Yuri Lapshin

COLLECTIVE AGENCY FORMATION THROUGH
THE RENEWAL OF SCHOOL ACTIVITY

A Change Laboratory Interventional Study

CRADLE
Center for Research on Activity, Development and Learning

Working papers 4/2013
Yuri Lapshin

COLLECTIVE AGENCY FORMATION THROUGH THE RENEWAL OF SCHOOL ACTIVITY

A Change Laboratory Interventional Study
Supervisors
Professor Yrjö Engeström, University of Helsinki
Academy research fellow Annalisa Sannino, University of Helsinki

Unigrafia, Helsinki

ISBN 978-952-10-8218-4 (pbk)

ISSN-L 1798-3118
ISSN 1798-3118
Yuri Lapshin

Collective Agency Formation through the Renewal of School Activity
A Change Laboratory Interventional Study

Abstract

Understanding the processes of collective agentive work practices and working out approaches to develop the professional’s and citizen’s agency are nowadays topical for Europe, and under active discussion. Cultural-Historical Activity Theory (CHAT) and its interventionist methodology provides a fruitful framework for research on the nature and laws of collective agency formation in real, complex, object-oriented activities, including education. This research investigates collective agency development of a school team through the attempt to renew its educational activity. The research is carried out in collaboration with pedagogical team of the “School of Self-Determination” (Moscow, Russia) in the context of current national educational reform. Under the increasing pressure of the reform the school collective seeks to redefine its shared object of activity, to identify and overcome the contradictions of its activity and to overcome inner crisis in the collective agency. For activity theory, agency is primarily related to the sharing of an object of activity by the working collective and secondarily to the capacity of the collective to transform the activity collaboratively, as well as to the capacity of the involved people to bring up the others to bear mutual sense-making. The core concept of this study is the concept of dialectical contradiction as a driving force of the development. The research project includes preliminary historical study of the school activity and agency development, ethnographic research of the current processes in the collective activity, and interventional multisession process of the Change Laboratory, led by myself with the participating of representative group of practitioners – members of the school collective. Further on, the research procedure includes post-interventional ethnographic research to observe the changes in the school activity and in the collective agency of the school team. To answer my research questions, described in the research plan, I shall analyze the collected data in order to understand the relationship between the transformation of the shared object of the
collective activity of the school team and its development. In this analysis I shall use methods of discursive analysis of contradictions, interactional analysis of changes in the interpersonal relationship among teachers during the Change Laboratory process, comparative historical analysis of the evolution of the school activity and agency - in diachronic perspective of different stages and synchronic perspective with the development of the country’s social climate and state policy. The dissertation is based on four articles; each article is written to answer one of the four research questions concerning different aspects of collective agency in its relation to the development of the school’s activity system.
1 INTRODUCTION

Understanding the processes of collective agentive work practices and working out approaches to develop the professional’s and citizen’s agency are nowadays topical for Europe, where new ideas of “Enabling State Policy”, the Workfare State, the New Liberal State among others, are under active discussion (Dingeldey, I. 2005, Miettinen, 2013). These modern conceptions presume to share the responsibility between the state and active citizens as true subjects of economic and social development, and educational institutions must play a crucial role in helping people to become active and socially agentive.

Cultural-Historical Activity Theory (CHAT) and its interventionist methodology provides a fruitful framework for research on the nature and laws of collective agency formation in real, complex, object-oriented activities, including education (Engeström, 2005, Virkkunen, 2006; Yamazumi, 2007; Daniels, 2007). Interventional research projects conducted in collaboration with practitioners interested in transforming their activity in response to modern time requirements also offer broad opportunities to deepen and develop CHAT itself.

The Russian educational system is going through a reform aimed at improving the quality of education and including it in modern international trends. The reform includes at least three significant changes: a new State Educational Standard (including brand new personality development and meta-competence levels); the Unified National Test as a new evaluation approach, introduced in 2009 and now the only indicator for school efficiency (Minina, 2010); and new financial regulations (“the money goes to the child” principle, which leads to the tendency of schools to merge (despite all the attendant problems). In this process, schools face various problems and contradictions that underline behind them and some of the schools must go through deep crises. Unsurprisingly, that school teachers and administrators, as well as school students and their parents, often regard the reform requirements as a pressure and a danger. The real danger is that the traditional for Russian “top-down” approach to reform generates suspicion and distrust of all educational agents (teachers, school administrators, parents and children), and provokes public resistance as well as imitation in response to the new requirements. One of the external social challenges to practice is how to involve school collectives, teachers and administration into a common process of reform as genuine agents of the innovative transformation of their activity.

The research is carried out in collaboration with the pedagogical team of the “School of Self-Determination” (Moscow, Russia), which has a strong tradition of innovative pedagogy focused on constructing agentive collaboration with
children in education and school life. Currently, in the context of increasing pressure of national educational reform, the school seeks to redefine its object, to identify and overcome the contradictions of its activity. This effort enjoys the support of the Change Laboratory intervention led by the author. The openness of the teachers and administration, their readiness to dedicate extra time to collaboration and their permission to use the materials of the intervention in research purpose made this study possible.

I study the collective agency development of teachers through the attempt to renovate the school’s activity system. In 2012 it was conducted an ethnographical study examined a current situation, a historical quest sought changes in the school activity, and the interactive multisession process of the Change Laboratory was launched for a representative group of school team members. The intervention continued until March 2013, followed by ethnographical observation of its implementation into the school practice, and planning through until the end of the 2013-14 academic year. I analyze the collected data to understand the relationship between the transformation of the shared object of collective activity of the school team and the development of its collective agency.

The core concept of this study is the concept of dialectical contradiction as a driving force of development (Ilyenkov, 1982), which is one of the central points of Cultural Historical Activity Theory and Developmental Work Research Methodology (Engeström 1987, 1996, 2001). By identifying dialectical contradictions in the object of activity and overcoming them with creating a new concept, which unifies both sides of the contradiction, the work collective not only transforms the activity system, but also develops itself as the subject of activity by sharing the new concept. This development allows the collective to solve disturbances and conflicts in work practice, change the relationships between colleagues, to raise and share common agency.

The dissertation will be based on four articles; each article will answer one of the four research questions concerning different aspects of collective agency, which will be discussed below in the theoretical section of the research plan.
2 RESEARCH QUESTIONS AND ARTICLES

**Question 1.** How are contradictions in the activity system manifested in the discourse of teachers during Change Laboratory sessions?

Article 1. Discursive manifestations of contradictions in the renewal process of the concept of school activity.

**Question 2.** How is the development of the agency of the school team expressed in changing the social interactions of team members in the process of forming of a new concept of school activity?

Article 2. Changes in social interactions in the school collective as a manifestation of changes in collective agency.

**Question 3.** How has the agency of the school team changed with the temporal change in school concept during the historical evolution of the state policy and the social climate?

Article 3. The historical evolution of the educational activity of the school and the transformations, changes and contradictions of the school team agency.

**Question 4.** How is the renewal developed in the Change Laboratory implemented in school practice and how does it influence agency in the long term?

Article 4. Renewal of the school activity: the implementation of new concepts into practice and the spread of new agency in the team.
3 THEORETICAL FRAMEWORK

The theoretical framework of this study is Cultural-Historical Activity Theory (CHAT), which is based on the classical ideas of L.Vygotsky and A.Leontiev. Vygotsky put forward the revolutionary idea of the development of higher mental functions (“neo-formations”) are mediated by cultural artifacts in social interaction:

Any function … in the development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an inter-psychological category, and then within the child as an intra-psychological category… Internalization transforms the process itself and changes its structure and functions. Social relations or relations among people genetically underlie all higher functions and their relationships. (Vygotsky, 1981: 163)

Based on Vygotsky’s ideas, Leontiev worked out the theory of object-oriented activity as a “mediated subject–object interaction”, which is a “non-additive, molar unit of life with its own structure, its own internal transformations, and its own development” (Leontiev, 1978) - a system of relations between human as the subject and material object as human’s motive, structured in goals, acts, conditions and operations.

According to Leontiev, the notion of a “subject of activity” means an individual with “true motive”, or the object of the activity. The material object becomes the motive of the activity, when it meets with a need of the individual: “a need is objectified by the object”. The process of “objectifying” is the establishment (by individual) of the relationship between the individual need and the internalized social meanings of the object. When the individual established such relations, the object becomes a motive and the individual becomes a subject of the activity (Leontiev, 1978).

As Kaptelinin notes, the principal limitation of this model is “one need, one motive, one object, and one activity” (Kaptelinin, 2005). For more than one actual need for the individual,

“…the selection of that activity is based on a comparison of the competing motives through the hierarchy of motives. The motive with the highest rank in the hierarchy takes over, and the activity oriented towards that motive/object is carried out.” (Kaptelinin, 2005) (Figure 1)
Kaptelinin concludes that Leontiev’s “systems of concepts, including the concepts of “need,” “activity,” “motive,” and “object” cannot be easily applicable to the case of poly-motivated activities” (Kaptelinin, 2005). Kaptelinin stresses that “Leontiev’s analysis was predominantly dealing with activities taking place at the individual level (…) as units of life of individual human beings, individual subjects. Even though the possibility of extending the scope of analysis and applying the concept of activity at supra-individual levels, for instance, to consider activities of individuals as contributors to a larger-scale activity carried out by a group or organization, was clearly indicated by Leontiev, his framework was specifically developed for individual activities (i.e., activities in a “narrow sense”) (Kaptelinin, 2005).

Stetsenko and Arievitch point out the connection between human subjectivity, collective material production and the social interactions of people involved in a collective activity:

“An important idea that Leontiev did not seem to emphasize enough (and perhaps to fully appreciate) is that human subjectivity, the collective processes of material production and social interactions all co-evolve as parts of a unified system constitutive of human social life, interpenetrating and influencing each other, while never becoming completely detached or independent from each other. The primacy of material practice notwithstanding, all three represent processes that are dialectically connected, that
is, are dependent upon and condition each other—“ (Stetsenko & Arievitch, 2004)

To extend Leontiev’s category of activity to collective phenomena, Russian social psychologist A.V. Petrovsky attempted to develop a concept of interpersonal relationships, mediated by activity (Petrovsky, 1982):

“The development of interpersonal relationships and the group as an entity is determined by the personally valuable and socially significant content of joint activity.” (Petrovsky, 1982)

Petrovsky considered a group to be a subject of activity. He analyzed a branch of group phenomena, such as motivational choices, referentiality, the well-being of personality in the group, self-estimation, leadership, cohesion, value orientations, and responsibility assignment in relation with the development of the group activity. According to Petrovsky, “the development of the content of group activity transforms a diffuse group into a collective as the highest stage of group development” through several intermediate stages, and vice versa: “the destruction of the activity leads to the destruction of interpersonal relationship in the group.” (Petrovsky, 1982)

Petrovsky’s analysis of the development of group phenomena in relation to the development of the content of activity offers us several possible indicators of inner processes in the collective subject of activity. However, these indicators are not enough, because Petrovsky associated the group phenomena with the content of activity and, in fact, lost the object, which, according to Leontiev’s definition, is a “sense-maker”, determining the activity itself (Leontiev, 1978).

The approach of Y. Engeström (Engeström, 1987) to the extension of Leontiev’s theory to the area collective activity, often called a new generation of Activity Theory, is much more powerful. Engeström established collective activity as a unit of analysis, describing it in the triangle model (see Figure 2) as the interaction between the working collective of people as a subject, common object shared by them, and the community, mediated by three types of mediators: tools, rules and division of labor. Engeström also suggested a meaning for each mediated interaction (Figure 2).
This new generation of activity theory focuses “on the learning and development that emerge in the institutional contexts of practical activities culturally and historically mediated within a society.” (Yamazumi, 2007) The approach and triangle model of collective activity by Y. Engeström enable us to study the collective subject, to investigate the development of its agency in relation to the development of the shared object within the entire system of activity.

3.1 The concept of “agency” in the context of collective activity

The problem with the conceptualizing, operationalizing and investigating collective agency in empirical research today is far from being solved today. As Hitlin and Elder note, “the term “agency” is quite slippery and is used differently depending on the epistemological roots and goals of scholars who employ it” (Hitlin & Elder, 2007). Nevertheless, as A. Edwards insists based on her studies of collective work practices in education and social care, “strong forms of agency are necessary for professional practice in complex settings and can be learnt” (Edwards, 2007).

As “the capacity of a person or any other entity to act in a world” (Bandura, 2001), “to act independently and to make their own free choices” (Barker & Chris, 2005), “the temporally constructed engagement by actors of different structural environments… both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations”
(Emirbayer & Mische, 1998), the concept of agency can be applied to collective activity phenomena.

For activity theory, agency is primarily related to the transformation of the activity, “when the object/outcome of the activity has been reconceptualized and all the other elements of the system have changed correspondingly” (Virkkunen, 2006).

Engeström defines such agency as the capacity of an actor for “breaking away from a given frame of action and the taking of initiatives to transform it” (Engeström, 2005). Referring to Engeström’s definition, Virkkunen proposed: “when a group of people does this and search collaboratively for a new form for the productive activity in which they are engaged we could speak of shared transformative agency (Virkkunen, 2006).

Edwards points out that joint activity changes the object as well as the relationships between the people involved in it. She introduced the concept of relational agency, which is “a capacity to work with others to expand the object that one is working on by bringing to bear the sense-making of others and by drawing on the resources they offer when responding to that sense-making” (Edwards, 2007).

Yamazumi notes also, that agency is “the subject potentialities and positions of the externalized creation of new tools and forms of activity with which humans transform both their outer and inner worlds and thus master their own lives and futures” (Yamazumi, 2007). By studying the processes of transformation of the activity, one can understand the formation and development of the agentive collective subject of it.

3.1.1 The theoretical concepts for answering the research questions

As shown in the theoretical observation, the development of the collective agency in Cultural Historical Activity Theory is linked to two aspects: the aspect of “sharing” the concept of the object of activity, and the aspect of “being able to transform” the common activity. I expect to see both sides of agency development in the Change Laboratory process (which will be described as an activist interventional research method and as a particular case), which targets to the formation of the new concept of activity and aims to solve the inner problems of the team. Since the central point of this study is to find and to overcome contradictions in the activity system, the concept of contradiction as a driving force of development (Ilyenkov, 1982; Engeström 1987, 2001) is the central theoretical focus.

To answer the first research question “How are contradictions in the activity system manifested in the discourse of teachers during the Change Laboratory sessions?”, I will identify the contradictions in the activity system and the evolu-
tion of their discursive manifestations in the participants’ discussions – dilemmas, conflicts, critical conflicts and double binds (Engeström, Sannino, 2011) - during the group process of forming the new concept of the common object.

To answer the second research question “How is the development of the agency of the school team expressed in the changing the social interactions between the team members in the process of forming the new concept of the school activity?” I will analyze the evolution of the social interactions in the group of the school teacher and compare the interactional phenomena (disturbances, conflicts, crises, arguments in conversation, stereotypes of interactions, and stages of group development) to the process of understanding and overcoming the contradictions in the Change Laboratory. The theoretical concepts for this analysis are relational agency (Edwards, 2007) and Petrovsky’s conception of interpersonal relationships, mediated by activity and the stages of the development of work collective (Petrovsky, 1982).

To answer the third question of my research, “How has the agency of the school team been transformed with the temporal changes in the school concept during the historical evolution of the state policy and the social climate?” I will use Vygotsky’s concept of the historical process of development of higher mental functions (Vygotsky, 1997), the concept and methodology of the historical dimension of comparative education (Sweeting, 2005) and the Foucauldian concept of governmentality (Lemke, 2002) to see how the collective agency evolutioned in the history of the school and Russian society. The task is to identify the cycles of agency of the school team in connection with changes in the state policy and the social climate in Russia, influence the school activity.

To answer the fourth question, “How is the renewal developed in the Change Laboratory implemented in school practice and how does it influence agency in the long term?” I will use the main concept of the collective activity triangle model (Engeström, 1987) and the main concept of transformative agency (Engeström, 2005; Virkkunen 2006), as well as the concept of relational agency (Edwards, 2007). By answering this question, I hope to compare the results of analyses of the previous questions and add them to the analysis of the data from post-Change Laboratory ethnographic research.
4 METHODOLOGY AND METHODS

The methodology of my research relies on the experimental-genetic method of Vygotsky (1978), implemented and extended in organizational development by Y. Engeström (1996a) as Developmental Work Research (DWR), with the central role of formative interventionist method known as the “Change Laboratory” (Engeström, 1996b), aimed to the development of collective work activity through findings and overcoming dialectical contradictions in social interaction within group of practitioners in collaboration with interventionist researchers.

4.1 Developmental Work Research Methodology

4.1.1 Vygotskian research principles in DWR

DWR methodology is based on two main epistemological principles (Sannino, 2011), derived from Vygotsky’s works: the double stimulation principle and the principle of ascending from abstract to concrete.

As A. Sannino (2011) wrote:

Vygotsky’s principle of double stimulation (1978) refers to the mechanism with which human beings can intentionally break out of a conflicting situation and change their circumstances or solve difficult problems. In double stimulation, the first stimulus is the problem itself. Human beings employ external artifacts which they turn into signs by filling them with significant meaning. These signs are used as second stimuli with the help of which the subject gains control of his or her action and constructs a new understanding of the initial circumstances or problem.

This principle allows the researcher to organize the situation in interventional research, when the participants will reconider the problem situation (especially contradictory situation) using the new tools (Vygotsky’s cultural signs), which researchers can offer or participants can find.

The principle of double stimulation shows how an individual can gain the power to use outside resources to determine his or her own behavior. This principle is presented as a key factor in the human ability to transform at the same time the world around and him- or herself (Sannino, 2011).
The other important principle of DWR is “ascending from abstract to concrete”, which derives from Marxist dialectic (Ilyenkov, 1982) and which V. Davydov has turned into epistemological principle of learning activity (Davydov, 1984). This principle highlights the theoretical abstraction as the main method of learning activity, allows the scientist to separate studied important connections and relations, from the phenomena and “refers to the identification of the genetic origins of phenomena… based on a functional relationship, also called a germ cell” (Sannino, 2011).

Finding the germ cell is an important part of Developmental Work Research methodology, which opens a path to further development and transformation of the activity and reorganizes the work collective itself:

Theoretical generalization requires experimentation with problematic situations in order to find the germ cell behind them. Then, from this original abstract principle one can observe its different material manifestations, and even conceive further new variations. … Subjects have to look for generating mechanisms behind the problematic phenomena they refer to. This mode of generalization … brings subjects to think dialectically about their practices, to establish connections with many other phenomena that initially remained in the shade because they looked different, to explain this systemic constellation of problematic phenomena, and to construct new solutions. (Sannino, 2011)

The methodological principles of DWR are extremely useful for studying agency in collective activity. K. Yamazumi resumes “the three principal positions of activity theory in human developmental research: the interrelationships of development, contradiction, and agency” (Yamazumi, 2006).

It is equally important that Developmental Work Research methodology, based on the epistemological principles described above, contains the original features of the Vygotskian research approach. Vygotsky emphasized that the analysis of new formations of any higher psychological function and social behavior (such as collective agency) consists of “taking each higher form of behavior not as a thing, but as a process, and putting it in motion so as to proceed not from a thing and its parts, but from a process to its separate instances” (Vygotsky 1997).

N. Veresov (2010) identified the five principles of the Vygotskian experimental-genetic research methodology as follows:

1. The principle of “buds of development”. At the beginning, the experimental study should detect the functions which are in their “bud” (embryonic) stages, are not yet developed.
2. *The principle of dramatic event.* “The dramatic event is the form in which the higher function appears first as a social relation before it becomes an internal higher mental function.”

3. *The principle of interaction of real (natural) and ideal (cultural) forms.* In the course of the experimental study, both forms should be detected. The tools and means of interaction between these forms should be specially created and involved in the experimental procedure.

4. *The principle of developmental tools.* During the experiment, cultural tools the child should discover (find) in cooperation with an adult or more competent peer.

5. *The principle of sustainable qualitative changes as an outcome of the experiment.* These new qualitative levels of organization should be experimentally detected and described. (Veresov, 2010)

Developmental Work Research methodology (Engeström, 1996a) implements Vygotskian principles of experimental-genetic research in organizational learning. The following main features of DWR indicate that the participants, who represent the collective subject of activity, face and overcome the contradictions of the activity system ‘in special settings’ organized by researchers. The researchers ‘enter into social interaction’ (collaboration) with the participants, as an experimentator does with a child in Vygotsky’s classical experiment. The researchers provide ‘the developmental tools’ (history and ethnography research materials, triangle model patterns for creating a systemic view of the activity, special settings designed for ongoing tasks). “Facing the contradictions” (with the help of researchers) may be considered as a ‘dramatic event’ mentioned by Vygotsky, in which the ‘highest form’ of collective analysis of the activity appears ‘first as a social relation’. To overcome the contradictions, participants must build the new model of activity and create the projects to implement it into actual practice (working in their ‘Zone of Proximal Development’). Through this methodology, the researchers can observe how ‘the new functions in collective activity are growing up’, facing with old ones, and replacing them at the beginning in social relationships inside the learning process, and subsequently implementing (‘internalizing’, according to Vygotsky) them into actual collective activity.

4.2 The methods of DWR

DWR includes preliminary historical research on the development of the activity system, the ethnographical research of current activity processes and the formative interventional method known as the ‘Change Laboratory’ (Engeström, 1996b). The process of intervention based on the expansive learning cycle (see
Figure 3) provides opportunities for the developing collective work activity through findings and overcoming dialectical contradictions in social interaction within groups of practitioners and in collaboration with interventionist researchers. To analyze the process of social interaction in the Change Laboratory Engeström and Sannino worked out a method for analyzing discursive manifestations of contradictions (Engeström and Sannino, 2011).

![Figure 3. The phases of the cycle of expansive transition and learning (Virkkunen and Kuutti, 2000).](image)

As Virkkunen pointed out,

> Developmental Work Research is an interventionist methodology that aims at prompting and supporting practitioners’ agency in analyzing and transforming the system of their joint activity. Agency here means breaking away from the given frame of action and taking the initiative to transform it” (Virkkunen, 2006).

In my research I apply the DWR methodology to study the relationship between the collective agency of the school team (which could be conceptualized in the different forms, as described above) and the formation of the concept of collective activity in the development of both sides.
4.2.1 Historical and Ethnographical Research Analysis

To analyze the activity system of the school in its historical development from its foundation in 1970 until now, we held 20 narrative interviews with teachers, administrators and creative leaders who work or used to work at the school. We also interviewed 10 former graduates of the school, 10 parents of the school pupils (5 of whom were former pupils of the school), and conducted 7 focused group interviews with pupils of the school (18 children from 7 to 11 grades). Additionally, we analysed the collection of conceptual documents (papers, books, brochures and videos) of the school’s different periods.

These materials enabled me to construct a chronological timeline of the school’s history, to distinguish the main periods and cycles of school development, and to model the activity system of each period. The inner history of the school has been compared to the political history of the country and, at the same time, to the educational policy of the state.

We observed and videotaped typical processes of collective work e.g. as the school team and different workgroup meetings, episodes of school life, educational activities, school board meetings, project conferences. The materials of the preliminary study served in preparing and conducting the Change Laboratory formative intervention.

4.2.2 Change Laboratory Formative Intervention method


Engeström describes the typical layout of the Change Laboratory (see Figure 3) as a set of Vygotskian developmental tools:

In the Change Laboratory, the original 'task' of Vygotskian designs is represented by the mirror which contains challenging examples of problems and disturbances. The original 'mediating artifact' is represented by a model of the entire activity system that is used to make sense of the built-in contradictions generating the troubles and disturbances depicted in the mirror. This model is also used as a vehicle of time travel, to construct a vision of the past and the future of the activity system. The potential capabilities and emerging formations are represented by the surface in the middle. It is a third space, reserved for new ideas and tools for reorganizing the activity. (Engeström, 1996b)
The aim of the Change Laboratory in the school was to reconceptualize the collective work activity of the school by the group of participants representing the school team with a set of developmental tools provided by the researchers. The researchers conducted the sessions, prepared the developmental tool for the practitioners, and collected data to analyze the development of a new concept of school activity and the development of team agency.

The representative group of teachers and administrative persons comprised 24 participants (of 65 members of the school collective) including the director of the school participated in the Change Laboratory group. The participants represent all structural divisions of the school as well as informal groups inside the collective and were selected by the sociometric query.

The team of researchers comprised of three persons, two of whom were the conductors of the sessions and the third was tasked with observing and videotaping the process.

The sessions took place from October 2012 to the end of March 2013. 10 sessions was made, on average twice a month. The duration of each session was three hours with a 15-minute break in the middle. The average number of participants for session was 16.

All the sessions were fully videotaped and observed by a member of research team, all the materials made by the participants were saved. The material and ideal production of the sessions, the content of participants’ speeches, and the verbal and nonverbal signs of development of interpersonal relations will undergo be the subject of later analysis.

**Figure 4.** The prototypical layout of the Change Laboratory (Engeström, 1996b).
4.2.3 Post-Change Laboratory Ethnographical Observation

The ethnographical observation of the processes in the school team as a collective subject of activity and correspondence with the transformations of the activity system, will take place during the academic year following the Change Laboratory formative intervention (until the summer of 2014).

The work processes will be videotaped, and interviews will be held with members of the collective, school children and their parents, and representatives of communities around the school. The new conceptual documents, which will be worked out during this period, will be collected.

The new content of the interacting (subject, object and community) and mediating (rules, tools, and labor division) elements of the activity system will be identified in their development and will presumably establish a relationship between the transformation of the activity system and the development of collective agency.
5 DATA COLLECTION

5.1 The research area: “The School of Self-Determination” (Moscow, Russia)

This study was conducted in Moscow school №734, which is a public school on the periphery of the city, founded in 1970 and became known under the informal name “School of Self-Determination” (see Figure 6). The school’s conception of education is focused on developing its students as “self-determining personalities”. The school has a strong tradition of inner democracy and collaborative alliance between adults and children. Throughout its history, the collective of the school developed various pedagogical innovations aimed at involving children in the active subjective position in the learning process and social school life. After the death of the school’s headmaster Alexander Tubelsky in 2007, the teachers’ collective fell into a serious crisis of its work. The teachers and administrators feel now that their methods lacked the effectiveness, especially under the pressure of the new requirements. Also they experience considerable tension and confusion within the team.

Figure 5. The school of Self-Determination – the location of the study.
5.2 Tasks and timetable

1. Historical research (April – June 2012): narrative interviews with members (current and former) of the school collective, former pupils, partners, officials, documentary research (printed texts, photos and videos) are finished, the additional data will be collected after finishing the Change Laboratory to clarify and complete the Historical Reconstruction of the development of the school activity system. I use the historical research data to prepare the developmental tools (mirror materials) for the Change Laboratory formative intervention, as well as to write article №3, “Historical evolution of the activity of the educational school and the transformations of the school team’s agency: development, changes and contradictions”.

2. Preliminary ethnographic research (April – September 2012): Structured interviews with teachers, pupils and parents, as well as observation and videotaping of the main processes – finished. I use the data collected in the preliminary ethnographic study to prepare the developmental tools (mirror materials) for the Change Laboratory formative intervention, as well as to compare the state of the school activity system and the agency of the team before and after the Change Laboratory for article №4: “The renewal of the school activity: the implementation of the new concept into practice and the spreading the new agency in the team.”

3. The Change Laboratory formative intervention (October 2012 – March 2013): 10 sessions with a representative group of teachers and administration (24 participants from the 65 members of the school collective) – finished. The participants’ discussion talk during the videotaped sessions of the Change Laboratory will be transcribed for the analysis in article №1, “Discursive manifestations of contradictions in the renewal process of the concept of school activity”. The non-discursive behavior of the participants during the sessions will be analyzed for article №2, “Changes in social interactions in the school collective as a manifestation of change in collective agency”.

4. Post-Change Laboratory ethnographical research (April 2013 – May 2014), collecting the same types of data as in the preliminary research: interviews, videotaped processes, documents – in progress. This data will be used in the article №4, “The renewal of school activity: the implementation of the new concept into practice and the spread of new agency in the team”.


5.3 Preliminary research data description

- Twenty narrative interviews with teachers, administrators and creative leaders who work or used to work at the school about the history of their work in the school and points of view on the current situation;
- Ten interviews with the parents of the school pupils (five of whom are former pupils of the school);
- Seven focused group interviews with the pupils of the school (18 children from 7 – 11 grades);
- Protocols and videotapes of the observations of various work processes (the team and different workgroup meetings, episodes of school life, educational activities, school board meetings, project conferences, etc.);
- The collection of conceptual documents (papers, books, brochures and videos) from the school’s different periods.

5.4 Preliminary materials processing

- Dividing the narratives of the interviews into the categories of the activity system (object, subject, tools, rules, labor division, and community), gathering the table of the historical evolution of school activity, looking for the main tendencies that appear and change over time.
- Constructing the chronological timeline, distinguishing the main periods and cycles of school development, comparing the inner history of the school with that of the country;
- Constructing the triangle models of activity in each period and identifying the historical contradictions;
- Identifying the cycles of development of the school activity system, their general features, and the state of collective agency in each period of the cycles.

5.5 The Change Laboratory formative intervention

The aim of the Change Laboratory process is to reconsider the collective work activity by the group of participants who represent the school team, with a set of developmental tools provided by the researchers. The tasks of the sessions correspond with the stages of the Expansive Learning Cycle (see Figure 7).

The participants are teachers and administrators who represent all divisions and branches of the school collective and the administrators (including the current director and two of her deputies). The group comprises 24 members (of the 65 teachers in the school collective).
5.5.1 The developmental tools, used in the intervention:

- **The mirror surface** includes the quotations from the interviews in the preliminary research (with teachers, parents, students and external partners); photos and videotaped fragments of the educational process, workgroups and collective meetings reveal the problematic cases, taken by the researchers from the preliminary observations; the results of previous Change Laboratory sessions, artifacts related to the school activity (brought by participants), map of the problems and history timeline (reconstructed by participants during the sessions).

- **Model, vision**: The triangle model of activity system for modeling of the school’s of past, present and future; identifying the contradictions and projecting the innovations.

- **Ideas and tools**: the surface for new findings made by participants during the sessions.

All the surfaces are organized along with three time dimensions (past – present – future), and activated with the planned task of each session.
• *The program of each session*, including general and small-group exercises and discussions was specially arranged with reliance on the progress of previous sessions and current group dynamics.

5.5.2 Time schedule and session format

The sessions began in October 2012 and continued through to the end of March 2013; 10 sessions were made, on average twice a month. The date of the next session is arranged with the participants at the end of the current session. The sessions begin at 16:00 and finish at 19:00, with a 15-minute break in the middle.

5.5.3 Observation methods

Special member of the research team videotaped and observed the sessions; all materials made by participants are saved. The material and ideal production of the sessions and the content of the participants’ speeches, verbal and nonverbal signs of the development of interpersonal relations will be analyzed.
6 DATA ANALYSIS METHODS

6.1 Comparative Historical Analysis

My research uses the Comparative Historical Analysis (Sweeting, 2005) to analyze changes in the activity system through combinations of diachronic (reconstructing the historical timeline and identifying cycles in the development of the school activity) and synchronic (comparing the stages of the cycles at different moments) prospective in the context of state policy and the social climate in appropriate periods. This approach will allow me to understand how the agency of the school team is connected with changes in the object of activity and how inner changes in activity are related to changes in the outer situation around the school and historical development of the country. This approach could also help me to understand the current situation in the school as historically conditioned, trace the historical roots of current contradictions in school activity and supply the mirror materials for the Change Laboratory intervention.

I analyze the narrative interviews of teachers who used to work at the school in different times, and of former pupils of the school and educational officials who used to work with the school in different times. I also analyse the conceptual documents of the school in different periods and use the historical information about state policy and the social climate in different periods of time. The connections between the various stages of the inner history of the school and corresponding stages of Russian history will be reconstructed through cyclic comparison of them.

This analysis will be used for article №3, “Historical evolution of the activity of the educational school and transformations of school team agency: development, changes and contradictions”.

6.2 Discursive Analysis of Contradictions

I intend to use the method of discursive analysis for the participants’ dialog of the Change Laboratory sessions and interview narratives to identify the manifestations of dialectical contradictions in the school activity, lying behind its current disturbances, tensions and conflicts (Engeström & Sannino, 2011). This method presumes a search of the discourse data for several types of manifestations of contradictions, including ”dilemmas”, ”conflicts”, ”critical conflicts” and ”double binds”, which define them with appropriate “linguistic clues” (see Figure 8). This method enables to explore the meanings of participants’ talks in order to understand, what kind of contradictions actualize now and to see the process of facing with them as well as attempts to overcome them in the Change Laborato-
ry. Since Developmental Work Research methodology views the contradictions as “driving forces of development”, this method will help us to understand the essence of the discussions that took place during the sessions and to identify the different stages of the process of transformation of the activity. Finally, this method will reveal the state of agency of the collective subject of activity in different stages of the process of its development during the formative intervention.

Figure 7. Methodological framework ("onion") to analyze the discourse data for finding contradictions (Engeström & Sannino, 2011).

This analysis will be used to write article №1, “Discursive manifestations of contradictions in the renewal process of the concept of school activity.”

6.3 Interactional Analysis

Videotaped during the ethnographic research (pre- and post-Change Laboratory) team work processes and the sessions of the Change Laboratory formative intervention (10 sessions each three hours in length) will be analyzed from the point of view of interactions between the participants. To do so I intend to use the methods of interactional analysis (Jordan & Henderson, 1995), which allow one to analyze the behavioral phenomena of interacting actions between the participants of the Change Laboratory group.

As the authors of the method say, “knowledge and action are fundamentally social in origin, organization, and use, and are situated in particular social and material ecologies ... The goal of I.A. is to identify regularities in the ways in
which participants utilize the resources of the complex social and material world of actors and objects within which they operate.” (Jordan & Henderson 1995)

“I.A. finds its basic data in the details of social interactions in time and space and particularly, in the naturally occurring, everyday interactions among members of communities of practice… Artifacts and technologies set up a social field within which certain activities become very likely, others become possible, and still others become very improbable or impossible.” (Ibid)

I intend to analyze the behavioral phenomena of interactions among the participants of the Change Laboratory group and the data of ethnographic study on school work practice before and after the Change Laboratory.

The foci of Interactional Analysis are:

• The Structure of Events: the beginning and ending, segmentation
• The Temporal Organization of Activity: moment-to-moment, rhythm and periodicity
• Turn-taking (in talk-driven interactions and instrumental interaction)
• Participation Structures
• Trouble and Repair modes in interaction and activity
• The Spatial Organization of Activity
• Artifacts and Documents, inscribed in (mediating) the activity or interaction. (Ibid)

It will provide additional materials for the discursive analysis mentioned above and will allow me to draw conclusions about changes in the interactions between the members of a work collective in relation to the development of the shared object of activity during and after the formative intervention. I aim to use the special software tool “Compendium” (Brown et al., 2012), which is openly distributed for scientific purposes. It enables me to construct the matrix of different kinds of interactional phenomena in one map as well as to trace its changes (see Figure 9).
This analysis will be used for article №2, “Changes in social interactions in the school collective as a manifestation of changes in collective agency”.

The combination of the methods of the data analysis (described above) with the analysis of the post-Change Laboratory ethnographic research and analysis of the renewal of the activity system will enable me to draw final conclusions about the development of collective agency in relation to the formation of a new shared object of the school activity and transformation in the system of activity of the school collective. It will serve as a basis of article №4, “The renewal of school activity: implementation of the new concept into practice and the spread of new agency in the team”.

**Figure 8.** The example of a Matrix of social interactions between the participants of the group, as provided by “Compendium” software (Brown et al., 2012)
7 THE PLAN OF THE ARTICLES

I plan to write four articles in 2014 - 2015, at the rate of one article every half year.

1. “Discoursice manifestations of contradictions in the renewal process of the concept of school activity” – an empirical paper, based on data from the Change Laboratory study, that will be written in the first half of 2014.

The article will be devoted to the analyzing the talk of the participants in the Change Laboratory group, identifying contradictions in school activity by finding their discursive manifestations. The article will count the frequency of use of different linguistic clues which manifest the contradictions in connection with the renewal process of the concept of school collective activity in the Change Laboratory.

2. Changes in social interactions in the school collective as a manifestation of changes in collective agency” – an empirical paper, based on data from the Change Laboratory study, that will be written until the end of 2014.

The article aims to identify non-discursive manifestations of the contradictions of the school activity system in the social interactions of the participants through the interactional analysis of videotaped sessions. The article will analyze the group dynamics of the Change Laboratory in connection with the renewal process of the concept of school collective activity.

3. “The historical evolution of the educational activity of the school and the transformations, changes and contradictions of the school team agency” – an empirical study, based on data from the historical research, that will be written during the first half of 2015.

The article will analyze the evolution of the school activity system in connection with political and social changes in Russian history of that period. The article will look for similarities in different periods of school activity; identify the various stages of activity development in connection with changes in state policy and the social climate in Russia, thereby which influences activity development. The article will be based on an analysis of interviews with current and former
teachers and pupils of the school, as well as with members of the community around the school (parents, colleagues, educational officials).

4. “Renewal of the school activity: the implementation of new concepts into practice and the spread of new agency in the team” – an empirical paper, based on post-Change Laboratory ethnographic research, that will be written until the end of 2015.

This article will analyze changes in agency of the school collective during the practical implementation of a new concept of collective activity, as elaborated upon in the Change Laboratory, into school practice. The article will be based on ethnographic research data, collected during the next educational year after finishing the Change Laboratory.
REFERENCES


Davydov, V.V. (1984). Substantial generalization and the dialectical materialistic theory of thinking. In M. Hedegaard, P. Hakkarainen, & Y. Engeström (Eds.), Learning and teaching on a scientific basis: Methodological and epistemological aspects of the activity theory of learning and teaching (pp. 11–32). Aarhus, Denmark: University of Aarhus.


Yuri Lapshin

COLLECTIVE AGENCY FORMATION THROUGH THE RENEWAL OF SCHOOL ACTIVITY

A Change Laboratory Interventional Study

Helsinki 2013
Supervisors
Professor Yrjö Engeström, University of Helsinki
Academy research fellow Annalisa Sannino, University of Helsinki

Unigrafia, Helsinki

ISBN 978-952-10-8218-4 (pbk)

ISSN-L 1798-3118
ISSN 1798-3118
Yuri Lapshin

Collective Agency Formation through the Renewal of School Activity
A Change Laboratory Interventional Study

Abstract

Understanding the processes of collective agentive work practices and working out approaches to develop the professional’s and citizen’s agency are nowadays topical for Europe, and under active discussion. Cultural-Historical Activity Theory (CHAT) and its interventionist methodology provides a fruitful framework for research on the nature and laws of collective agency formation in real, complex, object-oriented activities, including education. This research investigates collective agency development of a school team through the attempt to renew its educational activity. The research is carried out in collaboration with pedagogical team of the “School of Self-Determination” (Moscow, Russia) in the context of current national educational reform. Under the increasing pressure of the reform the school collective seeks to redefine its shared object of activity, to identify and overcome the contradictions of its activity and to overcome inner crisis in the collective agency. For activity theory, agency is primarily related to the sharing of an object of activity by the working collective and secondarily to the capacity of the collective to transform the activity collaboratively, as well as to the capacity of the involved people to bring up the others to bear mutual sense-making. The core concept of this study is the concept of dialectical contradiction as a driving force of the development. The research project includes preliminary historical study of the school activity and agency development, ethnographic research of the current processes in the collective activity, and interventional multisession process of the Change Laboratory, led by myself with the participating of representative group of practitioners – members of the school collective. Further on, the research procedure includes post-intervenational ethnographic research to observe the changes in the school activity and in the collective agency of the school team. To answer my research questions, described in the research plan, I shall analyze the collected data in order to understand the relationship between the transformation of the shared object of the
collective activity of the school team and its development. In this analysis I shall use methods of discursive analysis of contradictions, interactional analysis of changes in the interpersonal relationship among teachers during the Change Laboratory process, comparative historical analysis of the evolution of the school activity and agency - in diachronic perspective of different stages and synchronic perspective with the development of the country’s social climate and state policy. The dissertation is based on four articles; each article is written to answer one of the four research questions concerning different aspects of collective agency in its relation to the development of the school’s activity system.
CONTENTS

1 INTRODUCTION ............................................................................................. 1
2 RESEARCH QUESTIONS AND ARTICLES ................................................. 3
3 THEORETICAL FRAMEWORK ..................................................................... 4
4 METHODOLOGY AND METHODS ............................................................ 10
   4.1 Developmental Work Research Methodology ......................................... 10
      4.1.1 Vygotskian research principles in DWR ....................................................... 10
   4.2 The methods of DWR .............................................................................. 12
      4.2.1 Historical and Ethnographical Research Analysis ........................................ 14
      4.2.2 Change Laboratory Formative Intervention method ..................................... 14
      4.2.3 Post-Change Laboratory Ethnographical Observation .............................. 16
5 DATA COLLECTION .................................................................................... 17
   5.1 The research area: “The School of Self-Determination”
      (Moscow, Russia) ........................................................................................... 17
   5.2 Tasks and timetable ................................................................................ 18
   5.3 Preliminary research data description ...................................................... 19
   5.4 Preliminary materials processing ............................................................. 19
   5.5 The Change Laboratory formative intervention ....................................... 19
6 DATA ANALYSIS METHODS ..................................................................... 22
   6.1 Comparative Historical Analysis ............................................................. 22
   6.2 Discursive Analysis of Contradictions ..................................................... 22
   6.3 Interactional Analysis ............................................................................... 23
7 THE PLAN OF THE ARTICLES ................................................................. 26
REFERENCES ................................................................................................... 28
1 INTRODUCTION

Understanding the processes of collective agentive work practices and working out approaches to develop the professional’s and citizen’s agency are nowadays topical for Europe, where new ideas of “Enabling State Policy”, the Workfare State, the New Liberal State among others, are under active discussion (Dingeldey, I. 2005, Miettinen, 2013). These modern conceptions presume to share the responsibility between the state and active citizens as true subjects of economic and social development, and educational institutions must play a crucial role in helping people to become active and socially agentive.

Cultural-Historical Activity Theory (CHAT) and its interventionist methodology provides a fruitful framework for research on the nature and laws of collective agency formation in real, complex, object-oriented activities, including education (Engeström, 2005, Virkkunen, 2006; Yamazumi, 2007; Daniels, 2007). Interventional research projects conducted in collaboration with practitioners interested in transforming their activity in response to modern time requirements also offer broad opportunities to deepen and develop CHAT itself.

The Russian educational system is going through a reform aimed at improving the quality of education and including it in modern international trends. The reform includes at least three significant changes: a new State Educational Standard (including brand new personality development and meta-competence levels); the Unified National Test as a new evaluation approach, introduced in 2009 and now the only indicator for school efficiency (Minina, 2010); and new financial regulations (“the money goes to the child” principle, which leads to the tendency of schools to merge (despite all the attendant problems). In this process, schools face various problems and contradictions that underline behind them and some of the schools must go through deep crises. Unsurprisingly, that school teachers and administrators, as well as school students and their parents, often regard the reform requirements as a pressure and a danger. The real danger is that the traditional for Russian “top-down” approach to reform generates suspicion and distrust of all educational agents (teachers, school administrators, parents and children), and provokes public resistance as well as imitation in response to the new requirements. One of the external social challenges to practice is how to involve school collectives, teachers and administration into a common process of reform as genuine agents of the innovative transformation of their activity.

The research is carried out in collaboration with the pedagogical team of the “School of Self-Determination” (Moscow, Russia), which has a strong tradition of innovative pedagogy focused on constructing agentive collaboration with
children in education and school life. Currently, in the context of increasing pressure of national educational reform, the school seeks to redefine its object, to identify and overcome the contradictions of its activity. This effort enjoys the support of the Change Laboratory intervention led by the author. The openness of the teachers and administration, their readiness to dedicate extra time to collaboration and their permission to us for using the materials of the intervention in research purpose made this study possible.

I study the collective agency development of teachers through the attempt to renovate the school’s activity system. In 2012 it was conducted an ethnographical study examined a current situation, a historical quest sought changes in the school activity, and the interactive multisession process of the Change Laboratory was launched for a representative group of school team members. The intervention continued until March 2013, followed by ethnographical observation of its implementation into the school practice, and planning through until the end of the 2013-14 academic year. I analyze the collected data to understand the relationship between the transformation of the shared object of collective activity of the school team and the development of its collective agency.

The core concept of this study is the concept of dialectical contradiction as a driving force of development (Ilyenkov, 1982), which is one of the central points of Cultural Historical Activity Theory and Developmental Work Research Methodology (Engeström 1987, 1996, 2001). By identifying dialectical contradictions in the object of activity and overcoming them with creating a new concept, which unifies both sides of the contradiction, the work collective not only transforms the activity system, but also develops itself as the subject of activity by sharing the new concept. This development allows the collective to solve disturbances and conflicts in work practice, change the relationships between colleagues, to raise and share common agency.

The dissertation will be based on four articles; each article will answer one of the four research questions concerning different aspects of collective agency, which will be discussed below in the theoretical section of the research plan.
2 RESEARCH QUESTIONS AND ARTICLES

**Question 1.** How are contradictions in the activity system manifested in the discourse of teachers during Change Laboratory sessions?

Article 1. Discursive manifestations of contradictions in the renewal process of the concept of school activity.

**Question 2.** How is the development of the agency of the school team expressed in changing the social interactions of team members in the process of forming of a new concept of school activity?

Article 2. Changes in social interactions in the school collective as a manifestation of changes in collective agency.

**Question 3.** How has the agency of the school team changed with the temporal change in school concept during the historical evolution of the state policy and the social climate?

Article 3. The historical evolution of the educational activity of the school and the transformations, changes and contradictions of the school team agency.

**Question 4.** How is the renewal developed in the Change Laboratory implemented in school practice and how does it influence agency in the long term?

Article 4. Renewal of the school activity: the implementation of new concepts into practice and the spread of new agency in the team.
3 THEORETICAL FRAMEWORK

The theoretical framework of this study is Cultural-Historical Activity Theory (CHAT), which is based on the classical ideas of L. Vygotsky and A. Leontiev. Vygotsky put forward the revolutionary idea of the development of higher mental functions (“neo-formations”) are mediated by cultural artifacts in social interaction:

Any function … in the development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an inter-psychological category, and then within the child as an intra-psychological category… Internalization transforms the process itself and changes its structure and functions. Social relations or relations among people genetically underlie all higher functions and their relationships. (Vygotsky, 1981: 163)

Based on Vygotsky’s ideas, Leontiev worked out the theory of object-oriented activity as a “mediated subject–object interaction”, which is a “non-additive, molar unit of life with its own structure, its own internal transformations, and its own development” (Leontiev, 1978) - a system of relations between human as the subject and material object as human’s motive, structured in goals, acts, conditions and operations.

According to Leontiev, the notion of a “subject of activity” means an individual with “true motive”, or the object of the activity. The material object becomes the motive of the activity, when it meets with a need of the individual: “a need is objectified by the object”. The process of “objectifying” is the establishment (by individual) of the relationship between the individual need and the internalized social meanings of the object. When the individual established such relations, the object becomes a motive and the individual becomes a subject of the activity (Leontiev, 1978).

As Kaptelinin notes, the principal limitation of this model is “one need, one motive, one object, and one activity” (Kaptelinin, 2005). For more than one actual need for the individual,

“…the selection of that activity is based on a comparison of the competing motives through the hierarchy of motives. The motive with the highest rank in the hierarchy takes over, and the activity oriented towards that motive/object is carried out.” (Kaptelinin, 2005) (Figure 1)
Kaptelinin concludes that Leontiev’s “systems of concepts, including the concepts of “need,” “activity,” “motive,” and “object” cannot be easily applicable to the case of poly-motivated activities” (Kaptelinin, 2005). Kaptelinin stresses that “Leontiev’s analysis was predominantly dealing with activities taking place at the individual level (...) as units of life of individual human beings, individual subjects. Even though the possibility of extending the scope of analysis and applying the concept of activity at supra-individual levels, for instance, to consider activities of individuals as contributors to a larger-scale activity carried out by a group or organization, was clearly indicated by Leontiev, his framework was specifically developed for individual activities (i.e., activities in a “narrow sense”) (Kaptelinin, 2005).

Stetsenko and Arievitch point out the connection between human subjectivity, collective material production and the social interactions of people involved in a collective activity:

“An important idea that Leontiev did not seem to emphasize enough (and perhaps to fully appreciate) is that human subjectivity, the collective processes of material production and social interactions all co-evolve as parts of a unified system constitutive of human social life, interpenetrating and influencing each other, while never becoming completely detached or independent from each other. The primacy of material practice notwithstanding, all three represent processes that are dialectically connected, that
is, are dependent upon and condition each other…“ (Stetsenko & Arievitch, 2004)

To extend Leontiev’s category of activity to collective phenomena, Russian social psychologist A.V. Petrovsky attempted to develop a concept of interpersonal relationships, mediated by activity (Petrovsky, 1982):

“The development of interpersonal relationships and the group as an entity is determined by the personally valuable and socially significant content of joint activity.” (Petrovsky, 1982)

Petrovsky considered a group to be a subject of activity. He analyzed a branch of group phenomena, such as motivational choices, referentiality, the well-being of personality in the group, self-estimation, leadership, cohesion, value orientations, and responsibility assignment in relation with the development of the group activity. According to Petrovsky, “the development of the content of group activity transforms a diffuse group into a collective as the highest stage of group development” through several intermediate stages, and vice versa: “the destruction of the activity leads to the destruction of interpersonal relationship in the group.” (Petrovsky, 1982)

Petrovsky’s analysis of the development of group phenomena in relation to the development of the content of activity offers us several possible indicators of inner processes in the collective subject of activity. However, these indicators are not enough, because Petrovsky associated the group phenomena with the content of activity and, in fact, lost the object, which, according to Leontiev’s definition, is a “sense-maker”, determining the activity itself (Leontiev, 1978).

The approach of Y. Engeström (Engeström, 1987) to the extention of Leontiev’s theory to the area collective activity, often called a new generation of Activity Theory, is much more powerful. Engeström established collective activity as a unit of analysis, describing it in the triangle model (see Figure 2) as the interaction between the working collective of people as a subject, common object shared by them, and the community, mediated by three types of mediators: tools, rules and division of labor. Engeström also suggested a meaning for each mediated interaction (Figure 2).
3.1 The concept of “agency” in the context of collective activity

The problem with the conceptualizing, operationalizing and investigating collective agency in empirical research today is far from being solved today. As Hitlin and Elder note, “the term “agency” is quite slippery and is used differently depending on the epistemological roots and goals of scholars who employ it” (Hitlin & Elder, 2007). Nevertheless, as A. Edwards insists based on her studies of collective work practices in education and social care, “strong forms of agency are necessary for professional practice in complex settings and can be learnt” (Edwards, 2007).

As “the capacity of a person or any other entity to act in a world” (Bandura, 2001), “to act independently and to make their own free choices” (Barker & Chris, 2005), “the temporally constructed engagement by actors of different structural environments… both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations”
(Emirbayer & Mische, 1998), the concept of agency can be applied to collective activity phenomena.

For activity theory, agency is primarily related to the transformation of the activity, “when the object/outcome of the activity has been reconceptualized and all the other elements of the system have changed correspondingly” (Virkkunen, 2006).

Engeström defines such agency as the capacity of an actor for “breaking away from a given frame of action and the taking of initiatives to transform it” (Engeström, 2005). Referring to Engeström’s definition, Virkkunen proposed: “when a group of people does this and search collaboratively for a new form for the productive activity in which they are engaged we could speak of shared transformative agency (Virkkunen, 2006).

Edwards points out that joint activity changes the object as well as the relationships between the people involved in it. She introduced the concept of relational agency, which is “a capacity to work with others to expand the object that one is working on by bringing to bear the sense-making of others and by drawing on the resources they offer when responding to that sense-making” (Edwards, 2007).

Yamazumi notes also, that agency is “the subject potentialities and positions of the externalized creation of new tools and forms of activity with which humans transform both their outer and inner worlds and thus master their own lives and futures” (Yamazumi, 2007). By studying the processes of transformation of the activity, one can understand the formation and development of the agentive collective subject of it.

3.1.1 The theoretical concepts for answering the research questions

As shown in the theoretical observation, the development of the collective agency in Cultural Historical Activity Theory is linked to two aspects: the aspect of “sharing” the concept of the object of activity, and the aspect of “being able to transform” the common activity. I expect to see both sides of agency development in the Change Laboratory process (which will be described as an activist interventional research method and as a particular case), which targets to the formation of the new concept of activity and aims to solve the inner problems of the team. Since the central point of this study is to find and to overcome contradictions in the activity system, the concept of contradiction as a driving force of development (Ilyenkov, 1982; Engeström 1987, 2001) is the central theoretical focus.

To answer the first research question “How are contradictions in the activity system manifested in the discourse of teachers during the Change Laboratory sessions?”, I will identify the contradictions in the activity system and the evolu-
tion of their discursive manifestations in the participants’ discussions – dilemmas, conflicts, critical conflicts and double binds (Engeström, Sannino, 2011) - during the group process of forming the new concept of the common object.

To answer the second research question “How is the development of the agency of the school team expressed in the changing the social interactions between the team members in the process of forming the new concept of the school activity?” I will analyze the evolution of the social interactions in the group of the school teacher and compare the interactional phenomena (disturbances, conflicts, crises, arguments in conversation, stereotypes of interactions, and stages of group development) to the process of understanding and overcoming the contradictions in the Change Laboratory. The theoretical concepts for this analysis are relational agency (Edwards, 2007) and Petrovsky’s conception of interpersonal relationships, mediated by activity and the stages of the development of work collective (Petrovsky, 1982).

To answer the third question of my research, “How has the agency of the school team been transformed with the temporal changes in the school concept during the historical evolution of the state policy and the social climate?”, I will use Vygotsky’s concept of the historical process of development of higher mental functions (Vygotsky, 1997), the concept and methodology of the historical dimension of comparative education (Sweeting, 2005) and the Foucauldian concept of governmentality (Lemke, 2002) to see how the collective agency evolved in the history of the school and Russian society. The task is to identify the cycles of agency of the school team in connection with changes in the state policy and the social climate in Russia, influence the school activity.

To answer the fourth question, “How is the renewal developed in the Change Laboratory implemented in school practice and how does it influence agency in the long term?”, I will use the main concept of the collective activity triangle model (Engeström, 1987) and the main concept of transformative agency (Engeström, 2005; Virkkunen 2006), as well as the concept of relational agency (Edwards, 2007). By answering this question, I hope to compare the results of analyses of the previous questions and add them to the analysis of the data from post-Change Laboratory ethnographic research.
4 METHODOLOGY AND METHODS

The methodology of my research relies on the experimental-genetic method of Vygotsky (1978), implemented and extended in organizational development by Y. Engeström (1996a) as Developmental Work Research (DWR), with the central role of formative interventionist method known as the “Change Laboratory” (Engeström, 1996b), aimed to the development of collective work activity through findings and overcoming dialectical contradictions in social interaction within group of practitioners in collaboration with interventionist researchers.

4.1 Developmental Work Research Methodology

4.1.1 Vygotskian research principles in DWR

DWR methodology is based on two main epistemological principles (Sannino, 2011), derived from Vygotsky’s works: the double stimulation principle and the principle of ascending from abstract to concrete.

As A. Sannino (2011) wrote:

Vygotsky’s principle of double stimulation (1978) refers to the mechanism with which human beings can intentionally break out of a conflicting situation and change their circumstances or solve difficult problems. In double stimulation, the first stimulus is the problem itself. Human beings employ external artifacts which they turn into signs by filling them with significant meaning. These signs are used as second stimuli with the help of which the subject gains control of his or her action and constructs a new understanding of the initial circumstances or problem.

This principle allows the researcher to organize the situation in interventional research, when the participants will reconsider the problem situation (especially contradictory situation) using the new tools (Vygotsky’s cultural signs), which researchers can offer or participants can find.

The principle of double stimulation shows how an individual can gain the power to use outside resources to determine his or her own behavior. This principle is presented as a key factor in the human ability to transform at the same time the world around and him- or herself (Sannino, 2011).
The other important principle of DWR is “ascending from abstract to concrete”, which derives from Marxist dialectic (Ilyenkov, 1982) and which V.Davydov has turned into epistemological principle of learning activity (Davydov, 1984). This principle highlights the theoretical abstraction as the main method of learning activity, allows the scientist to separate studied important connections and relations, from the phenomena and “refers to the identification of the genetic origins of phenomena… based on a functional relationship, also called a germ cell” (Sannino, 2011).

Finding the germ cell is an important part of Developmental Work Research methodology, which opens a path to further development and transformation of the activity and reorganizes the work collective itself:

Theoretical generalization requires experimentation with problematic situations in order to find the germ cell behind them. Then, from this original abstract principle one can observe its different material manifestations, and even conceive further new variations. … Subjects have to look for generating mechanisms behind the problematic phenomena they refer to. This mode of generalization … brings subjects to think dialectically about their practices, to establish connections with many other phenomena that initially remained in the shade because they looked different, to explain this systemic constellation of problematic phenomena, and to construct new solutions. (Sannino, 2011)

The methodological principles of DWR are extremely useful for studying agency in collective activity. K. Yamazumi resumes “the three principal positions of activity theory in human developmental research: the interrelationships of development, contradiction, and agency” (Yamazumi, 2006).

It is equally important that Developmental Work Research methodology, based on the epistemological principles described above, contains the original features of the Vygotskian research approach. Vygotsky emphasized that the analysis of new formations of any higher psychological function and social behavior (such as collective agency) consists of “taking each higher form of behavior not as a thing, but as a process, and putting it in motion so as to proceed not from a thing and its parts, but from a process to its separate instances” (Vygotsky 1997).

N. Veresov (2010) identified the five principles of the Vygotskian experimental-genetic research methodology as follows:

1. The principle of “buds of development”. At the beginning, the experimental study should detect the functions which are in their “bud” (embryonic) stages, are not yet developed.
2. *The principle of dramatic event.* “The dramatic event is the form in which the higher function appears first as a social relation before it becomes an internal higher mental function.”

3. *The principle of interaction of real (natural) and ideal (cultural) forms.* In the course of the experimental study, both forms should be detected. The tools and means of interaction between these forms should be specially created and involved in the experimental procedure.

4. *The principle of developmental tools.* During the experiment, cultural tools the child should discover (find) in cooperation with an adult or more competent peer.

5. *The principle of sustainable qualitative changes as an outcome of the experiment.* These new qualitative levels of organization should be experimentally detected and described. (Veresov, 2010)

Developmental Work Research methodology (Engeström, 1996a) implements Vygotskian principles of experimental-genetic research in organizational learning. The following main features of DWR indicate that the participants, who represent the collective subject of activity, face and overcome the contradictions of the activity system *‘in special settings’* organized by researchers. The researchers ‘enter into social interaction’ (collaboration) with the participants, as an experimentator does with a child in Vygotsky’s classical experiment. The researchers provide ‘the developmental tools’ (history and ethnography research materials, triangle model patterns for creating a systemic view of the activity, special settings designed for ongoing tasks). “Facing the contradictions” (with the help of researchers) may be considered as a ‘dramatic event’ mentioned by Vygotsky, in which the ‘highest form’ of collective analysis of the activity appears *‘first as a social relation’*. To overcome the contradictions, participants must build the new model of activity and create the projects to implement it into actual practice (working in their ‘Zone of Proximal Development’). Through this methodology, the researchers can observe how *‘the new functions in collective activity are growing up’*, facing with old ones, and replacing them at the beginning in social relationships inside the learning process, and subsequently implementing (*‘internalizing’, according to Vygotsky*) them into actual collective activity.

### 4.2 The methods of DWR

DWR includes preliminary historical research on the development of the activity system, the ethnographical research of current activity processes and the formative interventional method known as the ‘Change Laboratory’ (Engeström, 1996b). The process of intervention based on the expansive learning cycle (see...
Figure 3) provides opportunities for the developing collective work activity through findings and overcoming dialectical contradictions in social interaction within groups of practitioners and in collaboration with interventionist researchers. To analyze the process of social interaction in the Change Laboratory Engeström and Sannino worked out a method for analyzing discursive manifestations of contradictions (Engeström and Sannino, 2011).

As Virkkunen pointed out,

Developmental Work Research is an interventionist methodology that aims at prompting and supporting practitioners’ agency in analyzing and transforming the system of their joint activity. Agency here means breaking away from the given frame of action and taking the initiative to transform it” (Virkkunen, 2006).

In my research I apply the DWR methodology to study the relationship between the collective agency of the school team (which could be conceptualized in the different forms, as described above) and the formation of the concept of collective activity in the development of both sides.
4.2.1 Historical and Ethnographical Research Analysis

To analyze the activity system of the school in its historical development from its foundation in 1970 until now, we held 20 narrative interviews with teachers, administrators and creative leaders who work or used to work at the school. We also interviewed 10 former graduates of the school, 10 parents of the school pupils (5 of whom were former pupils of the school), and conducted 7 focused group interviews with pupils of the school (18 children from 7 to 11 grades). Additionally, we analysed the collection of conceptual documents (papers, books, brochures and videos) of the school’s different periods.

These materials enabled me to construct a chronological timeline of the school’s history, to distinguish the main periods and cycles of school development, and to model the activity system of each period. The inner history of the school has been compared to the political history of the country and, at the same time, to the educational policy of the state.

We observed and videotaped typical processes of collective work e.g. as the school team and different workgroup meetings, episodes of school life, educational activities, school board meetings, project conferences. The materials of the preliminary study served in preparing and conducting the Change Laboratory formative intervention.

4.2.2 Change Laboratory Formative Intervention method


Engeström describes the typical layout of the Change Laboratory (see Figure 3) as a set of Vygotskian developmental tools:

In the Change Laboratory, the original 'task' of Vygotskian designs is represented by the mirror which contains challenging examples of problems and disturbances. The original 'mediating artifact' is represented by a model of the entire activity system that is used to make sense of the built-in contradictions generating the troubles and disturbances depicted in the mirror. This model is also used as a vehicle of time travel, to construct a vision of the past and the future of the activity system. The potential capabilities and emerging formations are represented by the surface in the middle. It is a third space, reserved for new ideas and tools for reorganizing the activity. (Engeström, 1996b)
Figure 4. The prototypical layout of the Change Laboratory (Engeström, 1996b).

The aim of the Change Laboratory in the school was to reconceptualize the collective work activity of the school by the group of participants representing the school team with a set of developmental tools provided by the researchers. The researchers conducted the sessions, prepared the developmental tool for the practitioners, and collected data to analyze the development of a new concept of school activity and the development of team agency.

The representative group of teachers and administrative persons comprised 24 participants (of 65 members of the school collective) including the director of the school participated in the Change Laboratory group. The participants represent all structural divisions of the school as well as informal groups inside the collective and were selected by the sociometric query.

The team of researchers comprised of three persons, two of whom were the conductors of the sessions and the third was tasked with observing and videotaping the process.

The sessions took place from October 2012 to the end of March 2013. 10 sessions was made, on average twice a month. The duration of each session was three hours with a 15-minute break in the middle. The average number of participants for session was 16.

All the sessions were fully videotaped and observed by a member of research team, all the materials made by the participants were saved. The material and ideal production of the sessions, the content of participants’ speeches, and the verbal and nonverbal signs of development of interpersonal relations will undergo be the subject of later analysis.
4.2.3 Post-Change Laboratory Ethnographical Observation

The ethnographical observation of the processes in the school team as a collective subject of activity and correspondence with the transformations of the activity system, will take place during the academic year following the Change Laboratory formative intervention (until the summer of 2014).

The work processes will be videotaped, and interviews will be held with members of the collective, school children and their parents, and representatives of communities around the school. The new conceptual documents, which will be worked out during this period, will be collected.

The new content of the interacting (subject, object and community) and mediating (rules, tools, and labor division) elements of the activity system will be identified in their development and will presumably establish a relationship between the transformation of the activity system and the development of collective agency.
5 DATA COLLECTION

5.1 The research area: “The School of Self-Determination” (Moscow, Russia)

This study was conducted in Moscow school №734, which is a public school on the periphery of the city, founded in 1970 and became known under the informal name “School of Self-Determination” (see Figure 6). The school’s conception of education is focused on developing its students as “self-determining personalities”. The school has a strong tradition of inner democracy and collaborative alliance between adults and children. Throughout its history, the collective of the school developed various pedagogical innovations aimed at involving children in the active subjective position in the learning process and social school life. After the death of the school’s headmaster Alexander Tubelsky in 2007, the teachers’ collective fell into a serious crisis of its work. The teachers and administrators feel now that their methods lacked the effectiveness, especially under the pressure of the new requirements. Also they experience considerable tension and confusion within the team.

Figure 5. The school of Self-Determination – the location of the study.
5.2 Tasks and timetable

1. Historical research (April – June 2012): narrative interviews with members (current and former) of the school collective, former pupils, partners, officials, documentary research (printed texts, photos and videos) are finished, the additional data will be collected after finishing the Change Laboratory to clarify and complete the Historical Reconstruction of the development of the school activity system. I use the historical research data to prepare the developmental tools (mirror materials) for the Change Laboratory formative intervention, as well as to write article №3, “Historical evolution of the activity of the educational school and the transformations of the school team’s agency: development, changes and contradictions”.

2. Preliminary ethnographic research (April – September 2012): Structured interviews with teachers, pupils and parents, as well as observation and videotaping of the main processes – finished. I use the data collected in the preliminary ethnographic study to prepare the developmental tools (mirror materials) for the Change Laboratory formative intervention, as well as to compare the state of the school activity system and the agency of the team before and after the Change Laboratory for article №4: “The renewal of the school activity: the implementation of the new concept into practice and the spreading the new agency in the team.”

3. The Change Laboratory formative intervention (October 2012 – March 2013): 10 sessions with a representative group of teachers and administration (24 participants from the 65 members of the school collective) – finished. The participants’ discussion talk during the videotaped sessions of the Change Laboratory will be transcribed for the analysis in article №1, “Discursive manifestations of contradictions in the renewal process of the concept of school activity”. The non-discursive behavior of the participants during the sessions will be analyzed for article №2, “Changes in social interactions in the school collective as a manifestation of change in collective agency”.

4. Post-Change Laboratory ethnographical research (April 2013 – May 2014), collecting the same types of data as in the preliminary research: interviews, videotaped processes, documents – in progress. This data will be used in the article №4, “The renewal of school activity: the implementation of the new concept into practice and the spread of new agency in the team”.

18
5.3 Preliminary research data description

- Twenty narrative interviews with teachers, administrators and creative leaders who work or used to work at the school about the history of their work in the school and points of view on the current situation;
- Ten interviews with the parents of the school pupils (five of whom are former pupils of the school);
- Seven focused group interviews with the pupils of the school (18 children from 7 – 11 grades);
- Protocols and videotapes of the observations of various work processes (the team and different workgroup meetings, episodes of school life, educational activities, school board meetings, project conferences, etc.);
- The collection of conceptual documents (papers, books, brochures and videos) from the school’s different periods.

5.4 Preliminary materials processing

- Dividing the narratives of the interviews into the categories of the activity system (object, subject, tools, rules, labor division, and community), gathering the table of the historical evolution of school activity, looking for the main tendencies that appear and change over time.
- Constructing the chronological timeline, distinguishing the main periods and cycles of school development, comparing the inner history of the school with that of the country;
- Constructing the triangle models of activity in each period and identifying the historical contradictions;
- Identifying the cycles of development of the school activity system, their general features, and the state of collective agency in each period of the cycles.

5.5 The Change Laboratory formative intervention

The aim of the Change Laboratory process is to reconsider the collective work activity by the group of participants who represent the school team, with a set of developmental tools provided by the researchers. The tasks of the sessions correspond with the stages of the Expansive Learning Cycle (see Figure 7).

The participants are teachers and administrators who represent all divisions and branches of the school collective and the administrators (including the current director and two of her deputies). The group comprises 24 members (of the 65 teachers in the school collective).
5.5.1 The developmental tools, used in the intervention:

- **The mirror surface** includes the quotations from the interviews in the preliminary research (with teachers, parents, students and external partners); photos and videotaped fragments of the educational process, workgroups and collective meetings reveal the problematic cases, taken by the researchers from the preliminary observations; the results of previous Change Laboratory sessions, artifacts related to the school activity (brought by participants), map of the problems and history timeline (reconstructed by participants during the sessions).
- **Model, vision:** The triangle model of activity system for modeling of the school’s of past, present and future; identifying the contradictions and projecting the innovations.
- **Ideas and tools:** the surface for new findings made by participants during the sessions.

All the surfaces are organized along with three time dimensions (past – present – future), and activated with the planned task of each session.

**Figure 6.** Tasks of the Change Laboratory sessions in correspondence to the Expansive Learning Cycle
The program of each session, including general and small-group exercises and discussions was specially arranged with reliance on the progress of previous sessions and current group dynamics.

5.5.2 Time schedule and session format

The sessions began in October 2012 and continued through to the end of March 2013; 10 sessions were made, on average twice a month. The date of the next session is arranged with the participants at the end of the current session. The sessions begin at 16:00 and finish at 19:00, with a 15-minute break in the middle.

5.5.3 Observation methods

Special member of the research team videotaped and observed the sessions; all materials made by participants are saved. The material and ideal production of the sessions and the content of the participants’ speeches, verbal and nonverbal signs of the development of interpersonal relations will be analyzed.
6 DATA ANALYSIS METHODS

6.1 Comparative Historical Analysis

My research uses the Comparative Historical Analysis (Sweeting, 2005) to analyze changes in the activity system through combinations of diachronic (reconstructing the historical timeline and identifying cycles in the development of the school activity) and synchronic (comparing the stages of the cycles at different moments) prospectives in the context of state policy and the social climate in appropriate periods. This approach will allow me to understand how the agency of the school team is connected with changes in the object of activity and how inner changes in activity are related to changes in the outer situation around the school and historical development of the country. This approach could also help me to understand the current situation in the school as historically conditioned, trace the historical roots of current contradictions in school activity and supply the mirror materials for the Change Laboratory intervention.

I analyze the narrative interviews of teachers who used to work at the school in different times, and of former pupils of the school and educational officials who used to work with the school in different times. I also analyse the conceptual documents of the school in different periods and use the historical information about state policy and the social climate in different periods of time. The connections between the various stages of the inner history of the school and corresponding stages of Russian history will be reconstructed through cyclic comparison of them.

This analysis will be used for article №3, “Historical evolution of the activity of the educational school and transformations of school team agency: development, changes and contradictions”.

6.2 Discursive Analysis of Contradictions

I intend to use the method of discursive analysis for the participants’ dialog of the Change Laboratory sessions and interview narratives to identify the manifestations of dialectical contradictions in the school activity, lying behind its current disturbances, tensions and conflicts (Engeström & Sannino, 2011). This method presumes a search of the discourse data for several types of manifestations of contradictions, including ”dilemmas”, ”conflicts”, ”critical conflicts” and ”double binds”, which define them with appropriate “linguistic clues” (see Figure 8). This method enables to explore the meanings of participants’ talks in order to understand, what kind of contradictions actualize now and to see the process of facing with them as well as attempts to overcome them in the Change Laborato-
ry. Since Developmental Work Research methodology views the contradictions as “driving forces of development”, this method will help us to understand the essence of the discussions that took place during the sessions and to identify the different stages of the process of transformation of the activity. Finally, this method will reveal the state of agency of the collective subject of activity in different stages of the process of its development during the formative intervention.

Figure 7. Methodological framework (“onion”) to analyze the discourse data for finding contradictions (Engeström & Sannino, 2011).

This analysis will be used to write article №1, “Discursive manifestations of contradictions in the renewal process of the concept of school activity.”

6.3 Interactional Analysis

Videotaped during the ethnographic research (pre- and post-Change Laboratory) team work processes and the sessions of the Change Laboratory formative intervention (10 sessions each three hours in length) will be analyzed from the point of view of interactions between the participants. To do so I intend to use the methods of interactional analysis (Jordan & Henderson, 1995), which allow one to analyze the behavioral phenomena of interacting actions between the participants of the Change Laboratory group.

As the authors of the method say, “knowledge and action are fundamentally social in origin, organization, and use, and are situated in particular social and material ecologies ... The goal of I.A. is to identify regularities in the ways in
which participants utilize the resources of the complex social and material world of actors and objects within which they operate.” (Jordan & Henderson 1995)

“I.A. finds its basic data in the details of social interactions in time and space and particularly, in the naturally occurring, everyday interactions among members of communities of practice… Artifacts and technologies set up a social field within which certain activities become very likely, others become possible, and still others become very improbable or impossible.” (Ibid)

I intend to analyze the behavioral phenomena of interactions among the participants of the Change Laboratory group and the data of ethnographic study on school work practice before and after the Change Laboratory.

The foci of Interactional Analysis are:

- The Structure of Events: the beginning and ending, segmentation
- The Temporal Organization of Activity: moment-to-moment, rhythm and periodicity
- Turn-taking (in talk-driven interactions and instrumental interaction)
- Participation Structures
- Trouble and Repair modes in interaction and activity
- The Spatial Organization of Activity
- Artifacts and Documents, inscribed in (mediating) the activity or interaction. (Ibid)

It will provide additional materials for the discursive analysis mentioned above and will allow me to draw conclusions about changes in the interactions between the members of a work collective in relation to the development of the shared object of activity during and after the formative intervention. I aim to use the special software tool “Compendium” (Brown et al., 2012), which is openly distributed for scientific purposes. It enables me to construct the matrix of different kinds of interactional phenomena in one map as well as to trace its changes (see Figure 9).
This analysis will be used for article №2, “Changes in social interactions in the school collective as a manifestation of changes in collective agency”.

The combination of the methods of the data analysis (described above) with the analysis of the post-Change Laboratory ethnographic research and analysis of the renewal of the activity system will enable me to draw final conclusions about the development of collective agency in relation to the formation of a new shared object of the school activity and transformation in the system of activity of the school collective. It will serve as a basis of article №4, “The renewal of school activity: implementation of the new concept into practice and the spread of new agency in the team”.

Figure 8. The example of a Matrix of social interactions between the participants of the group, as provided by “Compendium” software (Brown et al., 2012)
7 THE PLAN OF THE ARTICLES

I plan to write four articles in 2014 - 2015, at the rate of one article every half year.

1. “Discoursice manifestations of contradictions in the renewal process of the concept of school activity” – an empirical paper, based on data from the Change Laboratory study, that will be written in the first half of 2014.

The article will be devoted to the analyzing the talk of the participants in the Change Laboratory group, identifying contradictions in school activity by finding their discursive manifestations. The article will count the frequency of use of different linguistic clues which manifest the contradictions in connection with the renewal process of the concept of school collective activity in the Change Laboratory.

2. Changes in social interactions in the school collective as a manifestation of changes in collective agency” – an empirical paper, based on data from the Change Laboratory study, that will be written until the end of 2014.

The article aims to identify non-discursive manifestations of the contradictions of the school activity system in the social interactions of the participants through the interactional analysis of videotaped sessions. The article will analyze the group dynamics of the Change Laboratory in connection with the renewal process of the concept of school collective activity.

3. “The historical evolution of the educational activity of the school and the transformations, changes and contradictions of the school team agency” – an empirical study, based on data from the historical research, that will be written during the first half of 2015.

The article will analyze the evolution of the school activity system in connection with political and social changes in Russian history of that period. The article will look for similarities in different periods of school activity; identify the various stages of activity development in connection with changes in state policy and the social climate in Russia, thereby which influences activity development. The article will be based on an analysis of interviews with current and former
teachers and pupils of the school, as well as with members of the community around the school (parents, colleagues, educational officials).

4. “Renewal of the school activity: the implementation of new concepts into practice and the spread of new agency in the team” – an empirical paper, based on post-Change Laboratory ethnographic research, that will be written until the end of 2015.

This article will analyze changes in agency of the school collective during the practical implementation of a new concept of collective activity, as elaborated upon in the Change Laboratory, into school practice. The article will be based on ethnographic research data, collected during the next educational year after finishing the Change Laboratory.
REFERENCES


Davydov, V.V. (1984). Substantial generalization and the dialectical materialistic theory of thinking. In M. Hedegaard, P. Hakkarainen, & Y. Engeström (Eds.), Learning and teaching on a scientific basis: Methodological and epistemological aspects of the activity theory of learning and teaching (pp. 11–32). Aarhus, Denmark: University of Aarhus.


