

THE PEDAGOGICAL ICT-DRIVING LICENCES

- A DANISH NATIONAL INITIATIVE TO OFFER TEACHERS TECHNOLOGY LITERACY

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The ICT in education action plan of the Danish Minister of Education states that by 2003 all Danish teachers must possess sufficient, relevant, measurable and homogenous pedagogical ICT competencies to insure a sufficient ICT integration in all subjects at all educational levels. The development of the Pedagogical ICT-driving License has helped push this development and its decentralised model has ensured local commitment while still maintaining a sufficient degree of national quality control.

The first Pedagogical ICT-driving License was School-IT in which primary and lower secondary teachers are taught ICT-integration and basic ICT skills. By March 2001 the Pedagogical ICT-driving License course has been attended by more than one third of all Danish primary and lower secondary teachers. Parallel to this success the development of a Pedagogical ICT-driving license for upper secondary teachers has taken place (HighSchool-IT). Due to the higher degree of subject orientation in upper secondary education, this ICT-driving license, while building upon the School-IT model, has a substantially higher degree of flexibility of choice for the individual teacher.

KEY OBJECTIVES OF THE PEDAGOGICAL ICT-DRIVING LICENCE

The Pedagogical ICT-driving licence must

- Substantially contribute to meet the needs for ICT-pedagogical competencies of the teachers
- Contribute to improve the pedagogical practice of the participants in relation to the integration of ICT
- Contribute to a change in methods in the work with the basic cultural techniques (reading, writing, arithmetic and the use of ICT).
- Contribute to an increased use of e-learning that meets the needs and qualifications of the individual teacher

PHILOSOPHY

One of the key objectives is to give each teacher the opportunity to take his point of departure in his working and social context. Another one of the founding principles of the pedagogical thinking of the Pedagogical ICT-driving licence is that knowledge and competencies do not arise through the transport of information from one person to another, but that learning is a result of collaborative learning through contributing, creating and acting.

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BASIC ASSUMPTIONS

- Development, process and teamwork are the key issues
- No use of ICT-tools without a pedagogical, didactic rationale
- The top and bottom 5% are always at the back of our heads when we design the course and produce the accompanying materials. It is important that the materials are both attractive for those who have begun the ICT integration in their teaching and understandable for those who have not even begun working with the computer on an individual basis.

STRUCTURE

A School-IT course offers 8 modules, which are identical for all teachers where as in HighSchool-IT the teacher follows 3 compulsory modules, 3-4 modules from a pool of 10, 1-2 subject specific modules from a pool of 32. Each module follows the same structure dealing with an overall theme that is described both from a pedagogical and an ICT-skill point of view. The structure of a module is outlined below:

1. Modul paper (compulsory)
2. Articles and case studies that focus on the pedagogical possibilities that arise from ICT integration
3. ICT exercises, the IT skills (platform independent)
4. ICT manuals (platform dependent)

Pedagogical discussions and the preparation of the paper takes place in the team where as the work with the ICT exercises and ICT manuals is individual according to the level of competence of each participant. You can say the each teacher digs into the material to the level he needs.

A web conference system supports the pedagogical debate and an online administrative system support the interaction between the instructors, the course providers, the participants and the project secretariat.

THE COURSE MODEL

The pedagogical ICT-driving licence is realised through flexible learning. The course is opened by an introductory day where teachers meet and get acquainted with each other, the course and its content and have the opportunity to discuss the objectives of the course with each other and the instructor.

The introduction also deals with the necessary technical and basic ICT skill elements that make the teacher able to continue the course after the introduction. During this introduction the teachers are divided into teams of 2-4 participants. In the School-IT model this team works together during the 8 modules, in

HighSchool-IT teachers participate in a number of different teams according to their interests and choice of modules.

The concept is based on team based competence development in which net based communication between teacher and instructor is crucial. The flexibility of the concept offers participants wide opportunity to organise the work so that it meets the needs of their everyday work as much as possible.

The course always covers 20 weeks or more; and during this period the teacher teams hand in 8 papers to the instructor. The team writes the module papers, which arise from and document the daily teaching practice of the teachers (examples of good practice using ICT in education. The instructor gives a reflective, constructive and qualifying response to the team who then rewrites the paper for final approval.

THE DISTRIBUTED COURSE ORGANISATION

Both the School-IT and the HighSchool-IT courses are offered to the teachers in a decentralised model in which the courses are realised by a number of local or regional actors in education. The course concept is described in such depth and detail that it has been possible to involve local actors in the practical aspects of the organisation of the courses. The result is that teachers do not perceive the courses as being top-down or hierarchically founded courses. They are often seen as highly local, offered to the teachers sometimes by the very school in which they are employed, sometimes offered to the teacher by the regional educational centre and sometimes by the local division of the pedagogical university.

In a distributed course organisation like this one, the quality and consistency of the concept and the accompanying material become crucial.

LOCALISATION POTENTIAL

The two basic frameworks, School-IT and HighSchool-IT have already proven flexible enough to become the basis for further localisation both nationally and internationally. The next steps that are being tested are Pedagogical ICT-driving licences for teachers in pre-school, in language centres, in nursing schools and in health schools. The next steps are driving licences for teachers in business and technical colleges. Internationally the concept has been successfully tested in Norway.

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