Agentive Learning for Sustainability and Equity: Communities, Cooperatives and Social Movements as Emerging Foci of the Learning Sciences

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Abstract: This symposium expands the object and scope of the learning sciences by introducing communities, cooperatives and social movements as crucially important sites of learning. The symposium papers employ and critically interrogate cultural-historical activity theory, specifically the theory of expansive learning, and the emerging methodology of formative interventions as a potential framework for dealing with learning in communities, cooperatives and social movements. Expansive learning emerges as a process of revitalizing the commons, or commoning. The contributions of the symposium point toward the importance of analyzing and fostering transformative agency as a quality of learning.

Overview of symposium

Evidence suggests that we have only years, not decades, to restore the balance before we tip the planet’s natural systems into irreversible cycles that will wreak havoc on vast swathes of nature and on the lives of billions of people around the world. The looming global environmental crisis requires learning and agency that go beyond and across the confines of disciplines, age groups, institutions and cultures. Such learning and agency building must be part and parcel of efforts to create and maintain sustainable and equitable forms of livelihood and communal life, that is, alternatives to capitalism as we know it. It is the task of engaged researchers to identify, analyze and foster them.

We need to celebrate instances in which we see the market being effectively reembedded in civil society—where investment and production decisions are being driven by social needs rather than private-profit considerations. Where city governments team up with local credit unions, pension funds, and unions to support the emergence of local cooperatives, where these cooperatives join together in planning processes that involve the local community, where these cooperatives’ products respond to real economic, social, and environmental needs as determined by the people involved. Alternatives to capitalism also emerge within established institutions such as education and health care, as innovative alternatives to privatization and commoditization.

Here, even if the experiments are local in nature and far from the global scale we so urgently need, people can at least begin to see the contours of the kind of world we need to create. There is an impressive range of such new democratic institutions and institutional ecologies that have been quietly developing just below the surface of public awareness in recent years. They presage various ways of reembedding the economy, not as a return to pre-capitalist modes of embeddedness, but as the creation of a new form of society in which economic decisions are made under norms of democratic dialogue (Adler, 2015).

The notion of reembedding the economy is closely related to the notion of expanding the commons, or commoning (Ostrom, 1990; Linebaugh, 2008). The notion of commons refers to the cultural and natural resources accessible to all members of a society, including natural materials such as air, water, and a habitable earth; these resources are held in common, not owned privately. Also knowledge itself needs to be understood as commons (Hess & Ostrom, 2007).

This view calls for reorientation of educational research toward the dialectics of agency and transformation in activities and communities in turmoil. Such a reorientation involves two major shifts. The first shift is moving beyond (but not excluding) classrooms and schools, toward communities, work activities and social movements as sites of learning. The second shift is moving beyond observations and analysis toward theoretically grounded interventions. The key ideas of such a reorientation include the following:
Learning and formation of agency are seen as intertwined processes; transformative agency is a central quality and outcome of learning.

Schools are seen as nodes in a community or network of diverse activity systems struggling to learn a new way of living.

Learning and instruction are seen as increasingly horizontal processes of sharing and hybridizing – vertical processes cannot be regarded as self-evident or superior.

Learning and instruction are seen as part and parcel of longitudinal efforts to build sustainable and equitable ways of life; short episodes or courses of school learning need to be seen as special cases embedded in long-term processes of transformation.

Learning and instruction need to be built on the histories and indigenous funds of knowledge within communities.

Learning and instruction need to be re-connected to their driving forces, namely vitally significant contradictions and efforts at their resolution in the lives of communities.

Research on agentive learning for sustainability and equity in communities and activity systems such as cooperatives and social movements is typically conducted with the help of formative interventions; methodologies of intervention research are of foundational importance for this field.

These challenges are addressed in four papers and a commentary, presented by scholars coming from five continents. In the first paper, Yrjö Engeström and Annalisa Sannino (University of Helsinki, Finland) propose a conceptual framework for studies of agentive learning in communities and social movements as an agenda for the learning sciences. In the second paper, Aydin Bal (University of Wisconsin, Madison, USA) will present findings from Culturally Responsive Positive Behavioral Interventions and Supports (CRPBIS), a statewide formative intervention study. In the third paper, Heila Lotz-Sisitka, Tichaona Pesanayi and Charles Chikunda (Rhodes University, South Africa), using conceptual tools from cultural-historical activity theory (CHAT), analyze learning in two sustainability-oriented commonality building activities, namely co-management of natural resources and communal food gardening. In the fourth paper, Manoel Flores Lesama, Antonio Carlos Picinatto (both from the Federal University of Paraná, Brazil) and Marco Pereira Querol (Federal University of Sergipe, São Cristovão, Brazil) analyze the learning challenges involved in the emergence of a rural credit cooperative in Brazil. Yew Jin Lee (National Institute of Education, Singapore) will serve as discussant of the symposium.

Agentive learning in communities and social movements: Toward a research agenda

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Is educational research effectively responding to the acute worldwide challenges of equity and ecological sustainability? We address this question in dialogue with recent analyses (e.g., Scott, 2015; Wooltorton & al, 2015) which claim that scholarly work in education should be more relevant and engaged in supporting transformative agency emerging in the struggles for fundamental human rights. A theoretical and methodological argument is developed drawing on data and findings from an ongoing research project on learning in productive social movements. The paper argues for interventionist studies that build on the interconnected categories of alienation and transformative agency in analyses of expansive learning.

Theoretical framework

The philosopher Sève (2012) defines alienation as a foundational category of dialectics having both an ontological and a gnoseological scope. This category allows one to grasp the historical development of human beings and provides methodological insights for investigating this development. Alienation is a result of the separation between productive work and social wealth established by the capital throughout history. Within alienated activities intrinsic antagonistic forces are at play: On the one hand, the conditions of production and development separated from individuals turn into subjugating forces; on the other hand, an unlimited emancipatory development of all forms of social wealth gains momentum. Within this dialectical perspective, alienation both prevents and generates transformative agency. Alienation and transformative agency form a dialectical unity of opposites.

In the theory of expansive learning (Engeström, 2015), learning is seen as qualitative transformation of collective activity systems, such as work units and communities. Expansion refers to a type of learning in which the object of the activity is qualitatively widened and nobody knows ahead of time what exactly needs to be
learned. Expansive learning leads to the formation of a new, expanded object and pattern of activity oriented to
the object. Three ideal-typical phases of the formation of the object in expansive learning may be identified,
namely 1) emergence of an initial diffuse object; 2) formation of a consciously articulated, abstract germ cell
object, and 3) construction of a concrete expanded object. In focusing on the learners’ work to grasp and transcend
the contradictory unity of alienation and transformative agency, the paper takes a step forward in the development
of the theory of expansive learning.

Three cases
The aim of this study is to identify dynamics that trigger, sustain or prevent expansive learning in social
movements facing major challenges of survival and sustainability. Our aim is also to understand how productive
social movements may stabilize their achievements and accomplish longevity.

Our first case is the Campesino a Campesino movement in Central America (Holt-Giménez, 2006). This
is a large-scale movement which develops sustainable forms of livelihood for poor farmers, challenging the
dominance of industrial forms of agriculture and food production owned by large corporations. In doing this, the
movement has developed an entire pedagogy based on horizontal interaction between farmers.

Our second case is the Herttoniemi Food Cooperative in Helsinki, Finland. Founded in 2011, the
cooperative brings together consumers seeking reliable supplies of organic and nearby food, and agricultural
producers of such supplies. The cooperative has about 200 members. It rents a field 30 kilometers from the center
of Helsinki where a hired farmer produces vegetables for the cooperative. During the harvest season, vegetables
are transported weekly from the field into the city to distribution points where members can come to pick up their
share. In spite of its growing popularity, the continuity of the food cooperative is constantly at risk. Small-scale
ecological farming is very labor-intensive and has to compete with the heavily subsidized farm products of large
food store chains.

Our third case is the New York City Community Land Initiative (NYCCLI). NYCCLI brings together
the homeless of New York and activists seeking to establish novel forms of financing and administering affordable
housing. A central aspect of the activity of this movement are diverse forms of popular education and self-
education of the homeless, the administrators, and the public at large.

Our analysis will show that these movements are examples of the core challenges facing education and educational
research in the 21st century. The analysis of the cases leads us to propose a set of key concepts and
criteria for expanded objects of educational research. The analysis also reveals a number of novel potentials for
education, as well as methodological challenges for educational research.

Data and methods
The first case is analyzed with the help of the rich historical and ethnographic data included in the pioneering
study of Holt-Giménez (2006). The two other cases are analyzed with the help of extensive ethnographic
observations and recordings of key meetings collected by our research group. In the analysis of the data, we use
the method of identifying discursive manifestations of contradictions (Engeström & Sannino, 2011) as well as the
stepwise model of double stimulation as generative mechanism of transformative agency (Sannino, 2015).

Preliminary findings
Each one of the three cases is dependent on learning and instruction, understood as generation of new practices
and requisite knowledge. In the three cases, learning and instruction are highly motivated by commoning efforts
(Linebaugh, 2008) that stem from contradictions in the lives of the participants. Learning and instruction in these
cases are primarily horizontal processes of sharing, combining and hybridizing different kinds of knowledge and
expertise. Learning and instruction are longitudinal processes; there are no fixed terminal objectives. The
movements and communities in the three cases could, however, benefit greatly if schools joined them.

Our findings indicate that the object of educational research and theorizing can and should be expanded
along three dimensions: (1) Spatially; learning and instruction need to be seen as increasingly horizontal processes
of sharing – vertical processes are merely special cases; schools need to be seen as only nodes in a community or
network of activity systems struggling to learn a new way of living. (2) Temporally; processes of learning and
instruction need to be seen as part and parcel of longitudinal efforts to build sustainable and equitable ways of life;
short episodes or courses of school learning need to be seen as special cases embedded in long-term processes of
transformation. (3) Motivationally; learning and instruction need to be re-connected to their driving forces, namely
significant contradictions and efforts at their resolution in the lives of communities - drivenness needs to be
recognized as a quality of productive learning.
This paper presents findings from Culturally Responsive Positive Behavioral Interventions and Supports (CRPBIS), a statewide formative intervention study. The CRPBIS research team partnered with the Wisconsin Department of Public Instruction, an urban school district, and community organizations (e.g., Urban League, Centro Hispano) to establish an inclusive problem solving process in schools, called Learning Lab. The goal of the Learning Lab is to build schools’ capacities for equity-oriented transformation (Bal, 2011). Learning Labs were implemented at three preK-12 schools in order to redesign discipline systems with local stakeholders, specifically those who are historically marginalized from schools’ decision-making activities. The paper will report on the implementation of a Learning Lab at Martin Luther King Jr. (MLK) High School in the 2013-2014 school year. The author will discuss how Learning Lab members examined the racialization of discipline at MLK and designed a new behavioral support system that was culturally responsive to the diverse experiences, needs, and goals of their school community.

Significance of the study
In U.S. schools, African American, Native American, and Latino students receive suspension and expulsion more frequently and are punished more severely for less serious incidents such as disrespect and excessive noise than their White peers (The Office for Civil Rights [OCR], 2014). Racial disproportionality has an impact on the likelihood of academic failure and involvement in the juvenile justice system (American Psychological Association, 2008). As a systemic contradiction, disproportionality creates a double bind for educators - “a societally essential dilemma which cannot be resolved through separate individual actions alone—but in which joint co-operative actions can push a historically new form of activity into emergence” (Engeström, 1987, p. 165). To handle this double bind, schools often rely on federally sanctioned standards-based programs for systems change. Those programs prescribe a universal behavioral support model implemented with high fidelity as solutions. The standards-based programs have not improved behavioral outcomes for non-dominant students (Vincent & Tobin, 2011).

Theoretical framework and research questions
Effective and sustainable transformations demand a robust theory of change and building coalitions (Soja, 2010). CRPBIS is informed by Engeström’s (2015) expansive learning theory. Grounded in historical materialism, expansive learning theory offers a new methodology called formative intervention for facilitating systemic transformations led and owned by local stakeholders (Engeström & Sannino, 2010).

This case study answers the following research questions: How can the Learning Lab be understood through expansive learning actions? How did the Learning Lab facilitate the creation of a culturally responsive school discipline system at an urban high school?

Method and analysis
The Learning Lab at MLK was comprised of 14 members: Two administrators, five teachers, five parents, one student, and the director of a local social justice organization. Members met for 11 sessions. Multiple data sources were analyzed including 96 hours of video recordings, interviews, and office discipline referrals. An in-depth qualitative analysis was conducted to trace the expansion of the MLK discipline system through a cycle of learning actions.

Results
Six expansive learning actions emerged in the Learning Lab: Questioning, analyzing, modeling, examining, implementing, and reflecting on the Lab process. Learning Lab showed promise as a means toward democratization of the school’s decision-making process. Overall, the CRPBIS Learning Labs functioned as research and innovation sites for the schools as well as for the research team to develop tools for authentic community-school collaborations. The district is now working with the CRPBIS team to scale up Learning Labs.

Implications
In the age of standardization with the relentless neoliberal attacks against public education, educators in the United States find themselves between a rock and a hard place juggling multiple tasks of the top-to-bottom education reform initiatives while facing lessening opportunities to experiment, reflect on their practice, and collaborate...
Building commonality: Navigating historically situated power relations in CHAT expansive learning research
Heila Lotz-Sisitka, Tichaona Pesanayi and Charles Chikunda, Rhodes University, South Africa

Developing activities of protecting, conserving, sustainably using and sharing the commons equitably with due consideration for all people and non-humans has been described in various fora as one of humanity’s most pressing challenges, including in UNESCO’s most recent document framing the purpose of education and learning for the 21st century (UNESCO, 2014).

We draw on Peter Linebaugh’s (2014) analysis of expropriation activities and appropriations of land and common property resources in the English countryside considering these issues as they traverse the rocky historical terrain of colonial Empire Expansion under British, Dutch, French and Belgian colonial rule. Jumping several generations southwards to the southern tip of Africa, we discuss two sustainability oriented commonality building activities, namely co-management of natural resources and communal food gardening. These activities and their emergent development are shaped by mediational and generative research based on cultural-historical activity theory. They are framed as relevant activities in the early 21st century in postcolonial, decolonizing societal contexts, and involve a re-appropriation and a re-claiming of the commons and commonality under complex conditions of climate change and water scarcity (Rittel & Weber’s (1973) ‘wicked problems’ and Engeström’s (2009) fourth generation CHAT objects).

The two case studies illuminate how via expansive learning in CHAT generative research processes, communities, formerly disenfranchised and left bereft of land, resources and other means of livelihoods are beginning to reclaim the commons through expansive learning and transformative agency - one bit at a time. The two cases are:

Case 1: A case of emerging co-management activity in the northern part of South Africa in the Limpopo Province, Olifants River Catchment, where communities previously disenfranchised of their land are now engaging in the activity of co-management of natural resources with a view to beneficiation of the wider community. In this case, we analyse early historical data in expansive learning and new activity formation, to probe how communities navigate power relations in order to establish conditions for cognitive justice in change laboratory contexts where new activity formation for co-management becomes possible (case: award.org.za).

Case 2: A case of communal farming activity in the south eastern part of South Africa in the Eastern Cape Province, Nkonkombe Municipality where communities previously disenfranchised of their land and later forced into communal farming under Bantustan state regulation are now developing a more democratically constituted form of communal food gardening under harsh conditions of drought and loss of technology capacity for supply of water to food gardens. This leaves elderly people with the difficult activity of carrying buckets of water to drums to provide water for their gardens, and food for their families. Rainwater harvesting and conservation (RWH&C) as alternative water management activity, involving a multi-stakeholder learning network, is being developed by the Lloyd Village community via CHAT expansive learning change laboratory workshops (case: amanziforfood.co.za).

In both cases, we firstly describe the history of the object of commoning activity (co-management in Case 1, and communal RWH&C in Case 2), the activity systems involved, contradictions emerging at the interface of interacting activity systems, change laboratories, networked and expansive learning processes, and emerging evidence of agency expressions and transformative agency (Engeström and Sannino, 2010).

Secondly, we deepen the analysis of these processes of expansive learning and agency formation using lenses of decolonization and cognitive justice and we reflect critically on how communities navigate power relations in order to engage in transformative activity oriented towards sustainability, the common good, and a re-claiming of the commons. These power relations, as our data shows, are complex, multi-layered, deeply historically and culturally imbued, and are extremely difficult to navigate in modern conditions. Yet people involved in the expansive learning processes do this, showing a willingness to traverse colonially instituted and other oppressive boundaries, in attempts to build new human activity that is beneficial to themselves, others and the common good. Two extracts from the data show but some of the contours of these dynamics:
“Equity partnerships in the co-management agreements must provide landowners with shareholding in the businesses, jobs and opportunities” (Case 1: Co-management agreement conditions document drawn up by previously disadvantaged communities).

“We will also participate in the trainings because farmers must not know more than us” (Case 2: Extension Officer -male, Personal Communication, July 15, 2014).

While the focus of our analysis is on local sustainability-oriented and commonality building activities, the analysis presented here has wider resonance as re-claiming the commons is not only a matter of concern for local rural communities in the global South who have been disenfranchised, but is rather a matter of concern for people across the planet who share common good resources such as clean air, water and the planet itself.

**Dialectics of expansion and contraction: The emergence of a rural credit cooperative in the southwest of Paraná State, Brazil**

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Sustainable agriculture faces the challenge of how to finance its operations. The study aims at analyzing the learning processes and the agency of farmers and rural advisors during the creation and development of a cooperative of rural credit for Sustainable Agriculture. Learning is not linear, but both expansive and contractive. Moreover, the production of social organizational structures to support sustainable practices, such as cooperatives and associations, involve agency of local actors, taking actions to transform their local activities.

**Methodology**

The developmental trajectory of the emergence and development of a rural credit cooperative is investigated through a historical analysis. The unit of analysis is a network of functionally connected activity systems. Historical events, understood here as actions, are selected using the concept of critical events, which are events that change the elements of an activity system. Here, we are particularly interested in the events related to the creation of the cooperatives that support farms towards more sustainable production in the southwest region of Paraná State, Brazil. A narrative is produced by organizing the historical events in a chronological order. The narrative is then analyzed using the model of the cycle of expansive learning, in which developmental phases are identified by observing qualitative changes in the structure of an activity.

**The case**

In 1966, in order to support alternative more sustainable forms of agricultural production, a group of small farmers from the Southwest region of Paraná, with the support of priests from Belgium, created an association of farmers called ASSESSOAR. The association promoted solutions to the challenges faced by farmers so that they could produce an alternative agriculture. Alternative refers to the adoption of practices and technologies that preserve the environment. The function of agriculture was not only production of commodities, but also conservation of natural resources and maintenance of local communities.

In order to support more sustainable production, the participants of ASSESSOAR, using financial resources from European NGOs, created a Rotating Credit Fund. The fund was successful in financing small farmers who were interested in producing more sustainably. However, the volume of credit was an important limitation to expand the credit to a larger number of farmers. Moreover, a group of rural advisors who did not agree with the modern agricultural model created a new cooperative of rural advisors called COOPERIGUAÇU.

In 1995, social movements together with trade unions and representatives of Landless Workers Movement started a series of protests requesting policies for family farmers. These sets of protests from the social movement called Grito da Terra (Cry from the Land) led to the creation in 1996 of a new rural credit line exclusive for family farmers, a line called PRONAF – Custeio.

ASSESSOAR and COOPERIGUAÇU supported the creation of cooperatives of rural credit in Paraná State, forming the cooperative system of credit called CRESOL. Despite being directed to small farmers, PRONAF-Custeio followed the old logic and principles of the model of credit created during the dictatorship period – originally created to finance modern inputs such as pesticides and chemical fertilizers. Therefore, the credit became a way to finance technologies aimed basically at increasing production and productivity.

To sum up, the new cooperative CRESOL and the rural credit line PRONAF –Custeio, which were solutions that were aimed at supporting sustainable production, soon became instruments for conventional modern agriculture.
Preliminary findings

Two findings are highlighted on the basis of a preliminary analysis of the case. First, the study shows that the cooperatives ASSESSOAR, COOPERIGUAÇU and CRESOL were attempts at supporting an alternative model of more sustainable agriculture. They were outcomes of the initiatives of local farmers, local rural advisors, and European priests. Their actions were motivated by the negative consequences of the conventional model of agriculture. They created cooperatives and associations to overcome the challenges faced in small farms.

Second, the study shows that the long-term trajectory of collective learning in this case is neither linear nor exclusively expansive. The ASSESSOAR and COOPERIGUAÇU were important expansions towards making sustainable agricultural production viable in small farms. However, the tentative effort to expand the volume of credit available to small farms through the creation of the new cooperative CRESOL and PRONA F-Custeio increased the volume of money, but also changed the object of the financing activity. The object changed from financing environmentally and socially sustainable food production to highly productive and highly profitable standardized commodity production. This change is interpreted as a qualitative contraction of the object. Although there has been discourse in CRESOL about the importance of financing sustainable agriculture, the practices show that the credit has been directed only towards conventional forms of agriculture.

References


