The cyber defence field of study at Põltsamaa Coeducational Gymnasium

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Põltsamaa Coeducational Gymnasium

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Põltsamaa Coeducational Gymnasium

- Põltsamaa Coeducational Gymnasium is a municipal School in Jõgeva County.
- 98 teachers and 704 students (181 in the gymnasium).
- 55 students are enrolled in the cyber defence programme:
  - 23 students in the 10th grade (8 girls, 15 boys)
  - 15 students in the 11th grade (17 boys)
  - 17 students in the 12th grade (1 girl, 16 boys)
Objective of the project

• Students acquire the principles of a contemporary digital lifestyle.
• Students are aware of the threats in cyberspace.
• Students act lawfully and ethically in cyberspace.
• Students gain knowledge and practical experiences in the cyber security field.
• Students gain personal cyber crime prevention skills.
• Students themselves inform their community on basic cyber security.
• Students continue studies in higher education.
Raising awareness

• The skills necessary to prevent becoming the victim of a cyber-crime.
• How digital services work and their weaknesses.
• The legal and the illegal.
• The ethical and the unethical.
• The value of privacy and identity.
• Rights and responsibilities.
• Students as “CARRIERS” of cyber defence awareness.
The cyber defence curriculum

Four cyber defence courses (35 h each):

- Information society
- Information technology (the basics of safe networking)
- Digital security and cryptography
- Introduction to mechatronics (UAV)

A school exam in networking to obtain a Mikrotik MTCNA certificate.
Project innovation

- No other Estonian or European comprehensive school taught cyber defence (2015).
- The curriculum became the basis of a national cyber defense elective course.
- “Deed of the Year in Education” in 2016.
Partners

- Estonian Atlantic Treaty Association
- Estonian Information System Authority
- NATO Cooperative Cyber Defence Centre of Excellence
- National Cyber Defense League
- Institute of Information Sciences at the University of Tartu
- National Defence League Jõgeva Unit
- Center for Communication and Information Security Research and Development
- Santa Monica Networks
- The e-Estonia Showroom

November 9, 2015 – key partners signed the cooperation agreement
Outcome

• Drop-out rate nearly zero.
• Students like the practical approach.
• Interesting guest lecturers and training visits.
• Parents are satisfied and supportive.
• Compiled syllabus for four specific courses.
• Noticeable decrease of cyber bullying.
• 20% of the students who enrolled in 2017 are from outside Põltsamaa.
• 9 MikroTik certificates received via the 2017 school exam.
Contacts

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