Australian Journal of Teacher Education

Volume 38 | Issue 5 Article 7

2013

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Recommended Citation

El Kadri, Michele Salles and Roth, Wolff-Michael (2013) ""I Am a Pibidiana": Societal Relations As The Locus Of Sustained Development In A Teacher Education Program In Brazil," *Australian Journal of Teacher Education*: Vol. 38: Iss. 5, Article 7. Available at: http://ro.ecu.edu.au/ajte/vol38/iss5/7

This Journal Article is posted at Research Online. http://ro.ecu.edu.au/ajte/vol38/iss5/7

"I am a Pibidiana": Societal Relations as The Locus of Sustained Development in a Teacher Education Program in Brazil

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Abstract: Many teachers point to the theory-practice gap between university training and their school-based work. Coteaching in conjunction with cogenerative dialoguing as a means of teacher induction has been shown to overcome this gap. In this paper, we articulate teacher development in the praxis-centered {coteaching | cogenerative dialoguing} setting of one Brazilian teacher education program in terms of changing societal relations. We draw on Vygotskij, Leont'ev, and Dewey's ideas on development. The results exhibit the experience of teaching generally and the extant societal relations specifically as the condition for teacher development. Implications for teaching education programs are discussed.

Introduction

I can say that when I got myself into PIBID [Institutional bursary program for induction to teaching], I didn't know at first that it was going to be so demanding. But really, I didn't know that it was going to re-frame my profession so much. I have been teaching since I was 17. It has been 10 years. But PIBID has shown me another reality and PIBID has provided me with the opportunity to create for myself a new meaning of my profession. And I think that through it we were able to find these successful practices in public school that I want to share with you today.

(Aline, PIBID participant, during her final presentation)

In teaching and teacher education, the gap between educational theory, generally taught at a tertiary institution, and educational practice is part of the common lore constitutive of the field of education (Ben-Peretz, M. 1995; Baird, 2010; Cheng, Cheng, & Tang, 2010). Although the literature in the field has shown that the induction period constitutes a strong mediating influence on teachers' professional development, new and seasoned teachers equally point out that in the practice of teaching, especially when they get to work with others, they learn so much more than in several teacher education courses or an entire teacher education program (e.g., Edwards, Gilroy, & Hartley, 2002; Erickson, Brandes, Mitchell, & Mitchell, 2005; Roth, 1998). Such recognition alongside with sociocultural theories of learning has lead to efforts that locate a certain amount of teacher education in the schools (Armour & Makopoulou, 2012; Dam & Blom, 2006; Le Cornu & Ewing, 2008; Rots, Kelchtermans & Aelterman, 2012). Such studies tend to

recognize the importance of a process of *inducting* individuals into teaching practice rather than just teaching them theory prior to praxis (Alhija & Fresko, 2010; Fresko & Alhija, 2009; Rippon & Martin, 2006); and such studies acknowledge the role of the societal relations new teachers entertain with others during practical training (Korthagen, Loughran, & Russell, 2006; Rots et al., 2012). In the opening quotation, the participant in a teacher education program that implements the {coteaching | cogenerative dialoguing} model (e.g., Tobin & Roth, 2006) talks about her experience as a new teacher in a program (PIBID) that provides bursaries to individuals who seek certification for teaching in the public school system of Brazil. Aline states that even though she has had 10 years of teaching experience – which is possible in Brazil in private institutions without certification – she still is learning in and from this program. Aline's statement is particularly interesting given that she exhibited considerable resistance to change her ways of teaching and a rather negative attitude toward change (see Section 4). Our research provides evidence of the tremendous learning that has evolved out and despite of a situation characterized by negativity.

The case we investigate here is of special interest, because there are relatively few studies that address teacher development when individuals have already been teaching but without formal training and certification. Such situations are frequent, for example, in Brazil, where individuals with English competencies may teach the subject matter in private schools; it is also common in countries such as Iceland, where small rural schools employ individuals without certification (Jóhannsdóttir, 2010); a US estimate suggests that there are about 60,000 teachers who have been licensed to teach without having completed a campus-based teacher education program (NCAC, 2010). In fact, both authors of this article had started their teaching careers without certification, simply based on their subject matter competencies. We both obtained our teacher certifications only after years of teaching and after having completed the required number of undergraduate education courses. Aline is one of these cases: she has been teaching for 10 years and, somehow, she reports finding "another reality" in PIBID. Participation in this program has allowed her to develop successful teaching practices, thereby contrasting a going complaint in Brazil that the English language could not be taught successfully (e.g. Lima, 2011). Aline's development caught our attention and made us wonder about the process of becoming (as) a teacher. What happened during teaching practicum through PIBID and the coteaching/cogenerative dialoguing practices that allowed her to identify with the program by referring to herself as *Pibidiana*? How should we understand professional development in such context? What are the societal relations that had the transformative effect, transforming these constitutive relations in turn?

The purpose of this article is to articulate teacher development in the praxis-centered coteaching/cogenerative dialoguing setting of this PIBID arrangement in terms of changing societal relations that shaped and were shaped by their participants, including Aline. We draw on the work of Dewey, Vygotskij, and cultural-historical activity theorists, who conceptualize human development and personality in terms of experience generally and the "ensemble of societal relations" (Leont'ev, 1983, p. 101; Roth & Lee, 2006, p. 30; Vygotskij, 2005, p. 1023) that an individual is and has been a part of specifically.

A Cultural-Historical Perspective on Learning and Development: Societal Relations

Any higher psychological function was external; this means that it was social; before becoming a function, it was the social relation between two people. . . . In general form: *the relation between higher psychological functions was at one time a real (physical) relation between people*. (Vygotskij, 2005, p. 1021, original emphasis)

In this article, we understand the transformation of new teachers during the praxis of teaching in terms of pragmatic, cultural-historically oriented theories that focus on experience (pereživanie) (Bakhtin, 1993; Dewey, 1938/2008; Vygotskij, 1935/1994). (Praxis refers to the living work, practices to patterned actions as made thematic in consciousness.) Thus, "every experience enacted and undergone modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experiences" (Dewey, 1938/2008b, p. 18). The term experience (pereživanie) is understood as "an indivisible unity of personal characteristics and situational characteristics" (Vygotskij, 1935/1994, p. 342), "the result of interaction between live creature and some aspect of the world in which he lives" (Dewey, 193/2008a, p. 50) and always has "practical, emotional, and intellectual" (p. 61) dimensions. In fact, the Russian term *pereživanie* also translates as "feeling" and "deep emotion," so that experience, as understood here, always implies the affective moment of praxis that shades every doing and thinking. The most important sources of development in and through experience are the societal relations with others (Leont'ev, 1983; Vygotskij, 2005).

In this article, we focus on the relations of teachers in training as the key to understanding their development in/through transformative experience. Transformative teaching experience always is located in the real human praxis of teaching (Roth, 2002). In the introductory quotation, Vygotskij articulates the locus of all higher psychological functions (which in the present situation includes everything we might identify as teacher content and pedagogical knowledge): societal relations. To understand human personality, one aspect of which in the present context would be being and becoming a teacher, Vygotskij (2005) paraphrases Marx's 6th thesis on Feuerbach, which states: "But human nature is not an abstractum inherent to the individual. In its reality it is the ensemble of societal relations" (Marx/Engels, 1958, p. 534). Marx adds in the 8th thesis, "societal life is essentially practical" (p. 535). It is therefore in real everyday sensuous praxis that human beings develop. The development of a person as the subject of activity is called *subjectification*. We understand this process to be "the production . . . of a body and a capacity for enunciation not previously identifiable within a given field of experience" (Rancière 1995, p. 59). In teaching, this field is the classroom and school. There is a dialectical process at work: the identification of the body, which occurs through a series of actions, is part of the reconfiguration of the field. Vygotskij takes such a dialectical perspective. The very real, societal relations that a person participates in – and, therefore, constitutes and is constituted by – transforms participation and, in this specific experience, gives rise to teacher experience generally. Whereas Vygotskij's ideas have influenced Western scholarship through the concept of the zone of proximal development – the difference between independent and collaborative performance – what has not been appreciated is the fact that for all of those participating in a societal relation, there are higher psychological functions at work right in and as relation. For beginning teachers, these may be active for a first time. It is in the society-specific relations that

higher psychological functions first appear: both externally *and* internally (Roth, 2013). Thus, in contrast to the delay between external and internal appearance ("construction") of the psychological functions that some scholars emphasize, Vygotskij's own students and followers have emphasized the double presence of the external relation and its reflection in consciousness (Leont'ev, 1983; Mikhailov, 1976). Our perspective distinguishes itself radically from other frameworks, because the societal relation that new teachers participate in *is* the external process of which the inner parallel is the reflection on the ideal plane.

Research Methods

Setting

National Efforts in Brazil to Improve Teacher Education

This study is part of a two-year investigation of teacher induction through coteaching and cogenerative dialoguing offered by the Brazilian "Programa Institucional de Bolsa de Iniciação a docência [Institutional Bursary Program for the Initiation to Teaching]" (henceforth PIBID). The worldwide move towards the recognition of collaborative relationships between school and university to enhance teacher education programs (Dam & Bloom, 2006; Glazer & Hannafin, 2006; Goodnough, Osmond, Dibbon, Glassman, & Stevens, 2009; Ruys, Van Keer, & Aelterman, 2011) is reflected in Brazil. As a result of the Educational Development Plan, proposed by the Brazilian Ministry of Education and the World Bank, has led policy makers to sign the World Commitment for Education. This has given rise to several new programs for teacher education. The main action of this policy was to place CAPES – an agency under the Ministry of Education in Brazil – in charge of teacher education programs. In 2008, CAPES proposed the *National Policy* for Teacher Education, in which the key factor is to overcoming the well-known contradictions of teacher education including the gap between theory and practice. The main tenet of the policy is to support specific efforts that place central emphasis on teacher education and the valorization of teachers for improving public education in Brazil.

PIBID is one of these programs designed by CAPES to enhance teacher education and teaching in public schools by offering bursary to teachers. The program also aims at promoting innovative teaching practices in public schools. PIBID promotes the integration of theory and practice by inserting novice teachers in public schools; and by positioning the schoolteachers as co-supervisors it provides practitioners with incentives to take a central role in teacher education. To participate in PIBID, universities were asked to propose an inter-institutional project. This study focuses on a teacher education program involving a public university in Paraná, Brazil. One participating school partner chose to implement {coteaching | cogenerative dialoguing} as context for the teaching practicum, which occurs during the third and fourth term of the teacher education program.

{Coteaching | Cogenerative Dialoguing} as Context for Teaching Practicum at the University of Londrina

In this study, a model of teacher education was used that originally had been implemented and studied at the University of Philadelphia: {coteaching | cogenerative dialoguing} (Tobin & Roth, 2006) and then adapted, in whole or part, to other settings and countries (e.g., Milne, Scantlebury, Blonstein, & Gleason, 2011; Murphy, Carlisle, & Beggs, 2009; Roth & Tobin, 2005). The {coteaching | cogenerative dialoguing} model had been proposed as an explicit attempt to overcome the theory-practice gap in teacher education and teacher development (Roth, Lawless, & Tobin, 2000). It consists of two, dialectically and therefore irreducibly related parts: coteaching and cogenerative dialoguing (the choice of using the Sheffer stroke "|" and writing coteachinglcogenerative dialoguing between brackets allows us to keep dialectical tensions alive and to eschew the use of independent polar opposites). This article represents our first investigation of a broader doctoral dissertation of the first author. In the dissertation, critical discourse analysis was incorporated to analyze the excerpts (see El Kadri, forthcoming)

Coteaching

The fundamental idea underlying coteaching is that teachers learn to teach by teaching. Moreover, learning opportunities are increased when teachers teach at the elbow of another teacher (Roth & Tobin, 2002). In coteaching, much learning occurs without reflection via tacit modes (Roth, Tobin, Carambo, & Dalland, 2004). The point of coteaching is to maximize teaching and learning in the here and now of actual, transformative and therefore revolutionary teaching praxis. Coteaching is successful because it increases access to social and material resources, and thereby increases opportunities for actions that otherwise would not occur and that greater teaching opportunities provide newcomers with greater opportunities of learning to teach (Roth, Masciotra, & Boyd, 1999; Stith & Roth, 2010; Tobin, Zurbano, Ford, & Carambo, 2003; Wassell & Lavan, 2009). Moreover, coteaching expands opportunities for the evolution of the activity system of preparing teachers and it plays an important role in identifying disturbances and theorizing underlying contradictions within this system (Milne, Scantlebury, Blonstein, & Gleason, 2011). Although there are other collaborative models of teaching, coteaching differs from others in that it emphasizes full, joint responsibility for all aspects of teaching rather than a division of labor. If one coteacher sees that something could be improved, s/he will immediately create a relevant opportunity even when another coteacher currently is in the lead (Murphy et al., 2004; Roth, Masciotra, & Boyd, 1999; Roth & Tobin, 2002; Roth, Tobin, Zimmerman, Bryan & Davis, 2002;). Reviews of coteaching research and evaluations from the school leaders provide evidence to the tremendous efficacy of coteaching, not only because new teachers develop in and as part of teaching praxis but also because the new teachers constitute a tremendous resource to teaching especially in difficult urban (inner-city) schools (e.g., Carambo & Stickney, 2009; Murphy, Carlisle, & Beggs, 2009).

Cogenerative dialoguing

In the model, coteaching, which draws on tacit modes of learning to teach, is paired with cogenerative dialoguing. Cogenerative dialoguing are encounters in which multiple stakeholders – any suitable configuration including students, supervising teachers, teachers in training, supervising teacher trainers, department heads, or principals – equitably participate in conversations about curriculum praxis that they have enacted together. It can be understood, therefore, as a form of structured discourse in which teachers and students engage in collaborative effort to help identify and implement positive changes in classroom teaching and learning practices (Martin, 2006). The main theoretical underpinning of cogenerative dialogues is the belief that each participant brings unique understandings and experiences to the field of activity while experiencing and interacting with the field in different ways (Wassel & Lavan, 2009). New understandings of praxis arise precisely because each participant brings unique understanding and experiences to the meeting (Wassell & Lavan, 2009), where all participants are provided equitable access to the conversation and to the understandings that are *collectively* generated (Roth et al., 2002). Their point, however, is to transform rather than merely understand praxis. A review of the literature highlights the highly positive impact they have on school culture and, from the perspective of the school, their use as a tool to facilitate the transition of new teachers into the community (Carambo & Stickney, 2009). Cogenerative dialoguing has been shown to influence the teaching and learning experiences of all participants (Scantlebury, Gallo-Fox, & Wassell, 2008), to locally relevant theory (Roth, Lawless & Tobin, 2000), and to constitute a viable solution to the ethical dimensions tensions – e.g., power over – that arise from the different institutional positions of the participating stakeholders (Stith & Roth, 2010).

Implementation of {Coteaching | Cogenerative Dialoguing}

In the present study, participants had chosen to implement {coteaching | cogenerative dialoguing} based on an initial outline of what the model implies. Inherently, because none of the participants had prior experience, they had to grow into their new roles in and through implementing the model. Realizing cogenerative dialoguing as described in the research literature was also made difficult when a new teacher exhibited resistance (e.g., Aline in the present study). That is, although named cogenerative dialogues, the debriefing meetings initially did not realize the heuristics on which effective cogenerative dialogues are based (Roth & Tobin, 2002). Similarly, participants had to grow into their roles of teaching alongside someone else and to take full responsibility for student learning even though someone else was taking currently the lead. Cogenerative dialogues occurred weekly at the school involving with all participants including all new teachers in the cohort, the cooperating teacher, and the teacher educator; on occasion, a member of the school administrative staff also participated (e.g., the coordinator or the educational supervisor). Most of the cogenerative dialogue meetings focused on issues related to (a) the enactment of coteaching and coplanning; (b) strategies for dealing with classroom management; (c) skills to be focused in the English teaching curriculum; (d) resources to be used; (e) approaches to teach English; (f) student motivation and attitudes; (g) debriefing preceding lessons; (h) participating in teaching social practices (e.g. seminar and school evaluation board) and the (h) relationship with the school. A limitation of our

cogenerative dialogue was the lack of inclusion of students in such meetings due to the impossibility of the meetings to occur at times when students did not have class.

Participants

As part of their practicum in a program to be certified as English teachers, 12 new teachers were assigned to a cohort led by the first author. In this article, we exemplify our findings about learning to teach in this cohort by drawing on the data involving one new teacher in particular (Aline). Aline comes from a teacher family and has been teaching English in private schools for ten years. She has tried to pursue her certification twice before this experience and has dropped out both times (because of a "lack of meaning"). The new teachers worked together with Alice, a regular public schoolteacher with 20 years teaching experience. Although Alice constantly described herself as tired of teaching and although she felt powerless, her fellow teachers considered her to be an active colleague: She usually engages in professional development and recently finished a two-year continued teacher education program designed by the state of Paraná. At the time, the first author was a doctoral student who had worked 13 years of teaching experience in a private institution, two years in public schools, and one year as a teacher educator in a public university. All participants provided written consent to be part of this study and agreed to the use of their real names. All participants contributed to the research design; and those who appeared in a particular study were invited to read and position themselves with respect the analysis provided. Without exception, the participants agreed that the contents of the papers reflected their experiences.

Data Sources

We recorded all forms of engagement in teaching-learning tasks on the part of the cohort. Coteaching, cogenerative sessions, talks in seminars and individual supervision were video-recorded and fully transcribed. The new teachers' written assignments were assembled into portfolios that entered the database. The database now consists of more than 8,000 pages of written transcripts. For this paper, exemplify what we learned during this study with materials from the 1,000 pages in which Aline appeared or that she had produced (e.g., assignments). We particularly focus on 15 selected episodes to characterize and theorize the students' participation within the teacher education program.

Data Analysis

We began our analysis by reading through the transcriptions to identify important themes in the data sources. Work began on this paper after feeling struck by the interactions between Aline and her audience during a public presentation, where she proudly articulated her membership in the program by saying that she is a *Pibidiana*. We then examined the entire database to identify everything that could be used to describe Aline's professional growth. Episodes of all the activities and tasks carried out during her two-year of experience in the project were selected. These episodes were then described

to obtain a sense of what was happening in each situation. Noticing that Aline's changes were all regarding relations, we then selected episodes in which she related to her coteachers, students and school staff. We draw on the ideas of Vygotskij and Dewey concerning "education" and the role of experience generally and the societal relations particularly. We came to this study with different perspectives in at least two respects. The first author was the participant teacher-researcher and also Aline's supervisor. Hers is an emic perspective. The second author, who was not directly involved in the program or data collection, brought an outside, or etic perspective to the data.

Becoming a Teacher Through Participating in Societal Relations

This study was designed to understand teacher development in a praxis-based program, where new teachers coteach with others and debrief in cogenerative dialogue sessions. We exemplify the changes with data from Aline's trajectory within the teacher education program and draw on cultural-historical oriented theories that focus on experience (pereživanie) as the locus of development (Bakhtin, 1993; Dewey, 1938/2008; Leont'ev, 1983; Vygotskij, 1935/1994). These theories emphasize that we become experienced through experience generally and in terms of continuously evolving societal relations specifically. The forms of development we observed, here exemplified in the changing relations that Aline contributed to constituting and was constituted by, occurred over a two-year period of participating in the teacher education program based on the {coteaching | cogenerative dialoguing} model. The relations we studied were those with coteachers (new teachers, supervisor and school teacher), with the students, and with the school. We describe the changing relations with her coteachers through the change of roles in coteaching and collaborative practices and the ways in which Aline oriented herself in these relations. We also describe changes in the relations with her students, which are mediated by the institutionally instituted division of labor that distinguished "students" from "teachers" even though careful analyses show that teachers learn while teaching and students assist teachers in learning (Roth & Radford, 2010). We understand the relations themselves as embodying "inner forces" that transform them. In the following two sections, we exhibit Aline's development across the two years of her program.

Societal Relations During the First Year in the Program

As intimated above, during the first year of the program, Aline's attitude towards and forms of engagement in societal relations were negative (resistance) and often expressed cynicism, ridicule, and blaming of others. In this section, we provide a description of Aline's part in relation to others not only because this is the starting point of the development we observed but also because the positive changes are the result of her early engagement marked by the same negative tonality. That is, in a dialectical inversion, negativity gave rise to a very positive orientation to teaching generally and to the societal relations with others specifically.

[&]quot;I don't like semantic mapping" Because "I can do it in my head"

During the first year of participation in the program, the societal relations involving Aline were recorded (in the teacher education relevant evaluation) as a "normal" for many student teachers more concerned with getting a certificate than with truly learning. It was as if she were "going through the motions" without a noticeable enthusiasm or expressions that teaching was a calling. She attended the morning meetings at school and did what she was asked to. She was quiet in the beginning. Occasionally she contributed to the discussions. She taught all the classes she was supposed to and was able to maintain the teaching schedule and tasks up to date. However, when she did contribute to the discussions, it tended to be in a negative way: making fun of something that was discussed or blaming the local staff for the inefficiency of the public school system as a whole. Nevertheless, what she produced would have earned her a "good student" had traditional evaluations been used. Her contributions to the relations with others might best be described as "passive," "peripheral," or "distant," since she did not actively contribute by raising issues, problems, or questions.

When she did engage in the discussions, she would exhibit resistance. Episode 1, in which the group has a discussion about reading strategies, characterizes Aline's participating in such meetings during the first year. The university supervisor (Author1) had just pointed out – in one of the cogenerative dialogue sessions – that the group's procedures for making students read in English classes may not have been effective and the group of four coteachers (including Author1) should perhaps rethink their approach and try to brainstorm different ways of teaching reading. The alternative focuses on the learning needs of students by taking a visual approach (turn 01).

Episode 1

- 01 Mi: Right. And you construct the story by the visual, you know, so you can reach those students who have, eh, a visual learning, right, to get another learning style. Can you imagine yourselves doing it?
- 02 ((Several new teachers shake their heads as if they were saying "No.")
- 03 Mi: No? Guys, why? Why Aline?
- → 04 A: Because I don't like it
 - 05 Mi: But why you don't like it?
- \rightarrow 06 A: It is better if I do it in my mind.
 - 07 Mi: Oh yeah, but for you as a reader, and for the students?
 - 08 A: I think it would be, I don't know, weird.
 - 09 Mi: Why?
 - 10 A: I don't know
 - 11 Mi: But why the prejudice against it?
- → 12 A: Because I have never done it.
 - 13 Mi: But that is the idea, let's break the barriers, let's do what we have never done before.

When there is evidence of resistance in the group – Author1 says "No? Guys, why? (turn 02) – Author1 addresses the group generally and then asks Aline specifically (turn 02). In respond to the query, Aline says that she doesn't like it (turn 03). Asked for a reason, she suggests that it is better to do it in her mind (turn 06). By being questioned why, Aline explains it due the fact she has never done it before (turn 12).

In this episode, we observe a relation playing out between Aline and her supervisor. We may characterize what unfolds before our eyes as inviting to change the approach to teaching and resisting to or even declining the invitation. At the same time, there is also an expression of resistance with respect to the teacher–student relations in the classroom, as Aline is unwilling to consider alternative strategies that would work better in teaching reading. Because she "can do it in her mind," in this case the reading strategies, she does consider it as an approach to engage in the curriculum whatever her reasons. In fact, when she says "it's better if I do it in my mind" she expresses a characteristic of her own learning strategies to her teaching practice. But in this episode she does not particularly consider the learning needs of the students in the class that the group is teaching. She is favorably inclined to teaching in the way she learns.

At this point in their collective work, the relations enacted with the supervisor and the anticipated relations with the students exhibit little commitment. From an activity theoretic perspective, the form of relation we observe does not just express personality but anticipates the development of personality. The inner, dialectical contradiction at work is that any development in a more positive direction – relations with others, commitment – has to develop out of the very relations that are characterized by resistance and non-commitment. Even though an activity is characterized by a negative affective tonality, only continued participation in activity can change it towards a (more) positive affective tonality (Roth & Radford, 2011). This is a point that activity theorists in the footsteps of Vygotskij have taken over from K. Marx: "A person, while transforming the world with other people, forms/shapes his mind" (Meshcheryakov, 1974, p. 15). As a result, the shaping of self occurs in and through participation in collective transformation of the world. However difficult it might be for others in the relation when there is resistance, it is only through continued relation that change may occur.

Making Fun of Others

The same attitude of resistance and non-commitment characterized the way Aline interacted with her peers, the other new teachers. The following episode shows her reaction when the supervisor announced that two novice teachers would join the group and exemplify her reaction to the relations with coteachers.

- 01 Mi: I am going to select today two more novice teachers to join us.
- 02 Ta: Ah, no, don't do that.
- 03 A: Yea, don't do that, we stay by ourselves.
- 04 Ta: We can stay by ourselves; there is no problem at all.
- 05 A: We don't care
- 06 Ta: We really don't care!
- 07 Mi: Why, guys?
- 08 A: We were thinking this is great.
- 09 T: No, not really.
- 10 Mi: Collaborative work?
- 11 A: We had to collaborate the whole year with these people here (laughs).
- 12 T: Yea, because we collaborate the whole year and they will come here lost, they will get there lost and they will just disturb.
- 13 Mi: You are going to be the experienced partner, have you ever thought about it? Think about!

By making fun of the topics of discussions, either related to the school practices, theoretical frameworks, suggested practices or the coteachers, she also demonstrated: (a)

the relation with coteachers was not important for her because "she *had* to collaborate the whole year with the people here" and she used to feel a little frustrated by having to teach and discuss possibilities with others; and (b) her failure to believe and lack of trust in the success of efforts intended to improve the teaching of English in public schools

Feeling "unwanted"

During the first year, Aline's relations with the school were also very tense. In part, this was so because Aline was very frustrated by the lack of recognition she received in the school. Her relation with the school staff shows that she always felt "unwanted," as she demonstrates in one of the discussions in which the cohort planned innovative practices. Of course one has to recognize that historically, the relationship between school and university has been one of the most contradictory of the educational system, especially the praxis—theory gap; and Aline feels caught in this contradiction. At the beginning, school staff used to make clear they that were tired of receiving student teachers, who treated schools like a panopticum for learning *about* teaching (Foucault, 1975). Aline used to express this feeling when she repeatedly said "the school does not want us here." She also quoted widely known Brazilian teachers, who critically talked about school-university relations, to prove her point that the entire group was unwanted at the school.

01 A: But you know what I think it is funny? They say it like that: "Wow, you are here just to disturb our life." It is the same what XX was talking about the other day, the school does not want us here!

At this point, therefore, Aline was not committed to the school, a relation with a particular emotional quality that does not lead to optimal engagement. The negative attitude she expressed is but a particular kind of reflection of this relation in her consciousness. She felt having little or no room to maneuver in this context and, thereby, little to no room for expanding her power to act. From a cultural-historical and critical psychological perspective, such a situation inhibits expansive learning that leads to greater control over conditions and to greater levels of agency (Holzkamp, 1993). From such a perspective – in which *context* and *agency* are key constructs for transformation – Aline did not see self-*transformation* as a possibility; and she did not consider herself as an agent of change to recreate and transform their own context and the social structures associated to it.

Irony

It is so beautiful, thinking so positive and so on, but, come on, let's be honest. You are teaching that language to him but he is not going to use it anywhere. All of this is a waste of time. (Aline)

The same attitudes of resistance and lack of commitment existed in Aline's relations to her peers. When discussing with the group possibilities to act, Aline exhibited resistance and her understanding that participation in the program and the relation to others were leading to *transformation* and *innovation*. The opening quotation clearly states a relation to the students that undermine them. Her relations show that she does not see herself as one of the responsible for transformation to occur and does not consider that students and teacher are all responsible for the outcomes (Stith & Roth, 2010). That is, by this time, Aline was participating in the program by its *exchange value* (finishing her mandatory teaching practicum period and get a teaching certification) and not for the *use value* (innovating and improving the teaching of English in public schools) (Williams, 2011).

Overall, Aline's relations during her first year of participation in the program were characterized by a negative orientation towards the objective of the program, lack of motivation and sense of no room to maneuver. Thus, on the one hand, we had this form of participation and relation that seems not implicated and not engaged at all in the activity. On the other hand, by the very end of this year, Aline's relation showed signs of development, as shown in the next subsection.

Completion of an Important Phase

Finishing this school year I have the impression of having completed an important phase that will guide me to be the teacher that I would like to be. During the whole year I could be present at and go through the most different situations, however, all the time I had the support not only of the other colleagues, the novice teachers, but also of the supervisor and the schoolteacher. Having the necessary support in the crisis or in the victory moment made all the difference for me. (Aline)

In the preceding subsections, we see that the relations involving Aline were strained to say the least. But to have any hope for change in the relations, she has to continue – rather than dropping out as she did before. She has to continue because the relations are where change, learning, and development originate (Vygotskij, 2005) even though these may be strained to the point of being "counter-productive." Despite the relations we observed, Aline completed the year on a positive note. Aline represents her experience as participating in the project as finished (completed an important phase) with projections to her future (it will guide her to the teacher she would like to be). At this point she is not yet according to her ideal teacher self. However, the way she talks about her participation is relevant regarding the relations with the others: she uses the verbs to be present at (and not to participate) and to go through to talk about her participation revealing that she does not consider herself, yet, as an active participant of the group. But she also surprises talking about *support*. Now, Aline seems to place great emphasis on the support provided by her coteachers because having this support is what "made the difference." This is relevant because it means that Aline appeared to recognize and accept the input of others and that she was not rejecting what others have to offer, in the way she did during much

of the initial year. Her acknowledgment that others may also contribute to, shape, and legitimize the roles of the others (new teachers, the school teacher, the supervisor, and the school staff) represents a change in Aline's relation within the project.

Societal Relations During the Second Year

By participating in the tasks as part of the teaching education program (such as coteaching, cogenerative dialogues, Pedagogical Week, student evaluation boards) the way Aline relates to others and her personality is being changed. In the following section we show Aline's developments not only how she becomes conscious of the importance of her relation to the others. Moreover, by participating in the activities proposed allowed her to change relations to the students, to her coteachers, her supervisor and the school. That is, in and through the experience of participating, Aline changes and becomes transformed. We show that by the very fact of participating in the activity she engages and minimizes frustration and produces positive attitudes towards teaching and the others. Despite her negativity in the first year, a very positive orientation to teaching generally and to the societal relations with others specifically has arisen.

Recognition in the School: "the practices that we have been doing for two years allowed us to have these successful results"

By the second year of the program, Aline's participation started to transform as the relations in which she was a part were changing the activity and the activities themselves were changing the relations. She became more deeply engaged and exhibited motivation, a wish to take control, and a strong belief that she was also able and responsible for transformation and innovation. In the process, she was noticing changes and with it emerged new forms of participating in the activities that demonstrated successful results. Therefore, Aline's participation in what the teacher education program demanded encouraged the development of new forms of relation that have allowed her not only to be successful in the school but also to become aware of this development. In one of the individual meetings with the supervisor, for example, Aline exemplifies changes in the school-university relationship through the school principal's move to come to talk to the group and recognize their work.

He came out of his position, as a principal, and went there to talk to us, to say like this, look, congratulations, the work has been ah, demonstration, recognition of our practices. I think that I have changed too, that it has been provided by the fact of being collaborating, I don't know if you remember, but by the end of the year I wanted to talk about the negative side, the woman that got me frustrated, how they did not facilitate. But our path at school has shown that this barrier is falling down in a way that if today I had to talk about these demonstrations I would only have positive things [to say]. (Aline)

As a result, the relations with the school changed from tenseness and negativity to one marked by recognition and valorization. We could see a development in Aline. She express belief in the possibility of transformation of schooling through practices – the same practices that also allowed her to change. This recognition is relevant for her participation because she felt she was treated as a legitimate participant in the educational

system. Her lexical choices of inclusion – "us," "we" – demonstrate how implicated and engaged she was becoming by this point. That is, although negativity and resistance marked her participation in relations initially, it is in and from the participation in these relations that the transformation emerged. As Dewey (1938/2008b) suggested, "there is nothing in the nature of emotion to prevent the development of intense emotional allegiance to the method" (p. 54). Consistent with cultural-historical activity theory, even experiences characterized by negative affective tonality are contexts from which subsequent experiences emerge that are characterized by positive emotion and vice versa (e.g., Holzkamp, 1993; Roth & Radford, 2011). It is not surprising, therefore, that researchers are beginning to emphasize the role of emotions in shaping work generally (Roth, 2007) and teaching and teacher education specifically (e.g., Ritchie et al., 2013), while being themselves shaped in work and teaching.

We noticed the same kind of development through the participation in the tasks when she was frustrated. Talking about her frustration in the cogenerative dialogue sessions, Aline reports that the coordinator has not given her a voice and credit to talk on a specific topic, but Alice, the regular teacher, provided her with opportunities to engage in the discussion:

- 01 A: She asked like that: "Alice. Uh? You can talk."
- 02 Ma: Yea, no, she didn't used to ask any moment for Alice and she looked at us.
- 03 A: Yea, then-
- 04 Ma: Because it was like that, if we wanted to talk.
- 05 A: With us was totally different. Then Alice used to say "no, but is that the girls," like that, "*The girls* know," "Speak Aline." There was a time when she said it three times, right: "Say Aline, about Andressa, the one who cries."
- 06 Mi: And have you said it?
- 07 A: I started to and the coordinator changed the subject. She said like that "No, but this one I know, I've already know about it."

By this time, we notice the development in the relation, a development that is the result of their collective experience of working together. By giving her space to talk, Alice relates to Aline in a way that places her in the role of "the one who knows." Aline is in the process of continued becoming: beginning as some who is at the school temporarily to someone who is an integral part of the school and know students' histories. If personality is understood in terms of changing participation in changing social praxis (Leont'ev, 1983), this moment reveals itself as in important episode for Aline's personality because the very fact that she is participating in this social praxis and altering the relations before existent between the participants (new teachers are usually not allowed in these meetings and her participations already changes it), and at the same time, she is changing her own participation from being someone who is there temporarily to a teacher who knows the student's histories and therefore, has knowledgeability to talk about him/her.

We Come Together and We Try to Make this Movement Between Theory and Practice

In the course of the second year, we observed an increasing transformation. Aline began to express herself publicly, and, in so doing, sustains and constitutes further transformation. For example, when Aline talked in front of others during mini—conferences, she not only exhibited empowerment but also increased her sense of empowerment by her engagement in the activity. Thus, in one presentation, the audience challenged her by saying that successful practices in public schools were impossible, especially in the teaching practicum. But Aline, who had begun to situate herself as defender of transformative practices, suggested that change is possible if the ones involved are willing to reframe their roles for achieving the common good. The following excerpt from her response exhibits her conviction in the possibility of success through collaboration. This also allows this new teacher to identify with the profession.

O2 A: So, the novice teacher does not know what to do because she is still in training; the supervisor teacher does not know what to do because she does not have experience in public school; and the schoolteacher who is there more than twenty years also does not know. So what do we do? Nobody does anything? No, we come together and we try to make this movement between theory and practice. We study. We prepare classes together according to the students' context. And we try to reframe our roles and make the learning meaningful for the students so they can see it as relevant, so they do not see the novice teacher as a person who comes to the school to teach the [regular] schoolteacher how to [teach] or use the students as a research object [to learn how to teach]. So: neither one nor another. It is the reframing of roles to the reframing of learning and knowledge. I think this is so relevant.

In this excerpt, Aline clearly stresses that by participating for longer periods in the school through coteaching and the collaboration between coteachers are the reasons that provided not only successful practices for teaching in public schools but also opened developmental opportunities for the new teacher, who was no longer perceived as either telling/showing the regular teachers how to teach or used the school students in an objectified way to try out new teaching techniques. By being aware of the reframing of the roles of the participants, Aline was able to reframe her own role at schools not as someone "who uses the student as a research object" but someone who was responsible for the students' learning. The way she reported her relations in the episode below with the other coteachers shows that this is a relation of support and collaboration that allowed the cohort to have successful results by focusing on students' needs that are specific to their context:

O1 A: The amount of time we spent at school was bigger, but I believe that are the practices that we have, though collaboration, that we have been doing for two years, like listening to student's voice, focus on the situated learning, paying attention to the context, involving the school teacher and the teacher educator in planning and in coteaching as much as possible that allowed us to have this result . . . that allowed us to have these successful practices, to see students' learning and people wanting to be teachers . . . and this can be done as part of the *normal* practicum.

Salient in this quotation is Aline's recognition of the collective responsibility for student learning that new teachers can enact when they participate in truly collective practices where all stakeholders assume their roles in the process. Here, this was a relation of support and collaboration that allowed the cohort as a whole to obtain successful results by listening to their students' voices, focusing on situated learning, paying attention to the context, and making the learning meaningful for the students. Her talk makes salient her commitment and her part in societal relations that are important dimensions of her experience of becoming a teacher. That is, she is recognized as a legitimate participant in teaching, and she further develops as a teacher through her teaching and in relation with others (coteachers, students). It is in and through her actions that the field was transformed and that her own capacity for enunciation was changing, an indicator for the process of subjectification (Rancière, 1995).

At the time, Aline also suggests that recognizing teachers' different competencies may be the key to improve teaching and trying to innovate in public schools. Participating in coteaching provided Aline with an experience of positive identification with the context and a perspective that accounts for transformation through collaboration. That is, in participation, she came to transform the participation, which allowed her to reframe the relations with others. This brought about a change in the activity; this, in turn, changed the roles of participants. That is, by changing the relations with the other teachers – from being "supervised" or "advised" by the teacher educator and the regular schoolteacher to symmetrical relation where everyone was responsible for student learning – Aline changed as a person. She now felt to be an integral part of the teaching activity. She now recognized that new teachers could be fully responsible for student learning if they participate in practices that all the stakeholders assume their role in this process. The changing in the relations between teachers was an action that encouraged Aline to attend to others in a responsible and committed way. Aline exhibited power to act: she does not merely accept the conditions but, through active participation, expands control over conditions by actively seeking transformation. In the critical culturalhistorical perspective that underpins our study, this is important because transformation occurs in the dialectic between the transformation of the purpose of our activities and the creation of the necessary conditions for our development (Holzkamp, 1993).

"Because we have had so nice relationships, they have realized that since the beginning this was what we wanted, we wanted to know them"

Aline's concerns for student learning and wellbeing also became an important part of her developing teacher subjectivity. When joining the student evaluation board the forum for schoolteachers of different subject matters to discuss specific students – for the first time, Aline clearly demonstrated frustration while discussing the experience in the cogenerative dialogue session. She said at the time that it was not what she had expected to encounter since there was no talk about students who were developing. There was also a lack of opportunities for hearing the teachers' voice and when they did, they talked about students in an inappropriate manner. Aline, who initially did not believe in her students' potential for growth (see Section 4.1.3) began to show concern, engagement, and responsibility for the students in her care. While coteaching and while becoming a legitimate participant in the classroom, Aline changed her conception of the ways in which students are represented in the Board meetings. But the very fact of participating in those meetings allows her to change: she engages, which provides her with opportunities for reflexive awareness and knowledge on how to meet student needs.

By this point, Aline's professional growth becomes to be strongly associated to her teaching practices and the relations shaped by it. By using a new evaluation tool designed by the group (portfolio) and expanding it (associated with self-assessment), she reports that she learned how to listen to the students' voice, and, as she came to understand them better and grew as a teacher.

A: It has become a tool of communication between students and teachers. I would say more: students started to realize that teachers really cared about them, about what they are going through, about what they have learned, about what they needed. What they used to say, their reflection did not get lost in the process. They were taken into account and were used to change attitudes, beliefs, and practices of their teachers in the classes. I am sure that I can say that it made me grow as a person, as a teacher and that mainly, it allowed the students the movement to look at themselves and their attitudes.

Her relations to the students by this point become central and she started "to listen to the students." This also describes changes in the way Aline used to position herself relating to students that differs from the episodes described in the beginning when she refused to think about how to better meet student needs. Here, her development could be noticed not only because she listens to students, but also because she creates and expands herself the procedures designed by the group that already aimed at placing students as the center of the learning. Rather than being someone "who can do it in her head," she transformed into to a teacher who changes teaching to enhance student learning. This means that Aline is able to place herself in a learner's position recognizing that she is learning to teach at the same time while providing students with opportunities to learn the subject matter (e.g., Roth & Radford, 2010). There was a dialectical process of subjectification at work: teaching means learning for the student and the teacher alike. Acting as a teacher not only transforms the field but also the actions themselves.

For Aline, the procedures developed by the coteacher group as an attempt to know and listen to the students were "fantastic." Aline describes as being "fantastic" some dynamics used in the first year of cotaught lessons in which activities were designed to get to know the students (their attitudes, content knowledge, or ways to situating themselves in the classroom). It clearly shows how much the students matter to her and how their relations were becoming engaged and committed.

- A: But it is because of it, if you think how fantastic what we have been done here, this thing of, this thing of the two and three first classes in which you apply a, a dynamic, as we have done of the balloon, remember? Wow, with that game of the balloon, we were able to know about the knowledge they had, who used to talk or who didn't talk, who was shy, and so on.
- A: You know, all this reflection that we don't do and that the questionnaire provided us with, then you have said something that maybe is worth to think about our classes instead of spending a long time preparing three, four, five extra exercises, in order to have no time left and you get nervous. Because you don't know, maybe if you organize that environment for knowing, you know, I think that maybe because of that we have had so nice relationships, at least we did, with my group, with the students, they have realized that since the beginning this was what we wanted, we wanted to know them.

The procedures developed by the group as an attempt to know and listen to the students were "fantastic," and these led to the good relations with the students due the fact that "since the beginning, they realized that it was what we wanted, we wanted to know them." It is clear that these relations developed through the process of engaging, caring, and participating and as a result of her "willingness to tune [herself] to others, to commit to a common cause, and to engage in a manner that is other-oriented" (Roth & Radford, 2010, p. 305). The experience of taking students into consideration provides the context of development as a teacher who cares for her students and therefore is willing to consider new ways of relating to them. It was in this changing field that good relationship with her students began to develop, allowing students, in turn, to realize that "we wanted to know them" to be able to meet their needs. Through her engagement Aline began to develop "so nice relationships" with her students, she developed a caring relationship, and came to better understand the larger school context. She exhibited willingness to "tune herself to others, to commit to a common cause and to engaged in manners that is other-oriented" (Roth & Radford, 2010, p. 300).

"Individual practices might not be sufficient in an educational environment as complex as our schools"

The transformations we observe and attribute to Aline are really changes in relations; such changes are not fully attributable to her because relations are irreducible social facts (Durkheim, 1919). Writing on her relations with coteachers in her teaching research, she reports being able to understand what it means to "learn from the other." She insists on the fact that by relating to others one may achieve more than working on one's own. Thus, in the course of her program, the quality of her relations change from one reflected in the attitude "I do not need them" to one that recognizes that she could learn with/from others. Even though resistance characterized her participation, Aline realized, in a dialectical reversal, the potential of working together to achieve goals in the complex system of public schools. Aline began to feel comfortable with the contributions of her coteachers: Thus, while presenting ideas for developing an activity in which students are supposed to write in English, Aline ascribed to Alice a curricular idea.

- One idea that Alice gave me after we have discussed it is that in the classroom they write their comment, hand it to us and at home they go to the site and post it.
- Ah, you also could use a print screen, Ana responded, it is an alternative if you do not have access to the Internet.
- Yea, Aline said, it is also an alternative. But with the questionnaire that we have applied in the beginning we could see that they all have access to it, but if you do not have, it is an alternative.

In this episode, Aline's relation to the regular schoolteacher Alice is one of trust. As Alice exhibited recognition of Aline's knowledgeability by giving her space to talk in teachers meeting (Section 4.2.2), Aline increasingly exhibited knowledgeability. She increased her contributions to the planning sessions and exhibited willingness to accept alternative ways of teaching, here by accepting Ana's proposal. In contrast to her first year, Aline opens up to the contributions others make. This way of relating to other teachers is important from the perspective of the zone of proximal development, where asymmetries are possible because of the existing inter-comprehension of interacting participants who become each other's teachers and students independent of their institutional positions (Roth & Radford, 2010). Thus, far from exhibiting an asymmetry,

the zone of proximal development is an interactional achievement that allows all participants to become teachers and learners simultaneously.

By that time, Aline was comfortable with the contribution of her peers (e.g., Ana, another new teacher, in turn 02) or Alice. Here, she presented her ideas for developing an activity in which students were supposed to write in English and positioned themselves towards the topic poverty.

- O1 A: Yea, they would do it with our help, they would write, they could use the dictionary and everything . . . one idea that Alice gave me after we have discussed it is that in the classroom they write their comment, hand it to us and at home they go to the site and post it.
- → 02 An: Ah, you also could use a print screen, they write there and them they don't need to surf in the internet at home, then, you, Estefanie, Alice, and Author1, divide and post it home, then go there and see it later. It is an alternative if you do not have access to the Internet.
 - O3 A: Yea, it is also an alternative, but with the questionnaire that we have applied in the beginning we could see that they all have access to it, but if you do not have, it is an alternative.

The same happened with the relation to the supervisor. Different forms of interaction characterize the debriefing meetings with Author1.

- 01 Mi: At the time you asked, for example, Racism, which is the image that represents it, he has to mark it, we find it on the net.
- O2 A: Ah, like that, with pictures, like the way you did, in your plan? Wow, they loved that activity. And they were indignant: "But how come I did not see it?" and so on and so on. It was very cool! We could work with that, right? This issue of, of comprehension of the text.

This episode exhibits how Aline and Author1 related during the latter part of the practicum; and this form of relation was the result of previous relations and experiences even though these were marked by more negative affect. Over the course of the two years, therefore, the relations between Aline and the school were contradictory and dialectical: While being a new teacher in a teacher education course, she also had 10 years prior experience. She entered the teacher education program thinking she would be "teaching the schoolteachers." But in and through relations with others – students, supervisor and schoolteachers as coteachers – the relations themselves changed. These changing relations manifest themselves as learning: She became experienced in and through experiencing teaching alongside others. The changing participation allowed Aline to change her understanding of roles: She began to see her university supervisor as someone she could learn from and teach too. Aline began to acknowledge what had been done in the classroom as a move that improved learning opportunities.

Discussion and Conclusion

This study situates itself in an international movement of situating teacher education in the praxis of teaching (e.g., Alhija & Fresko, 2010; Korthagen et al., 2006). Over the course of a two-year period, we documented a teacher education program based on the {coteaching | cogenerative dialoguing} model, which provides opportunities for learning to teach by coteaching and for learning about teaching through cogenerative dialogues about joint teaching experiences. We exemplify our results with materials from one new teacher, Aline. Following Aline's trajectory over the course of the two years, we observe development – a process of subjectification – as the result of a dialectical process. Although the negativity and resistance that marked her initial participation in the teacher education program and school teaching, this participation is the locus where the changes occurred. That is, despite negative and often strained relations, these very relations were the genetic origin for the changes we observe. That is, just as Vygotskij and Dewey anticipated, the genetic origin for development – knowledge, personality – is in the relation with the environment general and the societal relations that a person engages particularly. The condition for development is participation in the praxis of real, physical relations. Had Aline dropped out, as she had done twice before, or not engaged in those relations, we would have observed something else. But participation in the practicum, despite its rocky beginnings, eventually turned into identification with it to the point that she called herself a *Pibidiana*. Because of the *continuity of experiences* (Dewey, 1938/2008b), the rocky beginnings provided, paraphrasing Dewey, the experience that Aline enacted and underwent, and, in so doing, modified her such as to affect the quality of her subsequent experiences. Along the trajectory of this continuity of experiences, she expanded from what she felt as having little or no room to maneuver to experiencing a field that promoted expansive learning (Holzkamp, 1993). By relating to others and changing these relations, Aline was becoming a teacher. In a way, this study contradicts the commonsense of a self-fulfilling prophecy; and it contradicts linear models of teacher emotion as causes of stress, self-doubt, or successful classroom rituals (e.g., Ritchie et al., 2011). In the same way that frustration and other forms of negative affect can turn over into elation and positive affect in mathematics learning (Roth & Radford, 2011), negative affect, beliefs, and attitudes in teacher education can turn over into their opposites. Rather than outside forces, the change comes in and through participation generally and in and through relations with others. On the other hand, this study corroborates with the need to acknowledge the role of the societal relations new teachers entertain with others during practical training because teachers find themselves in a multitude of social-professional relationships which can be an essential source of recognition (Rots et al., 2012). In this sense, this study is in line with principles developed by the literature (Korthagen et al., 2006) on the field in which learning from experience is critical (e.g. during coteaching) and reflecting on such experience is essential (e.g. during co-generative dialogues). Because learning about teaching involves continuously conflicting and competing demands, teacher preparation needs to focus on how to learn from experience and on how to build professional knowledge (Korthagen et al., 2006).

Aline's trajectory exhibits the importance of creating contexts for constructing relations in teacher education programs: While Aline was teaching English and learning and while she was learning to teach in this context, she was also developing and accepting new forms of societal relations – a form of social capital – in which she was learning how to situate herself at school in new and productive ways (e.g. enhancing

students learning, constructing solid relations to other teachers, questioning societal practices). Whereas her initial contributions and ways of being may have been difficult, the persistence of all others in the relations, despite the difficult nature, "paid off" in the sense that it contributed to the change we observed. We do not understand such contributions as causal factors but as part of the conditions of the activity as a whole that supports actions to be transformative even if these are associated with negative attitudes, beliefs, and affect.

Recognizing that the relations are where change, learning, and development have their genetic origin (Vygotskij, 2005), several implications for teaching education programs are to be considered. First, our study may be understood as challenging the ways in which motivation is commonly understood in teacher education programs: Rather than requiring external motivation, the very participation in the activity of coteaching produces change. This has also been observed in other contexts, where, although beginning teachers with the option to teach one of their three assigned course alone or with someone else initially went with the first option, they changed to the second one (i.e., coteaching) within a few lessons of teaching with someone else (Tobin & Roth, 2006). Second, however difficult it might be initially to deal with others when there is resistance, it is only continued relation with others that change may occur. Finally, teaching with others over an extended period of time fosters changes in the relations with others. In our context, coteaching and cogenerative dialogues appeared to have been crucial aspects of a context that allowed transformation to occur and to be constitutive of the process of becoming a teacher (i.e., subjectification).

In this study, {coteaching | cogenerative dialoguing} was the context for the societal relations and experiences of individuals enrolled in a teacher certification program. The theoretical approaches on which this study is based – those that recognize experience to exist in the mutual interdependence of the agential subject and its environment (Dewey & Bentley, 1949/1999; Leont'ev, 1983; Vygotskij, 1935/1994) – do not allow for an attribution of cause and effects. Even if they did, the nature of this study would have been inappropriate for establishing cause–effect relationships between the {coteaching | cogenerative dialoguing} environment and the development of the new teachers. But we did observe that this form of experience not only led to transformations of the new teachers but also of other participants (Alice, Author1), the school curriculum, the teacher education program, and the school-university partnership. Most importantly, similar to what has been reported from other contexts and nations (e.g., Murphy, Carlisle, & Beggs, 2009; Roth & Tobin, 2005; Scantlebury, Gallo-Fox, & Wassell, 2008), the new teachers gained experience in and through experience, mitigating the often-reported gap between theory and practice.

This study contributes to the literature by providing a non-linear theory between environmental and individual conditions – i.e., *experience* [*perešivanie*] in the sense of Dewey and Vygotskij – and becoming an experienced practitioner. That is, even though there may be negative affect and resistance during early experiences, these experiences themselves transform environment and individual and, thereby, provide opportunities for new forms of experience. That is, the forces for transformation do not have to exist outside of the system, as some recommend (e.g., Fresko & Alhija, 2009), but praxis transforms itself – when appropriately supported. In this study, we highlight in particular the societal relations – which, for Vygotskij and Dewey, constitute the most important form and realization of experience. In this approach, knowing to teach is indistinguishable from being an experienced teacher; and one becomes an experienced

teacher in and through teaching experience. Knowing and experience no longer are something different, the former no longer is an abstraction from the latter. Rather, knowing and being experienced are but two ways of expressing the same. In this study, the practical and intellectual is integrally related with the affective (emotional). Thus, even though one could see frustration, resistance, and different forms of negative affect in the relations between Aline and her social environment, the negatively tinged experiences constituted the very context for the emergence of subsequent experiences tinged with positive affect. Similarly, what psychologists might describe as a lack of motivation turned into focused engagement and positive motivation. It takes dialectical theories to explain the self-transformation of experience in and through experience and therefore, to understand the process by which teachers develop professionally and the conditions that support and promote that growth. Thus, even if and precisely because a specific induction approach to teacher education is marked by inner contradictions, self-transformation is going to occur – though the direction of this self-development might not be desirable (Dewey, 1938/2008b). This study suggests that analyzing societal relations in teacher education programs might be the key to understand how one develops its personality (persona) and becomes a teacher in contexts that favor these interactions.

An important implication of this study would be that those existing teacher education programs have to be interrogated that institutionalize the theory-practice in their ways of enacting teacher education. The theoretical perspectives informing the present study would predict that participants in programs with an emphasis on taking university-based courses become experienced course- and exam-takers. However, the same frameworks predict that we should not expect participants to become experienced teachers. To become an experience teacher requires real teaching as an environment, or to develop affect (e.g., attitudes, emotions, motivations) conducive to and relevant in effective teaching practice. This is so because "an experience has a unity" and "this unity is constituted by a single *quality* that pervades the entire experience in spite of the variation of its constituent parts" (Dewey, 1934/2008a, 44). Moreover, adding the different parts – i.e., the emotional, practical, and intellectual – does not lead to the whole. That is, Dewey would not agree with a teacher education program that makes teachers acquire intellectual experience in one part and practical experience in another part. This study describes a way of thinking about teacher education that is consistent with such a conception.

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Acknowledgments

This research was supported by a grant from the CAPES Foundation, Ministry of Education of Brazil (5726/11-5). Our thanks go to CAPES; to Aline Belan (who allowed us to tell her story, has read the article and agreed with its content in all of its parts); to Griffith University, Mt Gravatt, Australia (where we wrote this paper); and to Elaine Mateus (who offered suggestions in a preliminary phase of this study).