



## Full length article

## The contradictions within inclusion in Brazil

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## ABSTRACT

This article presents data from a formative intervention conducted with Brazilian regular school teachers to develop strategies for their work with students with disabilities. The analysis was oriented by two questions: 1) How did the concept of inclusion of children with disabilities evolve during the intervention? and 2) What contradictions related to inclusion were manifested in the teacher's discourse and how might these contradictions explain the evolution of the teachers' concepts? Answering the first question, data were organized in two categories: inclusion as learning and inclusion as fallacy, with a higher incidence of the latter. The second question helped to understand the former, data showed discursive manifestations of contradictions of four types: dilemmas, conflicts, critical conflicts and double binds. Contradictions were also analyzed by content: 1) evaluation based on tests and reports *versus* evaluation based on students' learning; 2) teaching students with disabilities *versus* teaching non-disabled students; 3) current conditions *versus* possibilities *versus* needs. Throughout the intervention, especially towards its end, discursive manifestations of contradictions increased, showing teachers did not find themselves supported for undertaking such a task. The intervention process was not enough to overcome the contradictions, as they are deeply rooted in the historical conception of inclusion.

## 1. Introduction

The inclusion of children with special needs in regular schools in Brazil has been implemented since 2008, when a new policy regarding the schooling of these students was established (Brasil, 2008).<sup>1</sup> Although schools have been receiving children with different special educational needs, these institutions have not been physically prepared to receive these students and the staff have not been adequately trained to promote inclusion properly (Dainez & Smolka, 2019; Leonardo, Bray, & Rossato, 2009; Souza, 2013). Most regular schools have addressed inclusion by simply implementing Multifunction Resource Rooms. These have the function of complementing or adding to the work done in the regular classroom and giving support to the regular teachers. Teachers working in the

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<sup>1</sup> In Brazil, since 2008, children considered to have special needs, that have the right for special support at schools, are the ones with disabilities (intellectual, physical, sensory disabilities), with autism and gifted student.

resource room should therefore, have some knowledge of special education to work with the special need students when they are not having regular classes. (Brasil, 2008, 2009, 2011).

Bearing in mind the context above, an interventionist research was conducted in 2014 with a group of teachers working in basic education in a Southern Brazilian public school. The school presented good infrastructure, having adequate classrooms, laboratories and living spaces. The school also had an active resource room that was used by the students with special needs.

This research was performed with a group of teachers that was facing its first teaching experience with two students with intellectual disabilities who had been included in the sixth year of primary education. The students – a girl and a boy – were both 14 years old and attended school in different classes. They were literate, had good understanding and could speak clearly.

The sixth year of primary education in Brazil poses some difficulties for students and teachers, as subjects are taught by a different teacher from each specialized area. Students usually have some difficulties adjusting and the teachers can also have problems getting to know their students individually, as they do not spend much time with them. Dainez and Smolka (2019) have also reported difficulties faced by two special needs students when they were in their sixth year. They report that one of the students abandoned regular school and returned to a specialized school, and the other faced a setback in his learning and in the way he related with the others in the classroom.

The intervention proposed here had the intention of collectively elaborate local strategies and tools that would allow teachers to learn about inclusion and, consequently, help them to cope better with their students.

Since there was an intention to produce changes in a setting in need of transformation, the research was structured as a formative intervention (Engeström, 2011; Engeström, Sannino, & Virkkunen, 2014), which was inspired by the Change Laboratory model (Engeström, 2007; Virkkunen & Newnham, 2013), within the framework of Cultural-Historical Activity Theory. The idea was that the intervention would have the potential to produce collective rethinking about inclusion and, therefore, promote some of the necessary transformations in this process to make it more effective. Transformations do not take place easily and, therefore, there was no clear perspective about the outcome of the intervention. Nevertheless, the intervention was guided by Engeström's (2009) idea that any change, no matter how small, can become the germs for greater and more effective transformations.

Data analysis was oriented by the following questions: 1) How did the teachers' conceptions of inclusion of students with disabilities evolve in the process of the intervention? 2) Which contradictions regarding inclusion were manifested in the discourse of the teachers, and how might these contradictions explain the evolution of the teachers' conceptions?

## 2. Theoretical framework

One of the key concepts in this paper is the activity system, which is defined as a “[...] relatively durable formation of people focused on shaping a shared object with particular instruments, rules, and division of labor” (Engeström, 2013, p.242). Activity systems are collective creations, directed to an object, which evolve over long periods of time. They are often shaped as institutions and organizations (Daniels, 2008).

The concept of activity has a specific meaning within the theoretical perspective adopted in this paper: “[...] by this term we mean only those processes which, by realizing man's relations with the world, meet a special need corresponding to it” (Leontiev, 2009a, p.363). The need is collective and springs from the participants of the activity system (subjects). However, needs are not always explicit. The need is the activity's reason to exist and it must be investigated if one is to understand an activity system (Engeström, 1987; Leontiev, 2009a, 2009b). The intervention analyzed in this paper can be considered an activity as the teachers shared the reason for participating in it: the expansion of the concept of inclusion, which would allow the teachers to develop adequate teaching practices to attend the needs of students with intellectual disabilities and, consequently, improve students' learning processes. When a need finds an object to fulfill, the need becomes a motive.

Within the scope of the activity system, the concept of the object is tangled with the concept of the activity. Leontiev (2009a, 2009b) considers the object as the guide of the activity, its real motive. Engeström (1987) argues that the process of learning in an activity system is connected to the changes in its object (expansive learning) and not to the changes in the individuals that take part in them, as traditionally understood (Engeström & Sannino, 2010). Therefore, in the intervention described in this paper (the activity system), the expansion of the comprehension about inclusion was the object of the activity.

Engeström's (1987, 2001, 2013) theoretical proposal is defined by the idea of expansion. According to the author, learning can only be understood through processes of transformation and expansion that take place in the learners. Expansive learning refers to the production of what will be learned by the participants during the intervention; the new forms of activity that will be developed during the activity itself. Therefore, there is not a teacher teaching passive learners, but, there is a group of people seeking a collective solution to a problem, which means that learning is collective (Engeström, 2001; Engeström & Sannino, 2010).

The idea of transformation within an activity system is related to the contradictions faced by the subjects. Contradiction is the driving force of changes and development in an activity (Engeström, 1987). Within this framework, contradictions, which at first can only be an indication of problems and conflicts, can later trigger transformations in the object (Engeström, 2011; Engeström & Sannino, 2010), and in the intervention proposed here, we would expect transformations in the inclusion process of the school under study.

This research looked at the discursive manifestation of contradictions, as contradictions that cannot be directly observed. Contradictions are understood as a phenomenon which has a history and they are manifested in people's actions, at different times and in different contexts. The manifestations of the contradictions can be apprehended from people's speeches and actions, as described by Engeström and Sannino (2011) “[...] contradictions do not speak for themselves, they are recognized when practitioners articulate and construct them in words and actions” (Engeström & Sannino, 2011, p.371).

**Table 1**

Synthesis of the intervention sessions: date, number of participants, objectives and mediating artifacts.

Session n°. and Date	N°. of partic.	Objectives	Mediating artifacts
1 25/03	15	To understand the context where the intervention would take place	Questions and answers written on a blackboard
2 16/04	9	To discuss about the legislation regarding inclusion; elucidation of doubts and conceptual misunderstandings	Legal documents
3 28/04	13	To clarify the procedures adopted by the school regarding students with special needs; and the designation of the people responsible for such procedures	Synthesis of the legislation. Typification of the diagnosis of students from 6th grade attending the resources room. First attempt to create a protocol regarding inclusion in the school (rules, division of labor)
4 19/05	10	To continue the discussion about the school's organization regarding included students and organize a protocol to guide people's actions	Models organized by the participants for school organization (protocols)
5 09/06	9	To visit the resources room to promote interactions between the specialized teacher and the regular classroom teachers	Resources room and explanations given by the teacher responsible for it (the session was conducted there)
6 07/08	9	To discuss the learning process of the two students with intellectual disabilities included in 6th grade	Vygotsky's concepts regarding the relationship between learning and development, Zone of Proximal Development and mediation
7 20/08	9	To discuss the learning process of the two students with intellectual disabilities included in 6th grade.	Different models that represent the concept of Zone of Proximal Development used to explain the relationship between learning and development; examples of the classroom routine, given by the participants
8 16/09	9	To introduce the families of the two students with intellectual disabilities, and their perceptions of their children's learning and the role of the school in promoting (or not) learning situations	Transcriptions of interviews with the families (projected on a screen).
9 10/11	10	To problematize inclusion by showing that the students perceive themselves as excluded from the process of learning	Transcriptions of the interviews of the two students with intellectual disabilities (projected on a screen).
10 08/12	10	To summarize previous discussions as an attempt to keep them alive. Retrospective of the intervention	Participants' statements and questions regarding the previous sessions (projected on a screen).

### 3. The intervention

The intervention aimed at helping the teachers to become aware of the way the process of inclusion of students with intellectual disabilities was being carried out inside their activity system. The intervention would allow the teachers to begin questioning the inclusion process and, through questioning, search for alternatives to solve the problems that would arise and model possible solutions that would be further implemented, evaluated and, later, adjusted and consolidated. The intervention was organized by the researcher, but the proposals for facing the problems came from the participants and they were discussed collectively as suggested by Kerosuo, Kajamaa, and Engeström (2010) and Virkkunen and Newnham (2013).

The intervention was composed of ten sessions, from March to December 2014. The meetings happened at the end of the teachers shift at school and students would be dismissed of their classes, as there was no time available for teacher education and these professionals also worked in the other shift. The periodicity of the sessions was a consequence of the school's calendar and some sessions were quite long (Table 1). The group of participants was comprised of the researcher, twelve (12) teachers of different subjects, the resource room teacher, the pedagogical coordinator and the educational counselor.<sup>2</sup>

The sessions were inspired by the Change Laboratory Methodology, following the principle of giving auxiliary stimuli (mediating artifacts) for the participants to analyze their activity. A general overview of the intervention is presented in Table 1, specifying the objectives and the mediating artifacts that were used in each session. It is important to highlight that such artifacts were related to the intervention's purpose: the expansion of the comprehension about inclusion that would allow the teachers, and consequently the students, to learn. The mediating artifacts were used to elicit discussion and help to expand the understanding and management of inclusion among the participants. The choice of the artifacts aimed at responding to the group's necessities and it was adjusted during the intervention, according to the outcome of each session.

### 4. Data and methods of analysis

The 10 sessions were audio and video recorded, comprising a final amount of 8 h and 21 min, and then they were fully transcribed into 219 pages. The data were analyzed using discursive textual analysis (Moraes, 2003) with the help of the software QSR NVivo 10. The coding was done independently by three researchers and the divergences were reanalyzed.

The categories of analysis sprang from the theory and they were centered on the movements of the object of the activity (inclusion) and on the discursive manifestations of the contradictions related to it.

<sup>2</sup> The research followed ethic procedures. All the participants have signed terms accepting their participation and allowing data publishing. The research is registered with the Ethic Committee with the number 32107314.2.0000.5317 and approved by opinion number 715.236.

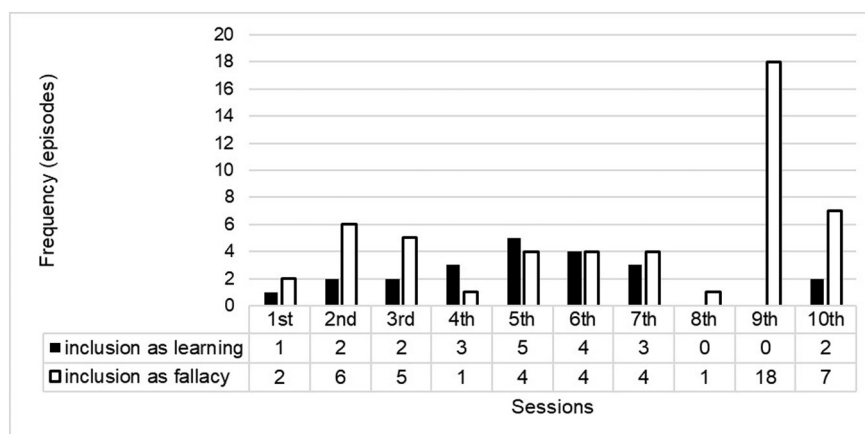


Fig. 1. Frequency of the participants' conceptions of inclusion.

## 5. Evolution of conceptions of inclusion within the intervention

Inclusion, as the general object of the activity system, has a social meaning which is historically and geographically (nowadays in Brazil) defined as: all special needs students should attend regular schools. However, individually, inclusion is experienced according to the personal experiences and motives of the individuals that are part of the system, and both social meaning and individual experience cannot be dissociated.

Inclusion, as the object of the activity system of the intervention, appeared ambiguously in the discourses of the subjects. In an attempt to deal with that, we chose two conceptions to organize the participants' conceptions regarding inclusion: inclusion as learning and inclusion as fallacy, thus described as:

- Inclusion as learning: the idea that students with disabilities in a regular school can learn.
- Inclusion as fallacy: the idea that students with disabilities in a regular school do not learn, they are just physically present at school. Students and teachers do not receive any kind of support to make the process of inclusion effective.

It is important to highlight that the subjects also manifested other intermediate conceptions, bringing up the tensions regarding the inclusion process, and these conceptions will be further addressed in the item regarding the discursive manifestations of contradictions. Such ambiguity in the object provided the mobility necessary for its transformation, as suggested by Engeström and Sannino (2010).

Fig. 1 presents the general view of the object during the sessions. Data shows that the category “inclusion as learning” presented the lowest incidence during the meetings, having its highest incidence in the middle of the intervention (sessions 4, 5, 6 and 7). Inclusion as a fallacy was an idea present in all the sessions, reaching its peak in session 9. These results should be analyzed taking into consideration the objective of the sessions (see Table 1) as the mediating artifacts used in each could have determined the focus of the discussion. For example, the introduction of Vygotsky's ZDP concept (Vygotsky, 1978), in sessions 6 and 7, triggered the discussion about learning; and the presentation of the interviews with the students, in session 9, caused the perception of the inclusion as a fallacy.

### 5.1. Inclusion as learning

Inclusion as learning was a category that emerged from the intervention plan, as one of its main objectives was that teachers would understand that the inclusion of the students with disabilities should encompass the idea that these students can learn. It was expected that the participants would develop such understanding and, thus, create and implement strategies that would help this group of students to learn. Such a proposition was inspired by Vygotsky's (1993) ideas regarding the potential created by the collective environment of a school to enhance the development of special needs children. He argued that education is responsible for the insertion of individuals in their social and cultural context. The learning process and the appropriation of the cultural artifacts (such as the elaborated language, scientific concepts, and tools) can trigger the development of special needs students' higher psychological functions.

Despite Vygotsky's optimism regarding schooling, what we have been observing about inclusion in Brazil (Dainez & Smolka, 2019; Fidalgo, 2018; Leonardo et al., 2009; Souza, 2013) is that learning rarely occurs for special needs students in regular schools.

However, it is important to highlight that non-disabled students also present learning problems in most regular schools in Brazil, placing Brazilians far behind in the world's educational ranking - as observed in the Brazilian PISA performance report (Brasil, 2016). Therefore, if the so-called “regular students” are facing difficulties in their learning processes and if schools are failing to promote the appropriation of the knowledge accumulated by the society in general, what should we expect from the students with disabilities

included at school?

The idea of inclusion as learning was present in 22 episodes during the sessions (Fig. 1), mainly during sessions 5, 6 and 7, when the Vygotskian concepts regarding learning were discussed.

Learning was usually mentioned when teachers made comments about tests and students' marks, as the following examples show.  
T3<sup>3</sup>: [...] Anyway, both students [the ones with disabilities] were considered to have a satisfactory performance; they both passed the written test, the same their peers took. Actually, the ones who technically have no disorder had lower marks than they did.  
(Session 3)

T5: [...] He [the teacher] showed me the test, his test [student with disabilities' test] was not that bad. There were another 20 students who did much worse [...].  
(Session 10)

The examples above illustrate how poor the teaching-learning process was. Although the focus was on students with disabilities, the non-disabled students were not learning as well and, therefore, something should be done to improve the general learning process in the classrooms, besides promoting learning for the students with disabilities.

Further, the idea that these students could learn, although restrictedly, was also manifested:

T10: He could even learn new things. He learned the structure of a poem. He could do it, at least.

RRT: But...

T10: It [the learning] is limited.

RRT: There are small advances.

R: [Referring to T10] How can you perceive that he has learned? How do you perceive it?

T10: He writes short sentences. For example, I asked him to compose a poem about his home, such as "my house is my home", "my city is my home". Short verses, two or three verses. He repeated a lot of words but, within his reality, he did it.  
(Session 6)

The excerpt above alone does not say much about the learning process of the student, but it offers some indicators of this process: the teacher could guide, highlight and call the student's attention to some characteristics of the text they were using in the classroom and the student could use this knowledge in his own writing.

Another recurrent idea used by the teachers to describe students' learning process was that it was mainly dependent on the students themselves and excerpts of different sessions illustrate this perception:

T3: [...] She is different, [...] she likes mathematics.

T4: She wants, she likes. She wants to understand, and she fights for it.

T3: In her way.

T1: She is great.

T4: She has problems in her speech, but she can read and interpret what she reads.  
(Session 5)

T11: I also see something else – are you talking about S2? The one from 6C? The problem with S2, what makes him different from S1, I believe, is that S1 is hardworking and S2 is not. I think S2 is lazy, he is not interested, he is playful, he is silly, he is in his little world and he believes it is enough. I teach him foreign language, I don't see him interested in knowing what a word means: "How do you say door in Spanish". Do you understand? He does not care. I mean, today I was correcting his test – a test worth 15 points. We do some tests to see how he is coping, because we know we can't treat them differently. Then I gave him the test. He simply didn't do it, he does not ask anything. Then I go to his table and ask: "Do you want some help?" "Is there anything you're not understanding?" "No, I know how to do it", he says. He can't do anything, but also he doesn't... I don't believe he is very interested.

T1: He can't focus. S1 can focus.  
(Session 6)

Learning and no-learning, were both related to the personality and behavior of the student. Teachers referred to S1 as the studious, hardworking one, the student that could learn even though she had a disability; and S2 was considered to be lazy and distracted, a student who took advantage of his disability in order not to do his school assignments. The individual characteristics of the students were used to explain the positive learning results but, mainly, were used to explain the no-learning.

Learning is perceived, by teachers, as something not associated with teaching. The emphasis on the capacity and the amount of effort individual students demonstrate illustrates a concept of learning and development as the results of individuals' biological development, or as a direct result of their IQ. Although the importance of the biological substrate for human development cannot be denied, and it is well known that mental dysfunctions rarely disappear, it should be taken into account that the development of the individual is not only determined by biology, but it is also highly influenced by the way they interact with the environment (physical, social and cultural) and the possibilities offered to them, which may aggravate an individual's disability or help them to find a way to overcome their restrictions.

<sup>3</sup> The subjects are identified with the letter T for teacher plus a number: T1, T2, T3; PC for pedagogical coordinator; RRT for resource room teacher; EC for educational counselor; R for researcher.

If teachers could advance on the idea of mediating their student's process of learning, as the teacher mentioned above (T10) did, in relation to the student with intellectual disability, the whole class could benefit from it and more students would also probably have their learning process guided in a more effective way.

## 5.2. Inclusion as fallacy

Fallacy is described as deceptive reasoning that simulates veracity, and it is an important word in the data analyzed here because it was used by the teachers themselves, as it is showed in the following excerpt:

T10: We worry about their learning process and we realize that it is not being effective. They are just at school. [...] we worry about the school program, but not only in relation to them. And they have reached a certain stage because they have been pushed further.

T3: The inclusion is a fallacy.

T4: People that planned it, in the Ministry of Education, they have never been in a regular classroom, let alone been with a special student.

(Session 8)

Teachers denounced "inclusion as a fairy-tale" when they say that to be physically present in school is different from being included, and that students with disabilities are not learning, but being pushed to the next grade. Teachers see a big difference between what is understood by inclusion in the Ministry of Education and what is carried out in schools, on a daily basis.

Actually, the success attributed to the Brazilian inclusion process is based on the increasing number of special needs students' enrolled in regular classes. In 2014, when this intervention took place, there were 745,363 special needs students included in regular primary schools in Brazil (Brasil, 2015), which represents 79% of special needs students in the country. Comparing this percentage with the one from 1998, when only 13% were included, which shows a clear increase in the number of special needs students enrolled in regular schools. However, the acceptance of special needs students in a school does not guarantee their inclusion, as pointed out before. There is no statistical data from the Ministry of Education regarding the total number of included students who are receiving specialized support. However, according to Vaz (2013), the number of students using school resource rooms does not account for half of the included students. Such data explains why the category "inclusion as a fallacy" was more frequently mentioned (52 episodes) than the category "inclusion as learning" (22 episodes).

Teachers in general stated that the included students had difficulties learning academic content and keeping up with the rhythm of their peers, as suggested below:

T4: Yes. Talking about S2, well, I don't think it is necessary for him to learn the mathematical contents that I teach. I don't think it's important.

R: Well, do you prepare other kinds of materials to work with him?

T4: I believe, from my point of view, that he only needs to adjust to classroom work. He needs to copy, he needs to learn how to organize his notebook.

T2: Basic things.

T4: Yes. I believe socializing is more important to him. He is not going to learn the LCM [Least Common Multiple].

(Session 5)

The dialogue above shows that the teacher believed that even though S2 attends math classes, he did not have to learn the content being taught there. She assumed that students with intellectual disabilities have no capacity and no reason to learn maths and, therefore, she validates the assumption that these students attend school solely to socialize with their peers.

If we analyze the Brazilian guidelines for school inclusion (Brasil, 2008), it becomes clear that their focus is on students being physically present at school, emphasizing the need for accessibility and acceptance of differences, while very little is said about learning.

Considering such students would not learn, teachers have developed a way to promote students with intellectual disabilities to the next grades, without using any pedagogical criteria, and seemingly feeling fairly comfortable with this situation. One of the teachers, talking about the criteria for promotion (or its absence), said: "Well, if I have to promote him considering some of his abilities, I will do it. He will never learn mathematics." (T4, Session 2).

Teachers' utterances express their understanding of what they consider the fallacy of inclusion in a school and that it is not doing its job. In their opinion, the absence of discussion regarding the matter shows that teachers, state and families are all accomplices in the process, as it is clearly shown next:

T3: We will keep promoting without teaching. Everybody pretends students are learning and we all pretend to be teaching. And we'll all be happy forever after. The politicians in the Ministry are there, and they don't care about this discussion. [...]

T4: So, what shall we do?

T3: It is over. The families are happy, as a special child demands a lot from the families. So, they send the child to school in the afternoon to be with the "babysitters". So, they won't cause trouble at home. The politicians are ok, as the families are not complaining anymore; children are at school now. Teachers have stopped complaining because they are doing that [the teacher points at the sentence "promoted without been taught" which is written on the slide prepared by the researcher]. I mean, if you do "that", everybody feels happy, the family, the politicians and then you create a vicious cycle.

(Session 9)

The discussion presented in the excerpt above should be understood taking into consideration the environment and conditions these teachers are subjected to. They have to cope with precarious school premises, high numbers of students per class, a lack of specialized professionals to work with the special needs students, low salaries, long working hours, inadequate or insufficient pedagogical training, discrediting of the teaching profession, among other problems (Dainez & Smolka, 2019; Fidalgo, 2018; Garcia, 2013; Laplane, 2014; Souza, 2013; Souza, Dainez, Smolka, Scian, & Hulsholf, 2014). Teachers' behaviors and attitudes seem to be a reaction to an inclusion proposal that has not taken into account the need for support and preparation in order to work with this group of students and students in general.

Taking the statements above about inclusion as fallacy and comparing their frequency to the ones from the category inclusion as learning (illustrated in Fig. 1) a question became paramount: Why, in an intervention that had sought expansive learning for the activity system, focusing the discussions on the improvements in school and classes for promoting special needs students learning, the category inclusion as learning was less important towards the end of the intervention, whereas the category inclusion as fallacy, became more relevant?

To understand why the categories evolved as they did, an analysis of the contradictions inherent in teachers' discourse and activity was necessary.

## 6. Discursive manifestations of contradictions related to inclusion

The discursive manifestations of contradictions related to the inclusion process portrayed the tensions within the school and within the group of teachers who took part in the intervention. These manifestations were related to structural and historical contradictions which affect inclusion in most Brazilian schools.

Within the process of expansive learning, many contradictions became explicit, however the participants neither had resources to face and overcome them, nor was the intervention able to give them the necessary support to do so. Instead of promoting expansive learning, the discursive manifestations of contradictions came closer to the fallacy. Looking at the three categories (Fig. 2), the discursive manifestations of contradictions regarding the inclusion process were dominant, which suggests that the teachers could perceive the difficulties and feel the pressures involved in such process.

In order to investigate the discursive manifestations of contradictions further, the categorization proposed by Engeström and Sannino (2011) was used. They proposed four different types of manifestations of contradictions: dilemmas, conflicts, critical conflicts and double binds. They are kind of escalated steps of experiencing contradictions. These types remark how the contradictions become stronger, the dilemma being the least strong and the double bind the strongest one. In our analysis the stronger types increased in number towards the end of the intervention. All the types of manifestations of contradictions will be discussed in detail later.

The manifestations of the contradictions were also categorized into three themes which described their content:

- Evaluation based on tests and reports *versus* evaluation based on students' learning: should students be promoted only because they had a health report attesting their intellectual disability or should they be evaluated according to their learning process? There was a lack of criteria to evaluate the students learning process.
- Teaching students with disabilities *versus* teaching non-disabled students: related to the teaching organization, bearing in mind that both groups of students should have the opportunity to learn. The discussions were mostly regarding how difficult it is to give support to the students individually when they have to deal with large class sizes.
- Current conditions *versus* possibilities *versus* needs: related to the physical condition of the school to receive children with disabilities. Discussions were usually about the Brazilian Educational System's problems: overcrowded classrooms; poor teacher training, long working hours; little investment in education.

Analyzing the type and theme of the manifestations of contradictions together provided a clearer view of such manifestations.

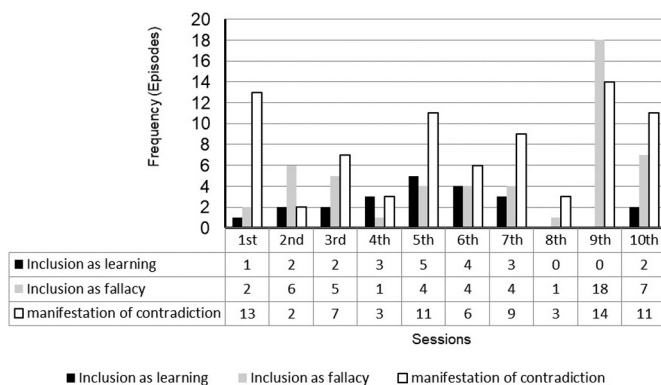


Fig. 2. Frequency of the categories regarding the way teachers perceived inclusion along the intervention.

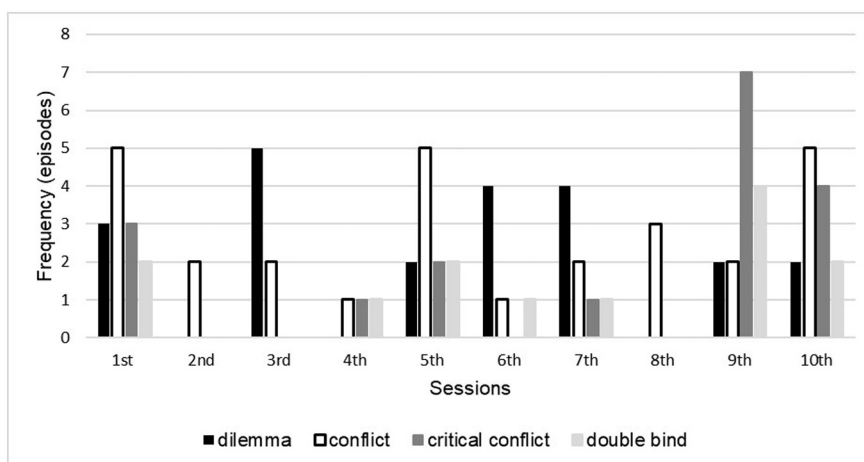


Fig. 3. Frequencies of the four types of discursive manifestations of contradictions during the sessions.

Figs. 3, 4 and 5 illustrate, respectively, the frequencies of types, the frequencies of themes and the relation between types and themes of the manifestations of contradictions during the intervention.

Figs. 3, 4 and 5 show the dynamics of the manifestations of contradictions which were observed throughout the sessions. The analysis of the contradictions is used here in an attempt to enlighten the way the inclusion process was perceived and lived by the teachers involved in the intervention.

### 6.1. Dilemmas

Fig. 3 shows that the presence of dilemmas diminished during the sessions. The dilemmas are the less severe contradictions (Engeström & Sannino, 2011) and, as their frequency diminished towards the end of the intervention, it is possible to think that they were not resolved and, as the participants brought out various problems faced by them, more serious types of manifestations of contradictions arose. Dilemmas are expressed as incompatible evaluations, reservations and hesitations and are usually accompanied by phrases such as: “yes, but...”, “on one hand [...] but on the other hand...” (Engeström & Sannino, 2011).

The analysis of themes of the dilemmas (Fig. 5) revealed that most of them were about the evaluation of the students with disabilities. The following examples give an idea of the content of these discussions:

T11: This is what I am asking: what does it [the law] consider “special”? Because it depends... The ones with a medical report?

T7: I believe I have special needs students, but I have no document to prove it.

(Session 1)

T2: She [S2' previous year's teacher] was telling me: “Well, we should not have promoted S2. But we didn't want to leave him

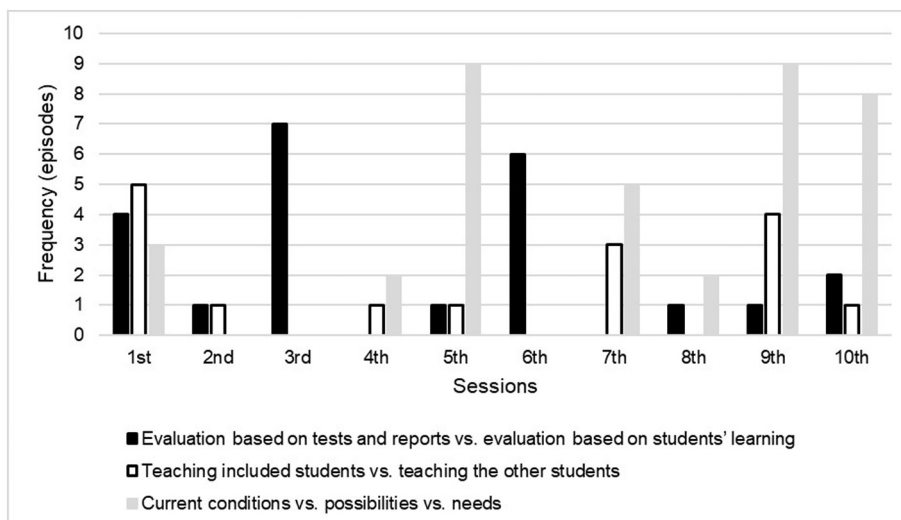


Fig. 4. Frequencies of discursive manifestations of contradictions' themes during the sessions.

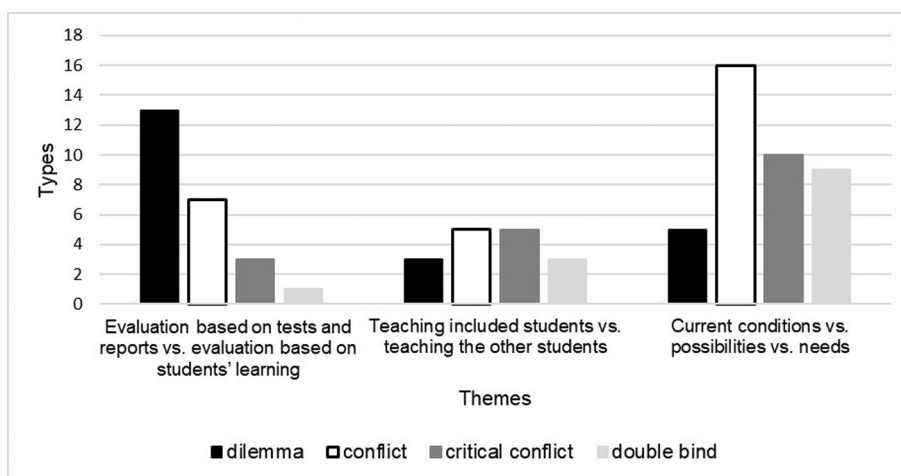


Fig. 5. Relationship between the types and the themes of the discursive manifestations of contradictions.

among the younger students. It was a difficult situation, wasn't it?"

(Session 5)

## 6.2. Conflicts

Conflicts were the most frequent type of manifestations of contradictions. They resulted from constant divergences among the participants during the discussions about inclusion. Conflicts are manifested in expressions of resistance, disagreement, argumentation, criticism, opposition, divergence, conflict of interest and attitude. Usually accompanied by phrases such as: "no" and "I disagree" (Engeström & Sannino, 2011).

The next example shows a dialogue between the art teacher and other teachers regarding "teaching included students *versus* teaching the other students":

T8: You should use the students who can do it to teach the ones who can't.

T3: Well, but this is not their obligation.

T8: But they could help, interact a bit...

T3: They don't have this obligation.

T4: They sometimes do it.

T8: Cooperation.

T4: But you can do it only sometimes: "Let's sit in pairs, choose who you want sit with." Do you believe they will choose a bad student?

(Session 5)

It can be observed that the art teacher was suggesting an alternative method to work with students in a more integrated way, using students who could understand the exercise better to help the students with more difficulties, in a collaborative manner. However, the other participants disagreed and reacted by saying that it was a bad strategy and it was not going to work, thus showing resistance to change.

The high incidence of conflicts shows that there were many different points of view about inclusion in the school. The category "current conditions *versus* possibilities *versus* needs" was predominant (present in 17 episodes), as demonstrated in Fig. 4 and in the example below:

R: This is what I have been saying all the time: if you keep teaching the same thing to all of them, this is not inclusion.

T3: Yes. But having them all in the same classroom and individualize the assistance is not possible, as well!

R: I believe something can be done.

T3: Do you believe it is possible? I would like to see you with 35 students in a small classroom, I would like to see if you would give them individualized assistance!

R: But if we talk about inclusion and continue doing the same, this is not inclusion!

(Session 5)

The researcher insisted on the importance of individualized assistance and T3 on the problems related to poor working conditions (mainly the large number of students per classroom) which did not allow learning to take place. T3 insisted on the impossibility of inclusion if the individual learning process of each student was to be considered. This episode could be classified in the category of inclusion as a fallacy, but it was considered as a manifestation of contradiction because the researcher repeatedly challenged the teachers' behavior, trying to make them face the contradiction present in their speech.

### 6.3. Critical conflicts

Critical conflicts played a significant role in the intervention, increasing their incidence towards the end of it. Fig. 3 shows that the critical conflicts were more frequent in the last two sessions.

This manifestation of contradiction is characterized by the conflict faced by the subject inside him or herself and it is different from the previous type (conflicts) which is related to conflicts between two or more subjects. Critical conflicts are manifested in expressions which reveal the feelings of individuals towards situations they perceive as impossibilities or that they do not fully understand. Critical conflicts paralyze individuals: they feel violated, guilty, silenced. Usually it is communicated using “I” and the use of metaphors and it is understood as a severe manifestation (Engeström & Sannino, 2011).

Critical conflicts showed how inclusion affected the teachers. In the next example, the teacher reveals her feelings of powerlessness as she could not help her included student:

T4: I am talking about myself, a maths teacher. I do not make a difference in his life! If he has maths classes and physical education classes, he will advance in physical education, but he won't in maths.

(Session 10)

Another representative example of a critical conflict could be observed in the use of a metaphor by the teachers when they referred to the school and the classroom as a battlefield. They talked about the distance between what they had in their school and what was necessary to carry out a minimal and adequate schooling process. Engeström and Sannino (2011) pointed out that the metaphors give us linguistic tips to identify the critical conflicts within discourse.

T3: [...] We are in a battlefield. And I was given nothing, not even a rifle, nothing. I am just here [gestures as if hiding, protecting himself]

[Colleagues laugh]

T3: And the best, no, the worst: who is always feeling guilty for the failure of education? The teacher.

T4: Of course, us.

T3: I do nothing; I don't teach differently, I don't give special attention, this and that. [...]

(Session 9)

The metaphor of a battlefield, which appeared in the 9th session, was also present in the last session and it clearly shows the feelings of the group towards inclusion. It is interesting to point that the same metaphor had appeared in Sannino's research with Italian teachers; and in her research the metaphor was also taken by the group, showing that it was not an individual perception, but it was systemic and felt by all the subjects (Sannino, 2010).

### 6.4. Double binds

Finally, we analyzed the manifestations of the contradictions classified as double binds, which, along with the critical conflicts, are considered manifestations of a more severe kind.

Double binds are an indication of feelings of impossibility when facing difficult and unacceptable situations. They are manifested in expressions which reveal that individuals do not know what to do, feel under pressure and consider alternatives unacceptable. Such situations cannot be dealt with individually; they need to be faced collectively. Usually communicated using “we” (e.g. “we need”, “we should”) and rhetorical questions such as “what can we do?” (Engeström & Sannino, 2011).

Double binds were less frequent, in the 13 episodes, with their highest incidence in session 9 (Fig. 3), when the interviews conducted with the two students with intellectual disabilities were presented to the group. The interviews revealed the inefficiency of the inclusion process and the teachers could not find a way to overcome them, as the following extracts show:

R: If this content was appropriate to the group, that could understand it, for S1, it was still far away [too difficult to understand].

T3: Yes, but everything is far away for them.

R: Yes, but how can we bring it closer to them?

T3: Ok, but then I will teach S2 and S1 only.

R: No.

T3: What about all the other ones? This balance is already very difficult during the class and, on top of it, we have students with special needs. A group of 30 students in a very small classroom! And, if you don't have classroom management skills, you do nothing!

(Session 9)

The example presented above shows that the teacher could not conciliate the idea of a large number of students, a small classroom and the presence of special needs students with the idea of teaching and learning. This shows the presence of the theme “current conditions *versus* possibilities *versus* needs” (Fig. 4). Although teachers frequently declared that they were doing all that was possible, they also admitted that they were a long way from what would be considered necessary:

T3: The best we do; and then I would say that my colleagues agree, and I am not criticizing our work, but our best, of all of us, is still very bad, it is horrible, compared to what it should be. It is horrible. My best, in general, is limited by an established structure. This is what I see. The system, as it is, does not allow us to act. There are a lot of things stopping us [...]

(Session 5)

T3: But if we can't solve the problem of the students considered normal, how can we solve their problems? [referring to students with disabilities]

R: So, what will we do?

T5: But we can't change it.

T3: This is how I see it: it will all depend on the teacher's consciousness; it'll be dependent on the teacher's consciousness. One is always dependent on the teacher's consciousness. The State should have a minimum tool... Depend solely on teachers' consciousness?

(Session 10)

The above episodes reveal strong features of the double bind manifestations: rhetorical questions, the use of the pronoun “we” and the idea that the contradictions cannot be resolved individually. The use of “we” shows that the contradictions are felt to be collective. The most dramatic feature of the double bind, however, seems to be the rebellion against the expected role of “teacher's consciousness” for promoting inclusion. There seems to be strong feelings against the idea that the solution for the problem of inclusion should lie solely on teachers' acknowledgement of their responsibilities towards the situation. Furthermore, teachers should make an effort to overcome the difficulties by working harder than they already do, in spite of their lack of support from the State and the poor working conditions offered to them. The rhetorical questions were asked without any expectation of answers.

The double bind manifestations were characterized by an urgent need of action. The teachers perceived something should be done to improve the situation, despite not knowing what, because of the seemingly insurmountable obstacles and impossibilities perceived by them regarding inclusion.

The incidence of manifestations of contradictions was higher in the last two sessions (Fig. 3), as was the number of critical conflicts and double binds. These last two kinds of manifestations of contradictions were an indication of dramatic situations and they were very close to impossibilities and fallacy. This reflection endorses the general tendency of perceiving “inclusion as fallacy” that increased during the intervention, as well as the strongest discursive manifestations of contradictions, which show that instead of overcoming the contradictions, teachers assumed that situation could not be changed.

The general increase of the manifestations of contradictions may be explained by the fact that the contradictions within the system (manifested in problems and tensions) were being made explicit and admitted. However, the acknowledgement of the contradictions by itself was not enough to trigger the necessary changes to overcome them at that point in time, and we believe it would be necessary for more than an isolated intervention to overcome such resistances and that such discussion should be present at the school on a daily basis.

Finally, the attempts to support expansive learning<sup>4</sup> during the sessions were not successful. The teachers and coordinator gave up on them and blamed their failure on the conditions of work at the school, without time and orientation to plan inclusive classes and lack of knowledge and, with these arguments, teachers disclaimed the responsibility to teach special needs students. Such arguments should be further analyzed to avoid blaming the teachers without taking into consideration their real working and teaching conditions (Garcia, 2017; Souza et al., 2014).

It is clear that the contradictions emerged in the speech of the subjects because they were diffused in the activity system. However, it is important to bear in mind that the contradictions regarding school inclusion are not exclusive to the school analyzed here; and the contradiction inclusion x exclusion is present in Brazilian society (Maciel & Kassir, 2011). The discursive manifestations of contradictions emerged in the intervention, but they were originated before they could be spoken, they were originated historically in the Brazilian educational system and society.

## 7. Historical perspective on the contradictions of inclusion

Kosic (1976) alerts to the fact that the appearance of a contradiction should not be misunderstood by its essence. The manifestations indicated that there were contradictions, although they were not restricted to their observed manifestations, as they are historical. Instead, they are empirical indications of a historical process which has been produced by a given situation. Therefore, to understand the contradictions it is necessary to follow their historical development (Engeström & Sannino, 2011). It is important to highlight that the historical origin of the contradictions regarding the inclusion process should be understood, taking into consideration, the educational, historical, social and political scenarios within which the proposal of inclusion was thought. It is necessary to realize that the contradictions related to school inclusion are not isolated; on the contrary, they are present not only in education but also in the society.

The Brazilian scenario for inclusion is part of a larger international landscape, involving specific political, ideological, economic and social interests. It is related to the way people with disabilities are seen and treated in different contexts and times. For instance, the Brazilian neoliberal policies for education, from 1990, have emphasized the need for inclusive education (focusing on different groups which were excluded from school, such as the poor, black people, ethnic minorities and people with disabilities) with the purpose of maintaining inequalities by using disguised methods of exclusion (Freitas, 2016). The former excluded groups have been enrolled at school, which seems like inclusion, but once there, they face all kinds of problems which result in exclusion within the

<sup>4</sup> The attempts to develop expansive learning took shape in three strategies elaborated by the subjects: 1) an inclusion protocol with the definition of the current procedures and new ones that they had considered important, 2) a diary to organize the routine of the special need students and, mainly, to establish a communication channel between school and special needs students' families and 3) coordination and articulation of the work with the special needs students, by regular meeting, between the resource room teacher and the regular teachers.

educational institutions (prejudice, grade repetition, dropout, lack of resources for learning, poor quality teaching, just to mention some). Such logic of inclusion, which “excludes from inside” (Bezerra, 2017; Fidalgo, 2018; Freitas, 2016) is one which rules the capitalism that is founded on work exploitation, inequalities and exclusion (Carvalho & Martins, 2012; Garcia, 2017).

When analyzing the contradictions, Engeström (1987) defines the primary contradiction as the inner conflict between the exchange value and the use value which sustains a capitalist society, something which is intrinsic to all the elements of an activity system. When this contradiction is analyzed in an under-developed country, such as Brazil, it is aggravated by the poverty and social inequality (Carvalho & Martins, 2012; Kassar, 2012).

To understand the manifestation of the contradictions that emerged in that school, in the year 2014, it is necessary to amplify the scope and deal historically with the inclusive education policies that have been behind the organization of the schools and the services offered to people with special needs. The 1988 Brazilian Constitution established education as a right of Brazilian citizens and a duty of the State (Brasil, 1988). Until the beginning of the 1990s, it was the responsibility of the specialized institutions (mostly private or philanthropic) to provide for the care and education of people with special needs.

In the 1990s, mainly in the second half of the decade, school inclusion began to be debated. In 1996, the law with the guidelines and basis of Brazilian education, the most important document in Brazilian education, dedicated a full chapter to Special Education, emphasizing that the education of people with special needs should happen preferably in regular schools (Brasil, 1996).

Inclusive policies were a consequence of the policies implemented to fight poverty and attempt to balance the needs of the labour market and the demands of the working class (Garcia, 2017; Kassar, Rebelo, & Oliveira, 2019). In the government of Fernando Henrique Cardoso (from 1995 to 2002) the idea was to include, by gradual insertion, people with special needs into regular schools, with the possibility of specialized services and schooling in different contexts. This same tendency was also observed in the government of Luiz Inácio Lula da Silva (from 2003 to 2010). In 2008, the National Policy of Special Education in the Perspective of Inclusive Education promulgates and regulates (Brasil, 2008b, 2009) the enrolment of students with disabilities, with global development disorders and gifted students compulsory in regular schools, defining resource rooms as support for inclusion. The first term of the President Dilma Rousseff (from 2011 to 2014) continued to invest in public policies and it was observed, that there was an increase of investment in inclusive education, mainly through the implementation of more resource rooms and the education of professionals to work in this scenario. The decree 6.571/2008 which restricted the act of specialized institutions was repealed in 2011, and therefore, allowed private and philanthropic institutions, financed by the government, to offer specialized services (Brasil, 2011).

This shows that in 2014, there was a consolidated policy of school inclusion, and there was an ever growing number of students with disabilities, especially in the initial years of primary school (Brasil, 2015). Although there were problems, such as a the single model of specialized service for all the students, the absence of continuous education for the teachers of regular classes, along with the lightweight training of the teachers of the resource rooms, and the responsibility given to them for helping students with multiple disorders (Michles, 2011; Mendes & Malheiro, 2012; Garcia, 2013), there was the hope that the proposed intervention could contribute to the promotion of locally inclusive practices that would guarantee the right of special needs students to learn.

If we go beyond the intervention, we can perceive the same manifestations of the contradiction in the Brazilian educational system. First, the contradictions related to the large scale evaluation of the students shows, that they are not adequate for students with disabilities (Cardoso & Magalhães, 2012); and, second, the automatic progression of students, even if they do not have the acquired learning objectives (Dainez & Smolka, 2019). Furthermore, contradictions related to teaching students with disabilities separately, emerge from the defence of the specialized spaces (mainly specialized schools) in a counter position to school inclusion (Kassar et al., 2019). Contradictions related to the pedagogical working conditions appear in the devaluation and depreciation of teaching activities, by the State, along with the idea that teachers are the people responsible for the educational results alone (Garcia, 2013; Michles, 2011).

From the perspective of the Cultural-Historical Activity Theory, contradictions bear the potential for changes and this is why the intervention took them into account. However, when the teachers were confronted with the contradictions it appeared that this did not lead to changes, as they may have been considered too great to be acted upon. The support being given by the intervention was insufficient to overcome them. The themes that generated most manifestations of contradictions (evaluation based on tests and reports *versus* evaluation based on students' learning; teaching students with disabilities *versus* teaching non-disabled students; what we have *versus* what is possible *versus* what is necessary), rather than promoting transformations in the activity system, generated more manifestations of an aggravated kind: critical conflicts and double binds became more frequent in the last two sessions, appearing to produce increasing anguish in the teachers for not being able to overcome them.

The contradictions in the field of education has intensified in Brazil, since the intervention, and two factors are explicitly related to what was observed in the school in 2014. The first is the Constitutional Amendment 95, approved on 15th December 2016 (after the impeachment of the President of Brazil, Dilma Rousseff), which instituted a new tax regime in the country and froze the investment in education for 20 years (Amaral, 2017). If in 2014 the condition of the schools was perceived as inadequate, then, without expressive investments, such conditions tend to be even more precarious.

The second factor concerns the new policy regarding special education announced in 2018, which was submitted to public consultation the same year. The text of this document does not prioritize inclusive education in regular schools, thus, indicating that specialized spaces (such as specialized schools and classes) may be the focus of the schooling process for people with disabilities (Brasil, 2018). The discussions about this new policy explicit the contradiction between the public and the private that has been always present in regards to the schooling of the people with disabilities in Brazil (Kassar et al., 2019; Laplane, Caiado, & Kassar, 2016). Such proposal justify the change it carries based on the poor results achieved by the students with disabilities in regular schools since the Policy of 2008, as it was observed in the intervention discussed here. However, instead of qualifying regular schools,

the alternative being announced are the specialized spaces (segregated) “when the barriers of the regular school are not overcome to guarantee the effective learning, participation and equal opportunities” (Brasil, 2018). Considering the condition of the schools (as discussed based on the data of the intervention) and the Amendment 95, it is probable that such barriers are not going to be overcome, and the perspective of the inclusion of people with disabilities in regular schools, will be abandoned.

Both factors reinforce the understanding of the contradiction in historical movement (Engeström & Sannino, 2011). They also find an echo in the primary contradiction inherent in the capitalist society, of use and exchange values (Engeström, 1987), which understands education as a commodity. In general, without looking back to the school where this intervention was performed, we could argue, that the contradictions, which emerged in 2014, in that specific school, have not been overcome but, instead, have been magnified.

Cultural-Historical Activity Theory's perspective emphasizes that the contradictions are possibilities for change, but does not affirm that expansive learning is always the outcome of contradictions. The development of the contradictions' potential for qualitative transformations was not observed, during the intervention, but this fact must be analyzed considering the historical aspects which conditioned the current contradictions and the possibilities of expansive learning in the group of participants. According to Engeström & Sannino (2010, p.12) “expansive cycles are historically determined, although not predetermined. Not just any kind of expansion of the object is possible at any given time”.

## 8. Conclusions

The formative intervention depicted in this paper aimed at promoting new collective learning possibilities regarding the inclusion process experienced by a group of Brazilian teachers. Therefore, the objective of this paper was centered on discussing the conceptions regarding inclusion and the discursive manifestations of contradictions related to such process during the intervention.

The results showed a difficult scenario for special needs students' inclusion. The perception of inclusion as fallacy was higher than the perception of inclusion related to learning. To understand these data, it was essential for the investigation of the discursive manifestations of contradictions. Its incidence was higher than the previous two and with aggravated types (critical conflicts and double binds) at the end of the intervention. It means that the intervention brought up contradictions. Also at the end, considering the content of the manifestation of contradiction, the category “current conditions versus possibilities versus needs” increased. This scenario shows how the participants' perception of school inclusion was very close to impossibilities, highlighting the difficulties they faced.

The intervention itself was not enough to overcome the contradictions and change their historical roots in an expansive conception of inclusion. Although the activity has not been changed, the individual practitioners' comprehensions about inclusion were developed, they became acquainted with legal and organizational aspects of school inclusion, with the learning possibilities of students with intellectual disabilities and, mainly, they become aware of the contradictions, being able to make them explicit in their discourse. These can be seen as transitional actions (Sannino, 2008) as they carry potential for changing the activity in the long run. A single intervention can hardly be expected to overcome historically entrenched and spread contradictions.

The contradictions related to inclusion have profound roots. It is very hard to experience the inclusion of students with disabilities in a school that excludes so many students. Furthermore, it is difficult to experience school inclusion in an unequal and excluding society, such as, Brazil.

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## References

- Amaral, N. C. (2017). Com a PEC 241/55 (EC 95) haverá prioridade para cumprir as metas do PNE (2014-2024)? *Revista Brasileira de Educação*, 22(71), 1–25.
- Bezerra, G. F. (2017). School inclusion of students with disabilities: A reading from Pierre Bourdieu. *Revista Brasileira de Educação*, 22(69), 475–501.
- Brasil (1988). *Constituição da República Federativa do Brasil*. Brasília: Diário Oficial da União.
- Brasil (1996). Lei n. 9.394, de 20 de dezembro de 1996: Estabelece as diretrizes e bases da educação nacional. Brasília: Diário Oficial da União.
- Brasil (2008). *Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva*. Brasília: MEC/SEESP.
- Brasil (2008b). Decreto N.º 6.571, de 17 de setembro de 2008: Dispõe sobre o atendimento educacional especializado. Brasília: Diário Oficial da União.
- Brasil (2009). Resolução N. 4, de 2 de outubro de 2009: Institui Diretrizes Operacionais para o Atendimento Educacional Especializado na Educação Básica, modalidade Educação Especial. Brasília: MEC/CNE/CEB.
- Brasil (2011). Decreto n.º 7.611, de 17 de novembro de 2011. Dispõe sobre a educação especial, o atendimento educacional especializado e dá outras providências. Brasília: Diário Oficial da União.
- Brasil (2015). Resultados finais do Censo Escolar (redes estaduais e municipais) Anexo II. Retrieved from <http://portal.inep.gov.br/basica-censo>.
- Brasil (2016). Brasil no PISA 2015: Sumário Executivo. Retrieved from [http://download.inep.gov.br/acoes\\_internacionais/pisa/documentos/2016/pisa\\_brasil\\_2015\\_sumario\\_executivo.pdf](http://download.inep.gov.br/acoes_internacionais/pisa/documentos/2016/pisa_brasil_2015_sumario_executivo.pdf).
- Brasil (2018). *Política Nacional de Educação Especial: equitativa, inclusiva e ao longo da vida (Minuta para discussão)*. Brasília: MEC/Secadi.

- Cardoso, A. P. L. B., & Magalhães, R. C. B. P. (2012). Educação Especial e avaliações em larga escala no município de Sobral (CE). *Revista Educação Especial*, 25(24), 449–464.
- Carvalho, S. R., & Martins, L. M. (2012). A sociedade capitalista e a inclusão/exclusão. In M. G. D. Facci, M. E. M. Meira, & S. C. Tuleski (Eds.). *A exclusão dos “incluídos”* (pp. 19–32). Maringá: Eduem.
- Dainez, D., & Smolka, A. L. B. (2019). A função social da escola em discussão, sob a perspectiva da educação inclusiva. *Educação e Pesquisa*, 45, 1–18.
- Daniels, H. (2008). *Vygotsky and research*. New York: Routledge.
- Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133–156.
- Engeström, Y. (2007). Putting Vygotsky to work: The change laboratory as an application of double stimulation. In H. Daniels, M. Cole, & J. V. Wertsch (Eds.). *The Cambridge companion to Vygotsky* (pp. 363–382). New York: Cambridge University Press.
- Engeström, Y. (2009). The future of activity theory: A rough draft. In H. Daniels, & K. D. Gutierrez (Eds.). *Learning and expanding with activity theory* (pp. 303–328). Cambridge: Cambridge University Press.
- Engeström, Y. (2011). From design experiments to formative interventions. *Theory & Psychology*, 21(5), 598–628.
- Engeström, Y. (2013). Collective concept formation as creation at work. In A. Sannino, & V. Ellis (Eds.). *Learning and collective creativity: Activity-theoretical and sociocultural studies* (pp. 234–257). New York: Routledge.
- Engeström, Y., & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1), 1–24.
- Engeström, Y., & Sannino, A. (2011). Discursive manifestations of contradictions in organizational change efforts. *Journal of Organizational Change Management*, 24, 368–387.
- Engeström, Y., Sannino, A., & Virkkunen, J. (2014). On the methodological demands of formative interventions. *Mind, Culture and Activity*, 21, 118–128.
- Fidalgo, S. S. (2018). *A linguagem da exclusão e inclusão social na escola*. São Paulo: Editora Unifesp.
- Freitas, L. C. (2016). A internalização da exclusão. *Educação e Sociedade*, 23(80), 299–325.
- Garcia, R. M. C. (2013). Política de educação especial na perspectiva da educação inclusiva e a formação docente no Brasil. *Revista Brasileira de Educação*, 18(52), 101–119.
- Garcia, R. M. C. (2017). Disputas conservadoras na política de educação especial na perspectiva inclusiva. In R. M. C. Garcia (Ed.). *Políticas de Educação Especial no Brasil do Século XXI* (pp. 19–66). Florianópolis: UFSC/CED/NUP.
- Kassar, M. C. M. (2012). Educação Especial no Brasil: desigualdades e desafios no reconhecimento da diversidade. *Educação & Sociedade*, 33(120), 833–849.
- Kassar, M. C. M., Rebelo, A. S., & Oliveira, R. T. C. (2019). Debates and disputes in the Brazilian national policy on Special Education. *Educação e Pesquisa*, 45, 1–18.
- Kerosuo, H., Kajamaa, A., & Engeström, Y. (2010). Promoting innovation and learning through Change Laboratory: An example from Finnish Health Care. *Central European Journal of Public Policy*, 4(1), 110–131.
- Kosic, K. (1976). *Dialects of concrete: A study on problems of man and world*. Boston: Reider.
- Laplane, A. L. F. (2014). Condições para o ingresso e permanência de alunos com deficiência na escola. *Caderno Cedes*, 34(93), 191–205.
- Laplane, A. L. F., Caiado, K. R. M., & Kassar, M. C. M. (2016). As relações público-privado na Educação Especial: tendências atuais no Brasil. *Revista Teias*, 17(46), 40–55.
- Leonardo, N. S. T., Bray, C. T., & Rossato, S. P. M. (2009). Inclusão escolar: um estudo acerca da implantação da proposta em escolas de ensino básico. *Revista Brasileira de Educação Especial*, 15(2), 289–306.
- Leontiev, A. N. (2009a). *The development of mind*. Marxists Internet Archive. Retrieved from <https://www.marxists.org/archive/leontev/works/development-mind.pdf> (Assessed in: March 2017) .
- Leontiev, A. N. (2009b). *Activity and consciousness*. Marxists Internet Archive. Retrieved from <https://www.marxists.org/archive/leontev/works/activity-consciousness.pdf> (Assessed in: March, 2017) .
- Maciel, C. A., & Kassar, M. C. M. (2011). Políticas sociais, políticas de inclusão? In M. C. M. Kassar (Ed.). *Diálogos com a diversidade: sentidos da inclusão* (pp. 17–37). Campinas: Mercado das Letras.
- Mendes, E. G., & Malheiro, C. A. L. (2012). Salas de recursos multifuncionais: é possível um serviço “tamanho único” de atendimento educacional especializado? In T. G. Miranda, & T. A. Galvão Filho (Eds.). *O professor e a educação inclusiva: formação, práticas e lugares* (pp. 349–366). Salvador: EDUFBA.
- Michles, M. H. (2011). O instrumental, o gerencial e a formação à distância: estratégias para a reconversão docente. In K. R. M. Caiado, D. M. Jesus, & C. R. Baptista (Vol. Eds.). *Professores e Educação Especial: formação em foco. Vol. Volume 2. Professores e Educação Especial: formação em foco* (pp. 79–90). Porto Alegre: Mediação.
- Moraes, R. (2003). Uma tempestade de luz: a compreensão possibilitada pela análise textual discursiva. *Ciência & Educação*, 9(2), 191–211.
- Sannino, A. (2008). Sustaining a non-dominant activity in school: Only a utopia? *Journal of Educational Change*, 9, 329–338.
- Sannino, A. (2010). Teachers’ talk of experiencing: Conflict, resistance and agency. *Teaching and Teacher Education*, 26, 838–844.
- Souza, F. F. (2013). Políticas de educação inclusiva: reflexões sobre os impactos no desenvolvimento de um aluno com deficiência múltipla. In A. L. B. Smolka, & A. L. H. Nogueira (Eds.). *Estudos na perspectiva de Vigotski* (pp. 225–264). Campinas: Mercado das Letras.
- Souza, F. F., Dainez, D., Smolka, A. L. B., Scian, R., & Hulsholf, C. (2014). Políticas e práticas de educação inclusiva: condições e contradições no cotidiano de uma escola de ensino fundamental. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas. Vol. 22. Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas* (pp. 1–19).
- Vaz, K. (2013). *O professor de educação especial nas políticas de perspectiva inclusiva no Brasil: concepções em disputa*. Dissertation (Masters in Education)Florianópolis: Universidade Federal de Santa Catarina, Centro de Ciências da Educação.
- Virkkunen, J., & Newnham, D. S. (2013). *The Change Laboratory: A tool for collaborative developmental of work and education*. Netherlands: Sense Publishers.
- Vygotsky, L. S. (1978). *Mind in society*. USA: Harvard University Press.
- Vygotsky, L. S. (1993). The collected work of L. S. Vygotsky. *The fundamentals of defectology. Vol. Volume 2*. New York: Springer Science.