

# Changes in the written stories production of students on the basic literacy by means of a metatextual support

Mudanças na produção de histórias escritas de escolares em fase de alfabetização a partir de apoio metatextual

Cambios en la producción de historias escritas de estudiantes en fase de alfabetización a partir del apoyo metatextual

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## **Abstract**

**Objective:** to assess the evolution of the written production of students, over the application of a metatextual program. **Method:** the program was implemented in the participants' schools, using a quasi-experimental design, with two intervention conditions: in the first condition, we used explicit instructions and the teacher was the mediator. And in the second one, the student used a self-regulatory strategy, without the mediator. The basis for the intervention was reading the pictures in sequence to form a story, which was told orally at first, and then in written way. Data analysis was based on the classification of written stories and statistical tests: ANOVA and Bonferroni's Pairwise Comparisons. **Results:** the results indicated significant differences in productions with and without tutorial support. **Conclusion:** the program is an effective teaching tool to improve and/or enhance the production of narrative texts in the classroom.

Keywords: Literacy; Child language; Handwriting.

#### **Authors' contributions:**

JPO - Study design; Methodology; Data collection and Article outline. FLV - Article outline; Data analysis; Critical review and guidance. APZ - Article outline; Data Analysis and Critical Review.

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**Received:** 31/08/2019 **Accepted:** 30/06/2020



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## Resumo

Objetivo: verificar a evolução da produção de histórias escritas de escolares ao longo de um programa metatextual. Método: o programa foi aplicado nas escolas dos participantes, utilizando-se um delineamento quase-experimental com duas condições de intervenção: na primeira eram utilizadas instruções explícitas, tendo o professor como mediador e, na segunda, o sujeito se apoiava em uma estratégia de autorregulação. A base para a intervenção consistiu no uso da leitura de imagens em sequência para formar uma história, inicialmente oral e, em seguida, escrita. A análise de dados foi baseada na classificação das histórias escritas e foram aplicados os testes de ANOVA e Pairwise Comparisons de Bonferroni. Resultados: indicaram diferenças significativas nas produções com e sem apoio tutorial. Conclusão: o programa utilizado tratou de uma tecnologia educacional eficaz para melhorar e/ou aperfeiçoar a produção de textos narrativos em sala de aula.

Palavras-chave: Alfabetização; Linguagem infantil; Escrita manual.

## Resumen

Objetivo: verificar la evolución de la producción escrita de estudiantes durante un programa metatextual. Metodología: el programa fue aplicado en las escuelas de los participantes, utilizando un diseño observacional con dos condiciones de intervención: en la primera, fueron utilizados instrucciones explícitas con el profesor como mediador, y en la segunda, el tema se basó en una estrategia de autorregulación sin la mediación del profesor. La base de la intervención fue el uso de lectura secuencial de imágenes para formar una historia, inicialmente oral y luego, escrita. El análisis de los datos se basó en la clasificación de las historias escritas y en los testes ANOVA e Pairwise Comparisons de Bonferroni. Resultados: indicaron diferencias significativas en producciones con y sin apoyo del tutor. Conclusión: El programa utilizado es un recurso didáctico eficaz para mejorar y/o perfeccionar la producción de textos narrativos en la clase.

Palabras clave: Alfabetización; Lenguaje infantil; Escritura a mano.

## Introduction

This article has focused on metatextual knowledge, one of the metalinguistic skills as proposed by Gombert<sup>1</sup>. This author defines this skill as knowledge about the properties of the text, analyzed from an intentional monitoring, in which the subjects focus their attention on the elements composing the text<sup>1</sup>. It is noteworthy that this focus of reflection and analysis must occur deliberately so it can be considered a metalinguistic skill, and this concept can be related to any type of text. This, however, does not prevent one from considering the issues of implicit learning, present throughout the process of development and learning of the subject<sup>2</sup>.

Some studies<sup>3,4</sup> indicate that metatextual knowledge is more explored in the scientific literature, from its relation with text comprehension, although some current studies also analyze this skill from the point of view of its structure<sup>5</sup>.

This concept of metatextual knowledge has been incorporated into a written production program elaborated by Oliveira and Braga (2012) and successfully tested in its initial investigations<sup>6,7</sup>. In the research by Oliveira<sup>7</sup>, the effects of this program in the production of written narratives of students with delay in the literacy process were verified. And later, the program was refined and named PRONARRAR, which is a two-phase intervention program that systematizes the teaching of the narrative text structure with mediations and with concomitant visual support of sequential images<sup>8,9</sup>.

Although the focus is on the structure and organization of the text, the subject does not stop working with the content and language use. In addition, the pictographic support of the program was carefully selected according to the stories related to the children's contexts and life experience, inserting familiar contents to their productions. However, it is important to notice that PRONARRAR was developed with children from southern Brazil (in the state of Paraná). Therefore, regional adaptations have already been noticed as necessary due to the cultural diversity and other specificities of the children that participated in the interventions<sup>9</sup>.



The results obtained so far confirm previous investigations relating visual support and students' performance in storytelling production. The researcher<sup>7</sup> has also emphasized that the illustrations used to show each element of the story (scenario, theme, plot and resolution), must be represented individually in each illustration<sup>8,9</sup>. The need to improve this data collection instrument, with special attention to the illustrations used in the program, was one of the reasons for the publication of PRO-NARRAR<sup>9</sup>. Within this context, PRONARRAR's main objective is to assist the process of writing the stories of students who are delayed in the literacy process. The program also works on aspects of reading and can be used as a teaching and/or improvement procedure for these written elaborations with students who are in early stages of literacy and who are not facing difficulties in this process.

Written story production is extensively explored in the literature. We highlight some studies that involve the performance of elementary school students.

Some studies<sup>10</sup> evaluated the performance of 3rrd, 5th and 7th grade students in the production of written narratives. Students were asked to produce stories from an illustration and an instruction that described a situation. The written narratives were analyzed according to the criteria of adequacy to the received instruction and the stimulus, as well as to the coherence, cohesion, textual structure and development of ideas. The results indicated coherent narratives that evidenced global comprehension with the development of detailed ideas and adequate vocabulary. On the other hand, they indicated few resources of cohesion, and in this aspect, the students presented greater difficulty. The authors concluded that most of the stories have evidenced all the parts that constitute the narrative structure (introduction, development and ending). However, some narratives presented an abruptly described resolution, that is, incomplete or poorly resolved. When analyzing the performance according to the level of schooling, they identified that, there is a progression on the development of the written narrative scheme throughout the schooling years. Researchers attributed this performance to both cognitive-linguistic development and to the effect of an increased exposure and work with writing in formal education.

Other authors<sup>11</sup> characterized, according to the school year and the educational network (public or

private), the orthographic performance and textual production of students from 4<sup>th</sup> to 7<sup>th</sup> grades. The evaluation of the written production was performed through dictation of words, of pseudowords and the production of a narrative text, from a sequence of images (five pictures that compose the children's story "A Stone in the Way", computerized and adapted). The orthographic errors were analyzed considering the words and pseudowords. The productions of textual narratives were analyzed in terms of linguistic competence and narrative structure (macro and microstructure). The authors considered as linguistic competence:

Total number of words (including grammatical classes and repeated words); total number of nouns; total number of verbs (counted in infinitive or inflected, except past tense); total number of verbs in the past (characterize the productions as narrative structures); total number of adjectives; number and discrimination of temporal markers (when, then, before and after); number of complete wordings (units that presented an inflected verb as center); number of incomplete wordings (units that did not present an inflected verb as a center, but they expressed an idea) (p.239).

The results indicated that schoolchildren in the public-school network had more orthographic errors and less competence to produce a narrative text. The performance in language skills did not show differences between schoolchildren in public or private education schools. There was also no difference in relation to years of schooling and interaction between these variables. The students from private schools presented better orthographic and narrative performance than those from the public schools. The authors concluded that the educational network, the progression of schooling and socio-cultural factors exert an influence on the students' orthography and narrative production.

Other investigations<sup>12</sup> studied the way elementary school students organize the content of the texts they create. After creating a narrative text, the students were interviewed about the strategies they used in the implementation of cognitive processes, as well as the knowledge and control they had about these metacognitive processes (conscious knowledge and self-regulation). The data was classified into macrocategories: general and specific strategies to organize the content of the text. Although most of the students stated they organized the content of the text and ordered the



ideas according to the type of text they were going to write, they could not clearly explain how they performed this organization. The students did not use strategies to classify or to organize the ideas in advance, and they showed no knowledge about the elements that structure the different types of texts. The researchers concluded that the difficulties revealed by students in organizing textual production can be attributed to the scarcity (or absence) of didactic guidelines to promote this process's knowledge and practice. The school should take responsibility for developing these skills in students including explicit strategies for teaching text production in the school curriculum.

In this perspective, other researchers<sup>13</sup> found that the degree of metalinguistic knowledge is intrinsically related to the real or imaginary representation of the other (reader), which influences all written production. Therefore, the authors made some suggestions for future research: i) to examine the influence of teaching practices on the production of meanings of a text, and ii) to carry out the unfolding of the pragmatic metalinguistic skill in the understanding of different textual genres and their influence on the development of scientific knowledge in various disciplines.

Other researchers have focused on evaluating the influence of visual or verbal support on students' textual production. Some authors14 investigated the influence of visual stimuli on the written production of students in the 4th and 5th grades using an action picture and four pictures in sequence. The students were divided into two groups: G1 (students without school complaints) and G2 (students with school complaints). Data were analyzed using communicative skills (linguistic, generic and encyclopedic). For both groups and for the two visual stimuli, the narrative genre was predominant. As for the encyclopedic competence, there was a significant difference only for the sequential pictures. The authors concluded that there was no influence of visual stimuli on the written productions of both groups. They pointed out that the action picture provided slightly better results for both groups, suggesting that this type of stimulus may be important to trigger the narrative genre that requires greater demand for linguisticcognitive aspects.

In this same perspective, other researchers<sup>16</sup> investigated the effect of the conditions of free writing production and written reproduction on the establishment of coherence in writing stories by children in the 2<sup>nd</sup> and 3<sup>rd</sup> grade. The children were asked to produce a free story and the reproduction of the children's story 'Little Red Riding Hood', which was previously read to the children. The stories were classified according to the proposed categories. The production of stories varied significantly, according to schooling, since the children in the 3<sup>rd</sup> year produced, in both conditions, stories that were more coherent. The stories produced in the condition of written reproduction provided a greater level of coherence in both the 2<sup>nd</sup> and the 3<sup>rd</sup> year students. The authors concluded that the previous storytelling promoted the writing of more coherent stories than the free writing condition. This suggests a need for specific support, even though initial, for the development of more cohesive and coherent stories.

No matter the considered focus, it is necessary to consider the children's world knowledge, that is, they need to recover their life experiences and perceptions with written language. In the stories produced by the children of another study<sup>17</sup>, these aspects were evidenced when the place they develop and learn is considered: the rural area. The wider and more diverse the life experience is, the greater the chances of children establish relationships between the most different types of texts, fundamentally broadening their understanding of them <sup>18</sup>.

Considering the observations above, this research aimed to verify the evolution in the written production of schoolchildren, during the application of the PRONARRAR<sup>8</sup> (metatextual intervention program). The objective was also to seek new elements to contribute to the improvement of the program.

## Method

# Sample

Fifty-nine students enrolled in the 3r<sup>rd</sup> year of elementary school at the time of the data collection participated in this study (2013) (Table 1), in addition to their respective teachers, in a total of six. The inclusion criteria were: i) voluntary participation,



after reading, agreeing and signing an Informed and Free Consent Term; ii) enrollment in the 3<sup>rd</sup> year of elementary school; iii) regular attendance in Portuguese language classes; iv) without history

of hearing loss, blindness and / or low vision. These data were obtained from school records and basic audiological evaluation. The sample was gender-balanced (Table 2).

**Table 1.** Complete descriptive for the variables of age and years of schooling.

Descriptive (years)	Age	Schooling
Mean	8,5	5,4
Median	8	5
Standard deviation	0,9	1,0

Source: by the authors

Table 2. Sample distribution as for gender

Gender	N	%	P-value
Female	29	49,2%	0.054
Male	30	50,8%	0,854

Source: by the authors

This research was characterized<sup>19</sup> as follows: it was an applied research, as to its purpose; observational descriptive, as to its nature and approach; as for technical procedures, it was a field study; and with a retrospective proposal, in relation to its development over time. All the norms established by resolution 466/2012, on ethical aspects in researches with human beings, were respected and the project was approved under the number 397,532, in 2013.

The study was carried out in three schools of a small town (Rebouças) in the State of Paraná. The audiological evaluation of the students to discard hearing loss was performed in a Clinic-School of Speech Therapy at Universidade Estadual do Centro-Oeste (UNICENTRO), Irati, Paraná.

## Instruments

The following instruments were used in the study:

- A Protocol to indicate students with learning difficulties<sup>20</sup>; it is an individual application protocol in which the teacher indicates the general profile of the student's speech, reading and writing abilities, elaborated from the records the teacher has on these performances.
- PRONARRAR Metatextual Intervention Program support for students with delay in the literacy process;<sup>8</sup> it was developed based on previous studies and the program aims at the

written production of children's stories. The procedure consists of an initial request to the student, to order a sequence of four available pictures, arranged randomly. When this sequence chosen by this student is not the correct, the mediator interferes, with questions, such as: "Does the story start like this?"; "Is that the correct order?" These questions are asked until this sequence is adequate. Next, the student is requested to make an oral description of this story and, then, the written production, using each of its elements (scenario, theme, plot and resolution), represented in each illustration. After the written description of each picture, the story is finished, with specific instructions8 for corrections as well as complements. For this analysis, 12 stories were considered, with varying levels of complexity (easy, intermediate and difficult), and this assignment was also the object of this initial PRONARRAR validation process<sup>8</sup>.

To analyze the stories produced by the students, specific instruments were used exclusively in the initial program<sup>7</sup>, built from previous studies, which will be described in the data analysis section. The protocols to measure the participants' performance were inspired by the previous studies and updated from the constant applications of PRONARRAR<sup>8,9</sup>. It is noteworthy that the protocols to be exposed refer to those used in 2013, and that there are updated versions<sup>9</sup> of these instruments.



## **Procedures**

In the first stage of the study, two meetings were held with the teachers to train them to use the program. At this stage, PRONARRAR was presented, and each of its phases was described, as well as the procedures to be implemented in the classroom.

In the second stage, the teachers had a training session with the students so that they could identify the parts composing a story, using metatextual strategies. Each schoolchild received a traditional printed story chosen by the teacher according to their familiarity and taste for the story.

Then, they performed a collective reading of this story and individually identified the elements that composed it, painting each one of its parts: scenery, theme, plot and resolution. At the end of the activity, the teachers resumed the elements that constituted this textual genre with the students. When necessary, the teachers made corrections. Next, the students prepared a chart (Chart 1) containing the main characteristics of each of these parts. This chart was used by the children in some of the program's sessions to reduce teacher mediation.

Chart 1. Description of the main elements composing a story.

Elements composing a story Description of each of the elements			
Scenario	The place where the story happens The time when the story happened One or more characters in the story		
Theme	Problem to be solved by the main character or characters		
Plot An action or set of actions to solve the problem			
Resolution	The moment when the mentioned main character or characters solve the problem		

Source: author7.

After this procedure, the use of PRONARRAR was referred. Twelve sessions, which correspond to 12 stories, were applied, six of them with the direct teacher mediation, using explicit instructions during the production of each part of the story. In the six sessions without the teacher mediation, the table was used as a strategy of self-regulation or support. Two sessions were held each week (one with support and one without support). The program lasted for six weeks.

The condition for the production of the story began with the child's contact with the pictures. Each story has four pictures that correspond, respectively, to the elements of the narrative (scenario, theme, plot and resolution). At this initial moment, the child was asked to arrange them in sequence, in a situation of mediation that would provide the appropriate sequence. Then the child was invited to tell the story orally and then to produce it, in writing, from each of its parts.

In the session with support, the quality of the mediation is extremely important, since the explanations and invitations for this mediation have implications for the quality of the produced written story and would help the child, in the phase in which it produces another story without mediation, using the self-regulation strategy. The duration of each session varied between 50 and 60 minutes.

# Analysis of Results

Data analysis included measures obtained by using the instruments built for the exclusive use of this program, as previously mentioned in the PRONARRAR<sup>8</sup> description. The main instrument for measuring the stories is shown in Chart 2. We highlight that this protocol has an updated version, as explained throughout the text.



Chart 2. Protocol for scoring written stories produced by students used in this data collection (2013).

Categories	Obtained Score						
Scenario	One character More than one character Time Place	YES=1 YES=2 YES=1 YES=1					
	Subtotal : 4 points						
Theme	Description of actions Clear presence of a problem situation?	YES=2 YES=5					
	Subtotal: 5 po						
Plot	No action One action More than one action	YES=0 YES=2 YES=4					
		Subtotal: 4 points					
Resolution/ Outcome	Outcome defined from problem resolution Simple and straight outcome without problem resolution Simple and straight outcome without relation with the stories Undefined or absent result	YES=4 YES=2 YES=1 YES=0					
		Subtotal: 4 points					
Sequence (Score only in the presence of Plot)	Presence Absence	YES=1 YES=0					
		Subtotal: 1 point					
Total score	18						

Source: by the author7.

As it is a classification system (in the validation stage), this analysis was assisted by three judges, for calculating the Reliability Index of at least 50% of the sample of the stories produced by the students. The judges were selected considering the areas of Psychology, Speech Therapy and Pedagogy, with experience in Written Language and Literacy. The indexes obtained between each judge and the investigator were, respectively: 89%, 84% and 91%. Previous data from this classification obtained rates of 75%<sup>21</sup> and 92.83%<sup>7</sup>.

In order to evaluate the changes that occurred during the intervention, a variance analysis (ANOVA) was performed for repeated measures. Given that there were sessions in which the teacher monitored the student (sessions, 1, 3, 5, 7, 9 and 11) and sessions in which the student worked more autonomously (sessions, 2, 4, 6, 8, 10, and 12) the performance of this variable was compared using Bonferroni's *Pairwise Comparisons* <sup>22</sup>

#### Results and discussion

Regarding the evolution of students in PRO-NARRAR, a statistically significant difference was observed throughout sessions with and without tutorial support. This analysis provided a comparative panorama in relation to the score obtained by the students in the stories throughout the sessions, described below.

Analyzing the sessions with tutorial support (sessions 1, 3, 5, 7, 9 and 11), significant differences can be verified in the performance of the children regarding the time they are evaluated: F (5.140) = 291.72, p<.001 (sphericity not assumed). Compared to Bonferroni<sup>22</sup> *Pairwise Comparisons*, these showed some oscillation in the results, according to data presented in Table 3, below.



**Table 3.** Presentation of PRONARRAR results for analysis of variance (ANOVA) for repeated measurements in the sessions with tutorial support.

	Moments of evaluation (sessions)						
	Session 1	Session 3	Session 5	Session 7	Session 9	Session 11	
	(n= 59) Mean (SD)	(n= 59) Mean (SD)	, , ,	(n= 59) Mean (SD)	(n= 59) Mean (SD)	(n= 59) Mean (SD)	F (5,140)
PRONARRAR	8.71 (2.13)	12.09 (2.92)	11.59 (1.82)	13.75 (2.21)	13.70 (2.27)	11.46 (2.44)	291.72*

\*p < .001 (sphericity not assumed). Source: by the authors

Statistically significant differences were recorded between session 1 and the remaining sessions. The performance in session 1 was always lower than what was recorded in the subsequent tutored sessions. Sessions 3 and 5 only recorded statistically significant differences when compared to sessions 7 and 9, but the performance in these two last sessions was higher. Session 7 records significantly higher results than those of sessions 5 and 11. Session 9 shows differences regarding sessions 3, 5 and 11, but, in this case, the performance in session 9 is higher in comparison with the

others. Finally, in session 11, a significantly lower performance was recorded in comparison with the ones for sessions 7 and 9.

Analyzing the sessions without tutorial support (sessions, 2, 4, 6, 8, 10 and 12), significant differences are also verified in the children's performance regarding the moment they were evaluated: F(5.261)=15.51, p <.001 (sphericity not assumed). In the Bonferroni's<sup>22</sup> *Pairwise Comparisons*, oscillations were also found in the results, according to data presented in Table 4, below:

**Table 4.** Presentation of PRONARRAR results for analysis of variance (ANOVA) for repeated measures in the sessions without tutorial support.

	Moments of evaluation (sessions)						
	Session 2	Session 4	Session 6	Session 8	Session 10	Session 12	
	(n= 59) Mean (SD)	(n= 59) Mean (SD)	(n= 59) Mean (SD)	(n= 59) Mean (SD)	(n= 59) Mean (SD)	(n= 59) Mean (SD)	F (5,261)
PRONARRAR	11.86 (2.48)	11.80 (2.30)	13.15 (2.34)	13.49 (2.05)	14.34 (1.18)	13.14 (2.29)	15.51*

\*p < .001 (sphericity not assumed). Source: by the authors

The two first sessions without a tutor presented very close results and without differences from a statistical point of view. Significant differences were observed in sessions 6 in comparison with sessions 2, 4 and 10. Results were higher in comparison with sessions 2 and 4, and lower in comparison with session 10 (showing progression). Session 8 recorded only significant differences from sessions 2 and 4. Session 10 recorded significant differences from all others, except from session 8. Session 12 recorded differences from sessions 2, 4 and 10, with relatively higher results in comparison with the first two (sessions 2 and 4) and lower in comparison with session 10.

On the other hand, in the first situation, an inconsistency of these data is identified in relation to the performance of the students in sessions 7, 9 and 11. A performance recorded in session 11, lower than sessions 7 and 9. This discrepancy can be explained based on three factors: the clarity of the story elements conveyed by the pictures; their sequence of application and the quality of the mediation during the sessions with tutorial support.

Regarding the first factor, it is noteworthy that the present data collection was one of the first ones to be carried out with PRONARRAR, aiming at its improved development and consequent validation. In previous<sup>21</sup> and current<sup>9</sup> studies, some necessary adjustments



were identified for the instrument, such as: review of the scores assigned to the stories, degree of difficulty and consequently the sequence applied to the stories, and finally, review of some stories that have pictures children find confusing when establishing adequate sequence of events. These first applications provided and continue to provide data for improving the instrument.

In relation to the quality of mediation, we expected that with the sessions, a gradual increase in the level of performance during the application of the program would occur, as in previous<sup>21,7</sup> studies. However, other variables involved in the story production situations would have to be analyzed, especially the quality of the instructions provided by the researcher at the teacher training session, and the variation of the situations when elaborating the written productions in a classroom environment.

As for the sessions without tutorial support, in general, results were recorded with significant differences, with a progression indicator. However, the results of session 12 are lower than those of session 10.

The possible factors that may have generated this lower performance in an advanced session are discussed. We highlight the sequence of application of the stories, that is, it is possible that a more complex session was anticipated, even though this classification had already occurred, considering, mainly, the components of each element of the story<sup>9</sup>. We also hypothesize individual factors, as it was a session without a tutor.

Although individual factors may interfere with the production, the author<sup>23</sup> also highlighted issues of affinity and stimuli. The author emphasized that the environment the child is inserted and the contact with the reading are factors that influence the process of narrative construction. This researcher refers to the production in the literacy phase, in which the logographic reading is essential, represented by the writing supports and pictures, in a general way.

The obtained data provide a satisfactory evaluation of the instrument application. The authors<sup>24</sup> reported that the stories produced in situations in which visual support (sequence of pictures) or verbal support was provided (from storytelling) were the ones with more sophisticated structure and linguistic organization. However, this effect was not observed among the children of the most advanced grades (3<sup>rd</sup> and 4<sup>th</sup> grades of elementary

school, at the time), whose stories presented a narrative structure elaborated in all production conditions: free, oral/written, sequence of pictures and reproduction.

Our results also corroborate other studies that used visual support strategies. However, the researchers<sup>10</sup> used only one picture along with an instruction that described the situation. These authors recorded coherent narratives, evidencing global meaning with the development of detailed ideas and adequate vocabulary; aspects which, initially, were more difficult for the students.

Following this perspective, another study<sup>14</sup> also reported similar results. In this case, the authors requested written productions with two different visual stimuli: an action picture and four pictures in sequence. The authors did not find significant differences regarding the type of used stimulus; however, they found slightly higher results, related to the action picture. As a result, the authors suggested that this type of stimulus may be important to trigger the narrative genre that requires greater demands of linguistic-cognitive aspects.

For this reason, we highlight, as an important and differential factor of PRONARRAR, the fact that the parts of the story are divided into four pictures and therefore, with the exposure of the problem, as well as possible actions to solve it. As it is one of the most difficult parts to emerge in the schoolchildren's productions<sup>25</sup>, we reaffirm that this separated visual support is a differential, especially due to the actions present on the pictures. The authors<sup>14</sup> also emphasized that the action picture provides slightly higher results in their research.

In another study<sup>15</sup>, it was found that stories produced in the condition of written reproduction provided a greater level of coherence both in 2<sup>nd</sup> and 3<sup>rd</sup> degree students. The authors concluded that re-storytelling favored the production of more coherent stories in comparison with free writing. Relating this to our results, oral storytelling situations followed by the elaboration of its elements separately, and then proceeding with its conclusion also exposed children to more than one situation with its content and, therefore, enabling possibilities of revising such production.

This satisfactory performance in a few productions (twelve) also has its merit in relation to the textual genre chosen for the work. The author<sup>26</sup> warns to the fact that the contextualization of the genres is closely linked to the social practices of



the subjects. In this sense, the social context itself and the communicative practices can limit the types of genres to which the subjects are exposed. For this reason, its production becomes less difficult, whether an oral or a written production. The researchers<sup>8</sup> highlight that the choice for the narrative genre was justified because it is one of the most present in childhood. In addition, this presence is natural, throughout the whole process of language construction (oral and written).

We highlight that the measures used by PRO-NARRAR analyze the performance in the produced narrative; and to classify these stories, the elements that compose it are taken into account, as well as their sequence. In this way, it is also possible to infer that as this production progresses, elements of linguistic competence involved in this production can be improved. Although it has not been the object of this analysis, one of the characteristics that draw attention in the evolution of these narratives is its size and the disposition of its elements. In some cases, the first narratives were composed of loose sentences, while the final ones contained paragraphs with more than one period for each element of the story.

## Final considerations

This research intended to verify the evolution of written production of schoolchildren, throughout the application of a metatextual program (PRONARRAR). The results obtained in the application of the instrument allowed a satisfactory evaluation of the instrument, from the statistically significant differences between the sessions with and without tutorial support. In other words, the data allowed us to evaluate it as an effective didactic resource to improve and / or enhance the production of narrative texts in the classroom.

The data also allowed us to conclude that the self-regulation strategy proposed by the instrument was effective in relation to the progression of the students' performance, as in the sessions without tutorial support more indicators of this progression appeared. This allows inferring that this strategy can become a point of extreme relevance in relation to the generalization of the skills acquired during the sessions with tutorial support.

These data finally allowed us to consider that:
a) new applications of the instrument are necessary in order to select the stories that more clearly

indicate the elements (scenario, theme, plot and resolution) transmitted by the pictures; and b) it is necessary to (re) evaluate the sequence of application of the stories; and c) to analyze and propose adaptations for the instrument for audiences with specific needs, such as those children who produce the stories using alternative communication resources.

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