ELYK – e-learning for SME in outlying areas

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Abstract

The poster outlines the ELYK-project. A national Research and Development Project that will document the potentials as well as generate new models for e-learning as an instrument of change in enterprises and networks (clusters) of enterprises in outlying areas. The project has special focus on user driven innovation in developing solutions. The poster also presents some of the initial findings of the project.

Keywords

action research, barriers to e-learning, clusters, in-service training, networking, small and medium sized enterprises, SME, supplementary education, user driven innovation.

The objective of the ELYK project (2009–2012) is to devise new ways of developing competencies in small and medium sized enterprises (SME) in outlying areas in Denmark. It is a project premise that internetworking and net-based learning will help achieve this goal. The project will conduct a series of experiments based on principles of action research and user driven innovation.

The ELYK project has a budget of about € 2.1 million, 75% of which is funded by the European Regional Development Fund and the Danish Enterprise and Construction Authority. The rest will be co-funded by the enterprises participating in the project and the consortium of universities and colleges carrying out the research: University of Southern Denmark, Roskilde University, University College Zealand, and University College South.

ELYK consists of four sub-projects:

1. A pilot project with two objectives: A) Identify participants for the networking and e-learning experiments. B) Inquire into the psychological, organisational and institutional challenges to furthering e-learning as a strategic tool for developing competencies; and to identify regional initiatives that may be helpful in overcoming these various barriers.

2. A networking project involving at least one network in each of the Danish regions *Zealand* and *South*. The project will map existing communicative practices, and will, by means of a dialogical process, plan and implement new ways of facilitating net-based communication in professional networks and clusters.

3. An inquiry into A) what kind of strategies for developing competencies by means of e-learning that will be relevant for SME in outlying areas; and B) how, in a regional perspective, it will be possible to organise programs for advising enterprises on the subject.

4. Two series (one in each region) of minimum three experiments with supplementary education and in-service training conducted on the individual, intra-organisational and inter-organisational levels. A) A minimum of two experiments will deal with flexible training integrating the learning process in development tasks in the enterprise and will explore how such teaching programs can be organised in terms of communities of practice. B) At least two experiments with short e-learning courses tailored to special target groups such as a line of business or particular work functions. The goal is both to identify shared needs for developing competencies within a network or cluster of enterprises; and to develop blended-learning concepts answering the needs of

individual companies for flexible, up-to-date development of competencies. C) A minimum of two experiments with e-learning in formal educational programs, involving new technologies, flexible patterns of study, and the integration of case-oriented and hands-on elements as a supplement to conventional forms of education. User participation and user considerations are pivotal to all of these experiments that will involve iterative processes of mapping existing practices, developing, testing and evaluating prototypes.

The challenge is to develop interfaces between the informal learning taking place *at the workplace* (internal learning), *between enterprises* (intra learning), and the *formal learning* offered by FE-Colleges (Typical Adult Vocational Training), among others. The findings so far suggest that the so-called skills-gap is not a general gap, but a complex pattern. It consists of A) a group of individuals outside employment. They are primarily men with low skills and rather low motivation. B) A highly competent, but formally low skilled workforce inside the enterprises. C) A very urgent pressure for ongoing process-improvement (process innovation) and product development (product innovation). In general, Danish SME are highly innovative and very including in using the creativity and innovative potentials of their employees. This can be explained by a combination of different factors: The low power distance between different levels of employees. A flexible workforce with a high degree of welfare security, but with a low level of job security. Interplay between business and traditional trade union interests between the social partners. Very localized systems of governance. And finally, a long tradition of close cooperation between enterprises and educational institutions (within further education), both at a formalised and non-formalised level.

The production structure may therefore be characterized as learning – meaning: Focus being on relative autonomy, involvement, complex tasks, and individual quality control. To some extent, the relationship is the same between the different nodes of the networks or horizontal clusters that many of these enterprises are parts of (Helms 2010). Globalisation creates structural changes but until now this has been beneficial to most of these rather agile enterprises. However, the financial crisis has increased the pressure. The picture of a dynamic, yet stable relationship between the training and competence development being offered by colleges and universities and the needs of the enterprises is breaking down. Yet, at the same time the "tacit learning ecologies" within the enterprises need articulation because of the growing cooperation with distant partners. Education is an important part of generating articulation and understanding. The enterprises do need structural couplings between the ongoing learning in and between enterprises. This could be labelled "Learning Ecologies". – And they do require very specific learning content, a sort of enterprise-specific micro learning. This again is a challenge to the general model of formal education with curricula, which should ensure that these courses are part of a general national (and even European) competence framework. At a national level, major reforms have been implemented in order to secure a higher degree of flexibility within these systems. But to some extent, this is contrasted to the economic incitements, and maybe especially to the cultural traditions of the colleges and their faculty. Thus, at this stage the ELYK project has demonstrated a willingness among colleges and universities to find new ways of developing both content and delivery of learning. The upcoming experiments will show whether these aspirations and the development and research projects will result in validated models for new ways of developing learning and especially e-learning, and also the potentials of these models in enabling or at least supporting economic development in outlying areas.

References

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