



REPUBLIC OF ESTONIA  
MINISTRY OF EDUCATION  
AND RESEARCH

Estonian Presidency  
of the Council of the  
European Union



# The Digital (R)Evolution in Higher Education

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# Few words about myself

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Department/occupation: Higher Education, Chief expert;

Main responsibility: Student support system, scholarships,  
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# Topics today

1. E-learning in Estonian higher education institutions and better accessibility to the higher education;
  - Better access to the competences
  - Student-oriented teaching approach
  - Learning analytics
2. Horizontal digital skills in higher education
  - Job-specific IT skills

# Background

## Estonian Lifelong Learning Strategy 2020:

- 1) To **provide every motivated and capable** candidate with **access to high-quality, flexible** and diverse choices higher education taking into **account the developments of labour market**.
- 2) To **apply modern digital technology in learning and teaching** in a more efficient way and with better results, to **improve the digital skills of the general population** and to guarantee access to the new generation of digital infrastructure.

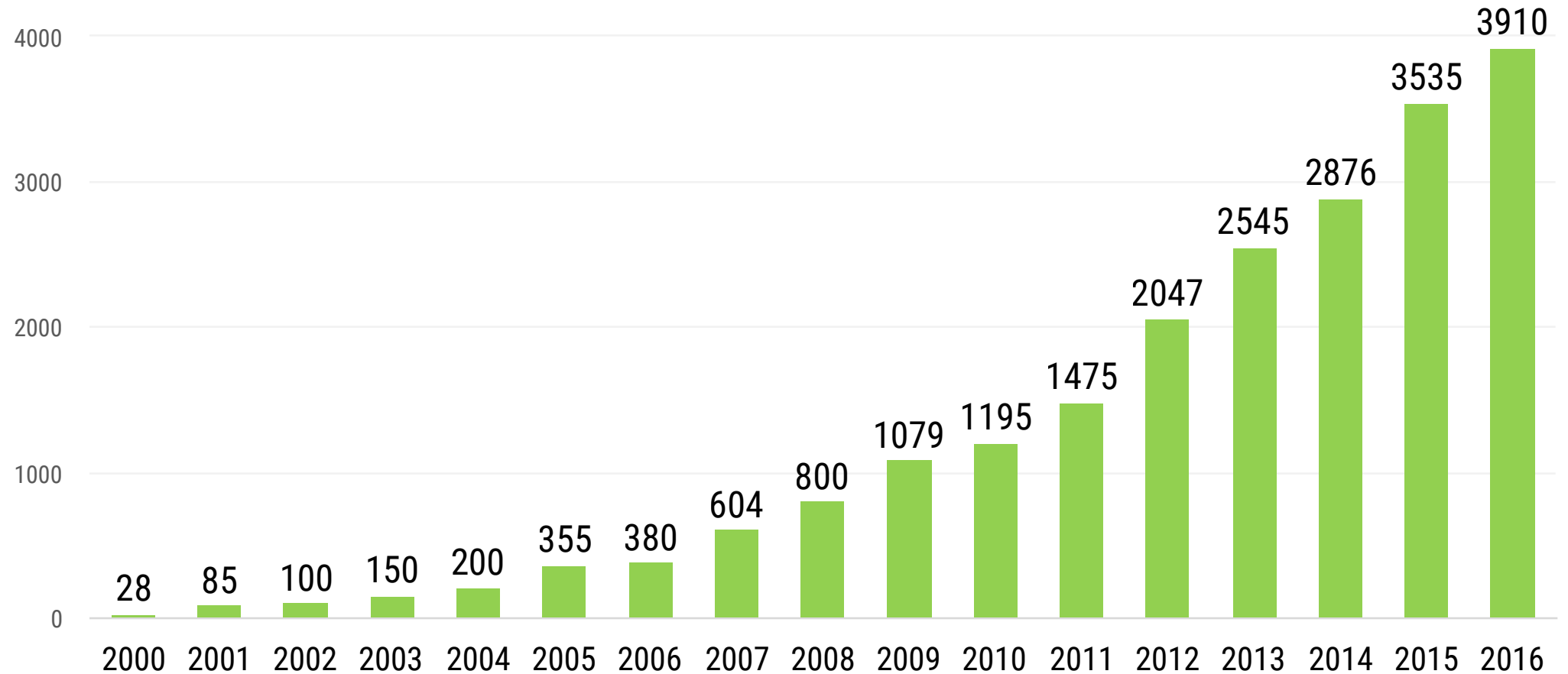
# E-learning – what it is and possibilities?

- ‘Form of studying when subjects are at least partially web based and have web based learning support’
  - Online classes;
  - Online study materials;
  - Online tests;
  - Online communication (forums, chat rooms).

# **E-learning – why it is good?**

- It offers flexible learning possibilities;
- It decreases the proportion of lectures and increases the proportion of individual work in the study process;
- It makes the information and study materials better available for learners;
- It diversifies the study process;
- It allows to facilitate cooperation with other universities, including international cooperation.

# Number of e-courses in the University of Tartu 2000-2016



# **E-learning – bottlenecks**

- Lecturer's digital competences;
- Technical questions;
- Does not support social competences and face-to-face conversation;
- Lack of live discussion between students/students and students/lecturers;
- 70% satisfaction rate.



## **E-learning – why it is good?**

The implementation of e-learning allows all, including regular students, adults, people with disabilities, learners in the regions, working people, etc., access to quality learning regardless of age, location or past learning experience. This is important both for improving the accessibility of higher education in the regions and the hard-to-reach groups, as well as for the provision of continuing education and retraining opportunities for those interested in implementing the principles of lifelong learning.

# **II Horizontal IT-skills**

# Horizontal IT skills – what is meant and why?

- Low problem-solving skills in a technology-rich environment in Estonia according to PIAAC survey;
- Every day labour market is getting more digitalized to support growth and be more competitive;
- Almost every field of study has contacts with digital world;
- Everyone wants to acquire digital competences, but not everyone wants to study programming or become programmer.

# Horizontal IT skills– how?

- Government in cooperation with universities and ICT companies are supporting universities to develop curricula;
  - The aim is to strengthen the development of ICT in the other fields;
  - Tallinn University of Technology – data processing and data analysis in the field of construction.
- **Very high demand for such courses:**
  - Conversion Master in IT
  - The curriculum aims to provide graduates with systematic skills and knowledge in Information Technology, needed by specialists in diverse areas of knowledge to innovatively organize IT related work in their organizations.

# Conclusion

- E-learning as a crucial help for students and lecturer's, but should not substitute completely the traditional learning process.
- We need to develop digital skills in every field to provide highly skilled labour force to labour market. Not just in the ICT curricula.



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# Thank You!

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