

Collaborative School-Family Relationships using the Expansive Learning Cycle to Enhance Parents Empowering in Helping their Child in the Context of a New Reading Method

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The benefits of parental involvement in literacy have been well documented over the years. It has also been shown that when introducing new ways of doing things, parents often show resistance. It is with a view to improving school-family collaboration in the context of *La Planète des Alphas*, a new reading method, that we conducted a research-intervention. This paper aims to describe how teachers question their own practices and interact with parents to give help and to put forward new models of pedagogical actions. This research-intervention employed the Cultural-Historical Activity Theory and the Change Laboratory methodology. We take a close look at the evolution of the discursive manifestations of transformative agency during the Change Laboratory sessions and the discussion topics they were related to. This approach deepens our understanding of the *decision making* process in the selection of new solutions and the notion of *relational agency* in fostering collaboration and communication throughout the expansive learning cycle. Five Change Laboratory sessions were coded and analyzed using MAXQDA 2018 software. We highlight the *activity system boundary crossing* that allowed teachers, parents and school principal to elaborate, implement and reflect upon new instrument- producing activities aiming at empowering parents in helping their child in schooling. Obviously, the relevance of this intervention and research process can be well extended to the overall field language construction and the overall literature on family-school relationships.

Keywords: School-family collaboration, expansive learning cycle, change laboratory method, relational agency, decision making process.

Introduction

The first years of formal schooling of the child are critical for the development of reading skills (Dail & Payne, 2010; Hawken, 2009) which then influence subsequent academic performance of youngsters (Alexander, Entwisle, & Horsey, 1997; Okagaki & Bingham, 2010, Senechal, 2006). Learning to read requires a lot of effort from children because they have to make a concrete representation of the sounds. The method used for teaching reading is therefore of

paramount importance. Not all teaching methods are equivalent. However, far from us the intention to lead in this paper a discussion on the best teaching practices of reading.

Teachers of a school X have opted for *La Planète des Alphas* reading method. The latter one was recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) which has integrated the method in some literacy programs aiming at the promotion of basic education for all children¹. The reading method has been used for over 15 years in nearly 20,000 schools in France and more than 130 schools in Quebec. It is one of the methods

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¹<http://www.unesco.org/archives/multimedia/document-437>

most likely to promote student success. (Huguenin, & Dubois, 2012). The reading method has received the scientific support from the Archives Jean Piaget Foundation of the University of Geneva. It has been the object of a scientific evaluation which has demonstrated the incontestable effectiveness of this method of reading (Éditions RECREALIRE²³).

A great body of studies have shown the influence of parents, or even of the family, on the educational success of young people, especially in literacy, regardless of cultural and socio-economic backgrounds (e.g., Dail & Payne, 2010; Jeynes, 2005; Sheldon, 2019; Torgesen, 2004). Specifically related to reading, involvement appears to be higher among parents from high SES backgrounds, compared to parents from disadvantaged backgrounds who are less likely to read to their children, and have less interaction with them (e.g., Dearing & Tang, 2010 ; Glasgow & Whitney, 2009). As a result, these young people, boys more than girls, have a less developed vocabulary and more difficulties in reading (Canadian Council on learning, 2009) (CCA). Hence the importance for the school community to work more with parents and families early in the child's school trajectory. Likewise, studies have shown that the school leadership, especially the principal's support, as being critical to the successful implementation of curricular changes (Barma, 2011; Deslandes, 2006, 2019; Deslandes, Barma & Massé-Morneau, 2016; Fullan, 2010). Indeed, literature indicates that school principals act as catalysts in promoting collaboration between the members of the school community and around issues of reforms and school improvement (Leithwood, 2009; Supovitz, Sirinides, & May, 2010). In times of curricular reform, challenges have also been identified with parents of students. Several of them are preoccupied because these ways of doing and learning are different from those that many parents have known and experienced (Dodd, 1998). Often parents react negatively to these non-traditional practices if they do not understand the issues related to their youngsters' learning (Deslandes, Barma & Massé-Morneau, 2016; Deslandes & Lafortune, 2000; Dodd, 1998). In order to better face the new challenges related to the implementation of any curricular changes, research indicates that the school

should act as a learning organization and encourage discussions and collegiality between its various actors (e.g., parents, school principal, teachers) (Barma, 2008; Deslandes, 2006; Deslandes & Bertrand, 2005).

It is with a view to improving the quality of the implementation of *La Planète des Alphas* reading method that the X school-team X contacted our research team, to accompany them in their approach. This reading method was implemented in 2015-2016 with Grade 1 students. Its use continued in 2016-17 with Grade 2 students and moreover, it was planned to introduce it at the kindergarten level the year after. However, teachers who have implemented this method have observed reluctance on the part of some parents. They thus wanted our research team to work with them and with some parents in order to address tensions observed during the first year of the implementation process and to co-model some new solutions to increase parents' empowerment in helping their child, thus improving the quality of the implementation of the reading method. According to Engeström and Sannino (2011), if tensions are identified and unveiled, they can be driving forces of change. One of the team researchers had gotten acquainted with the method and its tools through training offered by some experts with the reading method. The same researcher had also supervised a graduate student's work regarding the characteristics of *La Planète des Alphas* reading method (Bernier, 2016). The author had suggested that the reading method could help to solve the difficulties associated with the acquisition of grapheme-phoneme correspondences.

This project is in continuity with our prior work highlighting the resistance of parents during the implementation of reform or changes in the curriculum (Deslandes & Lafortune, 2000, Deslandes et al., 2016). The study focuses on learning by members of a school team who agree to question their practices and *cross the boundaries* of their activity system to learn from parents and then put in place new models of pedagogical actions. The objective of this paper is thus to examine the *decision making process* that leads teachers, parents and the school principal to find and implement new solutions to better equip parents to support and accompany their child in the use of *La Planète des Alphas* reading method. The two research questions are formulated as follows: 1) What are the problem

² <https://planetedesalphas.com/reconnaissances-et-evaluations-scientifiques/>

³ <https://editionsrecrealire.com>

situations identified by teachers and parents and what do they associate them with? 2) What are the proposed and then the implemented actions and what is the assessment of these solutions in response to the targeted issues that led to improve the implementation of *La Planète des Alphas* reading method?

Brief description of *La Planète des Alphas* reading method

Even though in this article, the focus is on the research-intervention process, the following section is intended to provide the reader with some information regarding the reading method. It is distinguished by a progressive learning facilitated by the use of several senses (sight, hearing, touch). It is in line with motivational and playful pedagogies, focused on play and taking into account the world of children. Unlike the syllabic method, where students learn syllables that have no meaning (ba, be, bi, bo, bu), in this method, they are taught real words (ex: *une fusée qui file*) and they develop their phonemic conscience which is the ability to conceive speech as a sequence of distinctive elements called phonemes. As a starting point, this method is based on a story where each letter is staged with the sound (phoneme) it makes. This is the alpha «song»⁴. The alphas are actually heroes who have the form and make the same sound as the letters, as for example, the "rocket" (*fusée* in French) is "ffffff". Thus, students gradually appropriate the written code by first studying vowels, long consonants, then more complex sounds. It's based on talking about characters, not letters.

Theoretical and Intervention Frameworks

In line with some of our prior researches (Barma, 2008, 2011; Deslandes & Barma, 2016, 2018), we rely on a paradigm that roots the collaboration between teachers, parents and school principals in three interacting systems of activities that can eventually go through collective transformations and new ways of working together (Engeström, 2001, 2015). Hence the relevance of referring to the *Theory of expansive learning* that goes beyond individual agency and looks for possibilities of collective

change efforts (Haapasaari, Engeström & Kerosuo, 2014). Third generation Cultural-Historical Activity Theory (CHAT) takes us beyond the limits of a single activity system and expands the unit of analysis to multiple activity systems interacting and potentially sharing a common object (Engeström, 2001). CHAT uses a triangular representation of individual / social mediation that has six interconnected elements or poles: *subjects, objects, tools, community, rules and division of labor* (Engeström, 2015). In any system of human activity, the subject who acts within a community is organized by rules and division of labor and uses artifacts or tools to accomplish, with others, the object of the collective activity. In other words, CHAT provides a valuable lens to assist subjects engaged in a task toward an objective and who are influenced by the rules and norms (guidelines, policies) of communities they are in and ways of how division of labor should occur. Using CHAT analytical tools helps to highlight the poles or the elements where changes need to be addressed (Engeström & Sannino, 2011). In Figure 1, two activity systems have the potential to expand their initial objects 1 and transform it into objects 2 by means of sense making and dialogue, to create object 3, a thirdness that is not yet there (Engeström, 2010). Miettinen (2006) refers to expansive learning as "a process of shared construction of an object, a mobilization of mutual resources as well as a process of mutual learning" (p. 176).

In order for a transformation to become collective and follow an expansive cycle (Engeström, 2015), a typical sequence of actions comprises six phases: (1) questioning and criticising the actual practice; (2) analyzing the situation; (3) modeling new models (4) examining and testing the new model; (5) implementing and (6) reflecting on the process. Through these different phases of the cycle, participants move across the frontiers (*boundary crossing*) of their own activity system, in order to share their expertise and to develop a common vision, the shared object. Inevitably, participants experience structural tensions within the same system of activity or between systems of activity (e.g., that of teachers, parents and school principal) in the course of actions. If they are recurrent, the tensions can become conflicts (Engeström & Sannino, 2011). When these tensions are unveiled and resolved, they play an important role in collectively transforming

⁴ <https://www.dailymotion.com/video/xtmrs>

activities that lead to expansive learning (Engeström, 2015). This process is based on the third generation of (CHAT) (Engestrom, 2001, 2015), in which the Change Laboratory (CL) method is anchored. In the CL method, the intervention research team and the participants work together to identify the problems encountered and to create new tools to overcome a problem situation. The CL method is based on the expansion cycle described above with its six categories of actions (Virkkunen & Newnham, 2013). Usually, the Change Laboratory method

comprises between 5 to 12 meetings or sessions. Each session is planned so as to facilitate a flexible realization of the process. Initially, the researcher interventionist explains the idea of the CL process in general terms, then presents as first stimulus a brief overview of research findings regarding in this case, parental involvement in schooling, notably in literacy and a few facts on the reading method. This first stimulus is referred as 'mirror data'. A general question is asked to participants to foster discussion (see Table 1).

Figure 1. Two interacting systems with a partially shared object as minimal model for third generation of activity theory (Engeström, 2001, p.136)

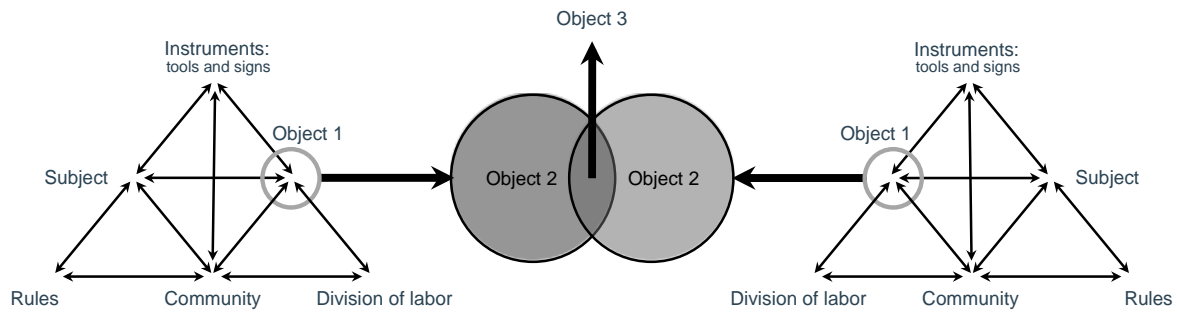


Table 1. Overview of the CL five sessions

1st session 2016-10-28	2nd session 2016-11-28	3rd session 2017-01-11	4th session 2017-03-16	5th session 2017-05-24
Objective of the session				
Identification of facilitating conditions and lived constraints by 1st year parents' students	Exchanges on lived tensions and solutions to better support parents and better work together	Identification by kindergarten teachers of the actions planned to equip their parents' students	Exchanges on modeling and actions implemented by kindergarten teachers and identification of new actions	Exchanges between kindergarten teachers and parents on the actions carried out. Identification of other actions envisaged
Participants				
1 School principal 1 1st year teacher	1 School principal 1 1st year teacher	1 School principal 2 kindergarten teachers	1 School principal 2 kindergarten teachers	1 School principal 2 kindergarten teachers
Parents				
2 mothers of 1st year boys	2 mothers	X	X	3 mothers of kindergarten girls
2 mothers of 2nd year boys				1 father of kindergarten girl
Research team				
Researchers : 2	Researchers : 2	Researchers : 2 1 graduate student	Researchers : 2 1 graduate student	Researcher : 1 1 graduate student
Total : 8	Total : 6	Total : 6	Total : 6	Total : 9

At the beginning of the following sessions, participants' statements that have been analysed are used to continue building the mirror data. The two researchers who act as moderators, are complementary in their expertise. In the current example, one researcher is expert in the Change Lab methodology and parental involvement and the other one, in reading and remediation with learning difficulty students. Another one is an expert in analysis the discursive manifestations of contradictions in the form of tensions. Their tasks in carrying out the intervention in a neutral way consists in planning, stimulating the participants and leading the work and discussion in each of the sessions (Engeström, 2001, Virkkunen & Newnham, 2013).

Furthermore, the notion of agency makes it possible to look for possible collective change actions (Haapasaari et al., 2014). In light of CHAT, agency is broadly understood as encompassing almost any form of the human capacity to act intentionally (Engeström & Sannino, 2013). It is manifested when people form intentions and execute willful actions that go beyond and transform the accepted routines and given conditions of the activity and organization in which they are involved (Engeström & Sannino, 2013). Another important aspect to consider is that agency happens when individuals ascribe new meaning to their activity in order to overcome a conflictual situation. As in previous works (e.g., Deslandes & Barma, 2018), we have chosen to focus on the ongoing dialogue between the participants in order to identify the expressions through which the six types of transformative agency can manifest (Engeström, 2015; Haapasaari et al., 2014). Just as a reminder, Engeström (2001) identified six types of expressions through which transformative agency may be manifested: (1) resisting, opposing, rejecting the change or new suggestions; (2) criticising the current situation, (3) explicating new possibilities, (4) envisioning new patterns for the activity, (5) committing to concrete actions and (6) taking actions after a completed cycle. For instance, this discursive agency varies along with the phases in CL sessions as they evolve over time.

In this article, we will take a close look at the evolution of these manifestations of transformative agency during five CL sessions and the discussion topics they were related to. This will contribute to deepen our understanding of the *decision making process* in the selection of

new solutions that led to a collectively shared object of their respected activities. Also inherent to this process is the notion of *relational agency* between colleagues defined by Edwards (2007) as "the capacity to work with others to expand the object that one is working on by bringing to bear the sense-making of others and to draw on the resources they offer when responding to that sense-making" (p. 4). In this view, leadership which is more informal, is rooted in the influence on others and may involve actors other than school principals such as teachers and parents (Supovitz et al., 2010). This type of leadership that is different from a positional title arises out "of the interactions among individuals, tasks and situations" (Supovitz et al., 2010). Leadership is thus linked to relational agency building and collaboration. In sum, the opportunity to analyze the conversations between the participants will reveal in what ways relational agency acted upon the process of decision making in the identification and implementation of new solutions.

Method

Data collection and analysis

Five CL sessions were conducted (see Table 1). The interventions took place in a semi-urban public school attended by 196 primary school students from Kindergarten to Grade 6. There are two multi-level classes: Grade 1 and 2, Grade 3 and 4. The composition of the groups of participants varied according to the purpose of each session. Thus, the first two sessions brought together two researchers, the school principal, the Grade 1 and 2 teacher, and four mothers of students who had experimented the reading method during the previous year, that is, when their child was enrolled in Grade 1. The other three sessions brought together not only the research team and the school principal, but also a graduate student, two kindergarten teachers (during the 3rd and 4th sessions) to which four parents of kindergarten students joined in the fifth session. All of the participants therefore chose to participate on a voluntary basis. They all signed the Change Laboratory participants' code of ethics form adopted by the Centre of Research and Intervention for Student and School Success (CRI_SAS/CRIRES) and designed to ensure a climate conducive to the exchange of ideas while respecting the opinions of others, in a spirit of collegiality and in a constructive atmosphere. The

participating teachers had a half-day release to facilitate their involvement. The invitation addressed to parents was sent by the school principal. As for the graduate student, her knowledge of the method was an asset when it came time to helping teachers to test new tools and new teaching devices.

The five CL sessions were videotaped and each one lasted for about 90 minutes. Then the verbatims were transcribed. Notes were also collected in the researchers' journal. The data were first coded in terms of units or segments of meaning according to the manifestations of transformative agency expressions as discussed previously, then according to the poles of the activity system to which the discursive expressions were directed. The analysis was done by expert researchers and a well-trained research assistant using MAXQDA 2018 software.

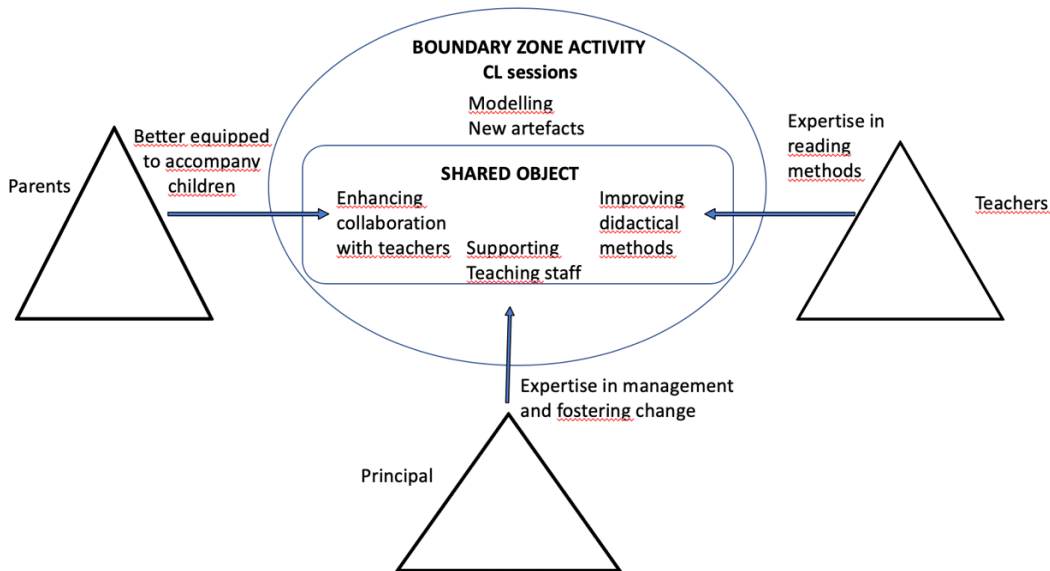
Findings and Discussion

The following section is organized in function of the objectives and the research questions that guided our study. It is incumbent to remind them at this point. The final goal of our study was to explore how to improve the quality of the implementation of *La Planète des Alphas* reading method. The objective was to examine the

decision making process that leads teachers, parents and the school principal to find and implement new solutions to better equip parents to support and accompany their child in the use of the reading method. The first research question aimed at identifying the problem situations according to the teachers' and parents' viewpoints and at examining what they associate them with. The second one intended to investigate the proposed and then the implemented actions as well as the assessment of these solutions in response to the targeted issues that led to the improvement of the implementation of *La Planète des Alphas* reading method.

The first research question guided the first two CL sessions. Those sessions aim to provide a space for dialogue between parents, one teacher and the principal who have had a first year of implementation of the reading method. It is an opportunity for the three groups of actors to *cross the boundaries* of their respective systems to obtain information in order to develop a new activity system model. In the light of CHAT, we can identify three activity systems: that of the teachers, the school principal and the parents who interact (see Figure 2).

Figure 2. Building boundary zone activity for *La Planète des Alphas* reading method to better equip parents to support and accompany their child with the new method



These CL sessions reflect the first two phases of the expansive learning cycle: questioning and criticising the actual practice and analyzing the situation. In order to examine the evolution of the types of expressions of transformative agency, we analyzed the on-going discussion between the participants. Thus, a total of 224 expressions with a higher percentage of explicating (38.9%) followed by criticizing (27.2%), visualization of the future (15.6%),

resisting (11.6%), action taking (4.9%) and committing to action (1.8%) (see Table 2). The participants mainly explicated positive past experiences and they also identified problems in the current ways of doing things (see Table 2). Resisting and criticizing expressions went down in the second session while explicating and envisioning went up thus corroborating results from Haapasaari et al. (2014).

Table 2.

Expressions of transformative agency during the first two CL sessions

CL sessions	Resisting	Criticizing	Explicating	Envisioning	Committing to actions	Taking actions
04/10/2016	16	36	41	8	4	11
28/11/2016	10	25	46	27		
%	11.6%	27.2%	38.9%	15.6%	1.8%	4.9%

Table 3.

Examples of types of expressions of transformative agency in the first two sessions of the CL

Types of expressions	Examples
Resisting	<i>I did not know that all the tools existed somewhere else, at the same time I question myself "Is it important for me to learn more about alphas?" (Parent)</i> <i>If the child still needs the labels, it's because we've been too fast. We have to come back because we are going too fast (Teacher).</i>
Criticising	<i>I wish I had books that really had all the alpha letters so that you can create stories ... (Parent).</i> <i>... in homework, it's difficult because if you type "alpha" on google, parents will have a lot of things, but in fact it's the method that is used with the syllable method (Teacher).</i>
Explicating	<i>Well I think the method is really interesting for children, it's alive, it's ... I think that no matter the level of the child everyone is interested in class (Parent).</i> <i>But what I hear in the method is that it is important to communicate with the parent, which means that in a more traditional classroom, there is no such communication (School principal).</i> <i>With the parents, so that things go well, you really have to create a sharing environment, so that the parent can confide his/her reluctance, so that we can tell them how it works and at home (Teacher).</i>
Taking actions	<i>I bought the slate ... with the magnetic stuff, we created vocabulary words with that (Parent).</i> <i>This year we offered workshops to parents and I'm happy. ... in the end it is to give training to the parents (Teacher).</i>

Table 3 illustrates some examples of the expressions of transformative agency over the first two CL sessions.

We also wanted to identify the discussion topics associated with the CHAT poles to which transformative agency expressions were addressed during the first two CL sessions. There

seemed to be consensus regarding the design of the object which is more in line with the improvement of parental capacity to support their child in the context of the implementation of a new reading method. It is agreed to focus on the challenges or tensions encountered in the parents' activity system. Findings show primary

tensions at each pole of the activity system. For examples, at the *tool* pole, despite explanation of the method by the teacher and the instructions that she sent home, parents would have liked to have access to books illustrating all the alphas. As one parent states: "[...] what we know as parent and ... how I showed it to my oldest child, but with alphas, I'm having trouble [...]. Others deplore that homework or training is not fully based on alphas. At the *rule* pole, although parents are eager to accompany their child, insufficient knowledge of the method and confusion especially when other children from the same family have learned to read with the syllabic method appear to predominate. At the *division of labor* pole, parents had to go beyond what is usually expected from them and conduct extensive research on Internet to learn more about the method. Secondary tensions (between the poles) between the *tools* and the *rules* and the *division of labor* poles correspond to communication needs between the parents and the teacher. Parents complain that they do not have enough information (*tool*) on how far they can go when the child can already read (*rules*) and how to work with the Grade 2 child who wants to continue learning with the alphas (*division of labor*).

Parents went even further explaining their needs during the second CL session and proposed some activities that they would have liked to have had in place to better accompany them during the first year implementation of the reading method. The suggestions include training for parents or a meeting with teachers at the beginning of the year or during the school year to clarify what is important, what the parent must do or not do in the accompaniment of the child. Parents also propose to send by e-mail a summary of the training that includes the philosophy and an outline of the reading method. Another one says "... I would have liked to be guided to reliable websites, those that correctly apply the method. Another parent gives a list of possible tools: "Capsules, summaries, maybe a short guide ..." The school principal adds: "[...] a booklet with the steps to follow. Perhaps two or three of them so that there is not an overload of information". She also mentions that it would be nice to share them through the school portal. The teacher, for her part, is thinking of a PowerPoint or a Prezi presentation or even a short YouTube video illustrating what was done in class. All in all, the envisioned actions are intended to

address parents' needs in terms of instruments or artifacts (*tool* pole) to better support their child and in terms of communication means (*tool* pole) to better inform parents about the reading method and about what is done in class. It is also suggested to offer training to other teachers who do not know about *La Planète des Alphas* reading method.

In line with Engestrom and Sannino (2011), these first two CL sessions made it possible to learn collectively by identifying the needs. It respects the first epistemological principle of the CL ie, the principal of double stimulation. The two sessions were key in the building of the mirror which represents the first stimulus necessary to have the other sessions move forward. Sessions three to five led to modelling and envisioning future activities to make the reading method more comprehensive and efficient at home. The artefacts produced by the participants acted as boundary objects necessary to give meaning to a potentially shared object: better equip parents in helping their child in view of improving the quality of the implementation of the reading method at school as well as at home. Within the framework of the Theory of expansive learning, it is possible to think that these suggestions for possibilities of actions contribute to increasing the permeability of boundaries, which in turn reduces tensions so that the interactions between the activity systems are more harmonious (Akkerman & Barker, 2011).

The second research question was addressed in the course of the following three CL sessions: What are the proposed and then the implemented actions and what is the assessment of these solutions in response to the targeted issues and aiming at improving the implementation of *La Planète des Alphas* reading method? As the reading method was going to be introduced to kindergarten students in the winter of 2017, the research team was invited to conduct three other CL sessions with the two kindergarten teachers and the school principal and a last one with the same actors and some kindergarten parents (see Table 1 for an overview of the sessions).

Table 4 presents the evolution of the expressions of transformative agency over the course of the three following CL sessions corresponding to the subsequent phases of the expansive learning cycle: modeling new solutions, examining and testing the model, implementing the model and reflecting. A total of

263 segments were coded. As indicated in the dialectical analysis, there was a movement toward *envisioning*, *taking actions* and *reflection over the process*, going from the abstract to concrete (i.e. the model is now ready to land in practice). It is in the fifth session that the

participants' transformative agency reached its climax by collectively taking over the discussion and initiating exchanges on their own practices, on what they particularly appreciated regarding the actions put into place and what they envision or would like to be put forward.

Table 4.

Expressions of the types of transformative agency expressions during the last three CL sessions

CL sessions	Resisting	Criticizing	Explicating	Envisioning	Committing to actions	Taking actions	Reflection
11/01/2017	1	7	26	35	3		
16/03/2017	2	13	23	23	6	19	10
24/05/2017	5	7	23	15		6	15
%	3.3%	11.3%	30.1%	30.5%	3.8%	10.5%	10.5%

Table 5.

Examples of the types of transformative agency expressions during the last three CL sessions

Types of expressions	Examples
Resisting	<i>I wanted you to see the video before the meeting, did you find that it was relevant or it would have been better to watch it after the meeting? (Teacher). I found it correct except a case ... I grew up with the traditional way ... I think it's something that should be introduced as soon as possible (Parent).</i>
Criticising	<i>But I find it incomplete, we could not just put it back (Teacher). The parent is not the teacher (School principal). What I would have liked to see is what type of activities you do in school, not necessarily what we will do at home (Parent).</i>
Explicating	<i>In fact, it may be to inform the parents at the meeting ...when they will come to class, give examples of activities (School principal). Little boys are interested in cartoons ..., it would be important in the PowerPoint to return to the realities of preschoolers ... (Teacher).</i>
Envisioning	<i>I see that ... we plan a nice meeting, we think it is okay and then afterwards, we may say "we should have done it otherwise" (School principal). I was wondering, we talked about a kit that could be given to parents, do we announce it at our meeting ? (Teacher).</i>
Committing to action	<i>We can present it like this ... I'm going to get the bags and I'll ask the secretary to send the real Alphas page to the parents by email (School principal). I will help her then (Teacher).</i>
Taking action	<i>It was done by another staff member at school (School principal). We sent the notices to the parents (Teacher).</i>
Reflection	<i>To improve, we would like to know what we would have to change at this meeting? (Teacher). Well, it gave us a hand because if we had not had this meeting, how could we help our child to practice in the evening? It allowed us to use the method the right way (Parent).</i>

Table 5 shows excerpts illustrating the different types of expressions of transformative agency. The school principal's expressions are included since she was particularly active during the third session.

Right at the start of the third session, it became imperative to present the ideas suggested during the first two CL sessions as mirror data to the two kindergarten teachers. The teachers' and the school principal's activity systems were then solicited. The question that guided this intervention reads as follows: *As kindergarten teachers, what do you envision or in what do you want to take action?* The participants agree with several of the activities suggested by the previous CL session. The suggestions for new actions they envisioned can be summarized as follows: parents training on the reading method, identification of reliable websites, punctual meetings and e-mail communication with the parents, creation of a guide, of capsules or videos.

The objective of the fourth session was to give the kindergarten teachers the opportunity to report on the concrete actions implemented in response to the identified problematic situations (*taking actions*) and to describe the envisioned adjustments (*envisioning*). In preparation of their meeting with parents on February 16, 2017, the two kindergarten teachers reported having requested the parents to watch the video on the reading method with their child. They began the meeting with a simplified PowerPoint presentation that had been prepared by the graduate student who also attended the meeting. Then they modeled ways of doing things using role playing based on the most frequent questions and responded to them. One parent attested about his last year's positive experience with the reading method. The 40 or so parents who attended the meeting had a long discussion with the teachers afterwards and took the opportunity to manipulate the figures. Subsequently, for five weeks, the teachers sent alphas-related challenges (exercises) to the child and to the parent. The school secretary and volunteer parents had plasticized the alphas figures to be sent home and to be kept for their second year. As future challenges, they *envision* the addition of a third kindergarten colleague who is currently working in another building and who is slowly adopting the method. It is also suggested to have the graduate student prepare supplementary activities that will be gathered in

a small binder in which new activities can be added over the years.

They then identified the new actions they have decided to prioritize from now on: meeting parents of kindergarten students in February to inform them and give them ideas regarding the method, a PowerPoint presentation and material production by the graduate student, including laminated alphas bags for kindergarten students so they can bring them home and tablemats placemats to put on the desks of first year students. On these appear the alpha figures, the transformed alphas and the cursive letters. For the years to come, they committed (*committing to actions*) to add a 4th meeting to their yearly calendar allowing them to meet with the kindergarten parents regarding the new reading method during the month of November

In light of CHAT, it appears that the actions that will be put into place are intended to alleviate some of the tensions previous identified at the various poles in the parents' activity system. By having an information meeting with the parents and making the video available before the meeting, as well as sending the PowerPoint presentation and figurines at home (*tools*), the teachers helped to reduce the confusion among some parents (*rules*) and facilitated the division of responsibilities between teachers and parents (*division of the labor*). Teachers' *modeling* of how to help the child and *implementing* new communication tools is part of phases 3, 4 and 5 of the expansive learning cycle (Virkkunen & Ahonen, 2011).

The fifth and last CL session occurred on May 24 2017. This session was intended to verify the parents' and the two kindergarten teachers' appreciation with respect to the new tool-oriented activities that had been taken and to reflect upon them. The fifth session corresponds to the last phase of the expansive learning cycle, that is *reflecting* and *consolidating*. Four kindergarten parents joined the school and the research team that included the graduate student. Except for a parent who was in his second experience with the reading method, all of the others were inexperienced regarding the method. A few examples follow. The parents reported their child's pleasure and enthusiasm with respect to the reading method. For them, the method is part of the technological era and appeals to the imagination and to all the senses, especially the boys'. The school principal reminds that the first year boys who had been identified

as having difficulties at the preschool level were no longer in that situation in October. One parent said it was relevant to watch the video about the method before the meeting because it allowed him to see what they were going to work with. In the same way, the meeting was very helpful to guide the parents in the way to accompany their child at night. However, other parents would have liked to see the types of activities, or even the teaching practices that teachers put in place at school. A teacher suggests taking pictures of the activities they are currently doing to make them available in subsequent years. Another acknowledges that keeping parents informed of what they are doing will allow them to talk about it at dinner time. One parent reiterates the fact that the new method must be introduced as early as possible in the student's curriculum taking into account its peculiarities in comparison with the traditional method to which parents are accustomed. This same parent is asking for statistics on the effectiveness of this method in order to secure parents with doubts thus still showing *resistance* and doubts regarding the effectiveness of the reading method. Following this comment, a teacher reports concerns among some parents who feared that this new method will create confusion for the child. It is therefore hoped to introduce (about 10 minutes talk) the method at the meeting in August with the preschool parents. A teacher questions the parents' preference for receiving either weekly challenges (exercises) or all of them at the same time at the information evening. It seems that the first option is more respectful of everyone's learning rhythm and that it prevents a parent from doing too much at the same time. Parents are wondering what to do when their child is learning fast or can already read. A teacher reminds that they must leave a novelty effect for the first year in which there is the transformation of alphas. Suggestions for internet interactive software that consists of games for kindergarten children on the alphas are offered as enrichment activities. Parents reveal ways in which they work with their child in the evening, for example, by doing either an educational activity or an oral game during the meal. A parent concedes that learning is done at school and that at home, it is mainly about consolidation.

Regarding the *decision making process*, the exchanges between the teachers and the school principal mark a key moment at the third session in envisioning new instrument-activity models.

The two kindergarten teachers took up the suggestions mentioned by the teacher and the participating parents in the second session and continued to expand, to develop them. For instance, one teacher said: "I think that the idea of having a document for the parents, ... it remains a tool, one can refer to it but there must be also a short training". The other teacher adds: "I really like meetings, I think it would be relevant to have one and to offer some training on *La Planète des Alphas* method to kindergarten parents, an extra meeting besides the one at the beginning of the year". The fifth session was also a key moment in the *decision making process*. One teacher says: "In order to improve we would like to know what we might have to change. At the meeting, was it complete? What did it give you as information? Was it clear?" This excerpt represents a stimulus and shows that the school team is willing to open the door to criticisms and to have some of the tools and activities improved or rejected. This question gave the opportunity to parents and the teachers themselves as well as the school principal who had experienced the new instrument-producing activities to analyze, envision and elaborate together new tools.

This collaborative work between teachers and with parents was clearly facilitated by the school principal's *relational agency* (Edwards, 2005, 2007). Our results underscore the relevance of accounting for the leadership of the school principal in bringing about changes in teachers' practices. For example, the school principal bought the necessary material on the reading method right at the start, thus giving instrumental support and encouraging the 1st year teacher to take risks and try the new reading method (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010, cited in Berebitsky et al., 2014). Moreover, the principal offered support and reinforcement orally: "What you are saying makes so much sense" and she also recognized the teachers' expertise when telling the 1st year teacher: "you are the multiplier, the change agent for this method" and by saying: "the teachers must adapt the exercises to their group level. It's a question of professional judgment". She encouraged interactions between the teachers: "You will complete each other, one of you will say one thing, the other one will say another". She rectified some points: "the thing parents feel the most insecure about is the fact that it is the beginning of the school year but not that the reading method is new". She also

believed in the parents' capacity: "parents can add and improve the exercises, that's the support that is being expected from them. In addition, they can come to the school that is very open to parents and ask questions and even participate in any Alpha activity if they wish." The school principal's behaviors align with reported works by Berebitsky et al. (2014) around literacy instruction in reading and Supovitz et al. (2010) with respect to the influence of the principal's support on teachers' collaboration and communication around changes. In other words, the principal's leadership is crucial in the context of curricular changes.

Conclusion

The final goal of our study was to explore how to improve the quality of the implementation of *La Planète des Alphas* reading method. The objective was to examine the decision making process that leads teachers, parents and the school principal to find and implement new solutions to better equip parents to support and accompany their child in the use of the reading method. We analyzed the dialectical discourse of the participants focusing on the expressions of transformative agency during five CL sessions and we applied CHAT framework. Overall, results show that the participants manifested all of the six types of transformative agency expressions thus highlighting trajectory through the whole learning cycle (Virkkunen & Newnham, 2013). The first two CL were mostly oriented to specific criticising and explicating well-tried practices. In the following three CL sessions, envisioning as well as taking actions and explicating what had been done were the most frequent transformative expressions. They were predominantly related to the artifacts/tools (*tool/pole*) to be modified, to be developed and to be put into place. The reflecting over the whole process took place during the last two sessions, mainly the last one, and included suggestions of

adjustments in terms of improving or adding new tools and new activities.

In this study, we illustrate how the tasks accomplished by the participants through the CL sessions brought together three different kinds of participants: principal, teachers and parents who shared the same concerns over the pupils reading skills. Several tensions were identified during the sessions and adjustments in the form of new artefacts or instruments were made. The three participating groups had their own ideas but were able to connect with one another so the activity expanded. Figure 2 that was illustrated previously depicts the boundary zone activity that took place and led to the improvement of *La Planète des Alphas* reading method implementation.

A major contribution of this research is to provide a different research-intervention approach anchored in CHAT and using the CL method to analyze the interplay between the *decision making process* in the selection of new solutions and the notion of *relational agency* in fostering collaboration and communication throughout the expansive learning cycle. The *activity system boundary crossing* allowed the teachers, the parents and the school principal to elaborate, implement and reflect upon new instrument-producing activities aiming at empowering parents in helping their child in literacy. Even though the application of CHAT and of the expansive learning cycle in this study was discussed strictly within the framework of *La Planète des Alphas* reading method and in the particular family-school context, we strongly believe that the intervention and the research process can be relevant to other fields and contexts undergoing innovation and likely to live tensions. The joint skills of the members of the research team make it possible to broaden their intervention to other research contexts since they have developed an expertise in the implementation of innovative collaborative practices.

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References

- Akkerman, S. F., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research, 81*, 132–169.
- Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education, 70*, 87-107.
- Barma, S. (2008). Un contexte de renouvellement de pratiques en éducation aux sciences et aux technologies: Une étude de cas réalisée sous l'angle de la théorie de l'activité [A context of renewal of educational practices in science and technology: A case study undertaken from a point of view of activity theory]. Doctoral dissertation, Québec, Canada: Université Laval.
- Barma, S. (2011). A sociocultural reading of reform in science teaching in a secondary biology class. *Cultural Studies of Science Education, 6*(3), 635-661.
- Barma, S., Vincent, M.-C. & Voyer, S. (in press). Decision-forming processes leading to peer mentorship. In P. Dionne and A. Jornet, (Eds), *Doing CHAT in the Wild: From-the-field Challenges of a Non-Dualist Methodology*.
- Berebitsky, D., Goddard, R. D., & Carlisle, J. F. (2014). An examination of teachers' perceptions of principal support for change and teachers' collaboration and communication around literacy instruction in reading first schools. *Teachers College Record 116*(4) <http://www.tcrecord.org> ID Number: 17401.
- Bernier, M.-T. (2016). *L'analyse des caractéristiques de deux outils pédagogiques utilisés par les orthopédagogues en intervention avec un groupe restreint d'élèves de première année pour la remédiation des difficultés liées à l'acquisition des correspondances graphème-phonème*. Maîtrise en Éducation, Université du Québec à Trois-Rivières.
- Canadian Council on learning (CCL/CCA) (2009). *Why boys don't like to read: Gender difference in reading achievement*. <https://files.eric.ed.gov/fulltext/ED519285.pdf>
- Dail, A. R., & Payne, R. L. (2010). Recasting the role of family involvement in early literacy development: A response to the NELP Report. *Educational Researcher 39*(4), 330-333. <https://doi.org/10.3102/0013189X10370207>
- Dearing E. & Tang, S. (2010). The home learning environment and achievement during childhood. In S. L. Christenson & A. L. Reschly, *Handbook of school-family partnerships* (pp.80-101). New York, NY: Routledge.
- Deslandes, R. (2006). Designing and implementing school, family and community collaboration programs in Quebec, Canada. *The School Community Journal, 16*(1), 81-105.
- Deslandes, R. (2019). *Collaborations école-famille-communauté. Recension des écrits. Tome 1. Relations école-famille*. [School-family-community collaboration. Review of literature]. Vol. 1. School-Family Relationships. https://www.periscope-r.quebec/sites/default/files/relations-ecole-famille_deslandes_2019.pdf
- Deslandes, R., & Barma, S. (2016). Revisiting the challenges linked to parenting and home-school relationships at the high school. *Canadian Journal of Education 39*(4), 1-32.

- Deslandes, R., & Barma, S. (2018). The expansive learning theory at the service of parent-teacher collaboration. In M. Carmo (ED.), *Education and New Developments* (pp. 121-125). Science Press. Budapest, Hungary.
- Deslandes, R. Barma, S., & Massé-Morneau, J. (2016). Teachers' views of the school community support in the context of a science curricular reform. *Journal of Education and Learning*, 5(2), 220-232. doi:10.5539/jel.v5n2p220
- Deslandes, R., & Bertrand, R. (2005). Parent involvement in schooling at the secondary level: Examination of the motivations. *The Journal of Educational Research*, 98(3), 164-175.
- Deslandes, R. & Lafortune, L. (2000). Le triangle élève-école-famille dans le cadre du renouvellement des programmes d'études à l'école. [The family-school student triangle in the renewal of school curricula] In R. Pallascio et N. Beaudry (dir.), *L'école alternative et la réforme en éducation. Continuité ou changement?* (p. 55-68). Québec, QC : Presses de l'Université du Québec.
- Dodd, A. W. (1998). What can educators learn from parents who oppose curricular and classroom practices? *Journal of Curriculum Studies*, 30(4), 461-477.
- Edwards, A. (2005). Relational agency: learning to be a resourceful practitioner. *International Journal of Educational Research* 43(3): 168-182.
- Edwards, A. (2007). Relational agency in professional practice: A CHAT analysis. *Actio: An International Journal of Human Activity Theory* 1, 1-17.
- Engeström, Y. (2001). Expansive learning at work: toward an activity-theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133-156.
- Engeström, Y. (2010). *From design experiments to formative intervention*. University of Helsinki, Center for Activity Theory and Developmental Work Research.
- Engeström, Y. (2015). *Learning by expanding* (2nd edition): *An activity-theoretical approach to developmental research*. Cambridge University Press.
- Engeström, Y., & Sannino, A. (2011). Discursive manifestations of contradictions in organizational change efforts: A methodological framework. *Journal of Organizational Change Management*, 24(3), 368-387.
- Engeström, Y., & Sannino, A. (2013). La volition et l'agentivité transformatrice: perspective théorique de l'activité. *Revue internationale du CRIRES: innover dans la tradition de Vygotsky*, 1(1), 4-19.
- Fullan, M. (2010). *Motion leadership: The skinny on becoming change savvy*. Thousand Oaks, USA: Corwin Press
- Glasgow, N. A. & Whitney, P. J. (2009). What successful schools do to involve families: 55 partnership strategies. Thousand Oaks, Sage Publications.
- Haapasaari, A., Engeström, Y., & Kerosuo, H. (2014). The emergence of learners' transformative agency in a Change Laboratory intervention. *Journal of Education and Work*, 29(2), 232-262. doi:10.1080/13639080.2014.900168
- Hawken, J. (2009). Pour un enseignement efficace de la lecture et de l'écriture: une trousse d'intervention appuyée par la recherche. *Canadian Language & Literacy Research Network (CLLRNET)*. Canada.
- Huguenin, C., & Dubois, O. (2012). *La planète des Alphas*. France: Récréaire.
- Jeynes, W. H. (2005). A meta-analysis of the relation of parent involvement to urban elementary A meta-analysis of the relation of parent involvement to urban elementary school student academic achievement. *Urban Education*, 40(3), 237-269.
- Leithwood, K. (2009). Four key policy questions about parent engagement recommendations from the evidence. In R. Deslandes (Ed.), *International perspectives on contexts, communities and evaluated innovative practices. F-S-C-P* (pp. 8-20). New York, NY and London, UK: Routledge.

- Miettinen, R. (2006). The sources of novelty: A cultural and systemic view of distributed creativity. *Creativity and Innovation Management*, 15(2), 173-181.
- Okagaki, L. & Bingham, G. E. (2010). Diversity in families: Parental socialization and children's development and learning. In S. L. Christenson & A. L. Reschly, *Handbook of school-family partnerships* (pp.80-101). New York, NY, London, UK: Routledge.
- Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to grade 4 reading comprehension, fluency, spelling, and regarding for pleasure. *Scientific Studies of Reading* 10, 59-87.
- Sheldon, S. B. (2019). Improving student outcomes with school, family, and community partnerships. In J. L. Epstein, M. G. Sanders, B. S. Simon, K. C. Salinas, N. J. Rodriguez, et F. C. Van Voorhis (Eds.), *School, family, and community partnerships. Your handbook for action* (4^e ed. pp.43-62). Thousand Oaks, CA : Corwin Press.
- Supovitz, J. Sirinides, P. & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly* 46(1), 31-56
- Torgesen, J. K. (2004). Lessons Learned from Research on Interventions for Students Who Have Difficulty Learning to Read. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 355-382). Baltimore, MD, US: Paul H Brookes Publishing Co.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). *When Education for all becomes a reality* <http://www.unesco.org/archives/multimedia/document-437-Eng-2>
- Virkkunen, J., & Ahonen, H. (2011). Supporting expansive learning through theoretical-genetic reflection in the Change Laboratory. *Journal of Organizational Change*, 24(2), 229-243.
- Virkkunen, J., & Newnham, D. (2013). *The Change Laboratory: A tool for collaborative development of work activities*. Rotterdam: Sense Publishers.