
The article analyses threshold concepts that can be identified in the development of educational research based on cultural-historical activity theory in Finland and the challenges these concepts pose to educational sciences. Eight threshold concepts were found: learning activity, activity system, expansive learning, Change Laboratory, developmental transfer, operating concept, transformative agency, as well as fateful object and enacted utopia. On the basis of an analysis of these threshold concepts, three dialectical principles of cultural-historical activity theory are outlined, namely historicity, research as opener of new possibilities, and formative interventions as methodological foundation. These principles may be seen as possibilities to strengthen the societal impact of educational research in the 2020s.

Descriptors: cultural-historical activity theory, dialectics, threshold concepts


The aim of this study is to widen our understanding of boundary crossing during expansive learning processes. We examined three Finnish expert organizations: a teacher training school, a children’s and adolescents’ care unit in a hospital, and a university entrepreneurship hub. In each of these organizations, research and development projects using the Change Laboratory method were carried out. For this paper, we analysed the data ensuing from these projects with a specific focus on the ways in which boundaries were crossed during the progress of expansive learning. Our findings show that regardless of the context, organizational boundaries acted as enablers of change in collective expansive learning. In all three cases, boundary crossing led to the creation of a new concept model for carrying out the organizations’ key activities, which makes our findings especially significant for understanding continuous expansive learning at workplaces.

Descriptors: boundary, boundary crossing, Change Laboratory, collaboration, expansive learning, expert organization


Digital support is a new form of operation that refers to guidance on the independent use of digital services and smart devices provided by various actors in society. Some citizens are being excluded from society due to a lack of digital devices and skills. The community workshops enabled building
cooperation among regional actors to support the digital inclusion of people in vulnerable positions.

We utilized the tools of cultural-historical activity theory to figure out the contradictions related to digital support activities, first with the aid of the activity system model. In order to resolve contradictions, the so-called mirror data motivated participants to define contradictions embedded in activities and resolve them with the help of various tools. This process of double stimulation facilitated the manifestation of expansive learning actions. Expansive learning was manifested in the participants' talk as questioning and analysing current digital support practices, envisioning change, and looking for solutions to the existing problems. The analysis of the discussion data of the community workshops showed that contradictions in the digital support activities are particularly related to incomplete and contradictory rules and practices, which prevent the reception of comprehensive digital support and obscure the division of labour among the digital support providers. Clarification of the rules related to digital support, inclusion of smart devices in the guaranteed minimum income, networking of local providers of digital support, and agreement on the division of labour were suggested as solutions. This research brings new knowledge to fourth-generation activity theory on the problem of digital inequality and how to solve it in a collaborative learning process.

Descriptors: activity system, Change Laboratory, community workshop, contradictions, digital exclusion, digital support, double stimulation, expansive learning


The article examines two projects conducted by eighth graders in the Change Laboratories carried out in the context of two upper secondary schools in Finland. As far as we know, Change Laboratories have not been previously organized so that adolescents are the main participants of them. The examination brings forth adolescents as active analysers of issues that they find significant as well as developers of solutions. The data consisted mainly of the recordings of the Change Laboratory workshops and we analysed it by identifying expansive learning actions. Based on this, the specific features of the Change Laboratories conducted with adolescents were reflected upon. All the previously known expansive learning actions were found in the data of one of the projects and almost all in the other project's data. The learning actions followed the expansive learning cycle, although the same learning action could take place in the different phases of the process. The research results illustrate that expansive learning can take place also in adolescents’ Change Laboratories.

Descriptors: adolescents, Change Laboratory, civic engagement, expansive learning, school, youth


This article analyzes an expansive learning effort in a supported housing unit for young people who are homeless or at risk of homelessness. Together with the staff of the housing unit, our team of researchers working within the framework of cultural-historical activity theory conducted a Change Laboratory that facilitated transformation from the culture of control and fear to the culture of open interaction and guidance. The study focuses on the multiple roles taken by the researchers when they fostered expansive learning: questioning the existing practice, analyzing the development of the activity of the unit, modeling a new way of working, examining the model, implementing the new model, reflecting on and evaluating the learning process and consolidating the new way of working. The study enriches the literature on intervention research by presenting a comprehensive analysis of the roles that researchers may take in the different phases of a Change Laboratory intervention. Making use of previous studies of educational interventions and the Change Laboratory, the article produces a preliminary spectrum of the possible roles of an
intervention researcher and identifies their key features. The article gives interventionist researchers instruments to plan and assess their activity and facilitates the comparison and systematic development of intervention methods.

Descriptors: Change Laboratory, expansive learning, intervention, roles