Finnish Educational Research Association Annual Conference 2021, Jyväskylä / Virtual Cultural-Historical Activity Theory and Formative Interventions SIG Annalisa Sannino & Jaakko Hilppö (Chairs)

Thursday 25.11 12.45-14.15

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3	Sylvie Barma, Laval University; Rollande Deslandes, University of Quebec in Trois-Rivières; Alexander Cooper, Laval University	Supporting a school team by participating in a Change Laboratory for and with adolescents in the context of cannabis legalization in Canada

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Thematic session 3: New directions for CHAT

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1	Jaakko Hilppö, University of Helsinki	Sleep in Early Childhood: Outlining a Fourth Generation CHAT Research Program
2	Maria Spante, University West; Jane Nodder, Lancaster University; Philip Moffitt, Royal School of Military Engineering; Catherine Hasted, University of Cambridge; Monica Egelström, et al.	Running online formative interventions – experiences from an international research community
3	Yrjö Engeström, CRADLE University of Helsinki; Pauliina Rantavuori, Tampere University; Piia Ruutu & Maria Tapola- Haapala, CRADLE University of Helsinki	From mental future orientation to material future-making: a change laboratory for adolescents' transformative agency

SESSION ABSTRACTS Thematic session 1: Key concepts and change laboratories Thursday 25.11 12.45-14.15

Problem definition in formative interventions: A case of generative workplace learning and agency to eradicate homelessness Annalisa Sannino, Tampere University

Learning, social and political sciences have shown how societal problems may be collectively grasped and how policy solutions may be developed with a strong push from local initiatives of participatory governance. Within these domains problem definition is seen as playing a key role, influenced not only by predisposition factors as socioeconomic statuses and political orientations, but also by ways in which problems are identified and grasped in terms of acute societal needs requiring collective learning and agency.

As current rapidly changing circumstances affect work in so profoundly new ways and resources appear scarcer than in the past, it is more relevant than ever to focus on how problem definition may affect research-based change efforts aimed at learning and agency. Also, as the nature of these problems is increasingly such that require coalitions among numerous workplaces, a suitable problem definition is one with relevance, vertically and horizontally, beyond a single workplace. Recent developments in fourth generation activity-theoretical studies open up interesting venues to trace how problems are defined in formative intervention research in ways which may be generative and conducive to policy developments with a strong impulse "from below" by workplace practitioners. By bringing together the perspectives of transformative agency by double stimulation, relational agency and expansive learning, the paper explores problem definition in formative intervention research-mediated workplace learning and its role for improving the quality of work, inclusive and democratic practices within and across the sectors involved in eradicating homelessness in Finland.

Emerging contradictions as learning opportunities. A transformative process in social support for children and families experiencing vulnerability Diego Di Masi, University of Turin Chiara Sità, University of Verona

Western democracies, inspired by a neoliberal ideology, have developed a decision-making process based on conflict removal (Benasayag & Del Rey, 2007). In such a scenario, all (abstract) opinions are equivalent, and (situated and context-dependent) contradictions, socially and historically determined, are eradicated. In the Activity Theory approach, conflict acquires a new epistemological status and becomes a learning opportunity. Adopting a dialectic perspective, facing conflict in a workplace means to analyze emerging contradictions to make their influence on professional practices visible, and to overcome the difficulties redesigning the activity system (Engeström & Sannino, 2011). The paper aims to present a case study conducted with professional and non-professional actors involved in an activity system oriented to implement informal social support for vulnerable families.

The study uses an application of the expanding learning circle (Engeström, 2015) to the LabT. LabT is a multi-vocal context, where researchers and local actors reflect on available data and design

innovation in child and family welfare. In this paper, we explore how the local data on the implementation of P.I.P.P.I. (an Italian program for vulnerable children and families) have been used to identify contradictions within the nodes and between two or more nodes of the activity system. Tertiary and quaternary contradictions have been explored during residential research days involving researchers, professional and non-professional actors. The group has analyzed the existing social support activity and designed a new one to respond effectively to the families' social support needs (Innovation Project), coordinating the new activity with other related activity systems.

Historicity in change laboratories: the role of the history wall tool to understand collective concept formation and model creation Maria Spante & Monica Egelström University West

In this paper we focus on how four change laboratories in schools in a Swedish municipality actively used the history wall tool in their respective CL process to tackle unequal access to educational success. The four CLs were conducted in 2019-2021 involving in total 83 participants. The participants in each of the four CL brought with them their individual professional experiences to the work with the history wall achieving a depicted timetable. This created a common ground for each CL collective to get a mutual understanding of the amount and content of what individuals brought with them into the professional situation of fighting inequalities to educational success. During the analysis, important events and characteristics of periods were conceptualized. Theses conceptualizations were further linked to the range of models created in each CL to tackle inequalities. However, it became apparent that the models differed, and we argue that they differed depending on the historical traits each collective discussed as issues for them at their school also influencing prioritized models to work further with at each school.

We suggest that the history wall work both stimulated further model creation as well as served as an understanding why certain models became prioritized by each collective. Therefore, the historical traits should be emphasized in the process as well in the analysis of created models to understand the participants rationale for concept formation and model creation.

Thematic session 2: Change laboratories, results and directions

Thursday 25.11 14.30-16.30

Between formal and informal in school - Developing a fantasy role-playing game in change laboratory Piia Ruutu & Yrjö Engeström, CRADLE University of Helsinki

In our research project "In Search for Significance: Fostering movement across the worlds of adolescents" a group of 8th grade students planned and implemented projects they found significant in their own lives and more broadly in society. These projects were executed in a Change Laboratory intervention (Virkkunen & Newnham, 2013; Sannino et al., 2016). Three students developed and played fantasy role-playing game called Brotherhood of Steel (BoS). As a part of project, the students analyzed role-playing as an activity system based on Engeström's model (Engeström, 1987/2015).

In this presentation we present the activity system of role-playing game made by the members of the BoS group and the key findings relating to the modelling process. Developing a role-playing game, its' world, scenarios, and characters is a demanding task for adolescents and requires systemic thinking. The model of the activity system had an important role as second stimulus to point out the demanding aspects and complexity of the BoS project to group members themselves and to others also. We also bring to discussion how the Change Laboratory intervention in school created a third space learning and what could be learned from that. The data contains three preliminary interviews of students, eight recorded Change Laboratory sessions, five follow up sessions, three follow up interviews of students, two follow up interviews of school staff and field notes

Distributed Creativity and Expansive Learning in a Teacher Training School's Change Laboratory Sakari Hyrkkö & Anu Kajamaa University of Helsinki

Through a cultural-historical lens, creativity appears not as a purely individual or cognitive phenomenon, but as collective activity aimed at renewing shared practices, vital in a fast-changing society where contradictions emerge in stabilized activity systems. While the social sciences still struggle to unambiguously define collective or distributed creativity, it is viewed as closely connected to collective forms of learning. However, empirical activity-theoretical studies focusing on creativity and learning remain rare. Our study presents a case from a Finnish teacher training school faced with tensions and conflicts due to a curricular reform. In a Change Laboratory intervention carried out in the school, the participating teachers jointly created new teamwork and instructional leadership structures and practices for the school, transforming their local context.

Drawing from CHAT and sociocultural theorizing on distributed creativity, we set out to explore how creative acts emerged during the Change Laboratory and how interactive creative processes contributed to expansive learning. Our findings illustrate how consecutive creative acts accumulated in interaction into novel, unexpected, even contingent conceptualizations of work activity. These "creative leaps" were found to mediate the group's joint efforts to tackle the conflicts and contradictions of their work activity, acting as intermediate concepts between creative acts and expansive learning activity. Our study offers a new analytical method for analysing and conceptualizing distributed creativity as a micro-level process promoting expansive learning. Our results point to the importance of a creative culture in organizational changes as well as the potential of participatory intervention methods in fostering such culture.

Supporting a school team by participating in a Change Laboratory for and with adolescents in the context of cannabis legalization in Canada

Sylvie Barma, Laval University, Rollande Deslandes, University of Quebec in Trois-Rivières, Alexander Cooper, Laval University

School community members played an important role in modelling classroom lessons with a school team aiming at enabling adolescents to make informed decision-making with relation to their health. Members of a school community may be characterized as an educational community when a group of partners are committed to the success and development of students' full potential, sharing a common vision and values, and demonstrating caring, warmth, and support in their interpersonal relationships with other members of the same community. We discuss how multilayered collaboration happened in 2019 between a grand-parent, parents, a medical doctor,

teachers, students and special ed teachers as they engage in responding to a demand coming from two schools to address the issue of cannabis legalization (Cannabis Act, 2018) with 8th grader adolescents.

Drawing on Expansive Learning, a Change Laboratory was put in place in two schools. Qualitative and quantitative data were collected. Eight CL sessions were videotaped. In each school, the first two sessions sought to introduce the CL approach to the participants and to present evidencebased mirror data in order to foster individual and collective reflections about cannabis use. The results illustrate the need state that triggered the CL in both settings and the transformative agency by the participants during the CL sessions as well as during the classroom activities. The results highlight the relevance of the Change Laboratory to foster school community members' agency as they support schools to better accompany adolescents when addressing health education.

Thematic session 3: New directions for CHAT Friday 26.11 08.30-10.00

Sleep in Early Childhood: Outlining a Fourth Generation CHAT Research Program Jaakko Hilppö University of Helsinki

In this presentation, I will argue for developing a research program focusing on children's sleep in early childhood from a cultural-historical activity theory perspective. I will also present a preliminary version of such a program and attempt to show how it has the potential to address the current dearth in knowledge on children's sleep, especially in the context of early childhood education and care settings. Overall, sleep and its impact on children's health, wellbeing and learning are well known. Yet, when reviewing the literature around sleep, especially children's sleep, most research is done from either medical or individual psychological perspectives. Although the notion of culture is employed within sleep literature, it is used in most instances descriptively, not analytically. Conversely, within the educational sciences, culture is a wellestablished concept but research on sleep is largely – if not completely – absent. Especially, within early childhood education research on children's sleep, like nap time in kindergarten, along with other basic activities are rarely the focus of larger studies, if studied at all. As corollary, research on sleep seems less attuned to the intricate intertwining of persons and practices, tools, communities, affects, rules and resources and their local histories around children's sleep. Combined with surveys suggesting that children's nap time in ECEC can be a source of tension between families, ECEC practitioners and administration, children's sleep seems like a highly promising avenue for CHAT research.

Running online formative interventions – experiences from an international research community Maria Spante, School of Business, Economics and IT, University West, Sweden Jane Nodder, the Department for Educational Research, Lancaster University, UK Philip Moffitt, MKC Training, the Royal School of Military Engineering, UK Catherine Hasted, Strategic Partnerships Office, the University of Cambridge, UK Monica Egelström, Department of Social and Behavioural Studies , University West, Sweden Fabiane Bravo, School of Education, University of Wisconsin-Madison, USA Brett Bligh, the Department for Educational Research, Lancaster University, UK The aim of this presentation is to share the successes and challenges that we have experienced, as an international community of researchers, running formative interventions in online research environments. We will consider lessons learned from six projects focused on interventions in diverse educational settings: 1) part-time adult learners working in facilities management, who were unhappy with online teaching and learning for the professional diploma courses they were undertaking; 2) K-6 school personnel seeking to create models, with which they aspired to tackle inequalities in accessing education; 3) post-compulsory education providers seeking to engage community stakeholders, in a particularly disadvantaged area with poor educational outcomes; 4) staff in a specialist school for blind students designing a model of inclusive practice, to respond to the changing nature of the student profile in their local community; 5) online educators in Higher Education Institutions, seeking to understand their own professional development needs; and 6) doctoral students from a range of disciplines, working alongside a multinational corporation to scope systemic and social challenges, developing an inclusive environment for neurodiverse employees to prosper.

By sharing our successes and challenges, we will contribute to existing knowledge about the various methodologies we used to design and conduct these diverse projects, so as to continue to build collaboration in the use of formative interventions by the wider international research community.

From mental future orientation to material future-making: a change laboratory for adolescents' transformative agency

Yrjö Engeström, CRADLE University of Helsinki; Pauliina Rantavuori, Tampere University; Piia Ruutu & Maria Tapola-Haapala, CRADLE University of Helsinki

In our research project" In Search for Significance: Fostering Movement across the Worlds of Adolescents", fourteen 8th grade students planned and implemented five different long-term projects they found significant in their own lives and more broadly in society. These projects were carried out in a Change Laboratory intervention (Virkkunen & Newnham, 2013; Sannino et al., 2016) during one school year (2020-2021).

In this presentation, we analyze the paths of these Change Laboratory projects as stepwise processes of transformative agency by double stimulation (TADS). In our analysis we apply Sannino's (2020) TADS model. Drawing on that model, we divide the process into six steps: (1) initial formulation of the raw object, (2) conflict of motives, (3) second stimulus; throwing a kedge anchor, (4) finding traction, (5) 'real conflict of motives' or crossing the threshold to implementation, and (6) implementation as objectification and expansion. The data consist of 12 pre-interviews, eight Change Laboratory sessions, and 24 follow-up sessions, all recorded and transcribed. Our findings show that the Change Laboratory intervention supported the move from individual mental future orientation to collective practical future-making. The TADS model offers a powerful framework to analyze, conceptualize and foster this shift form talk and thought to practical action and material production of future.