



Case studies

7. Turun Normaalikoulu, Turku, Finland

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This is one of 25 case studies produced for STEPS, the Study of the impact of technology in primary schools, to illustrate the impact of ICT, on schools, teachers and learners, and to highlight barriers and enablers to its effective use in the school. Further information can be found at <http://steps.eun.org>.



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1. CONTEXT OF THE SCHOOL

Turun Normaalikoulu, unlike most primary and secondary schools in Finland, is a state-owned school and part of the University of Turku. It belongs to the network of more than ten teacher-training institutes located all over Finland (eNorssi), which are all affiliated with universities in their town. Traditionally, during initial teacher training, student teaching takes place in Normaalikoulu. Teaching in Turun Normaalikoulu follows the regular Finnish curriculum, however, there are some additional legislations. Turun Normaalikoulu offers education from first grade to matriculation examination. There are about 1,100 students, of which 650 follow primary and secondary education. Class sizes are typically 20 pupils per class, with 3 parallel classes in each year.



The school is located in a suburb approximately 7km outside of Turku, the second biggest city in Finland. This suburb has been popular among immigrant families since the 1980s, with 33 per cent from multicultural backgrounds, compared to less than 7 per cent in Turku. This is also reflected in the school population: 47 per cent of students come from multicultural backgrounds, representing 38 different languages. The largest foreign language groups are Albanian, Russian, Vietnamese and Arabian.

2. EXAMPLE OF PRACTICE

The Turun Normaalikoulu has been providing distance learning equipment for the last 10 years, and delivers between 20 and 30 hours of distance education per week to remote communities in Finland. Language learning is mostly delivered in this way, such as English, French and German as a second language. Such arrangements with small communities allow young pupils to go to school close to home, and helps to keep the communities alive.



The image (right) shows an English language lesson being delivered to a class of four students, in a small secondary school of about 30 students in the island community of the Municipality of Velkua. The teacher is asking questions regarding a homework exercise. A digital overhead projector is used to display the contents of exercise books on pupils' screens. The teaching follows somewhat traditional methods despite the distance-teaching feature; for example paper-based exams are still taken and sent by either post or fax.

In another lesson observation, pupils were engaged in a process writing exercise using ICT. In an earlier lesson on Finnish language and literature, pupils had created a story. During this lesson pupils worked in a dedicated computer lab, using word-processing software to re-write the text. The teacher commented about the set-up of the room having computers on the side of the wall instead of in rows: this allows the teacher a quick overview of each screen to check to see that pupils are on task. Special software has been installed on the teacher's computer allowing them to monitor, and take over, each machine if needed, to assist students or bring them back on track for the exercise in question. Such software provides advantages if students are working across a number of computers in different locations.

3. IMPACT, BARRIERS AND ENABLERS

3.1 SCHOOL

ICT DEVELOPMENT PLAN, IMPLEMENTATION STRATEGY, ORGANISATIONAL CHANGES AND ATTITUDES

o **Impacts**

- o Turun Normaalkoulu has a common ICT development and implementation strategy with all the other Normaalkoulu in Finland. The strategy has separate learning goals set for each school level regarding the use of ICT and media. The strategy also comprises goals set for teacher trainees on how they should use and be supported in using ICT in a pedagogical way during their student teaching periods.

o **Enablers**

- o Based on the common strategy, a localised, school-based ICT strategy has been created for 2009-2012 by an ICT Group which comprises 15 teachers from all levels (Grades 1 to 12), plus an ICT system analyst who gives ICT and pedagogical support. At the network level, the strategy emphasises different areas of ICT each year, which is also reflected in the localised version of the strategy.

RESOURCING

o **Impacts**

- o The school has about 300 computers available and each classroom has at least one computer and internet access. Classrooms have different levels of ICT equipment; teachers are equipped according to their own interest, but within the school's budget. For example, some teachers have interactive whiteboards, some have projectors, whereas some use the computer labs and computer

clusters available in the school hallways. Additionally, laptops can be used and there is currently a pilot running with mini-notebooks.

- **Barriers**
 - Since all the rooms have different equipment, delegating the resources can be challenging.
- **Enablers**
 - The school will equip all the classrooms with interactive whiteboards, and the training of teachers will take place internally. The interactive whiteboards have been praised for their ease of use, allowing teachers to adapt their teaching styles without problems.

THE CURRICULUM AND ICT

- **Impacts**
 - ICT is not its own subject in the curriculum, but embedded in other disciplines. At secondary level, one ICT course is offered.
- **Enablers**
 - The fact that ICT skills for each level of student are stipulated in the school's ICT strategy emphasises its place in school. It is also important to note that responsibilities have been clearly allocated within the ICT strategy, for example the responsibility of the faculty and the Normaalikoulu in terms of the development of student teachers such as theory versus practice.

ASSESSMENT OF ICT AND ICT FOR ASSESSMENT

- **Impacts**
 - Basic skills in ICT and media should be acquired during the primary school phase. At the end of the 5th grade, pupils prepare a project which is used to ensure that their ICT skills are sufficient by the beginning of the 7th grade. At the end of the 9th grade, students get an ICT driving license.

ORGANISATION OF SUPPORT

- **Impacts**
 - As the school is part of the teacher training colleges' network, certain support and organisation is provided for research and reflection on teaching methods. There is also an ICT-specific working group, thus pedagogy-driven ICT practices have an important role.
- **Enablers**

- The fact that all Normaalikoulu have somewhat independent funding allows a uniform and standard-based teacher training experience for all student teachers regardless of the geographical or financial situation of the area where the college is located.

3.2 TEACHERS

ICT AS A TOOL FOR COMMUNICATION AND COLLABORATION

○ Impacts

- A school ICT Group meets five or six times during the school year. This group is responsible for writing the school's ICT strategy, as well as liaising with the university regarding student teachers and their use of ICT. In a meeting that took place on the day of the case study visit, teachers discussed the strengths and weaknesses of a workshop day where both trainee teachers and school teachers gave and participated in ICT workshops.



○ Barriers

- Apart from the ICT Group, it seems that most teachers share their ICT practices primarily with the trainee teachers and not so much with other colleagues. This is mainly due to time limitations, and the nature of teacher's work.

○ Enablers

- Members of the ICT Group include teachers from lower primary level up to higher secondary level. Synergies can be found across the different levels in the school.

ICT AS A TOOL TO IMPROVE THE QUALITY AND EFFICIENCY OF PLANNING AND ADMINISTRATION

○ Impacts

- Headteachers at the school are very positive about the added value ICT can provide for school administration and internal information strategies. The school administration software, allows teachers, pupils and parents to access certain parts of school records using a web interface.

○ Barriers

- Teachers increasingly suffer from information overload, so some important communication sent by the headteachers can sometimes get ignored.

- **Enablers**

- Apart from administrative work, ICT enables better school-home communication. It was mentioned that multicultural homes are often avid ICT users for communication purposes. For example, in one primary class only 10 per cent of parents have asked to receive paper-based communications.

THE PEDAGOGICAL ROLE OF ICT TO IMPROVE LEARNING AND TEACHING

- **Impacts**

- A 'palette of ICT training opportunities' is made available to all teachers allowing them to undertake training based on their own needs. It is also possible to receive individualised training from colleagues on the use of specific ICT, if needed. In such cases the colleague providing the training is paid. All the teachers are significantly beyond Level III of the Ope.fi (a national teacher training strategy).

- **Barriers**

- There is no ear-marked money for teacher training, but teachers can participate upon request. Even though teachers are very motivated in their profession, and many conduct their own experiments in the use of ICT for pedagogical support, there is not much evidence of practice being shared. For example, many teachers create their own learning materials which are stored on local computers, but are not shared with colleagues at a school level.

ICT SKILLS

- **Impacts**

- Teachers in Normaalkoulu have a long tradition of pedagogical practices, due to their dual role as a teacher and also a mentor for student teachers. For example, some teachers have specialised in distance education since the early 1990s, and the school has developed various applications to support teaching and learning.

- **Enablers**

- The eNorssi network emphasises the role of research and development in new pedagogical practices. Opportunities for peer-learning are encouraged, both with trainees learning from teachers and vice versa.

PARTICIPATION, MOTIVATION, CONFIDENCE AND PERFORMANCE

- **Impacts**

- Headteachers at the school (the Normaalkoulu has been led by a team of four school heads for the last three years) are very supportive of teachers who are

willing to invest in studying and developing new, pedagogically sound methods of using ICT, new media and other equipment.

- **Enablers**

- The positive atmosphere, along with the fact that the school has a special status as part of the Teacher Training Institute, has created a number of software spin-offs and learning resources. For example, Moped is a website for children from a multicultural background, which provides resources for learning Finnish as a second language. Another product which has been developed is a 'virtual interpreter', currently being used in local healthcare settings to help translate between the doctor or healthcare professional, and the patient.

3.3 LEARNERS

ICT SKILLS

- **Impacts**

- At elementary school level, more than half of the children come from multicultural backgrounds. Many of the children have access to computers at home, which has an impact on their ICT skills.

MOTIVATION, PARTICIPATION AND CONFIDENCE

- **Impacts**

- During the observed lesson, pupils seemed keen to use computers and regarded their use to be 'just a normal day in school'. It was mentioned that the use of ICT did not receive any special place in teaching students from multicultural backgrounds.

- **Barriers**

- The school has not been involved in school eTwinning projects and, currently, do not seem to seek such collaboration. Underlying reasons suggested that there is already sufficient cultural exchange within the school, having pupils with such diverse backgrounds.



PARTICIPATION IN ALL ASPECTS OF SCHOOL LIFE: ACADEMIC, SOCIAL, PERSONAL

○ Impacts

- One of the main goals of the Finnish school system is to provide pupils with the good main skills to live in a modern and changing society. It was emphasised that the school has an important role for its pupils and their parents in the suburb. The drop-out rate is low. Based on language skills, there are groups for Finnish mother tongue students and Finnish as second language. Two hours of additional, extracurricular education is provided in pupils' mother tongue each week, based on volunteer participation, to allow them to have at least one strong language.

○ Enablers

- It was emphasised that every teacher is also a Finnish language teacher in this school. After compulsory education (until the age of 16), half of the cohort seeks vocational training, while the other continue in education for three years with the aim of taking the matriculation exam. Approximately 19 per cent of students from multicultural backgrounds take this route.

4. REFERENCES

○ Sources:

- Interviews with the headteacher team, teachers and ICT support staff, plus lesson observations.
- Turun Normaalikoulu ICT Strategy (www.tnk.utu.fi/file.php?1307). (PDF download: the red parts are school's strategies, whereas the black parts of the text are from the eNorssi strategy).
- The ICT Strategy for all Normaalikoulu related to Teacher Training institutes' network (eNorssi), policy report (www.enorssi.fi/opetus/tvt-strategiat-1/Harjoittelukoulujen_TVT-strategia_2009_2012_VALMIS.pdf).
- General information about the eNorssi network (www.enorssi.fi/).

○ Further information:

- Moped (www.tkukoulu.fi/~moped/index.html).