

The creative chain of activities towards educational management transformation

Findings from an intravention case study

Monica Lemos

*Center for Research on Activity, Development and Learning,
University of Helsinki, Helsinki, Finland, and*

Fernanda Liberali

*Department of Applied Linguistics,
Catholic University of São Paulo, São Paulo, Brazil*

Abstract

Purpose – The purpose of this paper is to explore a formative intervention project that was developed for the Municipal Secretariat of Education in São Paulo, Brazil for the broad development of all levels of educational management (teacher educators, coordinators, principals, teachers and students). Thus, the creative chain of activities is a key theoretical framework for promoting critical collaboration in order to cross the boundaries of educational management organization.

Design/methodology/approach – The authors use data from the Management in Creative Chains Project (Liberali, 2012), as a way to enable the wide development of all levels of educational management. Data comprise formative meetings in which different educational managers system take part in two settings, the regional board with 25 schools and one of the participating schools. The analysis is based on thematic content and argumentative organization, and on critical situations and the potentials they entailed.

Findings – The study guides to the conclusions of the process of creative chain as a possibility to expand management in the educational system and its community.

Research limitations/implications – Every time there is a change in the mayors, there are changes in the way of addressing school management in the city. However, after the project, considerations about the needs of the communities became part of the public policy regardless of who is in charge of the city and its educational system.

Practical implications – This study can be used for transformation in the management and teaching and learning activities and improvement of the school-community relation.

Social implications – Socially this study can lead to improvement in the quality of life in the community and at school.

Originality/value – Differently from a top down educational management, which enables a reproductive chain, educational management in a creative chain, considering the community needs, enables subjects to become interdependent to expand and transform the activities in the educational system and hence the communities' reality.

Keywords Collaboration, Creative chain, School management, Educational management, Activity theory, School-community transformation

Paper type Research paper

Introduction

When working with educational managers in Brazil, it is common to hear them using the metaphor of firemen to describe their work. They often state that they have so many things to do at the same time and that there are so many urgent issues popping up that they get

© Monica Lemos and Fernanda Liberali. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>



overwhelmed losing track of the activities that are essential to develop their work as educational managers. Besides, as a result of evaluation systems, educational managers become more concerned about grades, reports and aims, instead of teaching, learning and transformation of communities (Lemos, 2017; Lemos and Engeström, 2018; Liberali *et al.*, 2015). In this line, Neumerski (2013) suggests that studies on educational management should uncover the interaction between educational managers, followers and community toward the improvement of teaching and learning.

Besides, previous studies on collaboration between school and community depict different perspectives on how to think over the matter. Green (2017) points toward the necessity of educational managers' preparation to understand and work with school community stakeholders on the one hand and more empirical research to document such initiative, on the other. Spillane (2005) points to the importance of different individuals developing different tools and structures, and the emphasis on the interaction among individuals for the improvement of school leadership. Broadening this idea, Aidman and Baray (2016) highlight the importance of leaders to be prepared to lead collaboration among multiple sectors in educational system. As a result, Burns *et al.* (2015) points that educational settings that work collaboratively produces rich learning environments for those involved in educational systems, specially, students.

As an alternative to overcome top down management, and as an attempt to suggest an alternative form of educational management, this paper explores a formative intervention that was developed for the Municipal Secretariat of Education (MSE) in São Paulo, Brazil for the broad development of all levels of educational management (teacher educators, coordinators, principals, teachers and students). Besides, as a way to deepen the analysis of the project we focus on an intravention (Sannino *et al.*, 2016) case study that took place in a specific school, which used the tools developed during the intervention to solve a flood issue. As this study involves different levels in the educational system, the creative chain of activities is a key theoretical framework for promoting critical collaboration in order to cross the boundaries of educational management organization.

In a collaborative approach to decision making, control and direction of decisions, Libâneo (2013) states that management assumes responsibility, dialogue, attitudes of sharing ways of acting that foster coexistence, coping with change and breaking with individualist standards.

As an attempt to understand this form of educational management, we focused on the framework of the Cultural-Historical Activity Theory (CHAT), in a social perspective, to outline a way of organizing programs in schools that allow the creative development of all participants, based on the critical collaboration. The analysis of development within practical social activities is in the core of CHAT. Our lives are organized by activities. By producing, transforming and creating tools human beings recreate new forms of life (Leontiev, 1978; Sannino *et al.*, 2009). The framework of CHAT enables the understanding of educational management as in constant transformation demanding the creation of new tools to deal with issues that are constantly changing. From the perspective of teacher training (directors, supervisors, coordinators, teacher educators, teachers and researchers) and considering the concept of creative chain (Liberali, 2009), collaboration and criticality are taken into consideration. The concept of critical collaborative management is based on the research by Magalhães (1990, 2016). It is structured as a type of management that everyone involved in school takes on roles in observing, analyzing, evaluating and proposing ways to transform, together, the school and the reality in which they live.

This paper reports different moments of a formative intervention research, conducted in a critical collaborative perspective, in which educational managers learn through becoming involved in all moments of the research process and through becoming responsible for shared analysis of their needs and reorganization of educational management. Data comprise formative meetings, in which different participants from the educational system take part in

order to reorganize educational management by defining the notion of educational management, developing a management plan based on such notion and implementing it. The analysis is based on thematic analysis and argumentative organization, which guides the process of creative chain understanding and how such understanding makes it possible to expand management in the educational system.

In order to guide the study, we address the following questions:

RQ1. How is the process of creative chain organized in educational management?

RQ2. What are the contributions of the creative chain to educational management transformation?

We organize the paper first of all by drawing the critical collaborative aspect of the creative chain as the theoretical backbone of the study; second, we depict the research context with an overview of the focal educational system; third, we describe and discuss the data in light of the selected theoretical framework; and, finally, we conclude by suggesting some characteristics to envision educational management in a creative chain of activities perspective.

School management

The concept of management demands recognizing the importance of conscious and informed participation of people in the decisions about guidance and planning of activities, which implies strengthening the collective (Lück, 2009). From a more entrepreneurial perspective, management can be understood as a set of policies, practices, attitudinal standards, actions and instruments employed by an institution to interfere with human behavior and direct it in the workplace. Such model is based on shared individual communication and responsibility and on the diversity of follow-up and improvement measures that constitute an organization for results that exist because of their role outside the institution (Drucker and Marciariello, 1993).

Therefore, the creative chain of activities was developed as an attempt to break from repetitive, oppressive and propagative way of materializing school life.

The creative chain of activities

Understanding the chain of activities is essential in this work, especially regarding the movement of activities within an educational system and in its three different levels, the MSE, the Regional Board of Education (RBE) and the schools, to be introduced in the methodological section, where most of the school managers used to follow a reproductive organization, led by the Secretariat itself.

According to Liberali (2009), a creative chain implies collective engagement in an activity that produces shared meanings, which will be then shared with other new partners so that those participants from the initial activity bring to a new activity. As stated by Schapper-Santos (2010), new meanings are produced and carry some aspects created in the first activity in a creative process, generating a creative flow.

As the creative chain comprises more than two activity systems (Engeström, 2015), Liberali (2009) states that "similarly, some of the partners from the second activity, when engaged in a third activity, follow the same path. This creative chain presupposes that features of the totality can emerge in the production of new creative outcomes in the new activities" (Liberali, 2009, p. 102). In this perspective, it is also essential to keep in mind the production of an intentionally jointly object through interconnected activities.

For instance, when teachers study their contents in order to prepare their classes and reflect on the needs of the students and of their communities. These activities emphasize the production of a collective object which will become an instrument in the activity of teaching classes on that topic. Then, teachers and students work together with realities and school contents planning on

how it helps creating new possibilities of acting outside school. They study, discuss and develop new contents in different knowledge fields in order to investigate and plan new ways of acting, these are formative and transformative activities.

Based on such activities and with the objects produced, students and teachers engage in active participation in different situations, they plan activities to follow up their actions and the ways in which such object constructed in the classes turn into instruments and contribute to the ways they participate in new activities. Together, teacher and students observe how they acted and discuss about new forms of thinking and acting inside and outside school based on the objects studied in class. These activities are the monitoring activities, which again give rise to the studying activities, which will help produce new objects, which will become instruments for the formative activities, which will produce objects that will become instrument for the monitoring activities, which will be used in expansive cycles of development.

In this study, the activities are related to different levels within the educational system, which are connected through a network of activities, such as formative meetings that happen in different levels of the system, with different characteristics according to each level, though taking the others into consideration. More specifically, the creative chain supports the analysis of the whole educational management organization process and the activities that specifically involve moments of studying, educating and monitoring, as described in the tool management plan, in the methods section. Sharing, then, is a key word for the creative chain because it engages different participants in the organization of educational management activities, for example, in the definition of educational management and afterwards in its implementation. As stated by Burns *et al.* (2015), “real changes occur because we work together” (p. 14).

Therefore, there is a main difference between the reproductive chain and the creative chain (Magalhães, 2016). While in the first activities are transposed from one level to the other, in the latter participants transform the activities according to their need and the object of the activity, while retaining some aspects created in previous activities. In this perspective, the aims of the creative chain are the creative production of new cultural outcomes, with argumentation or negotiation, as the tool in the production of meaning.

Magalhães (2016) explains that the creative chain offers possibilities for concepts to be critically and collaboratively reviewed within the diverse activities compose it. This chain promotes the creative production and expansion of the object across and within the network in an intentional way. As stated by Liberali *et al.* (2009), this movement increases the creative, critical and collaborative potential of the collective. Lemos *et al.* (2015) stress the power of the creative chain in enhancing community transformation by overcoming educational management encapsulation.

Carvalho (2015) suggests that in the creative chain, participants continually develop their potential for understanding and questioning each other's actions. In these chains, participants go through processes of finding their voices and contributing to the creation of the collective objects (Vendramini Zanella, 2013) assuming different roles (Fuga, 2009). In this perspective, the creative chain can be viewed in a political perspective as a means to achieve more democratic and emancipatory conditions for all (Guerra, 2010).

In order to understand the notion of creative chain of activities it is important to get deep into three other concepts that are interconnected to it: creativity, criticality and collaboration.

The first one regards the creativity that guides the chain. Creativity opposes to reproduction of activities disregarding its essential features, according to Vygotsky (1998, p. 24), “it is a historical, cumulative process where every succeeding manifestation was determined by the preceding one,” it is also important to consider that the creative movement of the chain happens in a process in which means that in certain moments of reproduction can be combined with attempts to creativity.

Referring to the expansive learning cycles, Engeström (2009, p. 26), states that “creative externalization occurs first in the form of discrete individual deviations and

mundane innovations.” Creativity involves transformation of activities, bearing in mind a joint object, based on the needs of subjects, in a certain context embedded in a development process, such as the educational system, the case introduced in this paper.

The second one, criticality, is connected to the idea of transformation taking into account that theory and practice are inseparable, therefore essential to knowledge production and effective changes (Shapper-Santos *et al.*, 2012). In addition, according to Brookfield (2005), criticality is related to a process and not to a specific result, since it implies constant questioning, challenging the way of thinking and acting. The author believes that with no criticality personal relations become atrophied and working places do not innovate. In a similar line of thought, Freire (1967) states that men and women who are able to perceive and live history as a possibility of experimenting by comparing, judging, choosing, deciding and breaking boundaries change their own lives and consequently the world. In an educational management perspective, Ylimaki *et al.* (2017) suggest that by reflecting critically on their practices, educational managers can transcend existing norms and values, and by doing so they can mediate societal aims and curriculum work avoiding normatively problems.

As this work discusses the educational process of educational managers, it is important to take into consideration the Freirean perspective of transforming oppressive conditions by relating what is done in the classrooms to what can be done outside schools to change the realities of our society (Freire, 1970) as a form of overcoming problematic or obstacle situations, called by Freire (1967) as the unviable heard of.

Finally, the third concept, collaboration embraces authorship and co-production in formative intervention processes. To collaborate does not mean to establish symmetry or similarity of ideas in knowledge production, it implies, on the contrary, conflicts, questioning, display of different points of view, tensions and crisis (Magalhães, 2011; Shapper-Santos *et al.*, 2012) that thereafter unleash transformation in research and educational management practices.

Besides, Magalhães (2011) proposes that collaboration in the context of critical collaborative research involves everyone in risk-taking possibilities for a negotiated vision, motivated by the desire for transformation, production of new visions, beliefs, theories and practices. In fact, it is the dialectical relations among participants in an interaction in which the subjects affect and are affected by the established relations. In such framework, types of questions and answers are essential, they enable the creation of collaborative spaces and the creation of conflicts to share reflections about senses and theories that support actions and enable sharing meaning (Magalhães, 2016).

In addition, critical collaboration opposes to a kind of conflict that takes value imposition over another. Such imposition can be materialized in an authoritarian voice that imposes and demands a unique meaning to be accepted, transmitted and recognized (Bakhtin, 1952), in opposition to a multivoiced process (Engeström, 2001). Schön (2002) points out that, many times, in the relation amongst subjects there is a kind of game that can generate defensive attitudes, in which subjects feel the necessity of protecting their actions and their images. They feel prevented to share their points of view, doubts and suggestions.

The changes and demands of the contexts, and the complex challenges of everyday life, in which the subjects are situated, demand and create foundations for a work in partnership (Engeström, 2008). Thus, Liberali (2012) states that the conflicts are materialized in argumentation and become the object and instrument of activities. Caution is needed, however, so that the process of argumentation in the creative chain of activities does not set an imposition of ideas that lead only to convincing the other.

In this research, the activities are related to different levels from an educational system. These levels are connected through a network of activities searching for a closer relation to the joint object, which in a wider perspective, can be related to the concept of educational management.

In this scenario, the creative chain of activities aims at the creative production of new cultural outcomes, in a critical collaborative movement, having argumentation and negotiation as tool in the production of meaning. Thus, the clash of meanings becomes central, creating dramatic events that become the basis for understanding the concept of critical collaboration, as opposed to imposed perspectives of action.

A critical-collaborative management could then be defined as a way of acting in a chain of activities intentionally organized to reach and fulfill a community need. Therefore, we understand the critical-collaborative management as a way of acting in the activities in a creative chain that allows the joint object in its activities to be voluntarily produced to meet the needs consciously recognized by educational management’s community.

Research context and methods

In Brazil, the federal government supplies funding and develops guidelines to be used and followed by local governments (municipalities and states). In the time of the research (2010–2012), the educational system involved in the project comprised 772 kindergartens, for children in between one day and five years old, 545 elementary schools, 8 high schools, in a total of 1,325 schools.

As described in Figure 1, the educational system involved in the project comprises different educational managers with different positions. The first column shows its different levels (MSE, RBE and schools), the second column presents the leading roles in the different level, and the third, the main duties of these leaders. The roles are mainly: secretary of education, director of elementary and high school, and pedagogical team in the MSE level; director; pedagogical director, supervisor and teacher educator in the RBE level; and principal, principal assistant, pedagogical coordinator, teachers, students and parents in the school level.

As for duties, the pedagogical director manages teacher educators who, in turn, provide training for pedagogical coordinators (PCs), and some teachers. At the school level, the pedagogical coordinator is in charge of working with the needs of teacher education, the students and parents. Teachers and students work with teaching and learning processes, while parents should take part in educational management by contributing to the connection school-community.

The Management in Creative Chains project was initiated by the MSE to deal with the lack of collaboration amongst managers from different levels. The project holds its

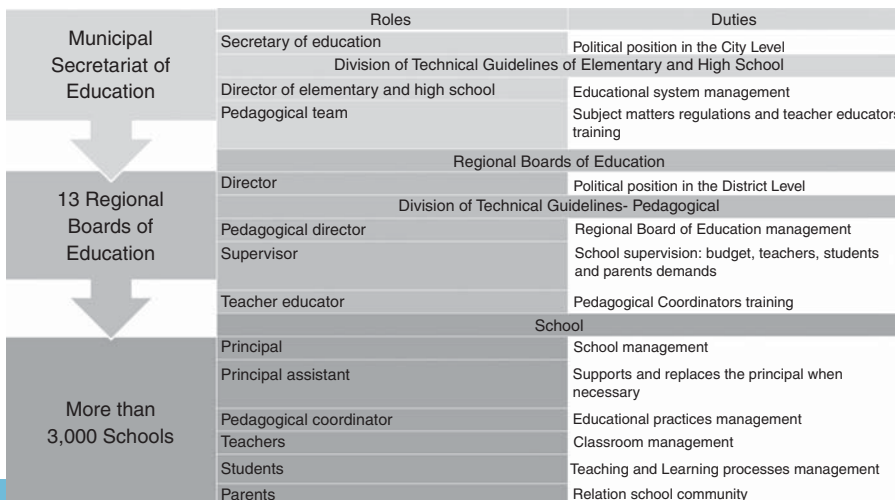


Figure 1. The city of São Paulo educational system organization

background in the critical collaborative research (Magalhães, 1990, 2016) as a form of formative interventions (Engeström and Sannino, 2010), which generated an intravention (Sannino *et al.*, 2016). In the critical collaborative research, different partners engage by negotiating and acting in different moments of the research, such notion is hand in hand with the background of formative interventions that enables research in the making. While in the formative intervention there is a strong presence of researchers, the intravention works as a space where practitioners develop and recreate the tools from the formative intervention.

The data are analyzed from two settings: the regional board with 25 schools and at one of the participating schools. This school was selected based on its PCs engagement with the project which could provide strong evidence of the possible potential of the formative design under development.

Research tools

The first task in the project was to produce a concept of educational management that would correspond to the educational managers' needs. Thus, the concept produced would take into consideration the different voices involved in the process of managing education in the city at the different levels: MSE, RBE and school. For instance, the pedagogical team from the MSE started focusing more on student's teaching and learning process than on the results accomplished on different tests and assessments.

The following task was to produce a management plan in which educational managers could organize their activities according to their contexts' needs in relation to a possible joint object. Such plan was organized considering moments of studying, educating and monitoring.

As a way to deepen activities developed by educational managers, they were asked to work them out during the formative intervention. In that event, the consultant researcher worked so that educational managers could study how to:

- prepare schedules;
- organize pedagogical and other meetings; and
- observe, analyze and discuss classes, amongst others.

Therefore, every educational manager could develop such activities in their contexts. The pedagogical team from the Secretariat of Education could work with Teacher Educators from the RBE; Teacher Educators could work with school PCs; and PCs would work with teachers at their schools, who would work with students, who would work with parents and other community members.

The intravention analyzed in our discussion dealt with a flood issue that prevented many students from going to school and caused diseases in the community (Lemos, 2017). Data were organized based on the flow of the creative chain of activities. As an attempt to show how collaboration and criticality were scrutinized in the process, the topic of the problem with a river that separates the school and the community was chosen as a main theme in the paper. Three research instruments were used for that: an interaction during a formative meeting at the RBE, the management plan of the focused school, developed in the formative meetings at the RBE and two semi structured follow up interviews.

Researchers conducted the formative intervention regarding activities and concerns brought by educational managers. They were videotaped and major episodes were chosen based on the intensity of interactions they materialized and on the stream of the topic related to problem with a river.

We selected the section of the management plan, focusing on the flood issue. Similarly, the first author conducted two semi structured interviews with one pedagogical coordinator and six

teachers emphasizing their views on how the intervention activities of the first chain contributed to the intravention activities that happened in the school. This aimed to provide a view of the connections among the many activities of the “Management in Creative Chains Project.”

Data were organized to provide the understanding on how the communities needs were used as opportunities for the development of a creative chain of activities.

Data analysis

The analysis is based on thematic content (Bronckart, 1999) and argumentative organization (Liberali, 2013; Toulmin, 2003) which provides the possibility of scrutinizing the multiplicity of voices in the discourse. In addition, the analysis focused on critical situations and the potentials they entailed. In accordance with Freire’s perspective of the viable unheard of, the creativity and criticality of the participants were exposed and discussed with references to the creative chain of activities.

Findings and results

We organize the findings and results in two subsections as a way to answer both research questions:

RQ1. How is the process of creative chain organized in educational management?

RQ2. What are the contributions of the creative chain to educational management transformation?

In the first subsection, we provide data from the interaction about concept formation in the formative meeting, the management plan, and the interviews with pedagogical coordinator and teachers. Whereas in the second subsection, we make use of the theory that supports the notion of creative chain of activities to shed light over the data.

The creative chain of activities organizing educational management

One of the tasks in the formative meeting was to define the object of educational management, what was educational management for, PCs expressed difficulties in defining if management was for teaching-learning, or if it was for teaching-learning for community transformation. On the one hand, some PCs stated that the focus of educational management was on teaching and learning since they focused on evaluation and assessments results, on the other hand, other PCs were concerned about how community issues affected school, so the definition should be teaching and learning for community transformation (Lemos and Engeström, 2018). One of the PCs who stood for teaching and learning for community transformation, used the example of a river nearby the school she worked as the dramatic event to support her argument. The issue of the stream was first pointed out when PCs had to define what educational management was for.

PCX started by using a concrete fact as the premise to support her argument on educational management for community transformation. “Our school has always worked with themes – and there was a polluted stream next to our school.” She used first person pronouns to determine that she was introducing a different point of view from the other PCs. After that, she used another concrete fact as a claim to support her argument referring to the tours the school team used to make every year to be more acquainted with school problems. At that time, PCX implicated the school team in the discourse by using the pronoun we, at that moment she did not speak for herself anymore she was also voicing the school team. PCX finally concluded her argument by stating that when schools want to transform realities they also transform people’s mindset.

After the definition, educational managers had to produce a management plan to organize their activities in three different moments: studying, educating and monitoring.

The management plan was produced by the school focusing on activities that integrated the school with the community, mainly to work with a flood issue.

Management plan produced in 2011 to be implemented in 2012:

(1) Activities plan of the management network:

- Educating: collective meetings for teaching, staff and students education.
- Studying: educating at RBE, events participation, forums and meetings with health professionals participation (family medical doctor, social assistant and teachers).
- Monitoring: visiting classrooms, visiting community, monitoring presentations, productions and activities developed by students at school in the community. Monitoring community meetings.

It is important to emphasize that the management plan was produced beyond its expectations, it kept the main characteristics and the initial partners that could be involved in the activities such as RBE and teachers and included health care professionals, social workers and community members, which was not a demand for the production of the plan.

School organized a chain of activities engaging different school professionals, students, local community and health care unit through activities, such as: monthly meetings with all involved in order to discuss the problems, and how they could become visible to the politicians, so they could give attention and start solving the flood issue; weekly meetings with teachers involved in the project so that teachers would work with the stream issue connected with the curricula; and events organized by school and community close to the river. The teachers directly involved in the project were: arts, sciences, physical education, geography and information and communications technology (ICT).

The arts teacher developed instruments with waste from the stream, so students could parade a samba school in the community. In addition, sciences teacher worked with the importance of garbage collection and hygiene in order to prevent diseases. Besides, physical education teacher worked with different types of sports and games students could practice if there was a green area instead of the polluted stream. The geography teacher developed a research with the students, so they could investigate how the river bank was affected by the construction of different companies in its margins and how it would affect the river flow. Finally, the ICT teacher instructed students on how to develop a survey with community members, so they could find out how the polluted stream and the flood affected the community life.

The selected episode about how educational management was put into practice in school refers to an interview that took place on December 13, 2013. The researcher (R) and the PCX participated in the interview, which purpose was to discuss how the pedagogical coordinator had worked with questions about educational management discussed in the formative meetings, especially the concept of management and implementation of the management plan. It is also important to mention that each member worked inside their field of knowledge using different tools to solve the same issue.

In the beginning of the interview, the pedagogical coordinator shared how she worked with the school needs considering students, teachers and school community. First, the pedagogical coordinator explained that the needs were placed in the form of a wishing tree. During the conversation, PCX explained how the process happened with the school team, students and community members. PCX pointed out that the pedagogical journeys, weekly meetings for teaching education meetings in which the pedagogical coordinator was in charge of working a specific project with teachers that accomplished a specific number of hours at school, and the pedagogical meetings, monthly meetings with all school members were the only times when the team was together and they could discuss their needs.

In addition, the second selected episode is part of a semi-structured group interview in which the researcher, pedagogical coordinator, two geography teachers, a Portuguese

language teacher, a physical education teacher, an art teacher and an ICT teacher took part. The purpose of the interview was to discuss how the team worked with the needs, previously raised, in the classroom.

During the interview, PCX pointed out the discussion with the locals as initiator of the stream project and told how the discussion reached other instances and expanded in a creative chain far beyond the originally envisioned in Management in the Creative Chains project.

Therefore, the creative chain of activities process involves different members of the educational system taking part in the educational management transformation, namely, PCs in the RBE, pedagogical coordinator, teachers and students at school and furthermore community members.

The interaction in which the concept of educational management was expressed, the discussion about the management plan and the interviews depicted how managerial activities were organized to materialize educational management not only as prescription but as an effort to transform educational management itself, the school and the community.

The contributions of the creative chain for the focus school can be visualized in Table I, which summarizes our findings in terms of the transformation of educational management. We organize the table by coding moments of crisis, which characterize problematic situations or obstacles, to depict the processes of creative chain and the potentials, to point out the contributions.

In the interaction about the concept of educational management, first line of Table I, somehow PCX engaged the school collective introducing the meaning of educational management, carrying her school need in the discourse (first column) while attempting to create a new definition for educational management (second column). This creative chain principle allowed features of a previous meanings to produce new ones (Liberali, 2009).

PCX concluded her argument by using the logical connector “so”, considering the school voice to the argument when she used the pronoun “we” and the place adverb “there” to refer to her team and to the school. In terms of creative chain of activities, bringing the school team voice to the definition was an important link because PCX did not speak for herself, but also for the other school subjects. Such claim provides a possibility of criticality since PCX is questioning her own reality in favor of producing a more suitable definition of educational management to the whole system.

In the case of the management plan, second line in Table I, critical collaboration manifested through different initiatives school members took in order to envision solving the flood issue. First of all, by the organization of the management plan itself engaging different members as responsible for getting together to overcome the flood issue, and second by the development of different activities in order to put the management plan into practice.

In excerpt 2, third line of Table I, when discussing how the pedagogical coordinator worked to find a joint object with the school, PCX aimed to develop a chain in which teachers, students and community members had the possibility of being engaged to provide possibilities for the construction of the collective object. The process was remarked by the repetition of the pronoun “we”, involving different levels (students, teachers and community) in the discourse also remarked in her speech pointing toward a creative and collaborative process. “We start with the needs. Well, these are our needs, but with regard to these needs, think about what we want. What do we want to become?”

The metaphor of wishing tree is stated as a possibility of collaboratively finding out the school and the community needs when PCX re-voiced teachers’ and students’ lines. The most important point in relation to PCX was the team’s and her involvement with the community, and the proposal to transform the living conditions of the subjects inside and outside school, including school and community members.

The management plan that was initially produced to organize school activities was transformed into the wishing tree to enable school and community participation, keeping its

Data	Process of CCA (Crisis)	Contributions of CCA (Potentials)
Interactions during formative meeting	Our school has always worked with themes – and there was a polluted stream next to our school. And I felt, and the whole school group felt hypocritical, right? Talking about coexistence ... living with something that we spend all the time with	Then I had an idea... I found the way. Damn, I want to dream of a better school! And when we talk about transforming society, it is not to go there and clean the stream or picking up the trash. I keep thinking "I deserve it, my student deserves it, and you deserve a better school to have a better quality of life!" So, at the moment that the school wants to transform reality it transforms people who accept anything mindset. So, that's what we try to do there!
Management plan	To work with the flood issue	Different initiatives to envision solving the flood issue
Interview with coordinator	PCX. Yes, it is. And earlier this year we did the wishing tree as well. We were thinking about our wishes and our wishes for the school. We started with the needs. "Well, these are our needs, but with regard to these needs, think about what we want. What do we want to become?" "I wish my students had more opportunities to study, I wish we had better working conditions, I wish we had an interdisciplinary work with other people"	
Interview with teachers and coordinator		PCX. [...] We concluded that the linear park would be a solution to the lack of leisure here in the community PCX. So, it was a knowledge building made through the discussions. Because at first, the meetings served as channel for discussions and studying; we started inviting people from Green and environment secretariat that also came to talk to the community. They had conversations with people from the health care center, with the school, and with the community members. So, we started studying about it. And by studying we realized that the linear park would meet our demand. To revitalize the area

Table I.
Process and contributions of the creative chain of activities (CCA)

main features, as planned in the RBE, but changing it according to the educational management needs. School members and community involvement was essential, so participants could point their wishes, needs, acting collaboratively in the process of educational management change.

It is important to notice that, line 4, Table I, PCX recognized that the knowledge building happened in the discussions and conversations in which different stakeholders (people from

Green secretariat and the environment, with health care unit, with school members and with the locals) could collaboratively contribute to understand and initiate a movement to transform the flood issue (our demands): no more grounding but (they changed the initial idea of grounding replacing by linear park). In addition, teachers and PCX brought the importance of students' voice who also had direct involvement in the object designed by the community.

Based on Brookfield (2005), by creating a new way of working with the management plan, the pedagogical coordinator, teachers, students and community members envisioned a possibility of reflecting upon their reality and transforming school work. Such transformation was due to the interplay between knowledge and practice (Shapper-Santos *et al.*, 2012) inside and outside classroom and school and that was the main contribution of the creative chain of activities to educational management transformation.

To sum up, the flood issue seemed to be the problematic situation or the obstacle in between the school and the community, however, when other members were invited to take initiative and the linear park proposal came up, there was a strong potential to solve the issue. Such potential become the unviable heard of as stated by Freire (1993) supporting the contribution of the creative chains of activities.

Conclusion

The objective of this paper was to discuss educational management organized, in a creative chain of activities, leading to a critical collaborative perspective. Based on a large-scale project developed in the MSE in São Paulo, Brazil, we raised some central aspects for the type of educational management we consider as critical collaborative in a creative chain of activities.

Throughout the paper, we pointed toward a critical collaborative perspective of educational management that was materialized in formative meetings in the municipal educational system in the form of intentional chains of activities for the creative development of educational managers (teacher educators, directors, PCs, teachers, students and community members).

Thus, we answer *RQ1* by describing the different actions involving the formative process that promotes a chance to transform, together, the school and the reality in which those involved in the educational system live, through: joint discussion of problems that affected the community, need survey; drawing an object to overcome it; and deliberately organizing activities for achieving them.

The pedagogical coordinator developed different activities with the school team, health care unit and community members on how to call authorities attention in order to provide proper garbage collection and to clean up the stream, so they could build up a linear park avoiding floods and providing the community a space for leisure (Lemos, 2017).

As Neumerski (2013) suggests, such form of management uncovers the interaction between educational managers, school team and community, in the case of this study, not only toward teaching learning but as a potential to community transformation. Such transformation derives from the development of tools for the school leadership (Burns *et al.*, 2015; Spillane, 2005) and for the improvement of community.

Therefore, by answering *RQ2* we conclude that the educational system reorganized its activities in a new chain and not as individual links, which means that the management plan produced according to school and community needs provided more participation, collaboration and engagement. Differently from a top down educational management, which enables a reproductive chain, educational management in a creative chain is based on the constitution of a discourse in which subjects become interdependent to expand and transform the activities in the educational system and hence the reality beyond the educational system itself.

More than posing the crisis we debate the potential for management activities transformation, so that school and community create better conditions for interacting and contributing for each other's quality of life improvement. The activities reorganization promoted transformations of the school managerial, teaching and learning and community

modes of acting, both in relation school community and vice versa. Therefore, educational managers, teachers, school staff, students and community members are invited to take part at school and community decisions.

By reorganizing educational management bearing in mind the community and school needs, which generated crisis in the day-to-day of school activities, school and community changes its practices and relations to one another. It is important to mention, though, that in Brazil every time there is a change of government, no matter if it is in the federal, state, or municipal level, policies also change; however, this alternative form of management by the dialectical relation school-community became a public policy that still reverberates despite the change of major twice.

Future research will benefit from a larger scale study in which the relation school and community transform s educational management. Better than that, it would be a dream if research affected not only policies, but also political actions so that students and teachers would have better conditions to study and work.

References

- Aidman, B. and Baray, S.N. (2016), "Leveraging community resources: creating successful partnerships to improve schools", *The Educational Forum*, Vol. 80 No. 3, pp. 264-277, available at: <https://doi.org/10.1080/00131725.2016.1173149>
- Bakhtin, M. (1952), "Os gêneros do discurso (Discourse genres)", in Fontes, M. (Ed.), *Estética da criação verbal*, Martins Fontes, São Paulo, pp. 277-325.
- Bronckart, J.-P. (1999), *Atividade de linguagem, textos e discursos (Language activity, texts and discourses)*, 2nd ed., Educ, São Paulo.
- Brookfield, S.D. (2005), *Discussion As a Way of Teaching: Tools and Techniques for Democratic Classroom*, Jossey-Bass, San Francisco, CA.
- Burns, R.W., Yendol-Hoppey, D. and Jacobs, J. (2015), "High-quality teaching requires collaboration: how partnerships can create a true continuum of professional learning for educators", *The Educational Forum*, Vol. 79 No. 1, pp. 53-67, available at: <https://doi.org/10.1080/00131725.2014.971990>
- Carvalho, J.S.F.D. (2015), "Autoridade e educação: o desafio em face do ocaso da tradição", *Revista Brasileira de Educação*, Vol. 20 No. 63, pp. 975-993, available at: <https://doi.org/10.1590/S1413-24782015206309>
- Drucker, P.F. and Marciariello, J.A. (1993), *Management*, Harper and Row, New York, NY.
- Engeström, Y. (2001), "Expansive learning at work: toward an activity theoretical reconceptualization", *Journal of Education and Work*, Vol. 14 No. 1, pp. 133-156, available at: <https://doi.org/10.1080/13639080020028747>
- Engeström, Y. (2008), "Weaving the texture of school change", *Journal of Educational Change*, Vol. 9, pp. 379-383, available at: <https://doi.org/10.1007/s10833-008-9086-6>
- Engeström, Y. (2009), "Wildfire activities: new patterns of mobility and learning", *Journal of Mobile and Blended Learning*, Vol. 1 No. 2, pp. 1-18.
- Engeström, Y. (2015), *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*, 2nd ed., Cambridge University Press, Cambridge.
- Engeström, Y. and Sannino, A. (2010), "Studies on expansive learning: foundations, findings and future challenges", *Educational Research Review*, Vol. 5 No. 1, pp. 1-24, available at: <https://doi.org/10.1016/j.edurev.2009.12.002>
- Freire, P. (1967), *Educação como prática da liberdade (Education as Liberty Practice)*, Paz e Terra, Rio de Janeiro.
- Freire, P. (1970), *Pedagogy of the Oppressed*, Herder and Herder, New York, NY.
- Freire, P. (1993), *Pedagogy of the Oppressed. 1970*, Vol. 68, Continuum, New York, NY, available at: www.ncbi.nlm.nih.gov/pubmed/4527926%5Cnhttp://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Pedagogy+of+the+oppressed#3

- Fuga, V.P. (2009), "O movimento do significado de Grupo de Apoio na Cadeia Criativa de Atividades do Programa Ação Cidadã", Thesis (Doctorate in Applied Linguistics and Language Studies), Pontifical Catholic University of São Paulo, São Paulo.
- Green, T. (2017), "Community-based equity audits: a practical approach for educational leaders to support equitable community-school improvements", *Educational Administration Quarterly*, Vol. 53 No. 1, pp. 3-39, available at: <https://doi.org/10.1177/001316X16672513>
- Guerra, M.G.G. (2010), "Formação de educadores: produzindo conhecimento e possibilitando mudanças sociais na comunidade (Teaching Educators: producing knowledge and social transformation in the community)", available at: www4.pucsp.br/pos/lael/lael-inf/teses/Tese_Monica_G_G_Guerra.pdf (accessed January 21, 2017).
- Lemos, M. (2017), "Collaborative agency in educational management: a joint object for school and community transformation", *RAE; Revista de Administração de Empresas*, Vol. 57 No. 6, pp. 555-566, available at: <https://doi.org/http://dx.doi.org/10.1590/S0034-759020170604>
- Lemos, M. and Engeström, Y. (2018), "Collective concept formation in educational management: an intervention study in São Paulo, Brazil", *Eesti Haridusteaduste Ajakiri-Estonian Journal of Education*, Vol. 6 No. 6, pp. 32-56, available at: http://eha.ut.ee/wp-content/uploads/2018/04/10_02b_lemos_engestrom.pdf
- Lemos, M., Liberali, F. and Toivaiainen, H. (2015), "The Creative Chain as a possibility of overcoming educational management encapsulation", Paper No. 109, Research Work and Learning, Singapore, available at: www.rwl2015.com/papers/Paper109.pdf
- Leontiev, A.N. (1978), *Activity, Consciousness and Personality*, Prentice Hall, Englewood Cliffs, NJ, available at: www.marxists.org/archive/leontev/works/activity-consciousness
- Libâneo, J.C. (2013), *Organização e gestão da escola: teoria e prática (Organization and School Management: Theory and Practice)*, 6th ed., MF Livros, Goiânia.
- Liberali, F.C. (2009), "A cadeia criativa no processo de tornar-se totalidade", *Bakhtiniana Revista de Estudos do Discurso*, Vol. 1 No. 2, pp. 100-124.
- Liberali, F.C. (2012), "Gestão escolar na perspectiva da teoria da atividade sócio-histórico-cultural (School management in the social-historical-cultural activity theory perspective)", A teoria da atividade sócio-histórico-cultural e a escola: recriando realidades sociais, Pontes, Campinas.
- Liberali, F.C. (2013), *Argumentação em contexto escolar (Argumentation in school context)*, Pontes Editores, Campinas.
- Liberali, F.C., Fuga, V.P. and Gonçalves, E. (2009), "Producing citizenship as shared meaning", *The Specialist*, Vol. 30, pp. 35-56, available at: <https://revistas.pucsp.br/esp/article/view/6215/4550#>
- Liberali, F., Borelli, S. and Lima, M.E. (2015), "Gestão escolar em cadeias criativas: um processo para transformações escolares (School management in creative chains: a process for school transformation)", in Silva, K.A., Maristella-de-Andrade, M. and Pereira Filho, C. (Eds), *A formação de professores de línguas: políticas, projetos e parcerias*, Vol. 1, Pontes Editora, Campinas, pp. 93-141.
- Lück, H. (2009), *Dimensões da gestão escolar e suas competências (Dimensions of school management and its skills)*, Positivo, Curitiba.
- Magalhães, M.C.C. (1990), "A study of teacher-researcher collaboration on chapter one reading instruction", School management dimensions and skills, available at: <http://hdl.handle.net/10919/39989> (accessed April 14, 2015).
- Magalhães, M.C.C. (2011), "Theoretical-methodological choices in AL research: critical research of collaboration in teacher education", *Inter Fainc*, Vol. 1 No. 1, pp. 34-45.
- Magalhães, M.C.C. (2016), "Intervention research in a public elementary school: a critical-collaborative teacher education project on reading and writing", *Outlines*, Vol. 17 No. 1, pp. 39-61, available at: <http://ojs.statsbiblioteket.dk/index.php/outlines/article/view/24205>
- Neumerski, C.M. (2013), "Rethinking instructional leadership, a review: what do we know about principal, teacher, and coach instructional leadership, and where should we go from here?", *Educational Administration Quarterly*, Vol. 49 No. 2, pp. 310-347, available at: <https://doi.org/10.1177/0013161X12456700>

- Sannino, A., Daniels, H. and Gutierrez, K.D. (2009), "Activity theory between historical engagement and future-making practice", in Sannino, A., Daniels, H. and Gutierrez, K.D. (Eds), *Learning and Expanding with Activity Theory*, Cambridge University Press, Cambridge, pp. 1-18.
- Sannino, A., Engeström, Y. and Lemos, M. (2016), "Formative interventions for expansive learning and transformative agency", *Journal of the Learning Sciences*, Vol. 25 No. 4, pp. 599-633, available at: <https://doi.org/10.1080/10508406.2016.1204547>
- Schapper-Santos, I. (2010), "O fluxo do significado do brincar na cadeia criativa: argumentação e formação de pesquisadores e educadores (Playing meaning flow in the creative chain: argumentation and researchers and teachers education)", thesis (Doctorate in Applied Linguistics and Language Studies), Pontifical Catholic University of São Paulo, São Paulo.
- Schön, D. (2002), "From technical rationality to reflection-in-action", in Clarke, J., Hanson, A., Harrison, R. and Reeve, F. (Eds), *Supporting Lifelong Learning: Perspectives on Learning*, Vol. I, Routledge Falmer, London, pp. 40-61.
- Schapper-Santos, I., Liberali, F.C. and Lemos, M. (2012), "Pesquisa Crítica de Colaboração: diálogos em construção (Critical collaborative research: dialogues in construction)", in Lopes, H.S.I. and Micarello, J. (Eds), *Itinerários Investigativos: infâncias e linguagens (Research Pathways: Childhood and Language*, Universidade Federal de Juiz de Fora Press, Juiz de Fora, pp. 95-113.
- Spillane, J.P. (2005), "Distributed leadership", *The Educational Forum*, Vol. 69 No. 2, pp. 143-150, available at: <https://doi.org/10.1080/00131720508984678>
- Toulmin, S. (2003), *The Uses of Argument*, Cambridge University Press, New York, NY.
- Vendramini Zanella, D. (2013), "Por uma formação crítico-colaborativa de alunas-professoas e professora-pesquisadora na graduação em Letras (Students-teachers and teacher-researcher critical collaborative education in a language and literature undergraduate course)", Thesis (Doctorate in Applied Linguistics and Language Studies), Pontifical Catholic University of São Paulo, São Paulo.
- Vygotsky, L.S. (1998), *The Collected Works of L.S. Vygotsky: Child Psychology*, Vol. 5, Plenum Press, New York, NY.
- Ylimaki, R., Lisa, F., Matyjasik, E., Brunderman, L and Uljens, M. (2017), "Beyond normativity in sociocultural reproduction and sociocultural transformation: curriculum work – leadership within an evolving context", *Educational Administration Quarterly*, Vol. 53 No. 1, pp. 70-106, available at: <https://doi.org/10.1177/0013161X1669200>

About the authors

Monica Lemos is a PhD Candidate at the Center for Research on Activity, Development and Learning (CRADLE) at the University of Helsinki, where she also had the chance to coordinate the Summer School on Activity Theory and Formative Interventions in 2013. In her PhD, Lemos studied a formative intervention for educational managers in which a concept of educational management was generated and implemented, such process took place in different levels of an educational system in São Paulo, Brazil. Lemos is also Researcher at Language and Activity in Educational Contexts (LACE) at the Pontifical Catholic University of São Paulo, Brazil, where Lemos taught higher education courses related to teaching education for over seven years. Monica Lemos is the corresponding author and can be contacted at: monica.lemos@helsinki.fi

Fernanda Liberali holds PhD Degree in Applied Linguistics from the Pontifical Catholic University of São Paulo and Liberali has also participated in two post-doctoral activities, one at the University of Helsinki and the other at the Freie Universität Berlin. Liberali is also Professor and Researcher at the Post-Graduate Programs in Applied Linguistics and Language Studies and in Teacher Education, and at the English Department at PUC-SP. Liberali holds a fellowship from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and was the Brazilian representative for the International Society for Cultural and Activity Research (2009–2011 and 2013–2014). Recently, Liberali have coordinated the Brazilian sector of the DIGIT-M-ED project, DIGIT-M-ED Brasil – Transforming Teaching-Learning, since 2012, an exchange between four international universities exploring digital video-editing media and the development of marginalized youth communities.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com

© Monica Lemos and Fernanda Liberali. This work is published under (the “License”). Notwithstanding the ProQuest Terms and Conditions, you may use this content in accordance with the terms of the License.

<https://creativecommons.org/licenses/by-nc/3.0/legalcode>