Teacher-Child Interactions in the Resource Room: paths to the co-construction of learning

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Abstract

This article identifies and analyzes interactions between a teacher and a child, whose language development was slow, in the resource room of a public school in Brasilia. In this qualitative study, with a focus on language construction, we observed communicative and meta-communicative strategies used in the learning process, based on the micro-genetic analysis of interactive episodes. As a theoretical perspective, we have adopted a cultural understanding of development that emphasizes the bidirectional and interactive character of learning. The study suggests that the teacher employ different pedagogical strategies in order to reach development and learning zones, resulting in the emergence of collaborative attitudes between teacher and child, and evidencing an interactive relationship, which is conducive to the co-construction of learning. Considering the discussions raised by the study, it is necessary to highlight the importance of personalized and co-participative care for children in inclusive education systems. **Keywords:** Learning; resource room; interaction.

Interacciones profesora - niño en un aula de recursos: caminos a la co-construcción del aprendizaje

Resumen

En este artículo se identifica y se analiza las interacciones entre una profesora y un niño, con atrasos en el desarrollo del lenguaje, en una sala de clase de recursos de Brasilia. En el estudio, de base cualitativa, se observaron las estrategias comunicativas y meta-comunicativas utilizadas en el proceso de aprendizaje, con enfoque en la construcción del lenguaje, a partir del análisis micro-genética de episodios interactivos. Como perspectiva teórica, se adoptó una comprensión cultural del desarrollo que resalta el carácter bidireccional e interactivo del aprendizaje. El estudio sugiere la adopción, por la profesora, de distintas estrategias pedagógicas que actúan en las zonas de desarrollo y aprendizaje y que resultan en la emergencia de actitudes colaborativas entre profesora y niño, evidenciando una relación interactiva que da señales a la co-construcción del aprendizaje. A partir de las discusiones suscitadas por el estudio, se hace hincapié en la importancia de la atención personalizada y co-participativos para niños que integran sistemas educacionales inclusivos.

Palabras clave: Aprendizaje; clase de recursos; interacción.

Interações professora - criança em uma sala de recursos: caminhos para a co-construção da aprendizagem

Resumo

Este artigo identifica e analisa as interações entre uma professora e uma criança, com atrasos no desenvolvimento da linguagem, em uma sala de recursos de Brasília. No estudo, de base qualitativa, foram observadas as estratégias comunicativas e metacomunicativas utilizadas no processo de aprendizagem, com foco na construção da linguagem, a partir da análise microgenética de episódios interativos. Como perspectiva teórica, adotou-se uma compreensão cultural do desenvolvimento que ressalta o caráter bidirecional e interativo da aprendizagem. O estudo sugere a adoção, pela professora, de diferentes estratégias pedagógicas que atuam nas zonas de desenvolvimento e aprendizagem e que resultam na emergência de atitudes colaborativas entre professora e criança, evidenciando uma relação interativa que sinaliza para a co-construção da aprendizagem. A partir das discussões suscitadas pelo estudo, salienta-se a importância dos atendimentos personalizados e co-participativos para crianças que integram sistemas educacionais inclusivos.

Palavras-chave: Aprendizagem; sala de recursos; interação.

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Introduction

The science of human development, as an autonomous area of knowledge, attempts to understand the transformation processes that we experience in the course of our lives. Understanding such transformations implies the necessary task of investigating learning processes. Over the years, many conceptions emerged in order to provide explanations for the phenomenon in the most diverse, even downright antagonistic, forms. In other words, the science of human development is vast, complex, and mostly unexplored.

Human development, in this study, presents itself as the outcome of a multiplicity of interconnected influences, factors and causes. Consequently, such development does not happen linearly. It happens as the result of a complex system of interactions through which individuals go during their maturation processes, which does not restrict itself to biological aspects. It is also necessary to consider the diverse interactions established between individuals and their multiple environments. In other words, we must consider their interactions with the environment itself, with the messages present all over the historical and cultural universe with which individuals dialogue throughout their lives, and so on (Valsiner, 2007, 2012).

The close relationship between development and learning has not always been regarded that way, and maybe it has not yet been duly recognized for a few theoretical perspectives. Vigotski (2001) raised objections concerning views that take turns dichotomizing and merging development and learning. Other visions extended the notion of interplay between learning and development. However, only after the studies of Vigotski and collaborators did the interdependence of these concepts become perfectly clear. Vigotski aimed at demonstrating the "unity and the diversity that existed between learning and development, as well as emphasizing the fundamental role played by educational actions in this process." (Kostiuk, 2005, p. 44). Thus, the relationship between learning and development becomes what we understand as a dialectic process where one factor drives the other successively. To Vigotski (2001), "the whole learning process is a source of development that triggers numerous processes, which would never get started by themselves without learning" (p. 115). This view shows the interconnection between learning and development. There is a relation between levels of development and potential capacity for learning.

The supposed relation for the child's levels of learning and development is beyond real capacity, which produces deep implications on the conception of these processes and their relation with educational contexts. According to Vigotski (2001), "in a collective activity guided by adults, children are able to perform much better than independently relying on their own comprehension capacity (p. 112)." This statement points at the notion that the difference between what they can do by themselves and what they can achieve with help constitutes a zone of potential development for children (Vigotski, 2001).Established interactions and social relations, therefore, permeate the relation between development and learning. That is, socially constructed, cultural symbols and meanings share and mediate that relation.

Another important approach, when it comes to human development, are the theories that emphasize the role played by culture in development processes (Branco, Pessina, Flores, & Salomão, 2004; Branco & Rocha, 1998; Valsiner, 1989, 1998, 2007, 2012). Culture serves a primordial purpose in the process of development construction. Human beings produce and modify culture and, at the same time, culture modifies human beings.

Geertz (1996) reaffirms this dialectic, bi-directional process of human constitution. From this anthropologist's point of view, humans are not only producers of culture. They are also products of that same culture in a biological sense. Such aspect is evident when we analyze a few aspects presented by Valsiner (2000), which hint at cultural influences in the motor development of children from different ethnicities. From a similar perspective, Rogoff (2005) contributes to this notion by presenting researches that point to an intersection between the processes of biological and cultural development, in accordance to data provided by studies concerning differences observed in the development of babies in distinct cultural communities.

Thus, there is no way of breaking apart the culture – learning – development triad. It is important to understand the constant relation among these three elements. In this perspective, it is possible to amplify the notions of culture, development and learning and move towards a full comprehension of these three spheres. This leads to a perception that presents itself as contrary to an understanding of development and learning as individualizing, self-contained aspects; and of culture as an isolated, abstract entity (Valsiner, 1989, 2007).

In other words, human beings are constituted by the interdependence between their own actions and their own personal meaning built in the dialogue established with "other socials". Therefore, it is possible to say that the process of signification or constitution of development implies signification and dialogue between "I" and "others", which gets started at the same moment that human life does, according to Rosseti-Ferreira, Amorim and Silva (2004). All analysis of human development, however, must pay attention to the complexity of this process, as well as to the interactions established by children during their development process (Maciel, Branco, & Valsiner, 2004).

Based on a systemic, inter-disciplinary focus on human development, we have observed an intrinsic relation between development and learning, as co-constructed aspects in the socializing processes that occur throughout life. In this sense, these processes manifest themselves since the very first moments of life and must be understood interdependently. Considering that human development is characterized by people's constant changes and reorganizations in the course of their lives, it will all depend on constituted social interactions. Social interactions, however, do not solely determine human development (Valsiner, 1989). It is believed that one of these symbolic systems, which provide a major contribution to human formation, consists of the language system. Language has been conducive to an extremely important qualitative leap in phylogenetic and ontogenetic development. Language's peculiarity and specificity, as well as the outstanding role it plays in the human constitution process, has drawn the attention of scholars and thinkers from different areas of knowledge such as philosophy, education, and psychology.

In this perspective, language proves a fundamental aspect when we speak of the relation between development and learning, especially because language is a specific characteristic of the human species. It is necessary to recognize that there is a biological system that leads to language development, but it is a process that cannot evolve away from a social system, which involves the vital role played by culture in a social, cultural perspective. Thus, language development and social function are primarily interconnected. That explains the need for interaction so we can consolidate our linguistic skills.

To Vigotski (1993), "language gets started at the social level and then, supported by the voice of the ego, becomes that thought-regulating inner voice." (p.17). In this sense, self-centered language is decisive in language's transition from exterior (social) to interior, which is characterized by an interdependence with thought. In other words, Vigotski is contrary to Piaget by believing that language has, overall, a social character. First, it serves the external function of reaching out to others; after that, it will play its internal role of regulating thought (Vigotski, 2000).

The social interaction experienced by children in their everyday lives lead to the start of the symbolization process, in which children realize the distance between words and objects/actions and, later on, migrate from social language to internal language and verbal thought. According to previous statements, language stands in a central position within the subjective constitution of individuals because it becomes the mediator of relations with the world outside, a complex universe of symbolic representation, and a driving force for development.

One of the most relevant issues concerning development and learning refers to the semiotic universe with which we interact. Most importantly, language consists of an extremely complex system of semiotic mediation, responsible for qualitative leaps in human development, particularly when it comes to typically human, superior thoughts (Vigotski, 2000).

In other words, language, as a symbolic system of mediation, is not only responsible for boosting communication among humans. However, it is not responsible for the emergency of superior psychological functions such as abstract and generalized thought, which gives us identity as a species.

To Vigotski (1993), human communication requires a meaning, which presupposes a generalization. Generalization is an advanced stage in word comprehension: "the most elevated forms of human communication are only possible because human thought reflects a conceptualized reality" (p. 5). Another concept that takes central position in this discussion is meta-communication. To Fatigante, Fasuloand Pontecorvo (2004), the importance of metacommunication in communicative processes becomes evident by the possibility of formation of *frames*¹ that guide the interpretation of what is affirmed in a denotative level. It all happens during the processes of interaction, so that the messages will not need to be transparent, since metacommunication provides participants, in a certain interaction episode, with information or clues for the comprehension of that event (whether such interactions are loaded with friendly proposals, or intimidation, for example). Non-verbal signs such as intonation, gestures or looks point at convergence, divergence, or ambiguity (contradictory) frames.

At the same time, we can also say that metacommunication opens a series interpretation routes, negotiated or defined, based on the unfolding of interactions. Thus, it involves all elements and opinions exchanged by those who communicate in a continuous way. As a result, metacommunication plays a pivotal role in the development of communication and interaction events. That is, the interactive processes can be limited by convergent or divergent objectives, which become evident to participants in the interactive process by means of messages exchanged during the interaction. Such processes permeate in human interactions from a very early stage (Müller, Marques, Pinto & Gomes, 2018; Pinto & Maciel, 2001).

Although it constitutes a condition for human development, especially the emergence of verbal language, nonverbal communication established during early childhood does not cease to exist after the outset of verbal language. Metacommunication is present in our social interactions our whole lives, and leads to the opening of dialogue channels with the world outside, which are consequently part of people's process of knowledge construction.

Communicative and meta-communicative processes are established in the interactions. In this perspective, we can say that the communicative processes established since one's birth are channels for the co-construction of human subjectivity (Fogel, Koeyer; Bellangamba, & Bell, 2002; Lyra, 2000, 2006).

In view of such issues, this study intended to identify, describe, and analyze the co-construction of development and learning, especially of spoken and written language, by means of the analysis of interactive processes established in a dyadic relation between a child and a teacher in the resource room of a public school in Brasília.

Method

The present article is the result of a qualitative study developed in the resource room² of a public school in the Dis-

¹ *Frames* in this study consist of relational contexts. They are constituted by communication and metacommunication processes, which can be frames of convergent or divergent objectives.

² The resource room in intended to be used for specialized learning

trito Federal (DF). The study was realized by means of observations, interviews, and video footage of teacher-student interactions throughout the school semester. After a summarization of all video material (Maciel, 1996), 13 episodes of interaction³ were selected for analysis.

Participants⁴ and Research Location

The research participants⁵ were a child, who was seven years old at the time, enrolled in a class of the first year of Elementary School in the Distrito Federal education system, and the resource room teacher. In general, proposed activities in the resource room were individual and had an average duration of 50 minutes realized twice a week.

The boy had a diagnosis of "Neuro Psychomotor Developmental Delay", which was the reason why he was getting support in the resource room. The 34-year-old teacher had been a member of the permanent staff at the State Education Bureau for 14 years, and had always dealt with children with special necessities.

In terms of structure, the resource room was relatively small, of rectangular shape, and had one window. Furnished with cabinets made of wood and steel, a mirror, two round tables surrounded by chairs, a cork notice board decorated with multi-colored strips of paper, and posters of educational content, the room was also equipped with a computer with its own desk and chair.

Procedures for Construction and Data Analysis

The procedures for data production involved observations realized throughout the school semester, twice a week. The observations were recorded in field notes. In addition, interviews were realized and recorded in audio. Also, a video camera on a tripod with a voice recorder was employed in order to record interaction episodes.

In order to assess the information collected for this study, we have chosen micro-genetic analysis (Góes, 2000; Rosseti-Ferreira, Amorim, & Silva, 2004). This type of analysis constitutes an important possibility for investigation

3 Due to article limitations, we have inserted the $1^{\rm st}$ interactive episode and its analysis.

4 In order to define research location and its participants, a few criteria were taken into consideration. Some of them were accessibility to location, negotiation to enter the institution, as well as the participants' availability.

5 The study received approval by the Ethics Committee for Research on Human Beings of the health science course in the University of Brasília. All ethical precautions concerning research on human beings were taken. All participants or their legal guardians agreed to take part in the research by signing a Written Informed Consent. in qualitative research areas. It consists of a methodology inspired in the cultural-historical theories widely employed in studies that involve the psychology-education interface. It is also conducive to the analysis of very particular aspects of interactive processes, which could not possibly be observed and analyzed by a different means.

According to Góes (2000), the micro-genetic methodology demands attention to the details of interactive episodes, in which focal subjects, intersubjective relations, and the social conditions of context stand out. In other words, the micro-genetic methodology leads to a comprehension of the dynamics present in social interactions.

Thus, the video footage was carefully watched and mapped out, according to the proposal of Maciel (1996). After that, a few episodes were selected for analysis. The description of these episodes attempted to privilege the non-verbal aspects of scenes. The analysis results were matched with the information obtained in interviews and field notes.

Our focus in the analysis of episodes was oriented towards the details of interaction, the subjective relations, and the social context. We also paid attention to other aspects related to the objectives and the adopted theoretical perspective of this study.

Results and Discussion

The episode consists of a pedagogical strategy in which the teacher shows images on a tablet and requests the child to read their corresponding words. The adopted pedagogical strategies are a very important factor when we consider the teaching-learning process. In this study, we have adopted the conceptualization of pedagogical strategies in accordance to Tacca (2006), that is, as strategies related to "the relational resources that guide the teacher in the creation of dialogue channels in order to gain access to a student's mind and emotions. This will lead to an understanding of the interconnections imposed by the affection-cognition unit" (p.48).

We consider that this definition amplifies notions that restrict pedagogical strategies to methods and techniques. It includes, therefore, subjective aspects referring to the social relations established during the process. In this sense, it is necessary to consider, as strategies, issues related to emotions, to affection, to the way the teacher conducts activities etc.

In this episode, it is possible to observe the teacher's encouragement so that the child will gain more autonomy concerning the proposed activity. This is evident, for example, when the teacher suggests that the child handle the images on the tablet, as we could observe in round 2: "*Will you click to see the next Picture?*"Or when she asks the child to point at the syllables in the word "Leite" (round 31): *First, tell me the syllables and I will mark them out here*".

The interaction adult-child, in a learning process, might lead to a redefinition of the situation by the subjects that participate in the activity by means of a progressive sharing of the task and of the construction of a crescent subjectivity. That presupposes a progressive participation, that is, the one

by children with special educational necessities, according to current pedagogical policies. The focus is on students with any special conditions, pervasive developmental disorder, as well as students with unusually sharp skills. At the time the study was realized, the Distrito Federal public education system was provided with 24 resource rooms distributed among 14 educational districts.

Interactive Episode			
Turn	Teacher	Student	
1	Let's take a look at the next word on the shopping list? Later, we are going to go get it at Big Box, right? Let's just finish this exercise.	The child is holding the mouse and looking at the computer screen.	
2	The teacher goes on: Let's take a look at the number of pictures, ok?	Child tries to produce a vocal response.	
3	The teacher draws the child's attention to the tablet and says: Would you like to click to see the next picture? The teacher hands the tablet to the child and prompts the child to handle the device too.		
4		Child leans over tablet and asks: Here?	
5	Teacher: That's right! oops! I think we skipped a picture. What's next?		
6		Child: Eistee	
7	Teacher: Oops! Wait a second. What is the sentence?		
8		eeee eite de corco.	
9	Teacher: Come on, honey. We can do better. It's "le".	Child keeps on looking at computer screen.	
10		Child: Le	
11	Teacher: Your tongue goes up like this		
12		Child keeps on repeating "LE"	
13	Leeee-iii-teee.	Leeee-iii-teee.	
14		Child goes on: te de coco.	
15	Teacher looks at child and smiles: Hum nice. You have gotten "coco" right. See?		
16		Child nods and says: humrum.	
17	Teacher: the "Coco" part sounds really good. Would you like to say it again?		
18		Child: Leee, Leee, Leeetch, Leee.	
19	Teacher: your tongue goes up: le		
20		Child: le.	
21	Teacher: "le" (several times). Now repeat, milk. "le". Tongue goes up.		
22	le	Le	
23	Teacher: that's right!		
24		Child:Te de coco.	
25	Teacher: great. Now we don't need to worry about the "coco", right?		
26		Child: Ei.	

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Continuation Table 1

27	Teacher goes on: now let's separate the syllables in " <i>leite". Let's go.</i>	
28		Child and teacher clap their hands together in order to count the number of syllables in the word "Leite".
29	Teacher: all right, let's go.	
30		Child looks at computer screen: look how many syllables!
31	Teacher nods and says: well, let's go. Wait. First, tell me the syllable so we can mark them up in here.	
32		Child: <i>"E", no, i mean "A" "D"</i> .
33	What?	
34		"A", "D".
35	Teacher points at screen and says: See. We are right here now.	
36		Child: "A, "D". No, No
37	Teacher: Wait a second. Would you step back a little? Sit up straight, dear. Give me some space, please. Which of the syllables here am I going to use to write the word "Le-i-te"?	
38		Child points with finger.
39	Teacher: Thats right! Syllable?	
40		Child: EEE.
41	Teacher: LE. Let me see. Let's practice a little? Here, take a look.	LE
42	Teacher asks child to observe his own pronunciation and places his hand on his own neck.	LE
43	Teacher: now we put this syllable and the letter together	
44		Criança: <i>"T" "E".</i>
45	Teacher: "Lete" or "Leiiiite". Let's see which letter is missing, dear?	
46		Child: "i".
47	Teacher: oh, the "i", I am going to mark up the "i".	
48		Child: here, the <i>"i" is alone. Ei…</i> (inaudible). <i>Why is the "i" alone</i> ? The "i"?
49	Teacher: now it is not going to be alone any more. When we write it in here, it is no longer alone. Right? It is alone only here (points at the space where the i appears by itself). You can write it, right? You can write it up here, ok?	
50		All right.

Source: Produced by the authors.

who learns becomes more and more active, participative, and autonomous in the realization of tasks, by means of a decrease in external regulation by the teacher (Pontecorvo, 2005a).

The stimulation of autonomy is observed as one of the most important tasks in the teaching practice. According to Morales (1999) "supporting a student's autonomy relates to how much liberty is granted in the learning activities" (p. 57).This consideration reinforces a flexible stand in the realization of pedagogical processes, which will allow children to create hypotheses and, eventually, confirm or deconstruct them. We emphasize the fact that, in the beginning of the activity, the teacher aims at keeping the child motivated for accomplishing the task by proposing a later visit to the supermarket in order to actually "buy" the listed products. This strategy, with the help of electronic equipment, seem to keep the child quite focused on the activity.

One important strategy in the pedagogical procedures observed is the recurrent use of the so-called *whimperatives*

(McDermott, 1977), commands or instructions formulated like questions. According to McDermott, commands formulated as questions are a way to gently suggest an expectation to be met. The way this "interrogative command" sounds depends on the established relation between teacher and child.

In the analyzed dyad, we understand that the use of *whimperatives* induces the child to participate, according to what we have observed in round 1, *"Let's take a look at the next word on the shopping list?*, and also in rounds 2 and 3.

Also, "Let's see which letter is missing, dear?", as in round 45. In these cases, although the teacher does not expect the child to refuse to keep on doing the activity, the commands are formulated in order to make the child feel motivated and willing, not forced or coerced to do things. That increases the possibilities of greater engagement and, consequently, learning possibilities.

In the process of development and learning, it is important to consider the relevance of social devices triggered by demanding interlocutors that make us go beyond (Pontecorvo, 2005a). This is evident, for example, in the line highlighted in round 7 "*Oops!Wait a second. What is the sentence?*", or in round 9when the teacher says, "We can do better." These are examples of how important it is for the teacher to play the role of someone who does not get satisfied by any answer, and that occasionally raises objections and delimitations while asking questions in order to motivate the child to search for explanations, or more consistent answers.

The teacher's work, therefore, must be guided by gently demanding better performances. Most often, affection and high expectations are considered incompatible. The affectionate teacher is normally seen as someone who never demands, whereas demanding teachers tend to be seen as coldhearted. In fact, affection and high expectations are not incompatible at all. Actually, they are both important elements when we consider successful pedagogical practices. Besides, the very reformulation of instructions reveals the teacher's attention and commitment to learning and development. According to Perroni (1992), the concerned adult reformulates speech in order to truly reach out to the child. In this episode, such reformulation might be verified in round 3, in which the teacher rephrases her message in order to make sure the child will understand her.

The construction of a pedagogical practice based on a dialogue interaction becomes evident in this episode. It is observed that the realization of a pedagogical process occurs in an interactive, dialogue-based way, which becomes evident, for example, when we consider the use of diverse discursive operations by the teacher as learning-regulating tools. In these regulations we have verified, for example: communicative operations of orientation such as in rounds 11 and 18; of assistance as in rounds 13, 21, 23, 27, 35 and 43; of information (by providing fresh data); of finalization (round 2, among other possible communicative strategies).

It is important to highlight the fact that the teacher intended, on several occasions, to establish eye contact with the child, especially when there were questions and requests for further explanations. Observed in numerous occasions throughout the observations, eye contact is one of the primordial resources in the establishment of trusting relationships. It is considered that one of the most important forms of human communication refers to face-to-face interaction, since participants can negotiate meanings in in real-time, a possibility that does not happen in written communication, for example.

In the research, the interaction processes pointed at a general context favorable to development and learning by means of convergent frames and trusting relationships, established by dyad. These aspects were revealed by characteristics and behaviors verified in the teacher's as well as in the child's actions. We can consider, for example, the incidence of moments when the teacher would praise the child's smallest advancements and right answers, the way the teacher really made an effort to keep the child motivated to do the activities; and the teacher's attention as indicators of positive frames. Concerning the child, we observed, in general, an alert, curious, available, and motivated behavior. We see such aspects as important indicators of a favorable pedagogical relation.

Despite the predominance of convergent frames, sometimes it was observed that the teacher assumed a controlling attitude by delivering direct orders or correcting the child's mistakes more emphatically. In these occasions, the child showed a certain discomfort and a little less motivation to do the activities. Although there were a few situations of resistance, especially when the child was expected to face his own difficulties, easygoing collaborations emerged in a more evident way.

In all analyzed episodes, it was possible to observe communicative and meta-communicative patterns in the pedagogical procedures that favored the establishment of positive relations, which were made obvious by the use of gentle intonation, the giving of explanations and orientations, and the predominance of motivating, encouraging words. Such characteristics of the pedagogical practice reveal a significant pedagogical relation, which is conducive to participation, an important aspect when it comes to successful pedagogical relations. In the episodes, we observed the predominance of the convergence of objectives concerning divergence events. The interactions that point at divergent objectives demonstrate more emphatic communicative and metacommunicative signs and tend to fail at constructing positive pedagogical frames. On the other hand, they amplify the possibilities of negotiation, which will allow for a new convergence of objectives. The actions of the teacher, concerning the realization of events in which divergent objectives appear, are fundamental. These actions have the power to lead situations either to convergence or to the permanence of divergence, which might imply the creation of more or less favorable learning environments.

On several occasions, it was possible to observe the teacher's operations within the child's zone of proximal development. According to Vigotski (2000), the ZPD offers educators an instrument by means of which it is possible to understand development's inner course, and assess processes under construction, that is, processes open to pedagogical intervention. According to Ajello (2005), "adults are expected to play a very particular role in the promotion of ways to elaborate more evolved information by means of an attentive intervention in interlocutors' zones of proximal development (p. 146)".

In the analysis of this dyad, we have verified the teacher's actions within the diverse zones of development, which involved the ZPD, as well as the zone of action promotion (ZAP), and the zone of free movement (ZFM), by means of responsibility transference, autonomy promotion, and encouragement of active participation or canalizations (constraints).

Concerning communicative aspects, Cadzen (mentioned by Pontecorvo, 2005b), affirms that typical verbal interaction in the classroom is characterized by a tripartite structure, in which a teacher's question is followed by a student's answer, which is followed by a teacher's comment. To Pontecorvo (2005b), the argumentative development in these cases, which is more conducive to the construction of knowledge, is not explored. This researcher subscribes to the opinion that, in this type of interaction, the intention to assess knowledge already consolidated by the child prevails over the intention to promote new knowledge.

Although we have verified the predominance of typical verbal interactions in the classroom, we consider such interactions to be real opportunities for the promotion of development and learning. In situations of pedagogical assistance in the resource room, interaction establishes itself in a more restricted way (dyad), which leads to the replication of the classical structure. Nevertheless, it was possible to identify the possibilities for the construction of learning and development made evident by means of communicative relationships established in this space.

Some of the most recurrent pedagogical practices observed were encouragements, compliments over right answers, orientations, incentive and motivation regarding the child's actions (in the episodes, such moments were punctuated by phrases like *Very good! That's right!*; *Well done!*). These are important aspects when it comes to successful learning practices (Maciel, 1996). To Tacca (2006), "only when pedagogical strategy focuses on the student's thoughts and emotions, can it create zones of possibility for new learning" (p.49).

Mirroring was a very common strategy used by the teacher during the interaction episodes. According to Orsolini (2005), conversational contributions, in which an adult repeats, reformulates, or extends the information introduced by the child, positively influence the development of a common discourse argument. Mirroring, therefore, communicates an effort to comprehend, and encourages the interlocutor to proceed with the discourse. An opportunity is given in order to reformulate or add other necessary information.

By using mirroring strategies (repeating something said by the child) in order to introduce the child to the right answer or standard pronunciations, or in order to reinforce/ praise right answers or advancements, the teacher offers models and immediate feedbacks. It important to remember that the teacher, in her communications with the child, verbalizes expectations that are also communicated non-verbally by means of behavior. This process, however, is not linear or unidirectional, since the learners in the pedagogical relation also communicate expectations, interest, motivation etc. That reveals the establishment of a co-constructive process, which is consequently bidirectional (Valsiner, 1989; Branco & Valsiner, 1997). Mirroring attitudes are important because, according to Vigotski (2000), "by means of adult imitation and by means of given instructions on how to act, the child develops a complete repertoire of skills." (p. 110).

According to Branco (2006), the symbolic possibilities, created by the interactions mediated by communication and meta-communication, are responsible for the creation of favorable contexts for the emergence and construction of meaning. The communicative processes, therefore, play a fundamental role in the interactive contexts because they guarantee the co-construction of meaning in intra and inter-individual realms. Thus, verbal and non-verbal communication necessarily convey the teacher's expectations concerning the child and the very realization of pedagogical activities. It is necessary to observe that, despite the emphasis on relational aspects, the learning-teaching process consists of a complex relation that includes several aspects and "cannot be reduced to a cold didactic relation. Neither can it be reduced to a warm-hearted human relationship" (Morales, 1999, p. 49).

A frequent example of co-construction by means of established communication refers to the more or less obvious taking of a theme introduced by another interlocutor with the intention to exclude small additions, variations, elaborations, and integrations. It is probably the most evident way to share experiences, knowledge, and assessments (Pontecorvo, 2005a, p. 73). The repetition of words or even whole sentences, uttered during the interlocution, is also an important resource in the establishment of interactions. Generally, behavior ratifies such interactions, which are not restricted to the communicative process. They play an important role when it comes to the development/learning relation. The importance of the relational aspects identified in this dyad can be analyzed from the perspective of Vigotski (2000) when he states that:

> Human learning presupposes a specific social nature and a process by means of which children penetrate the intellectual lives of those around them. Children can imitate a whole variety of actions that go way beyond the limitations of their own capacities. In a collective activity or under the guidance of adults, and using imitation, children are capable of doing much more. This fact, which seems to be of little significance in itself, is fundamentally important when it demands a radical change in the whole doctrine that deals with the relation between learning and development in children (p. 99).

Often, teachers or adults, in their relation with students, aim at fragmenting an activity or action by graduating the level of difficulty in order to facilitate the learning acquisition process. To Pontecorvo (2005a),in order to anticipate and measure the difficulties of a task, teachers "lend" their awareness and capacities to children, who are not equipped with the devices to handle such aspects.

In this sense, we can identify the positive aspects of imitation that do not lose their creative force. Even the imitation process demands creative and continuous reelaboration by children (Corsaro, 2011). In the analyzed pedagogical relation, it was possible to observe not only that but also other characteristics that indicate possibilities for the co-construction of language. We observed that the strategies adopted by the teacher allowed for the co-construction of hypotheses by means of situations and relations established by the child. Those are important points when we think of development and learning.

Studies show that the quality of relations established in pedagogical contexts is important element in the promotion of learning. Studies also indicate that the adopted method is not necessarily the main reason for successful pedagogical contexts. The main reason is the level of commitment and trust in relationships.

Thus, an important point when we analyze development and learning processes from the perspective of interactions is that the methods and techniques, although important, do not solely determine the success or the failure of a certain pedagogical practice. McDermott (1977) affirms, "No pedagogical style is inherently better or worse than others as long as children and teachers can understand the style sufficiently well in order to settle working agreements and trusting relationships". (p.15).

Final Considerations

By playing a pivotal role in the pedagogical context, the teacher is the main organizer of the whole process, an

essential position of mediator of children's development in its multiple aspects. This relation, therefore, constitutes a benchmark in the processes of learning and development, which allow the teacher to "consolidate the student as an individual by empowering the student as a person and as a learner" (Tacca, 2004, p. 101).

To McDermott (1977), the importance of social relations between teachers and children in the development of learning environments is an essential factor when we think of successful pedagogical practices. It is necessary to remember that when we approach human development by means of social relations, a bidirectional process reveals itself. That means the processes of change permeated by the interactions do not refer only to children. They also refer to the teacher.

Time limitations and the dynamics of the research context prevented us from further exploring all the questions proposed initially. New studies should come up, anyway, in order to better understand the aspects related to learning in a space for specialized service, especially concerning matters of the co-construction of spoken and written language.

The attention paid to the details of teacher-child relationships, verified in this study, however, contributed to the comprehension of punctual questions concerning the context of individual assistance. We also paid careful attention to moments in which interactive exchanges, established dialogue processes, and possibilities for the co-construction of language emerged. Thus, the analyzed material allowed for the observation of employed pedagogical strategies, of canalization processes, of the teacher's actions in the different zones of development, of the conflicts, and of the aspects related to the co-construction of learning.

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