Estonia's PISA success and digital learning environments

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Introduction

Who we are – Tallinn Co-Educational School - school head and English teacher

What makes a good school

World around and within us



Tallinn Co-Educational School since 1920 students ages 7-19

Tolerance Unity Global Perspective

906 students 70 teachers 45 classrooms 12 grades 4 floors 1 stadium

roomy, cosy, beautiful, full of light, cute yellow <u>schoolhouse</u> friendly, diligent, original, helpful, cordial, co-operative <u>students</u> considerate, helpful, supportive, undertanding, inspiring, positive <u>teachers</u> supportive, interested, caring, positive <u>parents</u> innovative <u>school</u> with great atmosphere and good climate, full of active people

ART MUSIC SPORTS LANGUAGES SCIENCES KNOWLEDGE

exhibitions concerts competitions projects

Mother Tongue Day Speech Contest Quick Brains Quiz Fashion Show

Knight's Tournament KRÕF – Primary School's Drama Festival

Science and Technology week Language Week Museum days Field trips

Estonian and Foreign Languages: English Russian German Finnish French Spanish Japanese

creative art work for graduation language portfolio with personal goals and analysis experiments collaborative learning research papers student conferences

PISA 2015

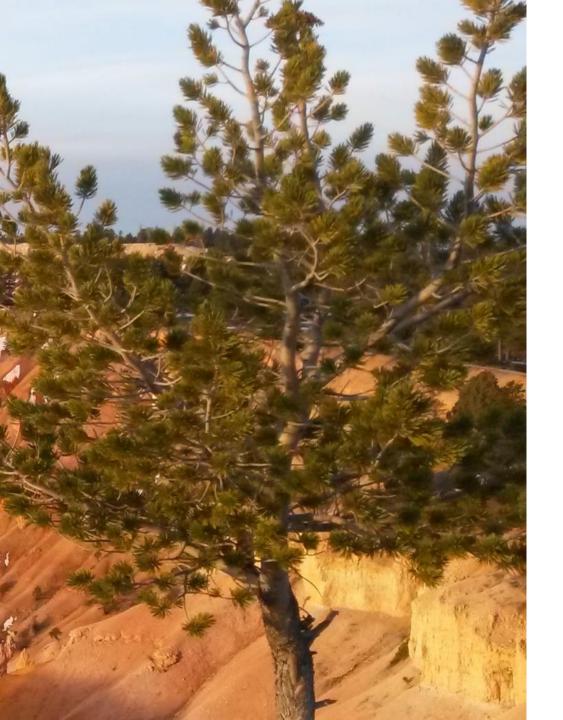
In science, Estonian students rank **1st** in Europe and **3rd** in the world after Singapore and Japan with the mean score of 534 points (the OECD mean is 493).

In mathematics, Estonian students rank **2nd** in Europe after Switzerland (sharing the 1st and 2nd place) and **9th** in the world with the mean score of 520 points (the OECD mean is 490).

In reading, Estonian students rank **3rd** in Europe after Finland and Ireland, and **6th** in the world with the mean score of 519 points (the OECD mean is 493).

Identifying success





Estonian success in PISA is threefold: school-home-society

Dedicated teachers

Demanding and supporting parents/home – educational tradition

Societal expectations and national pressure to do well - Culture oriented society (reading, singing, theatre, art, handicraft, etc)

EDUCATION SYSTEM - SCHOOLS — TEACHERS

Strengths in Estonia:

- * keeping small, close-to-home schools
- * art-music-handicraft-PE lessons for everybody + extra-curricular activities
- * regional educational choices / brands (e.g. sailing and sea studies)
- * great innovative solutions (open classroom, discovery-based study, programming)
- * traditions (local, nationwide history, competitions, song/dance festivals etc.)
- * discussion on educational issues in media
- * colleague to colleague best practice sharing regular meetings in schools
- * initiatives to support entrepreneurship, green thinking and environmental issues, bullying-free schooling, emotional stability through quiet time in class, creativity, foreign language study exchange programs, various museum programs, university partner school networks etc

EDUCATION SYSTEM - SCHOOLS - TEACHERS

Challenges locally and globally:

- * maintaining an effective school system making quality available for everybody
- * sustainable resources: money people (certain subjects!!!) time
- * motivating newcomers to enter / top professionals to stay teacher deficieny forces to employ also non-MA students
- * motivating up-to-date study materials
- * technical equipment (BYOD) and digital literacy
- * inclusive education support system teacher preparedness
- * constantly increasing expectations and needs
- * quality in teaching (qualification, professional development, secure exit)



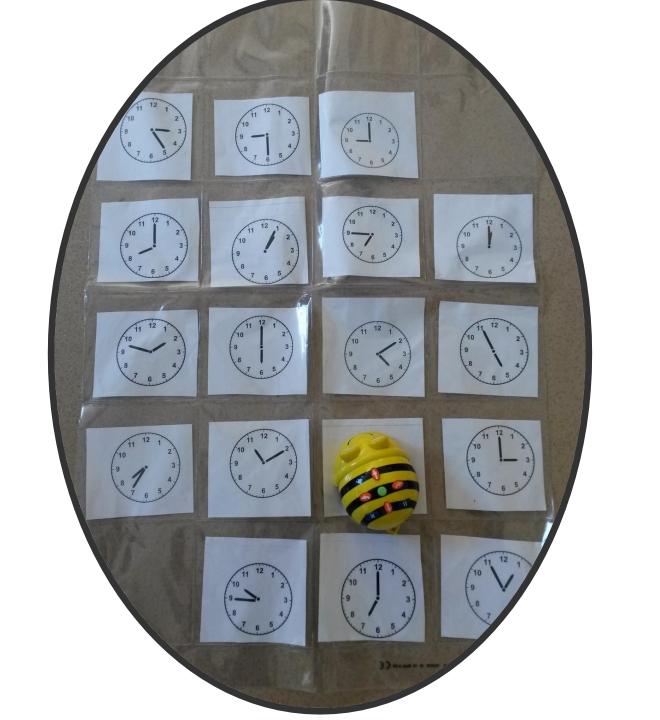
Digital learning environment/ virtual learning environment (VLE) / learning management system (LMS)

LEARNERS: Students / Teachers / Parents / School heads

INDIVIDUAL – GROUP CLOSED - OPEN

CONTENT: Finding and sharing materials – creating – archiving

PROCESS: instructing - communicating - giving feedback



WHAT? and WHY?

INFORMATION search

GAMES (Kahoot)

MATERIALS

DIGITAL LITERACY

COLLABORATION – sharing BEST PRACTICES – PRIVACY - SAFETY

Computers – Tablets – Phones – LEGO education – First Lego League – programming virtual classrooms – blogs - skype lessons – 3Dprinters - etwinning - museums (e.g. Science Center Ahhaa in Tartu, Energy Discovery Center in Tallinn) – ereaders ebooks – autocad – animations – film making - testing - apps - MOOCS - Future Teacher and other programs



Teachers' preferences (Ingrid Maadvere)

	2016	2017
Ajatelg - Timeline	MyHistro Dipity Timetoast	Timetoast MyHistro Dipity
Animatsioon - Animation	GoAnimate MonkeyJam ABCya!Animate	MovieMaker Powtoon GoAnimate
Audio	Audacity VoiceRecord SoundCloud	Audacity SoundCloud VoiceRecord
E-raamat – E-book	Storybird Issuu Cliptomize	Issuu Storybird MyStorybook
Ekraanisalvestus - Sreenrecording	Screencastomatic CamStudio AZScreenRrecorder	Screencastomatic ScreenCastle CamStudio

Esitlus - Presentation	GoogleDrive MSPowerPoint Prezi	GoogleDrive MSPowerPoint Prezi
Joonistamine - Drawing	Paint PaintNET DrawingforChildren	Paint Gimp PaintNET
Koduleht - Homepage	Weebly WordPress GoogleSites	Weebly WordPress GoogleSites
Kontoritarkvara – Office software	GoogleDrive MSOffice Office365	GoogleDrive MSOffice Office365
Koomiks - Comics	GoAnimate Toondoo ComicStripCreator	Toondoo GoAnimate CartoonStoryMaker

Küsitlus, test, poll – Questionnaire, test, poll	GoogleForm AnswerGarden Mentimeter	GoogleForm Doodle Mentimeter
Mäng - Games	Kahoot LearningApps Quizizz	Kahoot LearningApps Quizizz
Kuldvillak - Jeopardy	JeoparyLabs JeoparyApp eQuizShow	JeoparyLabs JeoparyApp eQuizShow
Mõttekaart - Mindmap	Mindomo Mindmeister Coggle	Mindomo Mindmeister Coggle
Pildiseeria – picture series	Kizoa PhotoStory Animoto	SlideShowCreator Kizoa PhotoStory

Pilditöötlus – Photo editing	Picasa Photoshop Picmonkey	Picasa Paing Photoshop
Piltide jagamine – sharing pictures	Instagram Flickr GooglePhotos	GoogleDrive Facebook GooglePhotos
Ristsõna - Crosswords	LearningApps CrosswordLabs HotPotatoes	LearningApps Puzzlemaker CrosswordLabs
Sõnapilv - Wordcloud	AnswerGarden WordCloud Wordle	AnswerGarden Mentimeter WordCloud
Tahvel - Tablet	Padlet Dotstorming LensooCreate	Padlet LensooCreate Dotstorming
Video	Youtube MovieMaker iMovie	Youtube WindowsLive MovieMaker iMovie

Thank you!

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