

## Case study 9.2.3: **The development of and support for the intellectual capital of individuals and regions**

**Authors** Alex Jonsson, Claus Knudsen, Johan Matic & Professor Roger Wallis, Department for Media Technology, Royal Institute of Technology (KTH), Stockholm, Sweden.

**Abstract** This study can be viewed from two different perspectives. It can be seen as two examples of collaboration between knowledge centers and distance recipients, where the overall aim is to support the growth of intellectual capital both at an individual and a regional level. Secondly, it can be treated as a more "hands-on" approach to understanding and evaluating distance learning initiatives by applying a variety of both traditional and rarely used intangible metrics.

The first case concerns a university course which has been run since 1996 both in the traditional classroom environment by the University of Stockholm in the Swedish capital and, simultaneously, at a distance in Vetlanda - a small town 350 kilometers away. The effects of virtual learning combined with the provision of entrepreneurial and technical resources at the distant site resulted in modes of behavior and achievements very different from those of students exposed to traditional teaching methods and environments. Some traditional values were lost, but other new ones were gained, as students struggled to find a satisfactory balance between the physical and the virtual.

The second case concerns knowledge sharing between a University in Sweden (KTH) and a young provincial University in Norway (Gjøvik). Courses in Media Technology, originating in part from KTH in Stockholm, are received by distance learning students in Norway. The aim is to assist the establishment of a new area of expertise at Gjøvik (which will ultimately run its own course). At the same time it is intended that KTH, as originator of the courses, will increase its own knowledge of various aspects of the same subject, by gleaning experience from the distance learning process. Lessons learned could have considerable value in the context of an enlarged European Union in which more member States can benefit from speedy knowledge transfer.

The cases can also be treated as studies of distance learning and how it can be evaluated. As educators' enthusiasm has grown for various forms of 'Internet Universities', most experiments have been evaluated solely by applying traditional metrics from the physical world. These include exam results, course completion percentages etc. The cases suggest that other less tangible factors must be identified and taken into account. These conclusions are supported by observations that

- the same teaching materials can have different functions for face-to-face and distance students (with the former being more academic and the latter more vocational, as in traditional correspondence courses),
- that distance students tend to demonstrate behavioral patterns linked to replicating some of the physical aspects which are lacking at a remote site.

The conclusion is that distance learning initiatives require a well argued and motivated use of the tangible and intangible human sensory environments in which distance students and lecturers live, study and may work in the future. Evaluation of such activities requires a thorough study of a range of tangible and intangible factors - the aim of these cases is to dig deeper into the task of identifying such factors and the means of their evaluation.