Digital literacy in teacher education – integration model

Teacher education in Sweden has long been subject to criticism for not providing teachers-to-be with relevant knowledge and skills concerning the use of ICT in teaching and learning. While numerous development projects have been carried out in schools about ICT since 1974, teacher education has not received same attention. Only as late as in 2005 a nationwide investment was launched and three projects commenced with the overall aim of enhancing ICT competence within teacher education.

One of the projects was called LICA (Learning, Information, Communication and Adminstration), in Swedish LIKA (Lärande, Information, Kommunikation och Administration) which brought together four institutions of higher education in Stockholm region: Stockholm Institute of Education - later merged with Stockholm University (SU) - , the Royal Institute of Technology (KTH), the Royal College of Music (KMH), and the Swedish School of Sport and Health Sciences (GIH). This six-year development project engaged approx. 600 teacher educators and 8 000 pre-service teachers in 245 different activities with the scope of integrating digital literacy in teacher education programs within the participating institutions of higher education.

Data collection for this paper has been carried out with participant observations, individual and focus-group interviews, and reflective experience-based work.

The project developed a holistic model for integration of ICT in teacher education with digital literacy as a key concept. This key concept was defined from three different perspectives: theoretical competence, didactic/pedagogical competence, and technical competence. These three perspectives were applied in the analysis of the present teaching practices and course syllabi as well as in further development of them.

Experiences from the project conclude that digital literacy needs to be developed together both on the individual as well as departmental level. Organizationally, it seems to be important to have one person or a group designated to lead the integration of ICT within a department/unit so that continuous exchange of new ideas and practices can be established. This person or group must have an overall responsibility with mandate in the organization. These educational developers have the responsibility for planning, networking, being updated in research and development, and evaluating the ongoing development work. Their work needs to be communicated and integrated into the organization so that learning can take place. The goal of developing a learning organization where collaborative knowledge creation and learning constitute a vital part of everyday actions can be obtained through long term commitment of all personnel in systematic improvement of courses and curricula through experimenting and competence development.