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# Constitution of Teaching Reflexivity: Evidence of Collective Professional Development

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#### **Abstract**

Reflexive teaching is built by critical teachers who analyze their theories and practices while they dedicate to the whole of their actions, reflecting with their peers over their teaching and the social conditions in which their experiences are inserted, always in a collective manner. I believe that reflexivity is built, necessarily, by discussions that seek to found with theory the daily decision-making towards an increasingly more intentional and less naïve action. In a public municipal school in the city of Campinas, Brazil, we carried out a formative-investigative project between the years of 2003 and 2008. We sought, in the formative project, to promote the teachers' professional development in the collective quest for overcoming the daily dilemmas through reflexivity, as well as in the shared construction of the school's pedagogical project aimed at improving the teaching and learning process. In the investigative project, we sought to understand the teachers' reflexivity process by means of a critical analysis on the levels of reflexive logic in the collective quest for overcoming daily dilemmas and shared construction of the school's political-pedagogical project. We opted to perform four data production procedures: Semi-structured interviews and recurrent interviews; written production analysis; and transcription of audio recordings of the meetings. Using the Indiciary Paradigm, in short, we seek to show with this formative-investigative project that the reflexivity process can be potentialized by certain strategies: not any one, not for any group of teachers, but those that are adequate and adjusted.

#### Introduction

Between October 2006 and October 2007, I participated in a post-doctoral internship at the University of Aveiro (Portugal), taking part in the "New Knowledge, New Skills, New Challenges to Educators' Training" Network, analysing the survey data that is presented here. The Thesis for my Habilitation Degree (Associated Professor) in Educational Psychology (ARAGÃO, 2010), which is based on the same survey, was concluded in October 2010, at the University of Campinas (Campinas - SP - Brazil).

I coordinated a formative-investigative project in a public school, between 2003 and 2008, which was asking some help because they did not know what to do with undisciplined students. Students physically and morally assaulting teachers, with a mocking disrespect even of the fact that they are teachers. I proposed ways to build solutions for the problem as long as it could be done collectively: the teachers of the school and I, as a university professor. Despite the agreement of the group and my available time for weekly meetings at the beginning, the faculty resisted the idea of a *collective* search for solutions: *if you are a college theoretician, why not tell us what to do?* 

The entire transformation the school underwent was not magic or luck. I started slowly, taking part in the discussions that took place during the school's collective work hours, and taking a stand when I believed the moment and situation permitted me to do so. We gradually realized that it was not possible to open space for further discussion within a school forum that had so many demands and administrative routines to be discussed. So I suggested that we create a new space for discussions that could contribute to overcoming dilemmas. This new forum became defined and won support from the school management staff: the creation of two Working Groups (1st to5th grade and 6th to 9th. grade teachers) for two hours weekly, or this 6-year period.

#### The cultural-historical theory and professional development: what Vygotsky and Schön say

Based on the contributions of the Vygotsky's concepts (1984, 1987, 1988), through the cultural-historical theory and Schön (1983, 1987, 2000), which discusses the formation of the reflective professional, we can point out that there are important convergences in the authors' work referred to in several dimensions, especially highlighting the concern with the social use of knowledge and the conviction that knowledge is a tool of transformation: the individual who knows and his actions on others and on the contexts.

Considering the main thinker of the cultural-historical approach, Vygotsky defended that no psychological theory could fail to study consciousness and was against the ideas that were accepted during his time (empiricism and innateness). He built a third approach that takes into account the subject's interaction with the social environment in which he lives. In a short period of time, he problematized a set of practices and certainties that existed in the field of psychology, discussed and elaborated counterpoints to new research conducted in other parts of the world in his time defending the idea that learning is necessarily a social activity, accomplished through the interaction between the subject and object of knowledge. Produced theories that emphasize the uniqueness of superior processes and advocating for the idea of man as a social being, which can only be understood in their time and space, from the relationship established with the environment.

His productions, originated about a century ago, are still current, to the extent that the issues presented by him are still very much part of the scenery that makes up the fields of psychology and education.

Through his work and the research later developed by his immediate followers, there is a major contribution of the author to the present, requiring the expansion and contextualization of its assumptions in order to understand the extent that the cultural-historical theory gained in recent investigations. Considering that in Brazil, much has been written and said about Vygotsky's thoughts; however, further and careful study of his original work (since only recently has his work been translated directly from Russian), we emphasize the responsibility of researchers who focus on the study of the cultural-historical theory to preserve the complexity and totality of Vygotskian's studies, in order to prevent the use of a simplified theoretical view, which is so rich and complex (OLIVEIRA, 1995).

Given these exceptions, we can say that the cultural-historical theory helps us think about many issues relating to education within a historical, critical and less dogmatic perspective (Freitas, 1994). The existing relationships within the school environment, as well as any other type of interaction between people, can only be understood in a profound manner, according to Vygotsky, when we consider that these relations are historically constructed and culturally located. Thus, the cultural-historical perspective proposes that we observe the student, the teacher and all of those who participate in the educational process as subjects inserted into a historic moment, originating from a social group, a class and a culture within which they transform and are transformed into highly dynamic interaction (*ibid.*).

Although the assumptions of Vygotsky's work relate more directly to the field of psychology, without having specific records of a finished theory on Education, there is a notable concern by the Russian psychologist on the subject: between 1922 and 1926, seven out of eight of his papers dealt directly with this issue. Certainly cultural-historical theory scholars even consider "critical pedagogy through which Vygotsky approaches psychology" (BLANK, 2003, p.37). It is important, however, to emphasize that we cannot expect direct, ready simplistic implications regarding the cultural-historical theory for teaching:

"The very idea of "application" of theory is an idea that tends to be viewed differently by the builders of theories and its users: the desire of educators to extract theories of an efficient 'how to', an essential component of the project itself teaching, it seems inappropriate for the researcher who seeks the internal consistency of its formulations, investing in its explanatory power and not in its potential to generate proposals for action. The tension between theory and practice is a constant in Education "(OLIVEIRA, 1995, p.54).

And yet according to Blank (2003), we can state that Vygotsky saw schools as the best Human Psychology lab. In his conception, educated societies, formal education appears as a *place* of learning and the acquisition of knowledge and plays an essential role in the construction of higher psychological functions. He further considers that the higher psychological processes undergo qualitative change during development and depend on the interaction with the environment and the inter-relationship between the above processes.

This means that we cannot reach a cognitive structural frame of mind and that the finished higher functions cannot invariably be determined, since the culture in which it operates is critical to the individual that it constitutes. Ultimately, we could argue that the training of the mind is social, cultural, and continuous, which reveals a number of implications of this concept to turn our gaze towards teaching and educational plan. Having made these considerations, we reaffirm our view that we are constituted in our social relations and are also individualized from them. Thus, the life stories, the senses and the singularities, which are produced and established through language, are constituted by the personal and professional teaching.

Thus, it is worth noting that the way teachers assign meaning to their practice and develop the knowledge contained in it, whether by their peers, the school's everyday situations, the materials they use, the reading, do not exist in itself same as something ready, finished. Quite the contrary, its relations with the theoretical studies and their execution is being elaborated, which mediate each other, as acceptance and/or rejection. The readings, execution, discussions that from which its planning and actions originate with the students are always relative, even if the teacher does not realize that. Emerging demands in our contemporary society often emphasize the idea of teacher training along the lines of technical rationality, in which the activity of the teacher is seen as an embodiment of knowledge that become instrumental that make them able to translate certain predetermined content intelligibly to their students. Technical rationality assumes that the teacher is a technician who has knowledge of the rules for the solution of educational issues, without necessarily producing knowledge. In this case, the teacher becomes a passive subject who has his practice based on the performance of procedures designed by other professionals.

Technical proposals view reflective training as secondary, complementary and fragmented, being offered in the form of discipline in the school curriculum, as well as other fronts of knowledge. A proposal for reflective teaching, as Schön (1983) defends, refers to reflection as a guideline for all the work that permeates school knowledge and "borders" with the technical skills and scientific knowledge. This is a proposal which considers that that the training starts with all the subjects, so that no knowledge is left behind. The reflective educational proposal advocated here points for the need for continuing education as a way of understanding the professional issues emerging from practice, promoting debates about them and contributing to the expansion of science. Assumes ownership and commitment. We speak of an inseparable relationship between scientific knowledge and everyday practice, as well as the way we appropriate and transform both through the reflexive attitude.

With this finding, we believe it is necessary to establish a counterpoint and argue in favour of another possible training concept, in which we view the teacher as a professional who enhances the processes of creation and appropriation of knowledge by students, in continuous development. The teacher produces knowledge, discusses and modifies his practice and reality through the reflection of his own action. To Alarcão (1996, p.177): "being a teacher entails knowing who I am, why I do what I do and raise awareness of the place I occupy in society." Let's conceive, as a fundamental dimension to the teaching profession, the reflective capacity of the teacher. We claim that for because we have clarity, that from the reflection we notice the reasons for our actions and beliefs, explaining the consequences of what is done. Reflection necessarily requires, the component of theoretical analysis of the object in question.

This issue shines light to the idea of reflexivity in this discussion about teacher training, because we say that a particular practice is reflective when teaching is built by critics, who analyse their theories and practices, as they pore over its action, reflecting on teaching and social conditions in which their experiences are embedded, always in a collective manner. Moreover, we believe that reflexivity necessarily consists of discussions that seek to theoretically justify daily decisions in directing an action that is much more intentional and less naive.

Thus, reflective teaching seeks to promote intentional articulation between the teacher's execution and thinking, leading him to act in accordance with his principles and theoretical systems. We can also say that this type of teaching promotes clarity of constitution between theory and practice, which are mistakenly dissociated.

Schön's work insists on revealing the need to narrow the way we perceive and conceive the relationship between theory and practice, stating that the theoretical hypotheses should be visited daily, in day-to-day events. Schools should therefore plan situations and collective practices and reflections, promoting discussions in which we learn from the interactions that are established among classmates and between them and the teacher, or in relation to the other.

The reflective professional has a different point of view when faced with a situation and sees the problem to be studied. Changes the working and research methodology: while the specialist looks at the problem and looks for its frame, the reflective practitioner looks at the thing itself and seeks to understand it as a whole.

A prominent feature of the reflective approach advocated by Schön (1983) is that learning by doing means intentionally considering professional experiences as individual sources of reflective thinking, without disregarding scientific knowledge or the theory that drives the action. The articulated processes are intelligent and intelligible.

We consider that Schön and Vygotsky are closer than distance, because in both we can see a huge concern for the social, for the interactional dimension, known as theorists deeply committed to society. Both authors are concerned with the social use of knowledge, with its purposes, and therefore, with the possibility that knowledge being used as a tool for transformation, firstly, of the person who knows; secondly, its action over others and from others over the contexts.

When Schön affirms the importance of seeking a theoretical basis in the actions performed, there is no indication of what this theory should be. If those who seek reflection do so based on behavioural or cultural-historical authors, they will always use reflection. Without doubt, many discussions will come, because the fundamental assumptions of analysis are different, but it will no longer be reflective. There is no difficulty in bringing the reflexive process that Schön proposes to Vygotsky's contributions. It is known that an object is illuminated when seen from different perspectives. And this is what allows, albeit without any guarantees of the view of the object in its immense complexity, but is closer to a less fragmented and less closed view over itself.

# The Genesis, Evolution and Transformation of the Formative-Investigative Project

The project's objectives were to promote the professional development of teachers in the collective quest to overcome everyday dilemmas from reflexivity, as well as in the shared construction of the school's pedagogical project aimed at improving the teaching and learning process. In the investigative project, we also sought out to understand the process of teaching reflexivity, through the critical analysis of reflective logic levels in collective pursuit of overcoming daily dilemmas and shared construction of the school's political-educational project.

From the beginning, we were careful to record the facts, speeches and events at the school: field reports written since 2003, audio-recordings that were agreed with members of the school community, reports of the weekly meetings, conducted by the teachers, monthly reports of activities also produced by each fellowship teacher. Later, semi-structured and recurring interviews were conducted, besides requiring that the teachers draft an annual report. This variety of devices created the possibility of using multiple sources of evidence that mutually helped to clarify certain aspects of teacher thinking. Given the nature of the inferences produced by the information, the procedures were organized, seeking for evidence of the process of the teachers' reflexivity.

It was possible to give visibility to a group of teachers who considered it difficult to work with unruly students when we invested on a change of action strategies and ways to educate in the classroom. Teachers began to view "unruly behaviour" as something that could be changed. The work was collective, sharing responsibility among all group members. Now it is not possible to say that "those students in teacher X's class X are this or that. "Now they are our students and we all have to work together if we really want to change the situation. Discipline and aggression problems continue to happen, no doubt, but we started to look at them differently, and especially to confront them. There is no illusion that students will be "nice" (and it is not what we want) but yes, we have other ways of dealing with relationships in the classroom.

Certain combinations were prioritized: defining and coping with everyday problems and dilemmas; the proposition of new/different forms of organization of the school' daily activities (classes, teachers, strategies, etc..); Collective production and systematization of texts on teaching practices: reports about certain themes, such as the proposal to produce texts with students and interdisciplinary practices, discussion and institutionalization of class meetings; watching and discussing films, reading literary texts/song lyrics that trigger reflections on specific topics, and experiences, by the teachers, of a strategy that could be done with their students. Thus, areas of discussion were recognized as being fundamental to share discoveries and searches, anxieties and joys, successes and failures personally and professionally, individual and collective.

Initially, we sought, in the literature, the theoretical foundation necessary to discuss the issue of unruliness, in order to understand those occurrences. The meetings were conducted so that the faculty could discuss previously selected texts, as well as analyse actions of intent and procedures adopted by the teachers, and the successes and difficulties discussed collectively.

The analysis of the data embedded in the speeches and writings of teachers caused a movement that went from initial perplexity to the possibility of making inferences, seeking to understand the constitution of those teachers' collective reflexivity. This initial admiration was caused by the discoveries that were being made about each of the many readings made in transcripts of audio recordings of meetings and interviews with teachers, and the reports produced. Questions most frequently presented were: How to disentangle the data? Where to start? What is relevant to the discussion? How to decide on the analysis of a survey that has more than 6,000 pages of transcripts, 13 semi-structured interviews and 30 reports from teachers that contain at least 10 pages each, where everything is so important? What about a school that was in a process of collective reflexivity and has a work project coordinated by me, since I'm also rapidly developing professional? Everything initially seemed crucial ... The process of data analysis made from the contents brought allowed uncover and reveal many aspects of this process. Look at *everything* very closely, analysing each of the reports, the speeches and writings, seeking evidence of formation of collective reflexivity process was the desire first, but not feasible ...

In transcripts of audio-recorded meetings, initiated a process of categorization from the clues that were revealed by the data, which later was also performed on all data produced. After reviewing some possibilities of the system of categories and lots of reading, some dimensions became clear. The project is a lived reality, completely reflected.

In order to analyse it, we must take the essential transformative elements; the categories are not reality, but rather, its presentation, which is steeped in reality and we want them to emerge; a system of categories is like a *ladle with holes in it to withdraw olives from a jar* (as said Sá-Chaves, 2007 [1]), which will draw from reality what is important, taking care not to damage the other elements, which albeit important, are not essential to the object under study, in order to capture the transforming elements, it is important to look at the meeting dynamics (intentional/emerging) or strategies; strategies (planned or emergent) should be analysed very carefully because the promotion of the collective reflectivity of teachers may lie there; the importance of looking at the dilemmas identified by the group of teachers at the start of each semester, the need to look at leadership in the meetings (university, schools or both), since the strategies and themes derive from leadership (intentional or emergent), we must also highlight the human and material resources that have supported the discussion of certain issues, since they also contribute to the promotion of reflectivity.

The methodological process for the promotion of reflexivity was crucial. We built the passage of an "I alone to I supportive," as Sá-Chaves (2002, 2007), suggesting strategies training in / with schools that have been recognized as instituting a sense of awareness, integrating and defining a diversity of perspectives on what happened there. All that was being discussed originated from the dilemmas presented by the teachers in different conversational spaces. We were looking for this sharing of responsibilities, rather than conducting "witch hunts", without the need to identify those guilty for the problems occurring there. But none of this would have happened if the existing working conditions hadn't changed in the school and the full support from the management team, which was essential to facilitate the reflection promoted there.

Another aspect worth mentioning is the fact that we considered that there is no separation between the personal and professional teacher. We believe that we teach from what we are, and this is also found in what we teach. As Nóvoa said (2009, p.38), this vision requires that "teachers be whole people", but without outdated romanticism, and looking at teachers as professionals.

### Final Thoughts

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## **Lessons Built From the Formative-investigative Project:**

There was a referential assumption that reflexivity allows a deeper knowledge, which broadens, challenges, persuades and consolidates the knowledge produced in the school, at the gym, as a human development, personal and social factor.

It is no possible to expand knowledge and expertise with only an individual effort, it is essential to recognize the added value of the other as an important partner for this expansion for an effective change that is produced in context, doing and reflecting on what has been done and what to do. We believe that the organization of the school must have space so that the collective can exist, spaces for conversations, time to talk. If psychology in general teaches us to look at an individual dimension, we cannot think of this individual outside of the collective. I believed that the group of teachers would end up proposing a reorganization of the school that would transform their teaching. I relied on the collective. I bet that the teacher should abandon him/herself to make inquiries that would lead him/her to understand that it is not necessary to relate theory and practice, because they are inseparable: the practice and theory are highlighted and the theory is built from practice.

From the data produced in the formative-investigative project, we could build a more conscious view about the dimension of the teachers' reflectivity that took place in this school. It's a contextualized view comprising certain relations and inquires about many other aspects regarding teachers' research practice. In this respect, it is a view that invites other viewpoints, other possibilities to understand the collective reflexivity. In short, we seek to show, with this formative-investigative project, that the process of reflexivity can be enhanced through certain strategies: not any one, not for any group of teachers, but those that are appropriate and adjusted. This is the most "important lesson" of this study. We can say, by concluding it, that other lessons were also learned, among which we highlight:

- The teacher who focuses on his practice, at school, has two main motivations: the need for theoretical foundations of his everyday actions (the search for answers within the theory for situations/dilemmas found every day in his work regarding teaching and learning relationships, discipline, self-motivation and the students) and the need for sharing the work performed (leaving a professional 'legacy' to teachers in training, exchanging success stories and dilemmas with other teachers, announcing or denouncing working conditions in the schools).
- The teacher perceive changes in their practice and the transformed knowledge are of various orders: knowledge of disciplinary content (transformations in the directing of the activities, the planning within each discipline, increased specific knowledge, attempts to interdisciplinary work, curricular innovation), pedagogical knowledge (changes in how the teacher starts conducting activities, proposed organization of the work for the students, evaluation of what is learned and plan new activities), student (overcoming the view that blamed the student for not learning, understanding the individual learning pace, belief that every student is capable of learning, provided that the differentiated working conditions are guaranteed so that all students can be reached), the school contexts (greater understanding of the needs of the community in which the school is located, greater flexibility of the actions and planning in accordance with the student's socio-cultural context, efforts to promote culture and personal growth in the community), the educational purposes (greater awareness of the impact on the educational activities, the pedagogical planning, the political-pedagogical project in the school) and the teachers themselves (gaining self-esteem and professional security, autonomy in educational processes, awareness of the responsibility for the teaching and learning processes).
- A change in the teacher's view about conducting research about their daily activities: the teacher initially demonstrated difficulty in accepting the research as valid or scientific, and embedded in his speech the positivist view of knowledge production. With the possibility of exchanging knowledge, produced within the collective spaces, with their peers, the teacher began to consider the importance of research that he conducted for the transformation of his practices and those of his peers, through a relationship of equity with other teachers.
- Participation in scientific events has been considered by such teachers as an important space for socializing and learning new teaching skills.
- The existence of spaces for collective work in the school proved crucial to the creation of a school identity. In these spaces, the teacher was able to socialize his knowledge, discuss actions, think of the whole school and establish key partnerships in the decision making process. Thus, I want to emphasize that the decision to transform the school also has to be collective, for then, you can have co-responsibility and self-implication from each and every one. However, in order to implicate as co-author, it is necessary that one can know the possible statements of that desired transformation. The local definition of what is sought requires the enunciation of those possible from a collective decision.

- The partnership between university and school also deserves to be highlighted: both one and the other are revising science and knowledge production concepts. We, at the university, once inserted in the school, assume an academic dialog, which fully supports this partnership. We believe that knowledge produced in the school has scientific validity and rigor, especially because they are legitimate and useful for the pedagogical practice. The school began to look more closely at academia, broke with preconceptions about the knowledge it produced. The teachers began to expose their knowledge at academic events with more security and property and search for answers, but without ceasing to provoke more questions and new answers. This profoundly feeding dialogue should be taken to other contexts of the university and school. We assume, in this work, the responsibility of the public university, in human resources and physical and financial resources, with the public schools. The partnership between the institutions is essential in the direction you want to defend in this work: in the transformation of educational practices that contribute to the empowerment and the promotion of social mobility within the community, backer and most deserving of scientific and technological innovations produced in academia and in schools.
- The school's management team was central so that this training-investigative project could conducted, supporting in an unchallenged manner, all the proposals made by the group and authorizing the conversation spaces, more or less formal group meetings, in order to contribute effectively so that the whole project could be developed satisfactorily.
- The process of reflexivity is only constituted by the systematic exercise of reflection held collectively and frequently, moving from the individual to the collective and from the collective to the individual, in a nonlinear way, i.e., there is no formation of collective reflexivity if there is participation of the individual subject: multiple voices that compose with individuals, moreover, the "becoming reflective" will be instituted collectively. This process differs depending on the theme that is being worked on;
- In the collective interaction, the affective nature is a huge cohesive factor, in a dialogue, provides security and strengthens professional and personal relationships. When students also participate in the decisions of school transformation, whether in meetings or other spaces, this allows for the creation of a bond of trust and friendship among the participants, which can cause the enhancement of territories within the school. This broadening also allows the integration of school times that the educational system cuts (class hours, for example) and this makes the notion of time be no longer chronological, but rather, psychological, intense, dense, of life;
- The importance of providing knowledge of psychology aiming to plan their actions towards the promotion of teaching autonomy increasingly well-grounded and intentional;
- I believe that continued training in the school is critical. The establishment of collegiate so we can discuss and build knowledge and learn things that are highlighted in our day to day, since no course could predict all the nuances and dilemmas that occur in the everyday activities. It is the constant possibility of discussing with privileged interlocutors, chosen dimensions of teaching, occurring in a systematic and frequent manner and with our partners-accomplices, daily, seeking to build training activities that enhance the knowledge and teaching practices.

The meetings were intentionally and respectively planned in order to discuss classroom practices, dilemmas, conflicts, being careful to learning along the way, as a group, that collective decisions resulted not only in the desired effect for us all, but mainly brought security, preventing that the sought "teacher who does not manage their class properly" or individual responsibility for problems in the classroom. This undoubtedly made with the group stronger, because we could talk about successes and failures with a presumed tranquillity, knowing that the group was not waiting for the "right" answers but mainly planned and intentional answers, also being the subjects of these actions.

Finally, we can say that in partnership with teachers and school staff, we were able to establish and build a set of knowledge and pedagogical knowledge and education to promote quality education that meets the new demands of elementary school students. Thus, we believe that it is possible to intentionally intervene in the processes of knowledge construction and professional and personal development leaving the promotion of a shared process of reflection for their practices and everyday actions.

<sup>[1]</sup> Orientation meeting during the course of post-doctoral, in April 2007.

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