

Effective Practices in Distance Education in Upper Secondary Level Geography in Finland

- Eila Jeronen
 - Senior lecturer in Biology and Geography Education
 - Department of Educational Sciences and Teacher education
- Sirpa Anttila-Muilu
 - Lecturer in Geography
 - Oulun Lyseon lukio



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The ICT strategies in Finland

Ministry of Education

- in 1995 an information society strategy
 - ICT in teaching and learning
 - in 1999 a 'learning citizenship society`
 - in 2004 Information Society Programme
 - to develop all citizens' information society knowledge and skills
 - to enable educational institutions to use information and communications technology (ICT)
 - to establish ICT-based procedures in education, training and research and
 - to promote social innovation through the use of ICT
- (<http://www.minedu.fi/eopm/strategi/2.html>)
- (<http://www.minedu.fi/julkaisut/koulutus/2004/opm14/opm14.pdf>)

The ICT strategies at schools

- all schools have an Internet connection
- systematic staff development has started
- innovative projects e.g.
 - **Hero(dot)eNews** seeks to bridge European schools, universities and teacher education by acting as a forum for national and international communication about environmental news
(<http://www.zgis.at/e4news/>)
 - **ENO-Environment Online** organised and co-ordinated by Eno School District in Eno, Finland. Different environmental themes are studied within a school year
(<http://eno.joensuu.fi/basics/briefly.htm>)
 - **OPE.FI** - ICT Teacher Training Project in Finland
(<http://www.minedu.fi/julkaisut/koulutus/2004/opm14/opm14.pdf>)

The curriculum for upper secondary school geography (1/5)

- **The main goals**
 - a student becomes aware of the relationship between the human being and nature
 - a student understands the earth to be a changing and diverse living environment
 - a student acquires a readiness to analyse regional environmental questions, and to find solutions in accordance with sustainable development
(Opetushallitus 2003).

The curriculum for upper secondary school geography (2/5)

- **Two obligatory courses**
 - The Blue Planet course consists of Physical Geography
 - Geographical Thinking
 - Position of the Earth in the Solar System
 - Atmosphere
 - Hydrosphere
 - Weather and Climate
 - Changing Topography of the Earth
 - Vegetation Zones, and
 - Landscapes through Maps and Figures (Opetushallitus 2003).

The curriculum for upper secondary school geography (3/5)

- The Common World course consists of cultural geography
 - The Nature of Cultural Geography
 - Population
 - Natural Resources
 - Primary Production and Environment
 - Industry and Energy
 - Traffic and Interaction
 - Landscapes and Land Use, and
 - Globalisation and Sustainable development
(Opetushallitus 2003).

The curriculum for upper secondary school geography (4/5)

- **Two optional courses**
 - The World of Hazards includes threats and risks, both from natural phenomena and the action of human beings
 - The Regional Research includes cartography, GIS (Geographic Information Systems), and regional geographical research by the students (Opetushallitus 2003).

The curriculum for upper secondary school geography (5/5)

- **The areas to be evaluated**
 - the development of geographical thinking skills
 - mastery of geographical concepts
 - stating arguments for conceptions
 - skills to observe regional dependences
 - the skill to interpret, evaluate and use geographical information, and
 - presentation and co-operational skills (Opetushallitus 2003).

Distance education in Oulun Lyseon Lukio School (1/4)

- **The geographical courses** studied in Oulun Lyseon Lukio School are
 - Natural Geography
 - Human Geography
 - Geography of Hazards, and
 - Regional Geography.
- One course consists of about 30 hours of teaching during the six weeks period.
- The lessons are each usually 75 minutes long.
- The students have three geography lessons in a week.

Distance education in Oulun Lyseon Lukio School (2/4)

- In distance education, teachers use two different **teaching approaches**
 - the Northern Ostrobothnia Distance Teaching Network (NODiTeN; Pohjois-Pohjanmaan etälukioverkosto)
 - two 100-minute videoconferencing sessions per course (<http://www.lyseo.edu.ouka.fi/english/information/>)
 - multiform teaching, which is used at Tyrnävä and Ylikiiminki satellite schools.
 - The teaching can be distance teaching all the time or
 - The teacher drives either to Tyrnävä or to Ylikiiminki to give the class and meet the students in one of the satellite schools and have the videoconferencing going on to the other satellite school.
 - a learning environment called *Optima Discendum* is used (<http://www.discendum.com/english/optima/index.html>).



Oulun yliopisto, KTK

Käyttäjätunnus: Eila Jeronen

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Ilmoitukset

Ainedidaktikot

Oppiaineiden opettajien profiili tässä työtilassa

Optimassa voi valita käyttäjille erilaisia profiileja. Opettajilla on tässä työtilassa "tutor"-profiili. Tällä profiililla voitte luoda kansioita ja erilaisia "objekteja" työtilaan.

Voitte tutustua luomiseen klikkaamalla hiirellä kansionne alta löytyvää vihreää otsaketta "Uusi objekti".

Tarkemmin objektien luomisesta löytyy ohjeita Optiman ylävalikosta valittavalla käskyllä "Ohjeet". (Klikkaa!)

LÄHETTÄJÄ: Tuulikki Tuominen-Eilola

Ainekohtaiset kansiot

Työpöytä

Uusi

- [Uudet ja muokattu objektit](#)
- [Ilmoitukset](#)
- [Työtilat](#)

Viestit

- [Viestit](#)
- [Yksityiset viestit](#)
- [Chat](#)

Merkinnät

- [Omat objektit](#)
- [Tietokoneelta tuodut liiteobjektit](#)
- [Suoritusten hallinta](#)
- [Omat suoritukset](#)

Käyttäjätiedot

- [Asetukset](#)
- [Vaihda salasana](#)
- [Yhteystiedot](#)
- [Tilasto](#)
- [Vaihda ympäristö](#)

Distance education in Oulun Lyseon Lukio School (4/4)

- Evaluation and assessment
 - The evaluation is based on numerical values
 - an integral part of the teaching-studying-learning processes
 - Formative evaluation is embedded in activities and interaction between students and between students and teachers
 - e-mail, bulletin boards, chat rooms, self-evaluation, and product evaluation
 - summarised evaluation
 - The evaluation is based on numerical values

Developing ICT with distance education as a part of it in schools (1/3)

- Problems in ICT education are very similar like in many EU-countries
 - Teachers are not completely convinced of its advantages
 - there are not enough learning materials and digital content
 - teachers have problems integrating ICT in the curriculum
 - teachers feel that the schools lack both effective technical facilities and support to maintain these environments
(Niemi, 2003).

Developing ICT with distance education as a part of it in schools (2/3)

- In order to create a rewarding online learning experience
 - evaluation needs to be combined with an effective learner-centred pedagogy
 - teachers should
 - set clearly defined learning goals and expected outcomes
 - develop criteria for evaluation
 - use multiple methods of assessing learning and teaching
 - provide activities, and
 - leave time for discussion.

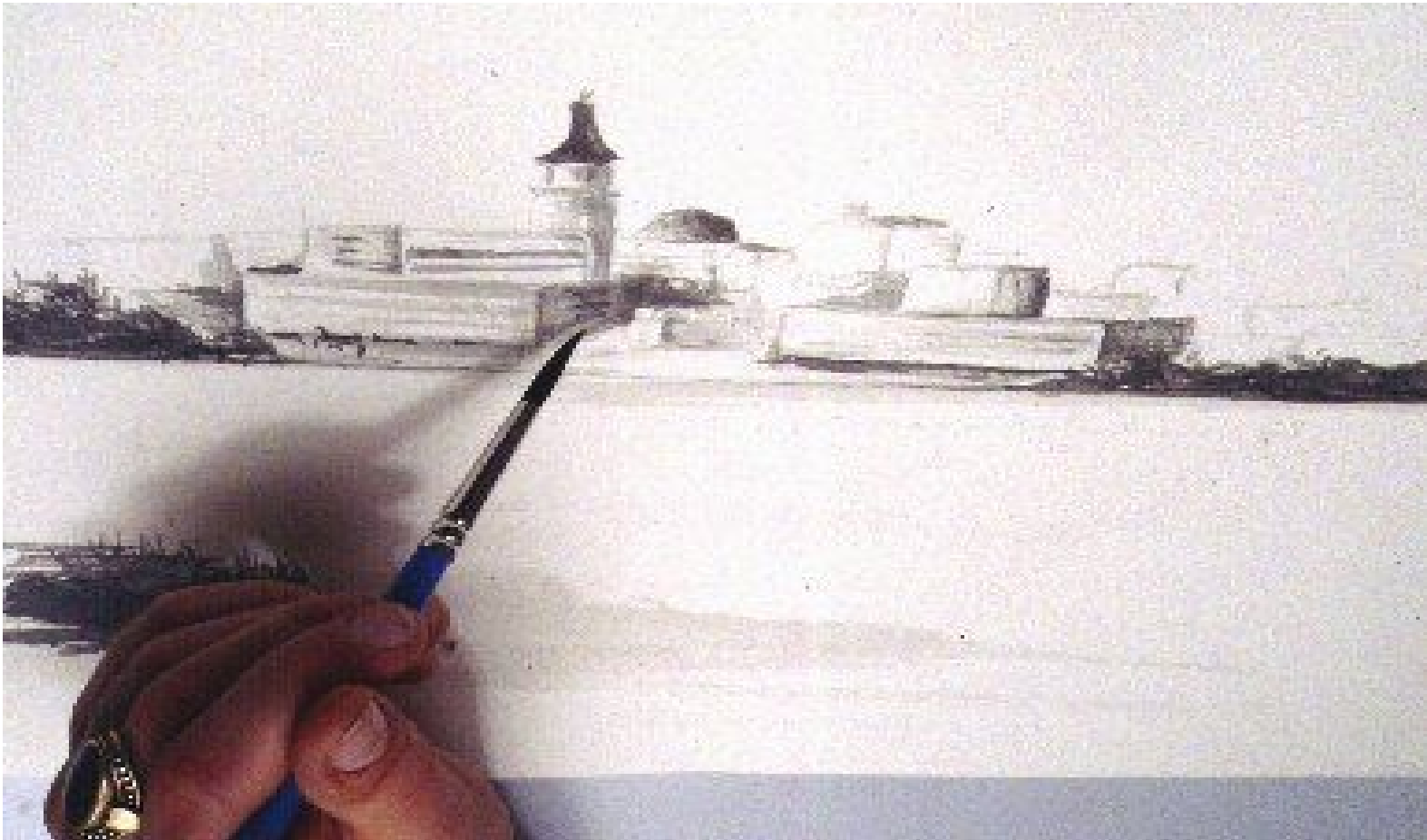
Developing ICT with distance education as a part of it in schools (3/3)

- course organization strategies play an integral part of the learning experience
 - scheduled student and teacher forms of activities and messages
 - ongoing communication and interaction to support students and help assessment and evaluation made by students and teachers.

Conclusions 1/2

- The main factor that appears to support Geography teachers using ICT is the fact that individual students are very motivated using ICT.
 - The creation of support networks for ICT and distance education will be the most important developments in Finland. This would help to ensure that all students have access to the best possibilities in learning using new technology.
 - In relation to possible future work at a European level, it would be helpful e.g. to have access to information on examples of innovations in the practical use of ICT in Geography education.
 - Long term, it would be helpful to create common European models of practice in ICT and distance education which would support the easy sharing and application of good practices.

Conclusions 2/2



Thank you for your attention - wellcome to Oulu, a city celebrating 400 years anniversary this year.