

**Strategy and action plan for ICT in education 2011-2016,
Akaa Upper Secondary School**

updated on July 6, 2014

1. Introduction

ICT education is central in planning all our current education activities at Akaa Upper Secondary School (Akaan lukio).

Flexible use of ICT prepares our students to face the challenges in the changing world and promotes lifelong learning.

2. The basis for our strategy

The educational goals for ICT are already present in the upper secondary school curriculum set in 2004. The objectives are ingrained in the different subjects and are present, in particular, in these two themes: technology and society, and communication and media skills. This strategy emphasises competence development for teachers, technical and pedagogical support for educational institutions in the use of ICT, as well as creating an environment of modern telecommunications and equipment.

At the national level, the development of information society is guided by a national program. The ICT strategy in upper secondary school is based on the idea that these skills can be attained by students, at an age-appropriate level, and within the limits of their personal capacity.

Actions proposed for developing upper secondary school education. In their report of 2010, the committee for the development of the upper secondary school outlined the key ICT skills. On the use of ICT in education, the report suggests that ICT should have an integral role in the teaching of all subjects. It has a clear beneficial impact on learning outcomes, but further studies are required.

The report suggests that information and communication technology will be phased into use in upper secondary education from 2014 onwards. Both teachers' and students' ICT skills will be assessed.

We share the vision of the ICT Network for the Tampere Region Upper Secondary Education (PAOK):

"The use of ICT in education is a natural part of the learning and working culture in the Pirkanmaa region. Our educational institutions support and encourage community-based development, openness, and sharing of knowledge. Our teachers and staff develop their skills according to our strategies and action plans, and use ICT to support the students' learning process. ICT skills are a natural and everyday part of the teachers' professional competence, and the use of ICT in teaching is not seen as a skill separate from pedagogic expertise. Teachers are supported by a community-based operations model for pedagogic ICT, and a sufficient number of resources have been allocated for support."

We expand on this vision in our action plan, and aim to expand our own pool of experts.

Our 2016 **Vision for the Akaa Upper Secondary School** (Appendix 2) stresses that the learning culture of the future is both community-based and individual-based. ICT has a key role in this future. The vision states that in the year 2016 we will have laptops and electronic textbooks in use.

Akaa Upper Secondary School Curriculum of August 1, 2010, follows the national guidelines. In addition, as our own emphasis for the curriculum, we state that the challenges for the transformation and renewal of the Upper Secondary School are shifting from teaching to managing the learning process, moving from individual learning to team-based learning, strengthening the role of digital and e-learning, moving towards understanding learning results and acknowledging success, and strengthening our international ties and language studies. The educational culture at Akaa Upper Secondary School supports achieving these goals.

The Principal and our ICT Group are responsible for developing pedagogical leadership at Akaa, but every teacher has a personal responsibility for their professional development and knowledge sharing.

3. Developing ICT for better learning

The reinforcement of collaboration skills (social media, applications for knowledge sharing and combining), transformation from distributing knowledge to community-based idea generation and combining knowledge.

Support for networking. Networks have power; common ideas can be developed and advanced better. Networks are better at noticing details and connections, and also better at forming a multi-faceted understanding of the big picture. Networks can be used, for example, to find new business ideas, acquire knowledge, and influence social issues and solve problems.

Developing problem solving capabilities. Creative problem solving combines information and things to produce completely new results. Individuals and groups need to find creative new ways to think, different perspectives, and especially, skills specific to handling information and communication technology.

Introduction of new learning environments, opening the school to the wider world. New learning environments are often associated with the use of advanced technology in education. However, new technology can just as well be used in a traditional learning setting. New learning environments are evolving to accommodate traditional ways of working where the student is in control and learning and reality are closely interlinked.

Customised learning paths. New operating environments provide the students opportunities to choose their own paths, and a suitable time and place for their studies.

Information and communication technology must be able to accommodate individual styles of learning and different types of goals.

The methods and pedagogical models employed by the teacher have a decisive effect on the appeal and quality of learning.

The students will be introduced to various e-learning environments, and learn how these environments are applied in different fields of study, how information retrieval is used in these fields, and how different kinds of specialised programs are used (picture processing, mathematical programs etc.).

The student's role must be active. The critical elements for learning, both now and in the future, will be peer learning, self-assessment, and peer review. Assessing the student's learning process will be central.

The students need skills that allow them to operate in an information society, and they must have the capacity for in-depth learning in various learning environments.

4. ICT competence development for the staff

Trainings:

Pilot projects and **peer coaching** are effective ways to familiarise and induct teachers. Practice has shown that information gathering and critical analysis skills need improvement. Teachers will take part in pedagogical trainings tailored for each subject. Competence development common to all teachers will include trainings on electronic testing, and trainings for the electronic matriculation exam. Information is communicated within the community through social media. We will also have a point of comparison through the "ICT in Use" project, a European Comenius Regio project, where we have an active role. We will also arrange common trainings with other upper secondary schools in the South Pirkanmaa region, as well as with other third parties.

Actions in the near future:

ICT skills are also part of well-being as competence is the single most important factor for well-being at work. IT equipment must be up to date and functional, and teachers need to be able to get support.

We are actively looking for partners in other upper secondary schools, and networking with other third parties in the region.

5. The technical environment

The current situation: first year students of 2013-2014 have received personal iPads. In addition, we have 22 iPads reserved for group work. We also share 20 laptops with the secondary school. Students' common room has two computers, and in the classes we have computers, dataprojectors, a document camera, a smartboard, and an appleTV.

The plan: Each age group, in their turn, will receive personal iPads. Equipment options are assessed yearly. E-textbooks will be phased into use so that every student will learn to use them naturally. The physical learning environment is developed in a way to enable community-based learning.

6. The communication plan

The official school web page ([link](#)) is used for external communication. In addition, the school has its own web site (). The official town web page will be used for publish basic information about the school, and to communicate topical issues. The school web site will give a more in-depth view of the school with additional visual elements. Our school Facebook page will serve as an everyday, fast, and active communication and feedback channel. It will also be used to publish information on upper secondary school policies and pedagogics.

The main internal communication tool is the Wilma student administration program. It is also our primary communication channel towards parents. E-mail is used as an external and internal communication tool.