondary education includes seven compulsory subjects—language and literature, foreign languages, mathematics, natural science, social studies, art and music, and physical education—as well as five elective subjects—religious studies, national defense, economic and business studies, philosophy, career education, and “bases of inquiry,” or investigative research. At the upper secondary level, about two-thirds of students’ total course load is compulsory courses, and the rest is elective.

Schools are required to adhere to the national curriculum as they develop their own school-based curricula. The national curriculum includes requirements for the development of school-based curricula, such as requiring involvement of a broad range of stakeholders, and for specific elements that must be included, such as school values. The Ministry provides optional resources and advisory services to assist individual schools as they develop their curriculum.

For upper secondary career technical schools, there is national curricula in 21 broad fields of study—such as Information and Communications Technology—that are based on national professional standards. Each national curriculum covers several specialties, including required vocational subjects for each specialty as well as required academic subjects, which are common across all upper secondary programs. VET schools develop their own program curricula in these specialty areas based on the national curriculum. All programs require a significant work-based learning component, at least 35 percent of the program and some have more than half of the program in the work place.

### *Assessment and Qualifications*

Estonia has a system of qualifications for students at the end of basic and secondary school. Students earn a basic school leaving certificate by completing basic education and passing a set of national graduation exams at the end of grade 9. There are three exams: Estonian, mathematics, and a third exam students choose from among a foreign language, science, or a social science field. The exams include both multiple-choice and essay questions, and are graded by teachers. They then have the option to continue to academic upper secondary education or vocational education.

Students who opt for academic upper secondary school take a set of national graduation exams after grade 12. The exams include Estonian, mathematics, and foreign language (English, French, German, or Russian). Twelfth graders also must pass an exam developed by the school based on the national curriculum and complete a research project in order to graduate. The application process for university varies by program of study but generally includes scores on the national graduation exams (often focusing on the subject most closely connected to the program to which a student is applying), additional university-designed subject exams, or interviews. Admission criteria for universities of applied science, which award technical bachelor's degrees, vary by school and program and may not require the national graduation exam scores.

Students who complete upper secondary VET program must take and pass a national professional qualification exam to earn a vocational qualification at the end of their program. National-level qualifications committees consisting of employees, employers, professional associations, and training providers approve the assessment criteria and procedures for each qualification. VET graduates can enter the workforce, apply to universities of applied science or, with additional coursework, apply to academic universities.

In addition to national graduation exams, the Ministry administers sample-based tests in grade 3 in Estonian and mathematics and in grade 6 in Estonian, mathematics, and one additional subject that rotates each year. The tests are administered to 10 percent of the population in order to assess school and system performance, but many teachers give the test to all students in order to check student progress, although there are no consequences attached to the results for students or schools. The results are used for national monitoring.

### *Distance Learning*

Estonia is recognized as a leader in digital solutions, including in the education sector. Teachers in more than 85 percent of schools nationwide use an online platform called e-Kool ("e-School") to streamline their daily teaching tasks, including communicating with students and families, uploading instructional resources to use or share with other teachers, and posting homework and other assignments for students. Students also use the e-School platform to submit completed assignments and create electronic portfolios

of their work. While e-School is designed to support in-person classes, it enables teachers, students, and families to shift key aspects of the teaching and learning process online.

Estonia has also prioritized making teaching and learning resources available online. In 2016, the Ministry of Education and Research launched an online resource library called e-Koolikott (“e-Schoolbag”) with the goal of making the full range of primary and secondary education resources available in digital form by 2020. The resources in e-Schoolbag are searchable by subject, grade, and resource type, and teachers can compile, save, and share their own “learning kits” of related resources. The resources available in e-Schoolbag come from teachers, subject specialists, universities, and textbook publishers. Since 2015, Estonian law has required that all new textbooks be made available in digital form.

Two government-supported foundations play key roles in curating online and distance learning resources for teachers. These include Ministry-produced resources as well as third-party apps or other technology tools produced by Estonia’s educational technology sector. For example, HITSA provides a guide to online and distance learning resources by purpose, such as online assessment tools and practice exercises.

### *Learning Supports*

All schools are required to conduct a yearly development interview to gauge progress and set goals for each student and implement appropriate support measures for students who are struggling academically. The development interview is structured as a conversation that, in addition to the student and teacher, can include the student’s parents, other school staff, and support specialists, like a psychologist. Teachers are also required to observe student development on an ongoing basis and differentiate instruction as needed. At the basic school level, teachers stay with the same students in grades 1 to 3—or sometimes even up to grade 6—which allows deep relationships to form with the children and their families and ensures that teachers are familiar with students’ progress. For students who need short-term academic support to catch up with their peers, schools provide supplemental teacher instruction or services from specialists like psychologists or social workers.

Under Estonian law, a student with special needs is any student who requires additional support due to a range of factors, including health status, disability, long-term absence from school, behavioral disorders, language learner status, or giftedness. There are three tiers of support: general support, which is available to all students and can include additional teacher instruction or access to support specialists; and enhanced and special support, which include more intensive interventions, like an individualized curriculum, and require formal identification of special needs. As of 2019-20, about 13

percent of students received general support and 6 percent of students received enhanced or special support.

Estonian policy states that students with special needs should be educated in mainstream schools and classrooms to the extent possible. About two-thirds of students formally identified as having special needs are enrolled in mainstream schools, and nearly 40 percent attend mainstream classes for the majority of instructional time. The Ministry has established 16 state-run schools for students with special needs who require more intensive supports than are available in mainstream schools. There are also municipally- and privately-run special schools. To support students with special needs, all mainstream schools in Estonia must have coordinators who facilitate cooperation among support specialists and teachers on behalf of students with special needs. The coordinator is responsible for making recommendations to teachers, parents, and the school leader regarding how best to support each student.

Estonia has also established a nationwide network of regional counseling centers providing out-of-school supports for school-age students. These centers, called Pathfinder Centers, were introduced as a pilot in 2008 and expanded to all counties in 2014. Pathfinder Centers provide guidance for students with special needs and other learning difficulties, including coordination of services; specialist services, such as speech therapy, psychological counseling, or social work services; and career and education counseling for young people up to age 26. Pathfinder Centers also coordinate with rural schools, which may not have full-time school-based support specialists, to offer students a wider range of support services.