

Company Research Knot at CRADLE

This research knot works in the intersection of and collaboration with the research groups of the CRADLE center with the aim of linking researchers from the cooperating research institutes who study the cultural-historical activity theory in the context of companies.

Multiple Mediation of Learning in Networks

Researcher: Hanna Toiviainen

This postdoctoral researcher project (Academy of Finland 2008-2010) belongs to the studies of adult education with the special focus on collaborative learning and the changing social practices at work. To enhance working and collaboration in complex networks of society, we need to deepen our understanding of the social origins and dynamics of learning. This is often omitted by the studies of organizational learning that take individuals' learning as an ideal. The concept of multiple mediation is suggested as the key to analyzing, modelling and developing the collaborative practices and interactions across the organizational and professional boundaries. It is based on Vygotsky's work – further developed by studies within the tradition of the Cultural-Historical Activity Theory (CHAT) – that demonstrates the significance of tools and tools-mediation in individuals' and communities' activity, and the re-mediation in transformation of activities. The introduction of information and communication technologies adds to the complexity of mediation, but rather than analyzing the ICT as such, this research will bring it to the context of the constellations of tools that actors are using in collaboration.

The project has both theoretical and pedagogical goals. The research questions are: 1) Learning-theoretically, what are the novelties, dimensions and dynamics of multiple mediation of learning in networks? 2) Practice-pedagogically, how can the agents in networks learn to master the dynamics of multiple mediation when implementing the novel tools constellations in collaboration? The research is based on a long-term follow-up and data-gathering from concrete network activities by means of work-ethnographic methods and developmental interventions. The case networks are A) a business network of the forest industry engineering in transformation from a domestic to a global activity, and B) a learning network formed in order to enhance regional workplace development in South Savo. The empirical research is informed by the CHAT concepts such as history, developmental contradiction, object of activity, tools, and mediation.

Learning production concepts – Tools for the management of networked activity

Leader of UH/CRADLE partner: Hanna Toiviainen

Researcher UH/CRADLE: Päivi Ristimäki

This research network project (TEKES, Finnish funding agency for technology and innovation, Program 'Concepts of Operations' 2007-2011) runs from September 2009 to December 2011 and is coordinated by Helsinki University of Technology other research partners being Lappeenranta University of Technology, and Tallinn University of Technology. It aims at developing tools for learning in production networks of small and medium sized companies. With these tools the actors in networks are able to construct learning concepts of operations. To benefit from the opportunities of multicultural networks requires new kind of collaborative abilities from the partners. Network-level competences and concept of operations emerge as a result of systematic learning: experimental and developmental activities.

The project has two phases. Phase I elaborates on the learning concepts and tools in the case companies (The Switch Oy and Stora Enso Packaging Oy) and their networks when for instance developing new products and their processability within the entire network. Phase II aims at creating a learning network of the SMEs in the single consignments industries (Finland, Estonia) in order to further elaborate on the findings.