

Flexible learning in Finnish HE

- National aims and strategies for flexible learning in HE
- Current in National Virtual University and Virtual Polytechnic
- Universities in Tampere: sustainability of e-learning
- Case Open Source Courseware
- Tampere eLearning Cluster: local, horizontal and vertical cooperation in e-learning

National aims and strategies for flexible learning in HE

- National Information Society Strategy for Education and Research 2000-2004
- Information Society Programme for Education, Training and Research 2004-2006

“One objective in the Government Programme is to consolidate Finland's position as one of the leading information societies in the world. The aim is to intensify the use of information society services in business and industry, education, training and research, health care, administration and people's everyday life.”

Finnish Virtual University

- A partnership of all 21 Finnish universities, incl. University of Tampere and Tampere University of Technology
- Based on collaboration, division of labour, shared knowledge and the expertise of the member universities
- Promotes online learning and teaching and develops compatible information infrastructures
- It is not a new university in itself and does not provide university education. For virtual studies students have to enroll in one of the member universities.

Finnish Virtual University focus areas 2006-2010

1. Enabling flexible learning within and across universities
 2. Promotion of common use and development of learning material
 3. Development of cooperation and common infrastructure
- All areas have been developed in separate projects since 2000.
 - Focus areas give the development effort more structure and goal orientation

Approaches to sustainability

"In the University of Tampere, the educational use of ICT is an integral part of the overall development of teaching in which it has an important instrumental value."

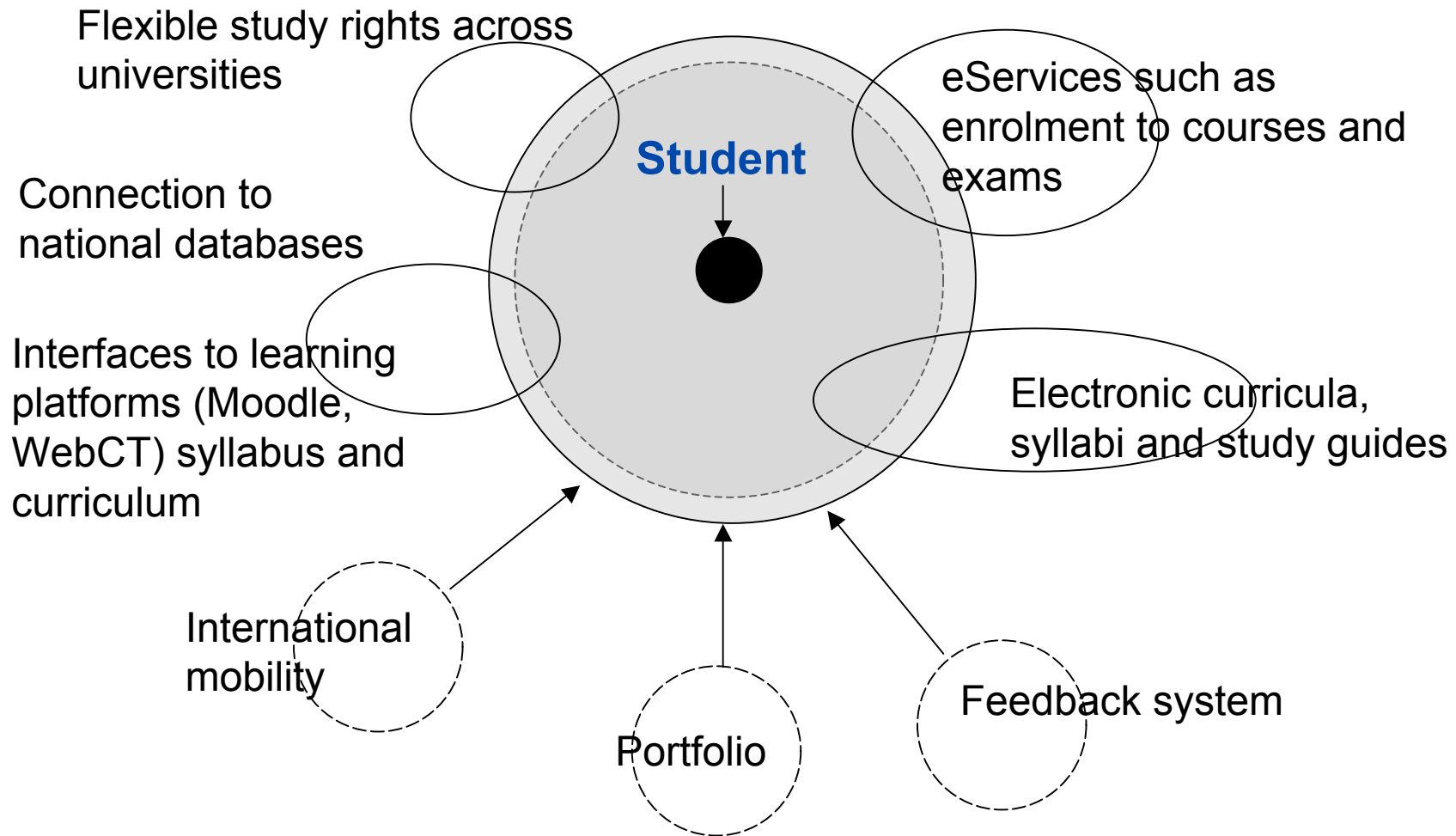
"ICT in teaching and learning will be a sustainable and natural part of every day work at the university."

(Strategy for the Educational Use of ICT at UTA)

Approaches to sustainability at UTA

- The UTA Virtual University project is an important means to reach the objectives
- Development of a support system for teaching
- Focus on the cooperation of support units and faculty departments
- Development of centralized student e-services provides the basis for the development and integration of various new services related to teaching and learning

Development of student administration systems at UTA



UTA: Better quality through the integration of information systems

- A central innovation is the development of the process of starting studies at the university
 - A single process includes the following phases:
 - Applying to university
 - Student selection
 - Acceptance of study right
 - Order and production of student card / access card
 - Enrolment to university
 - User accounts for e-mail and online services
- Motto: "Better to have information in one place right than in many places wrong."*

UTA: Better quality through the integration of information systems

- Efficient introduction and integration of e-learning in all levels demands process innovation that makes the various systems interoperate and makes the use of various technologies smooth and beneficial instead of disturbing and obstructing learning, teaching and administrative processes
- UTA has developed a watertight process for student enrolment and administration based on the interoperability and integration of information systems
- This development work follows the university strategy that aims at developing services and processes that are beneficial both for the provider and the user

Requirements for the systems

- The process has been enabled through the integration of four centralized information systems:
 - Student selection system (registrar's office)
 - Student administration system (registrar's office, Student Union)
 - User administration system (ICT centre)
 - Access control system (ICT centre, Student Union)
- Because all the information is personal information, special attention has been paid to information security and to legal issues concerning keeping registries
- The process involves also unconventional crossing of organizational boundaries as also the Student Union of the university has been given administrative responsibilities in the process

Benefits for the service provider

- Time for filling in forms and possibility for errors is reduced as information transfers automatically between the systems
- No more service lines for access cards or user accounts
- No need for temporary user accounts or access cards
- Compiling and up to date publishing of statistics is automated

Results

- The system has been operational for two years and 4000 students have gone through the process
- No problems in reliability
- Last autumn *all* student cards that were ordered at enrolment (July-August) were delivered well before the semester start at the beginning of September
- From day one the students can focus on studying because the basic technical requirements are taken care of

Virtual University focus at Tampere University of Technology (TUT) for 2005

1. Quality and target oriented development
 2. Extensive and Versatile activity across the university
 3. IPR issues
 4. Solutions for sustainability
 5. Cooperation and networking
- TUT Learning Centre
 - Personalized Student Portal
 - Curriculum development and e-study guides

Establishment of e-learning

- Development of e-learning in the departments
- 2/3 involved in development projects: web based courses, tests, simulations, games, video conferencing etc.
- Centralized technical and pedagogical support and training for teachers
- eLearning developed as part of overall development of teaching
- ICT and e-learning as part of curricula and programmes

Establishment of e-learning

- Updating the strategy for ICT in teaching
- Evaluation of the TUT Virtual University project 2000-2004
- Investigation in and solutions for sustainability and resources
- Quality of e-learning developed as part of the overall quality system
- Updating the strategy of the Finnish Virtual University

Finnish Virtual Polytechnic

- Cooperation network of all 31 polytechnics, incl. Tampere Polytechnic and Pirkanmaa Polytechnic in the Tampere Region
- Promotes and develops e-learning, networked collaboration and services
- Coordinated by a development unit (based in Tampere Polytechnic)
- Flexibility for traditional studies
- One shop online services for all Finnish polytechnic students

Finnish Virtual Polytechnic focus

- Use existing content and technological systems
- Offer connection to administrative systems
- Common portal and tools for content production and studies: online services for enrolment, accreditation etc.
- Promote pedagogically sound and reasonable use of ICT in teaching and learning
- Equal opportunities for e-learning
- Support and training for teachers: cooperation forums, quality guidelines, IPR forms, library and information service
- IPR issues, quality assurance

Challenges for cooperation

- We have an extensive offer of quality web based learning material, but there are problems with different technical and administrative systems, transferability, compatibility and reuse of learning material
- Technical challenge: identification of users and content producers
- Administrative challenge: accreditation of studies
- Financial challenge: overlapping work in the institutions
- Pedagogical challenge: development of content production
- More cooperation, best solutions and practices, compatible technological solutions, standards, e-student office, metadata and quality systems

Benefits of cooperation

- Wider customer base: corporate training, student mobility, open HE learning
- Cost effectiveness
- Reduction of overlapping work
- Specialization of polytechnics
- Quality of e-learning
- Flexible study possibilities
- Environment for pedagogical and technical development of teachers
- Pedagogical, process and service innovations

Case: OSCu Open Source Courseware

- A network project between six Finnish universities, coordinated by TUT, financed by partners and the Finnish Virtual University
- Basis: challenges in teaching of ICT (need for frequent updating, lack of teachers etc.)
- Aim: to expand ICT education through collecting local expertise to form a broader basis for high-level studies
- Means: sharing of knowledge, material, course planning and implementation work

Example course: Programming Mobile Systems, spring 2005

- Over 400 students in six different universities in eight different locations
- Teaching tasks and material development responsibilities of the course divided among partners
- Lectures by video conference, assignments and exercises supervised locally
- Students graded locally

Student views

- Flexibility is perceived as the main added value of web-based learning
- Responsibility for one's own studies
- “Quality of e-learning”: perception of quality depends on the students' learning and technical skills and motivation in general
- Essential to develop and support teachers in implementing e-learning to correspond better to the diverse learning needs of different student groups.

Long-term action research project
conducted at TUT 2003-2004

Tampere eLearning Cluster

- Partnership that promotes e-learning in the Tampere area
- Grass-roots initiative, started in 2001
- Gathers together actors in education, training and research and development of e-learning
- Offers information, resources and networking
- Services: website www.eoppiminen.tut.fi, newsletter, members' meetings, seminars and other events, project preparation

Aims

- Promote new ways of regional cooperation
- Make better use of the resources of the partners
- Create new opportunities for actors in the field of e-learning
- Theory meets practice

⇒ People and organizations get to know each other

⇒ Share information, knowledge, ideas and experiences

⇒ Solve together common challenges

Areas of collaboration

- Multidisciplinary e-learning research
- Multidisciplinary post graduate studies
- Regional, horizontal and vertical e-learning projects
- Public-private partnership

Current projects:

- Teacher training
- Digital literacy
- eLearning for SMEs
- Games and learning
- Integration of information systems
- Managing change in organizations

Workshops & seminars on IPR, sustainability of e-learning, information security, standards etc.

Partners

Virtual University

EU projects



University of Tampere



Tampere Polytechnic

Virtual Polytechnic



Pirkanmaa Polytechnic



City of Tampere



Tampere University of Technology

Virtual School



Vocational Adult Education Network



HERMIA

Hermia Technology Centre

eTampere

Evaluation

- Cluster a pioneer in Finland organizing local coordination of e-learning cooperation
- Evaluation study on the members' expectations and satisfaction and their commitment to the network
- Each organization has different grounds for joining: teacher training, research projects, information
- Different organizations and versatile aims create a challenge both for the functioning of the network and its evaluation

Cooperation is facilitated by

- Coordinator's work
- Similar minded people
- Well organized information flow
- Little bureaucracy, possibility for informal cooperation
- Equality of the member organizations

“The active are more equal.”

Benefits of cooperation

- Contribution (time, membership fees) and benefits are in good balance
- Advantages depend mainly on own activity
- Benefits include training, common events with lower costs, information, contacts, partners, learning from others, expert help, assistance in project preparation, project funding

Problems and challenges

- Lack of time
- Information flow from contact persons to the organizations is slow
- More trust, openness and genuine will for cooperation is needed
- No agreement on common objectives or roles for the organizations
- Organizations have not clearly thought out why they are members in the network
- The network needs to be a more integral part of the organizations and people's work

Updating the technology alone will not bring about transformation in teaching practices. Also the work processes have to be redesigned, otherwise the use of the new tools will be slow, fragmented and without critical mass.

To conclude...

- There is much effort for cooperation on national as well as local level to enhance the flexibility of HE
- Focus is on everyday practices and reasonable utilisation of ICT in teaching and learning
- More emphasis on supporting implementation
- There still is a lot of work to do in terms of e-learning truly penetrating the HE system
- Within institutions and organizations there tend to be a few active users of new methods whilst the rest stick to more traditional techniques
- Key issue is teachers' and students' skills and motivation to use e-learning