# FAIRY TALES AND MEDIATIONAL PRACTICE: POSSIBILITIES TO BUILD COGNITIVE REPERTOIRE IN CHILDHOOD EDUCATION

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## Abstract

This paper is about an exploratory study, aiming to verify the possible effects of a mediated practice, with the use of fairy tales, in the construction of cognitive repertoire, in pre-school children, as provided in the instrument "*Dynamic assessment and intervention: Improving children's narrative abilities*". Five-year-old children were the participants in the survey. In order to collect the data, a total of 6 weekly workshops were organized. Mediation was performed considering the mediation criteria, "*focus, expansion, affectivity, reward and regulation of behavior*". The work was divided into four steps: (1) rapport and fairy tale presentation without mediation; (2) design and pre-test assessment; (3) presentation of fairy tale with mediation and (4) drawing and post-test evaluation. The comparison of the results reveal that mediation, through the narrative of fairy tales, can be an important strategy for building cognitive repertoire with children, once all evaluated items, based on the Student Protocol Form, had positive changes by the end of the study.

Key words: Mediational intervention; Fairy tales; Cognitive repertoire; Narratives.

# CONTOS DE FADA E INTERVENÇÃO MEDIACIONAL: A CONSTRUÇÃO DE REPERTÓRIOS COGNITIVOS PARA NARRATIVAS

## Resumo

Trata-se de um estudo exploratório, objetivando conhecer os possíveis efeitos de uma prática mediada, a partir da utilização dos contos de fadas, na construção de repertórios cognitivos, em crianças préescolares, conforme previsto no instrumento "*Dynamic assessment and intervention: Improving children's narrative habilities*". Participaram da pesquisa, cinco crianças de cinco anos. Para a coleta dos dados, foram organizadas oficinas semanais, num total de seis. A mediação foi realizada considerando os critérios mediacionais, "*focalização, expansão, afetividade, recompensa e regulação do comportamento*". O trabalho foi dividido em quatro etapas: (1) rapport e apresentação do conto de fada sem mediação; (2) desenho e avaliação pré-teste; (3) apresentação do conto de fada com mediação e (4) desenho e avaliação pós-teste. A comparação dos resultados revelou que a mediação, por meio da narrativa de contos de fadas, pode ser uma relevante estratégia para a construção de repertórios cognitivos junto a crianças, uma vez que todos os itens avaliados com base *Formulário do Protocolo do Estudante* sofreram alterações positivas até o final do trabalho.

Palavras chave: Intervenção mediacional; Contos de fada; Repertórios cognitivos; Narrativas.

# LOS CONTOS DE HADAS Y MEDIACIONAL INTERVENCIÓN: CONSTRUCCIÓN DE REPERTORIOS COGNITIVOS DE NARRATIVAS

## Resumen

Estudio exploratorio, con el objetivo de conocer los posibles efectos de una práctica mediada, por el uso de los cuentos de hadas, en la construcción de repertorio cognitivo, en niños en edad preescolar, previstos en el instrumento "*dinámica evaluación e intervención: mejorar habilidades narrativas para niños*". Participaron en la encuesta, cinco niños de cinco años. Para la recogida de datos, talleres semanales fueron organizados, total de seis. Mediación se realizó teniendo en cuenta los criterios de mediaciones, "*enfoque, expansión, afectividad, recompensa y regulación de la conducta*". El trabajo se dividió en cuatro pasos: (1) rapport y presentación del

cuento de hadas sin mediación; (2) diseño y evaluación previa; (3) presentación de cuento de hadas con mediación) y dibujo (4) y evaluación previas. La comparación de los resultados revela la mediación, a través de la narración de cuentos de hadas, puede ser una estrategia importante para construir el repertorio cognitivo con los niños, una vez que todos los elementos evaluados *forma de protocolo de estudiante* han experimentado cambios positivos al final de la obra.

Palabras clave: Intervención mediacional; Cuentos de hadas; Repertorios cognitivos; Narraciones.

## **I. Introduction**

Nowadays, the care of young child, specially the ones from zero to five years old, has been a great concern. Factors related to changes of life in urban spaces, in the beginning of the second decade of the third millennium, have originated an expressive number of studies in a worldwide scale (Rosemberg, 2013; Didonet, 2001; Kramer, 2003). The main discussion of those works relates to the importance of the interactions in the first years of life, pointing that they are crucial for the promotion of a global human development. In this sense, it is defended that the spaces and experiences should promote possibilities for the children to be able to develop globally, harmonically and, mainly, to live in a more complex and plural society.

In Brazil, all this interest and intellectual investment in infancy come from a movement of expansion of childhood education, in a phenomenon nurtured by a range of social, political and economic factors present at post modernity in which not only create demand, but also asks for its expansion, (Souza, 2008). Most of these studies point to the necessity to create strategies for the improvement of quality of the educational service, especially because the mentioned expansion do not always comes linked to techniques and psychopedagogical instruments through which its quality can be guaranteed.

According to Souza (2008), it is possible to highlight two central elements for the discussion about the quality of childhood education: (1) the responsibility of

institutions towards the child and the society; (2) the global development of the child during the infancy. About it, the Law 9.394 of December 20<sup>th</sup>, 1996, which establishes the Streamlines and Bases for the National Education (Lei 9394/96), by the articles 29, 30 and 31 makes clear the role of childhood education that must be offered in the Brazilian context.

In this sense, it is highlighted the importance of childhood education contribution towards the promotion of global human development, establishing a partnership or complement to educational actions developed by the family. Thus, childhood education has the role to amplify the experiences and knowledge of the child, connected to the activities that favor the self-respect and the respect for the others, the differences and the living in society.

Despite the explicitness of the Law and of the official recommendations, the daily life inside the educational institutions still marks an exacerbation of activities involving, basically, school contents focusing only on the systematization of reading and writing. In fact, this observation demonstrates an unconsidered respect for the richness of languages available to the children, as well pointed by Malaguzzi (1999). The curriculum proposals that prioritize reading and writing over other possibilities in the construction of knowledge reinforce the distance between the child universe and the schooling process, which results on a reality where it is impossible to understand the child as a powerful human being. In that scenario the child is seen as a passive person, unable to make him/herself understood and participate in his/her own knowledge construction (Oliveira-Formosinho, 2008).

Oliveira-Formosinho (2008), points that this new conception of child, as a participant and active human being, co-constructor of meanings, "having his/her own voice which must be seriously considered, involving him/her in a democratic dialogue

and the making of decisions", must be present in the institutional spaces. As the previous author, Salles (2005) argues that the child can only be understood in the context of the society to which he/she belongs, by means of understanding his/her ability to produce culture.

Futhermore, it can be observed in everyday life of daycare pre-school, the little attention given to the cultural aspects, which are important elements for the promotion of child cognitive repertoire that are represented by the notion *time-space*, by perception of *cause relation*, among others, which are present, for example, in the infant narratives. Therefore, an important instrument for the cultural transmission and, consequently, for the whole development of children can be fairy tales linked with infant narratives.

Bruner (1997, 2001) mentions that one of the ways to have access, interpret cultural data and to provide elements for the psychological development and for the education is through narratives, understood as an organizing principle of human experience. The author clarifies that, culture is a group of tools with techniques and procedures for the individual to understand his world and deal with it. In the same way, the mind constitutes and it is constituted by culture, so that construction of meaning is what mediates the interaction between mind and society.

According to Bruner (2001), fairy tales not only allow the transmission of a cultural value, of a socially built element, but also can trigger the process of development of superior mental functions, necessary for the understanding of its existence and relations. In dealing with the school context, that author considers that telling stories and narratives are fundamental and necessary elements for learning, helping children to think, to feel and *"to create a version of the world in which, psychologically, they may expect a place for themselves – a personal world."* (Bruner 2001, p.43).

Kishimoto, Santos e Basílio (2007) emphasizes that the narratives permit the construction of something which offers meaning to the world and promotes the child enrichment and growth, once it is present in the conservation, in the telling and retelling of stories, in the body expression and the actions which result in the integration of several languages. Correia (2003) argues that the characteristics of narrations are kept regardless of being real or imaginary, because they are expressions of socio-cultural and historical forces, by which people transform their world experiences in narratives and these help their experience.

Thus, fairy tales are a possibility of transmitting cultural and linguistic values, as they are considered as tools or crafts through which it is possible to sketch the interactions among individuals and these ones with their environment, contributing for the development and learning processes. In educational contexts, one may empower its use by the learning mediation practice (Zumstein &Vectore, 2010).

Mediation as a concept has been cited and studied by many scholars, from Socrates, Plato, Hegel and Marx to Vigotski and Feuerstein (Meier and Garcia, 2007). However, especially in the field of education, Reuven Feuerstein theorized and organized criteria for that mediation to happen, which direct the psychopedagogical interventions, towards a transformation in the thought process (Feuerstein & Feuerstein, 1994).

According to Feuerstein (1994), development goes necessarily through the learning processes and, in that sense, he defends the hypothesis that there are two forms of learning: through direct exposition to the stimulus and through mediated learning experience. The second situation is, latter on, the main idea of his theory of mediated learning experience. For the author, both are important, though he points out that the more and the better mediated learning experiences, the more the individual will be able

to take advantage of the learning that comes from the direct exposition to the stimulus. Thus, mediation is an opportunity for the individual to understand how his/her own learning process occurs, giving him/her more autonomy through the learning experiences in life.

Human development processes, concerning organic factors as well as the emotional ones, are not static, on the contrary, they are dynamic and mainly influenced by interactions and meanings attributed by the individuals. The social cultural experience is, therefore, what will provide the resources for the child to become a human adult. It is important to emphasize that for Feuerstein (1980), it is not the culture in which the person participates that will determine his developmental capacity. It is the process of the internalization of that culture, how the culture is presented to the child and how the individual build it in their interactions.

To guarantee the access to culture and, consequently, ensure proper cognitive development structures, Feuerstein claims that it is necessary, especially for children, to be in an education context full of situations and mediated relations (Souza, Desprebiteris & Machado, 2004). That educational context does not mean school institution exclusively, but an environment that enables the child to experience the world by mediated learning situations.

In that sense, Feuerstein (1980) elaborates twelve criteria of mediation. Through those criteria, Feuerstein affirms that it is possible to structure actions that lead to a mediated learning experience. They are: Mediation of intentionality/reciprocity; Mediation of meaning; Mediation of transcendence; Mediation of feeling of competence; Mediation of self-control and regulation of own behavior; Mediation of consciousness of own changeability; Mediation of behavior of sharing; Mediation of self-process and psychological differentiation; Mediation of behavior of objective planning; Mediation of the search for optimism; Mediation of feeling of belonging (Beyer, 1996; Cruz, 2007; Feuerestein & Feuerstein, 1994).

Feuerstein & Feuerstein (1994) also points out that to consider an interaction as a Mediated Learning Experience, four of those twelve criteria should be used during the situation: mediation of intentionality/reciprocity, mediation of meaning, mediation transcendence and mediation of consciousness of own changeability.

However, when speaking about the development of small children, Klein (1987; 1996) and Blau & Klein (2010) emphasize that five of those twelve criteria are important to consider interaction as a mediated learning experience. They are:

- Focus (Intentionality and reciprocity): it occurs when the mediator intentionally searches means and situations to facilitate cultural transmission and make it suitable to each mediated. In small children's education this search will be characterized by focusing and searching the child's attention for what one intends to mediate. It is important to highlight that the child must respond verbally or non-verbally to the mediator's intention.
- Expansion (Transcendence): it refers to the going beyond the immediate context, searching to reach objectives and remote necessities. With small children it happens when they transcend from what is being presented here and now, so that they expand their experiences.
- Mediation of the meaning or affection: it relates to sharing with the mediatized, the cultural meaning of what is being learned. In the case of small child, Klein proposes that any adult behavior that expresses affection towards an object, a person, an animal or a concept of value is an action of affection mediation.

- **Recompense** (Feeling of competence): it refers to the promotion of the feeling of the subject's capacity to solve his/her problems. This mainly happens by the exploitation of the subject strong points and not by the emphasis on his/her weak points. Therefore, mediation involves the pointing of the adequate behavior, providing feedback to the actions developed by the child. A high self-esteem promotes motivation to complete challenges and thus transpose cognitive barriers.
- Self-regulation and behavior control: it aims at regulating behavior, inhibiting impulsiveness and adjusting response time of the mediatized, with the aim to produce metacognition or the thinking before acting. For the small child this regulation happens mainly by the model of behavior of the adult facing a task. This model will serve as an example of success. (Klein & Alony, 1993).

Klein (1991) ponders the existence of two kinds of mediation with small children in an educational context: the good and the bad mediation. These two kinds of mediation differ from each other according to the use of the criteria during the mediational process. In the bad mediation only one criterion is used at each time and, rarely there is the use of another. In the good mediation there is the use of at least three criteria, what, according to the author, empowers the learning experience. This way, when we refer to small children's education one must try to enrich the experience of mediated learning bringing elements which contemplate universal mediational criteria pointed above.

Klein (1996) also defends that, when working with small children, these situations should be presented in all social environments to which the child have access, and that all actions towards small children should consider the possibility of mediation.

In this sense, it is understood that one of the possibilities of mediational work with small children is, exactly, in the space of narration of fairy tales. It is believed that the postulates of Brunner (1997), about benefits of fairy tales for the infant development, combined with the structuring of mediation proposed by Klein (1996), will result in a tool which can empower the educational process, not only relating to the cognitive and affective development of children, but also to the rescue of infant languages, which is so important for their development.

From the above considerations, the current study had as objective to investigate the possible effects of a mediated practice, from the use of fairy tales, in the building of cognitive repertoires for the narrative ability with pre-scholar children, especially concerning: identification and rebuilding of history components; language and ideas adequacy and episode structure of narrations (Miller, Gillian & Penã, 2001). It is important to highlight that recent studies points to a new perspective in research with small children, emphasizing the relevance of their participation in social processes and defending that as active agents in the cultural context, they must also be active in the investigation processes (Oliveira-Formasinho, 2008; Sant´ana, 2010; Souza, 2012).

## Methodology

The study<sup>1</sup> was taken in a public childhood education institution (kindergartner with philanthropic character), located in the suburb of Uberlândia, an inner city in the state of Minas Gerais - Brazil. This institution is open from Monday to Friday, from 6:30am until 5:30pm and it is responsible for 175 children that participate in the

<sup>&</sup>lt;sup>1</sup> All the data collection for this research was approved by the Ethics for Research Committee from the Federal University of Uberlândia (protocol number 006/2003).

activities offered. The children that attend this institution are from four months to six years old.

The study was conducted following a qualitative theoretical perspective (Gonzalez-Rey, 2002), where the construction of the corpus is considered in a non neutral relation between the participants and the researcher, breaking the paradigm of neutrality and controlled environment as the only possible ways to construct scientific knowledge.

The design of the study does not allow generalizations on the topic. However, the relevance of the qualitative research lies in the possibility to explore different aspects of the phenomena in multiples ways. Still, it must be emphasized that, in the analysis of individual subjectivities, there is a possibility to grasp aspects of the social phenomenon, since subjectivity is socially determined and reflects itself as a part of the phenomenon (Minayo, 2006).

## **Participants**

Five boys with the age of five years old participated as subjects. The selection was done by the indication of the institution's coordinator, which used as criteria the school organization and the family authorization for the research.

## Instruments

For data collecting the following instruments were used:

 a) Adaptation of the dynamic assessment and intervention instrument organized by Miller, Gillam and Peña (2001) - Dynamic assessment and intervention: Improving children's narrative abilities. Such instrument is used for a dynamic assessment of narrative, resulting in the description and, in some cases,

comparison of students' story. It prioritizes the dynamic assessment of the story components, language, ideas of the story and the structure of the episodes, which together characterize the three main aspects of the narrative. Such components evaluate the cognitive repertoires or the abilities for the narrative of pre-scholars. In this sense, the own evaluation process, seen in a dynamic perspective, permits the mediational practice – intervention, which may result in the transformation of the way the child processes information and builds his/her repertoires or abilities. Such instrument can be attached to other ways of assessment of general language abilities and which leads the clinician to diagnosis that take directly to intervention (Miller, Gillian & Penã, 2001).

- b) Use of two infant stories of Grimm Brothers, 19th century "The Valiant Little Tailor" and "Snow-white and Rose-Red", re-edited in 2004. The fairy tales were used as instruments for cognitive repertoires assessment, through narrative.
- c) Video camera for taping the workshops. Records were later written down for data analysis.

## **Constructing the corpus**

Having in hands the parent's permission and the approval of the director of childhood daycare institution for the research, data collecting procedures began. For that, a total of six weekly meetings were held, within two months of work, with the same group of children, as described below:

The *first meeting* had as objective establishing *rapport* between the researchers and the children, besides the contact with the recording equipment. For such, ludic activities were developed, such as: drawings, games, among others.

The second meeting began with the narration of the fairy tale "The Valiant Little Tailor". The narration happened without the use of mediation criteria and it was told with reliability, that is, respecting the language, the structure, and the vocabulary of the original text (Grimm & Grimm, 2002). Not using mediation was on purpose to assess, in a second moment, what would be the possible transformations, after using the criteria. After the narration, the children were requested to do a free drawing about what they understood about the story, what, according to Sant'ana (2010), is a valuable resource to represent the child's thought and a strategy which respects the process by which they communicate their ideas. After the drawing, it was still requested that the child's speech were written down. The objective was to recognize what children had considered more relevant about the story and compare it after mediation. Such elements would be showed again, suppressed or transformed into theirs representation.

The *third meeting* began with the narration of the fairy tale "The Valiant Little Tailor", however, mediation criteria (focusing, meaning, expansion, regulation of their own behavior, competence feeling) was used during the story, according to the excerpt below:

 $M^2$  - Remember you asked me who the tailor was? (*Focusing*) What do you think this word means? (*Affection*) Where in the text can we find tracks about this word? (*Expansion*)

C1: - Master, it is a man.

M: - Very well, it is a man! (*Recompense*) But, what else do we know about this man? What does he do? Do we have that information in the text? (*Expansion*)

 $<sup>^{2}</sup>$  Letter M will be used to register the *mediator*'s speech. The *children* who participated are identified as C1, C2. C3. C4 and C5.

C2: <u>I don't know</u>, I think you will have to read again (child laughed)

M: Could anyone tell me if in the text there is some more information about this man? (*Expansion*)

C1: - Master, he works for the king.

M: That's it! What does he do? (*Recompense*; *Expansion*)

C1: - He makes clothes.

M: - Where in the text is this information?

C1: - In a place in the story.

C2: - Where does he say he is sitting and thinking (child tries to find among the pages of the story)

M: - Very well! This was in the beginning, in the middle or in the end of the story? (*Regulation of behavior*).

C1: - It was in the very beginning, master.

M: - Excellent! And what do we call the person that makes clothes? (*Recompense; Expansion*).

C3: - Dressmaker, huh!

C4: - But dressmaker is a woman, not a man.

M: - Very well, the person who sews is called dressmaker. But only women sew? Men don't sew? (*Expansion*).

C1: - I don't think so, I have never seen a man that sews.

C2: - So a man who sews is a tailor?

M: - Very well!! Tailor is the name of an old profession which exists until today, the dressmaker. It is the name one gives to the dressmaker who makes men's clothes. (*Recompense; Focusing; Expansion*)

By the end of the story, the procedure described before was used.

In the *fourth and fifth* meetings, the same process held in the first and second meetings, respectively, were repeated, but with the use of the fairy tale "Snow-White and Red-Rose" (Grimm & Grimm, 2004). It is important to clarify that, in the stages 2 and 4, respectively, learning mediation techniques were used, as proposed by Klein (1996), who structured and guided the elaboration of mediational interventions during the data building moments.

The sixth meeting was represented by the end of the research activities and by the moment of saying goodbye to the children with ludic session activities and feedback of the works built by the children (free drawings). For such, several toys and games were used, besides collating, drawings and other graphic activities. During this moment, the returning of the works to the children was done and they seemed to experience a self-identification process with the drawing, with the story rebuilding and, mainly, with the comparison of the characteristics among their drawings. This entire dynamic was videotaped and served as complementary data for the study.

Having the data recorded in video, children's speeches and actions in the sessions of narrations of the fairy tales narratives were transcript, making it possible the beginning of the data analysis process.

## Data analysis procedures

From the video transcript, the data analysis started. The process was divided down into two axes:

a) descriptive elements found in the children's drawings – made in a quantitative way, through the analysis categories explained below and

b) organizer elements found in the verbal representation of children about the story – inspired on the assisted assessment instrument of infant narration of Miller *et al* (2001).

For the analysis of the two axes, differentiated analysis categories were established. In the analysis of the graphic representation, four categories were used: (a) elements referring to the scenery (time and place); (b) information/characterization of the characters; (c) events time order; (d) cause relations. The elements were identified in the children's drawings (identification made by the own child) and quantified within these categories. The amount of descriptive elements found in the drawings in nonmediated situations was compared to the amount of the same elements in the drawings in the mediated situations.

A second comparison was made to evaluate quantitatively the descriptive elements in the two mediated situations. For such, the number of elements found in the representative drawing of the fairy tale "The Valiant Little Tailor" was verified, with the number of elements in the drawing related to the fairy tale "Snow-White and Red-Rose", considering the narration with and without mediation, presented to the children.

From the analysis of the children's speech, the children's rebuilding process of the stories was categorized and quantified. In this analysis, the categories described below were used, measured in three levels – low (identified by 0-1 point); medium (identified by 1-2 points) and high (identified by 2-3 points). They are:

(a) *complexity of ideas* – observed through the details found in the narration, considered as a *low complexity*, when there were only items found in the story; *medium*, when there was an indication of abstraction; and *high*, when the child incorporated in the narration, items not presented in the story.

(b) *vocabulary* – observed by the kind of child's vocabulary in the moment of the narration. The low level occurred when, in more than three situations, the child did not know how to express him/herself because of the lack of vocabulary or the wrong use of the words, giving different meaning from the known; the medium, when the child could express him/herself adequately, making less than three mistakes; and the high level, when, besides being able to express him/herself without mistakes/difficulties, the child was also able to verbalize new words, which had not been used before.

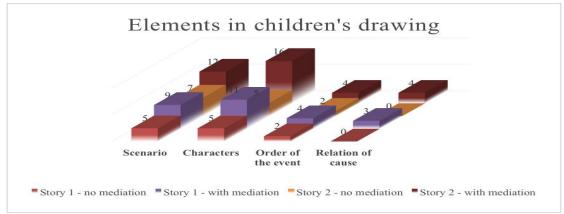
(c) grammar complexity – noticed by the grammar sentences analysis. It was considered *low* when the child expressed him/herself only with simple sentences; *medium*, when one observed the use of at least two composed sentences; and *high*, when the child used, in the majority, composed sentences.

(d) *creativity* – observed by the analysis of the capacity of transformation of the narrated material. It was considered *low*, when the child did not incorporated any new element; *medium*, when there was the presentation of the contents/new elements, without necessarily have a direct relationship with the initial story; and *high*, when the child presented new contents/elements, making the universe of the story ampler.

## **Analysis Results**

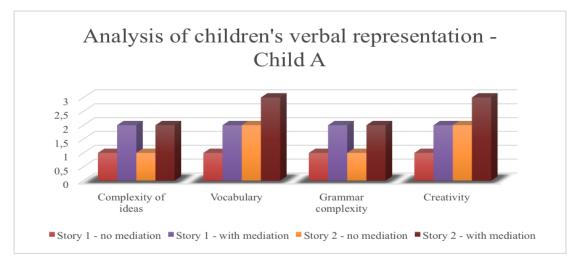
Picture 1 presents the results referring to the data analysis of the children's drawings. The figures represent the number of times descriptive elements were identified in the drawings of five children. The analysis was done in group, not individually.

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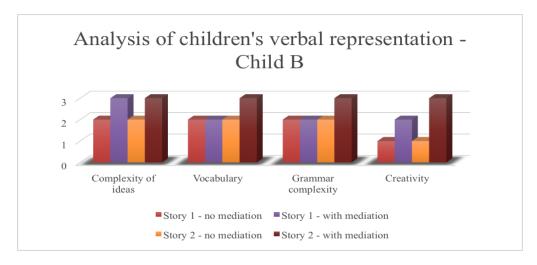


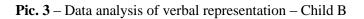
Pic.1 -Elements found in the infant's drawing

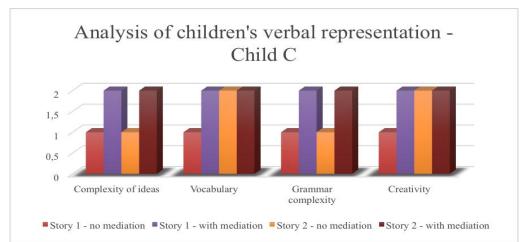
Pictures 2, 3, 4, 5 and 6 present the results of the verbal representation of the children, who participated in the study, concerning to the following categories: complexity of ideas, vocabulary, grammar complexity and creativity, presented in the rebuilding of the story process. This analysis was done individually.



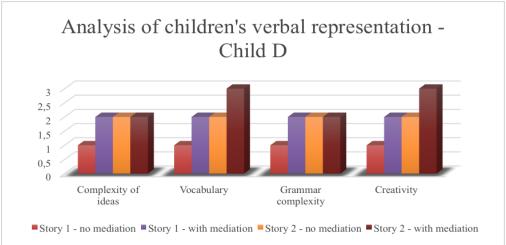
Pic.2- Data analysis of verbal representation – Child A



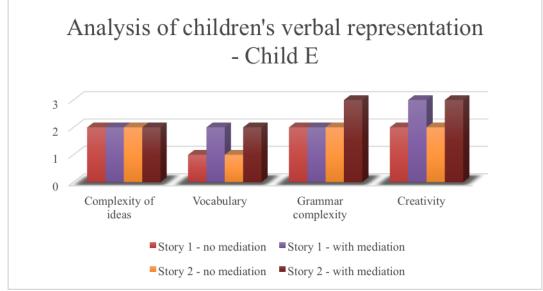




**Pic. 4** – Data analysis of verbal representation – Child C



Pic. 5 - Data analysis of verbal representation – Child D



Pic. 6 – Data analysis of verbal representation – Child E

As it can be observed in the pictures, the results point to a gradual increase of the cognitive repertoires through the exposition process to the fairy tales and, later, to mediation.

In Picture 1, it is highlighted that: (1) the descriptive element which presented positive alteration through the exposition process to the fairy tale, that is, the use of narration by itself, was a scenery composition element, an action that demands from the child, in terms of mental operation, the identification, comparison, classification process, mental representation and analytical perception and, in terms of mental function, systematic information search, capacity to considerate more than one information source, relevant data selection, adding behavior and verbal expression ability (Mentis, 2002).

Thus, it is possible to reaffirm that, exposition to the fairy tale, through mediational process, helps in the promotion of cognitive repertoires concerning mental functions as described before; (2) the introduction of mediational interventions describes an increase in the number of these descriptive elements for all the categories, which seems to point out that the two resources, when combined, contribute to the development of broader cognitive repertoires, which involve mental functions and more complex operations, such as: identification, differentiation, comparison, classification and mental representation.

Another factor that deserves attention is the increase in the number of elements in three out of the four analysis categories, when compared to the resources used by the children in mediation situations (underlined in the table). The categories which suffered alteration – *scenery; characters; cause relation* - demand a group of mental operations (mental transformation, comparison, classification, virtual relations projection) present in the three phases of the mental act, through several mental functions (understanding of

time concepts, systematization of the exploitation process, perception, data collecting, among others).

Concerning analysis of data from the infant narration (story rebuilding), made before and after mediation in the two stories, one may verify a possible amplification in the cognitive repertoires that such action demands. In the category *ideas complexity*, the child was assessed in the level of abstractions and associations which he/she was able to express; just one child did not present change from the beginning to the end of the process (as in picture 6). The other children (pictures 2 to 5) presented transformations in up to two levels, going from a bad performance (identified by the number 1 and which means having presented only concrete ideas) to a high performance (identified by the number 3, which means the presentation of concepts transcendence). Some examples may be explicit in the excerpt below:

M: - So, what is a giant for you?

C1: - It is a very strong thing.

C4: - Yes master, it is a very ugly and bad man.

C2: - Giant is a big person who plays basketball and soccer.

M: - So, it means that the giant is a big thing, ugly, bad and who plays basketball?

(Children laugh)

C2: - No Master, the one who plays basketball is in real life.

M: - And the others? They are fake?

C2: - They are.

M: - But maybe sometimes we don't find situations in which we feel we are in front of a giant like the one in the story? What did the tailor feel when he saw the giant?

C1:- He was afraid.

C4: - He wanted to go away.

C2: - He was not scared, he got really "brave"

M: - What is courage?

C2: - It is something like this... when someone does something and we...we fight.

M: -Hum, it is when someone does something and we do not like and so, we feel a bad thing which makes us angry?

C2: - That is it Master.

M: - Does anyone know the name of this feeling? (Silence)

M: - It is called anger.

M: - And what would be the biggest giant which you would have to face today?

C1: - I am afraid of big boys from my street, they do not like us.

C4: - I am afraid of thief.

The mediation seems to have helped children to develop a wider way to process information, thus acting in mental functions of the thought elaboration phase. As for the element *vocabulary*, there was an increase in all studied cases. Two children went from low to high performance (pictures 2 and 5), two went from low to medium performance (pictures 4 and 6) and one child went from medium to high performance (picture 3). As it can be observed in the passage above, vocabulary building takes place not only for specific words like *tailor*, but also relates to the sensations children have and do not know how to express.

Vocabulary acquisition is an indispensable resource for the cognitive development and for social interaction of the subject (Feuerstein & Lewin-Benham, 2012). Without the conceptual elements, all the communication process and,

consequently, the subject response process to the demands of the environment can remain impaired.

Concerning the *grammar complexity* and *the creativity* categories, it is possible to observe that there was an evolution in the presented levels by all the children, after the mediational process (pictures 2 to 6). In the grammar complexity category, children were assessed in their verbal ideas construction ability, which reveals the profile of information processing and the strategies the child builds to elaborate his/her own story. This process demands from the child inner organization and the ability to fast relate facts and ideas about the debated theme. This process of grammar complexity building can be observed through the comparison between children's speech in the moment they retell the story.

C2: (initial speech, before mediation) the little story is...a...a tailor, he fights and kills the monster. C2: (speech, after mediation process) ...there was a tailor who liked the princess, he fought the giant who was very strong and...and killed the giant. The king got very happy and he also got happy.

## **Final appreciation**

Concerning modest proportions and intentions, the current study<sup>3</sup> highlights the possibility to attach the use of traditional fairy tales to the mediational process defended by Feuerstein (1994) and adapted for small children (Klein, 1987; 1993), as empowerment to the infant learning. It showed to provide a good pedagogical strategy towards the elaboration of activities for small children in the early childhood educational context and to be a combined tool for the development of verbal and mental

<sup>&</sup>lt;sup>3</sup>We would like to thank the great contribution of the two professionals Fernanda Machado and Débora Nogueira Tomás, who actively participated in the data collecting and data analysis of the research. We also thank the director of the Kindergartener Institution, who kindly permitted the researchers' access to it.

appropriation. Thus, although results may not be generalized, it was possible to observe an improvement in the way children processed information, which is a determining factor for the knowledge building in future situations.

In general, children became more competent to organize their ideas (following marks of time and space reference and increasing the amount of information to compose the situation) and put them forward (improved verbal abilities and better approach to tell the story), they built new communication strategies and, at the moment of verbalizing, they increased their ability to create. So, it is understood that the main point raised in the hypothesis is confirmed: fairy tales, worked in a mediated way, may become relevant resources for the pedagogical work and that strategy can be used aiming the promotion of cognitive development repertoire with pre-scholar children.

Although the research was limited to one institution of childhood education, we do believe that the results are relevant and allow a wider understanding about this theme. However, it is necessary that other studies can be done, with a bigger number of participants, so that the results may be compared and debated in a broader way.

It is also important to approach the present theme in the perspective of the teacher's training for the mediational process. Are there opportunities for teachers to learn and improve their skills on mediational process when prepared for early childhood educational system? Considering the work of cognitive stimulation and subject global development, from the principles here highlighted, teacher's efficient and effective work in childhood education is an important parameter of quality, when one considers the development contexts of small children.

Therefore, the results contribute for the discussion of the necessity to invest in the quality of educational service offered in Kindergartener or Early Childhood Education Centers, once these spaces are currently the mainly place where children spend most of their time and where they first face with social challenges. Within this context, one of the aspects that deserve attention is related to the kind of interaction, stimulation and the amount of opportunities to mediated learning experiences in these children's daily life.

To finalize, a space organized to fulfill child's global development, prepared to respond the social demands, not being restricted to the challenges in the reading and writing process, needs investments in several instances of the society, so that it covers activities and methodologies that highlight the desired care with the infancy.

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