Original Article

Influence of the type of visual stimulus in the written production of deaf signers without complaints of writing impairments

Influência do tipo de estímulo visual na produção escrita de surdos sinalizadores sem queixas de alterações na escrita

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ABSTRACT

Purpose: To analyze the influence of the type of visual stimulus on the written production of deaf signers without complaints of writing impairments. **Methods:** Participants were 14 deaf subjects, of both genders, with ages between 8 and 13 years, students of third and fourth grades of Elementary School at a special school for deaf children, who were users of the Brazilian Sign Language. They were assessed by means of written productions based on two types of stimuli: a short sequence of four pictures, and a picture of an action. Each production was scored according to criteria adapted from the Communicative Competences theory (Generic, Encyclopedic and Linguistic). **Results:** In the analysis of the Generic Competence, no difference was found between the written productions based on the sequence of pictures or on the picture of an action. However, the picture of an action provided more narrative productions, whereas the sequence of pictures elicited more descriptive productions. Regarding the Encyclopedic and the Linguistic Competences, both visual stimuli provided similar results in written production. Both in the Linguistic and Encyclopedic Competences, the performance of the subjects was lower than expected for the level of education, demonstrating partial knowledge regarding the written Portuguese language. Nevertheless, it was observed that the sequence of pictures allowed a bit more elaborated organization of ideas and overall cohesion. **Conclusion:** None of the visual stimuli, whether sequence of pictures or picture of an action, provided better performance in the written production of deaf signers without complaints of writing impairments, for most of the aspects analyzed.

Keywords: Sign language; Evaluation; Hearing impaired persons/education; Writing; Deafness

INTRODUCTION

Writing is a complex activity both for hearing and deaf students. However, the predicting factors of a good writing performance for deaf subjects must consider the following variables: degree of hearing loss; type of school; teaching method; language used for communication; and presence of an interpreter and/or teachers proficient in sign language, in the case of deaf signers[1]. Thus, analyzing the writing of deaf subjects is more difficult, due to the fact that many variables might interfere in this process.

International[2-4] and national[5,6] studies have shown that many deaf people reach school age without an acquired language, that is, without having developed oral or sign language. Hence, the absence of a base language might interfere in the literacy process[5], as well as contribute to the production of written language with simple syntactic structures, restricted vocabulary, and difficulties regarding verbal inflection and agreement[5,7,8].

Sign language provides an important linguistic base for the literacy of deaf signers[2,9]. However, access to the regular school curriculum is not always reached only because they are admitted in regular school. It is necessary to make it clear how written language is acquired by these subjects and how it has been assessed; to guarantee an effective communication between deaf students and their teachers; and to carry out didactic modifications and other important accommodations to the academic success of these students[10].

Studies conducted in Brazil[2,11] have shown that the elements absent from the written productions of deaf subjects are,

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in great part, those that are absent from or that are manifested differently in sign language. Nevertheless, these studies have emphasized that deaf individuals are able to learn reference strategies in written Portuguese language during interaction with an interlocutor that dominates the language.

Due to the fact that deaf users of sign language use the visual channel, the employment of images has been a strategy to elicit written productions in these individuals. Moreover, it is a method that provides a standardized stimulus, which benefits the beginning of the child's productions, both in sign language and in written language[12].

Learning written language, for deaf individuals, goes beyond knowing the orthographic and operating rules of language. To achieve a proficient level of written production, it is necessary to develop the abilities for selecting topics, planning and organizing ideas[1]. In this sense, many studies have demonstrated that the written productions of deaf subjects are usually focused in sentences, and do not represent a cohesive and coherent textual structure[1,5].

With that in mind, a study[13] has suggested that the focus of investigation regarding the production of deaf individuals is changed to the analysis of Communicative Competences, which has demonstrated that the difficulties of these subjects are not that different from their hearing peers. The ability to referentially organize the content of narration has been investigated as a mark of the development of competences in the discourse of these individuals.

In the mentioned study[13], it was proposed that the linguistic competence might be a good basis for intervention on the development of literacy. Moreover, the authors added the need to develop studies that compare written productions elicited by sequences of images with those based on a non-sequenced image, in order to test the effect of visual stimulus on the discourse of children.

Based on these data, the initial purpose of the present study was to obtain a parameter to characterize the written productions of deaf signers without complaints of writing impairments, according to the type of image used to elicit these productions. The study also had the intention to possibly validate a writing assessment instrument for this specific population. However, the sample size limitation, also observed in other studies with deaf subjects[13,14], and the number of studied variables prevented this standardization.

A greater number of studies are necessary to obtain data regarding the assessment and pedagogic practices that attend the needs of deaf users of sign language, in view of the fact that the mastery of writing is an arduous task for this population. However, this is not considered an impossible task, as long as strategies that guide the production of more elaborate and cohesive texts are proposed, having in mind the bilingual reality and its relationship with writing, which is not based on sound. Studies[1,7,14,15] have shown that the development of reading and writing competences is an important factor to the academic, professional and social success of this population.

Hence, this study had the aim to analyze the influence of the type of visual stimulus on the written production of deaf signers without complaints of writing impairments, focusing on the analysis of communicative competences[16].

The initial hypothesis was that sequenced pictures, because they contain more visual temporal information than pictures of actions, would provide the deaf subjects better narrative written productions.

METHODS

The present study, prospective and cross-sectional, was developed at the Department of Physical Therapy, Speech-Language Pathology and Audiology, and Occupational Therapy, and approved by the Ethics Committee for the Analysis of Research Projects (CAPPesq) of the School of Medicine of Universidade de São Paulo (USP), under protocol number 1013/08. After being informed of the purposes and implications of the research, the parents/legal guardians of the participants signed the Free and Informed Consent Term.

Participants

The following inclusion criteria were used for selection of the subjects: to present severe or profound sensorineural hearing loss (over 71 dBHL for the mean of the frequencies of 500 Hz, 1 and 2 kHz); not to present writing impairment complaints, according to information provided by parents and teachers; to be enrolled in third or fourth grade of Elementary School in a special school; to present alphabetic level of writing; and not to be enrolled in speech-language therapy focusing reading and writing.

Initially, the sample was composed of 23 subjects. However, seven deaf individuals were excluded from the sample due to not contemplating the established criteria, and other two were excluded because they were not present on one of the dates the assessments were conducted. Hence, the final sample was composed of 14 subjects, eight female and six male, with ages between 8 and 13 years. With the aim to obtain a greater number of subjects, both third and fourth graders of Elementary School were selected, even though grade was not a variable in this study.

Although all subjects studied in a bilingual school, only six were considered fluent (great level) in Brazilian Sign Language (LIBRAS) by the teachers; three were considered in a good level, and five, in a regular level. On the other hand, it was observed that, in the evaluation of school performance, except for two students, all subjects followed through with the class. Only five students referred to use hearing aids.

Place

Data were collected at a special school for deaf individuals. The institution, guided by a bilingual educational approach, has a team composed of hearing and deaf professionals, all fluent in LIBRAS, and provides free service for deaf children and youngsters.

Material and procedures

Participants were selected through a Reading and Writing Assessment Protocol*, which evaluates the alphabetic level

and the reading and writing abilities of the students. The school records were consulted to obtain information regarding the evolution of the academic performance. The Informative Questionnaire for Teachers** was applied, with the aim to collect data about the current academic performance of the deaf students. The instrument was composed of information provided by teachers regarding the level of the students in LIBRAS and their individual academic performances. An anamnesis was conducted with their parents, with the aim to collect general data concerning the use of hearing aids, orofacial reading (OFR), and the history of speech-language therapy for reading and writing issues.

For the investigation regarding the main purpose of the study, we elaborated a video in order to carry out the writing tasks with the deaf signers, containing instructions in LIBRAS. A deaf instructor who is fluent in LIBRAS collaborated in the video. This procedure assured that all deaf signers received standardized instructions in order to carry out the tasks.

A writing task was elaborated based on the presentation of a picture, hereby named "picture of an action"[17], which contained several stimulating elements for textual elaboration. The other writing task was based on a sequence[12] of four pictures, which were successfully used in a previous study[12] to elicit a written production.

Both tasks were applied in a classroom with no more than 12 students. Subjects elaborated their own written productions individually.

Application of the writing tasks was conducted alternately, in order to avoid a possible training effect (subjects' performance could be better in the second task because they had already experienced the proposed activity). Thus, in the first session, third graders carried out the writing task based on the sequence of pictures, and the fourth graders, the task using the picture of an action. In the second session, it was the opposite.

There was no limit of time to carry out the written productions. Data collection sessions were filmed (Sony® Digital SR 47 video recorder with internal HD) and, at the end of each task, subjects were oriented to signal their stories. This procedure contributed to the qualitative analysis of the present study, as well as to the investigation of the relationship between sign language and written Portuguese in a further study.

Data were qualitatively and quantitatively analyzed according to the Communicative Competences (Linguistic, Generic, and Encyclopedic)[16], based on the ideas of the referenced author. Each production was scored according to the adapted protocol[18], and the maximum score for each production was 22 points (Chart 1).

Data analysis criteria

During the qualitative and quantitative data analysis, there was difficulty in evaluating the content of the written productions without support from the video interpretation in LIBRAS (in which subjects signaled the stories they had written). This difficulty was due to the use of distinct resources from those commonly used in habitual textual productions. Thus, it was necessary to include and train five judges with experience in reading and writing, participants of the research group conducted by the same supervisor of the present study, who analyzed the written productions of all subjects. Each judge analyzed and scored the written productions based on the picture of an action and the sequence of pictures individually and, after that, a meeting was conducted in order to reach a consensus on disagreements.

Comparative statistical tests were applied between written productions based on the picture of an action and on the sequence of pictures. In some cases, data distribution prevented the application of specific statistical tests. When possible, it was applied the McNemar test, which is indicated to verify the difference between nominal data from matched paired samples, or the Wilcoxon test, indicated for the comparison between two related or matched samples with ordinal measurement level. The level of significance adopted was 5%. Written productions were also qualitatively analyzed in order to complement the quantitative analyses.

RESULTS

Regarding the generic competence, no difference was found between the scores of written productions obtained from both visual stimuli, with reference to the type of discourse (p=0.453) (Table 1).

As for the encyclopedic competence, productions based on the picture of an action and on the sequence of pictures did not present differences (p=1.000) regarding the encyclopedic knowledge (Table 2).

With regards to other aspects of the encyclopedic competence (reliability to the theme, use of title, intertextuality, use of inferences, and vocabulary), it was not possible to apply statistical tests, because subjects' performances were in agreement for both stimuli. Most subjects did not use title, intertextuality and inference, and used simple vocabulary in the productions, regardless of the visual stimulus presented. As for the organization of ideas, data suggest that the sequence of pictures produced slightly better results.

Results regarding the linguistic competence: textual length and orthography (application of the McNemar test), and global cohesion and score (non-applicable statistical tests) were also obtained (Table 3).

Concerning textual length and orthography, no differences were found in data distribution between written productions based on the picture of an action and on the sequence of pictures (p=1.000 and p=0.150, respectively). As for the score, most subjects (nine) had partial performance in both tasks, that is, they used them in an inadequate and/or insufficient manner.

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Chart 1. Classification and scoring of communicative competences[19]

Competences	Description	Classification	Score
Generic	Type of discourse	• Narrative: • Report: • Argumentation: • Exposition: • Description:	
Encyclopedic	Encyclopedic knowledge	• Demonstrated to have knowledge on the theme • Demonstrated to have partial knowledge on the theme • Did not demonstrate any knowledge on the theme	• 2 points • 1 point • 0 point
	Reliability to the theme	• Maintenance to the theme • Partial maintenance to the theme • Did not maintain the theme	• 2 points • 1 point • 0 point
	Use of title	• Used title, relating it to the textual production • Used title, but unrelated to the textual production • Did not use title	• 2 points • 1 point • 0 point
	Intertextuality	• Present • Partially present • Absent	• 2 points • 1 point • 0 point
	Organization of ideas	• Adequate • Partially adequate • Inadequate	• 2 points • 1 point • 0 point
	Use of inferences	• Adequate • Partially adequate • Inadequate	• 2 points • 1 point • 0 point
	Vocabulary	• Complex • Simple • Inadequate	• 2 points • 1 point • 0 point
Linguistic	Length of text	• Long: developed more than 5 paragraphs • Medium: developed from 2 to 4 paragraphs • Short: developed 1 paragraph	• 2 points • 1 point • 0 point
	Punctuation	• Sufficient and adequate in most paragraphs • Insufficient or inadequate • Absent	• 2 points • 1 point • 0 point
	Orthography	• Until 2 orthographic errors • From 2 to 5 orthographic errors • More than 5 orthographic errors	• 2 points • 1 point • 0 point
	Global cohesion	• Present • Partially present • Absent	• 2 points • 1 point • 0 point

Table 1. Comparison of subjects' performance in writing based on the sequence of pictures and on the picture of an action regarding the generic competence (type of discourse)

Generic competence			Sequence		Total	p-value
			Description	Narrative		
Action	Description	n	3	2	5	0.453
		%	21.4	14.3	35.7	
	Narrative	n	5	4	9	
		%	35.7	28.6	64.3	
Total		n	8	6	14	
		%	57.1	42.9	100.0	

McNemar test ($p<0.05$)

Regarding global cohesion, most subjects (nine) had partial performance for both types of visual stimuli. However, there was evidence that the productions based on the sequence of pictures provided slightly better results in this aspect. Moreover, in the qualitative analysis of the written productions, it was observed the use of unconventional phrasal structure and difficulty in the use of phrasal elements, as exemplified in the following excerpt: "*Menino ver árvores, cão muito medo, muito cão medo, rato ver árvores bonito ar bom*" ("Boy to see trees, dog very scared, very dog scared, rat to see trees pretty air good").

The comparison between the mean total score obtained by the participants in each task showed that there was no difference regarding the type of visual stimulus presented (Table 4).

Table 2. Comparison of subjects' performance in writing based on the sequence of pictures and on the picture of an action regarding the encyclopedic competence

Encyclopedic competence			Sequence 0		Sequence 1		Sequence 2		Total		p-value
			n	%	n	%	n	%	n	%	
Encyclopedic knowledge	Action	0	0	0.0	0	0.0	0	0.0	0	0.0	1.000
		1	0	0.0	9	64.3	2	14.3	11	78.6	
		2	0	0.0	2	14.3	1	7.1	3	21.4	
	Total		0	0.0	11	78.6	3	21.4	14	100.0	
Reliability to the theme	Action	0	0	0.0	1	7.1	1	7.1	2	14.3	Non applicable
		1	0	0.0	2	14.3	3	21.4	5	35.7	
		2	0	0.0	1	7.1	6	42.9	7	50.0	
	Total		0	0.0	4	28.6	10	71.4	14	100.0	
Use of title	Action	0	12	85.7	0	0.0	0	0.0	12	85.7	Non applicable
		1	1	7.1	0	0.0	0	0.0	1	7.1	
		2	0	0.0	0	0.0	1	7.1	1	7.1	
	Total		13	92.9	0	0.0	1	7.1	14	100.0	
Intertextuality	Action	0	14	100.0	0	0.0	0	0.0	14	100.0	Non applicable
		1	0	0.0	0	0.0	0	0.0	0	0.0	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		14	100.0	0	0.0	0	0.0	14	100.0	
Organization of ideas	Action	0	0	0.0	2	14.3	1	7.1	3	21.4	Non applicable
		1	0	0.0	7	50.0	2	14.3	9	64.3	
		2	0	0.0	0	0.0	2	14.3	2	14.3	
	Total		0	0.0	9	64.3	5	35.7	14	100.0	
Use of inferences	Action	0	12	85.7	0	0.0	0	0.0	12	85.7	Non applicable
		1	1	7.1	1	7.1	0	0.0	2	14.3	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		13	92.9	1	7.1	0	0.0	14	100.0	
Vocabulary	Action	0	0	0.0	0	0.0	0	0.0	0	0.0	Non applicable
		1	0	0.0	14	100.0	0	0.0	14	100.0	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		0	0.0	14	100.0	0	0.0	14	100.0	

McNemar test (p<0.05)

Table 3. Comparison of subjects' performance in writing based on the sequence of pictures and on the picture of an action regarding the linguistic competence

Linguistic competence			Sequence 0		Sequence 1		Sequence 2		Total		p-value
			n	%	n	%	n	%	n	%	
Length of the text	Action	0	5	35.7	3	21.4	0	0.0	8	57.1	1.000
		1	3	21.4	3	21.4	0	0.0	6	42.9	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		8	57.1	6	42.9	0	0.0	14	100.0	
Punctuation	Action	0	1	7.1	1	7.1	0	0.0	2	14.3	Non applicable
		1	2	14.3	9	64.3	1	7.1	12	85.7	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		3	21.4	10	71.4	1	7.1	14	100.0	
Orthography	Action	0	2	14.3	2	14.3	0	0.0	4	28.6	0.150
		1	0	0.0	1	7.1	1	7.1	2	14.3	
		2	0	0.0	4	28.6	4	28.6	8	57.1	
	Total		2	14.3	7	50.0	5	35.7	14	100.0	
Global cohesion	Action	0	0	0.0	4	28.6	0	0.0	4	28.6	Non applicable
		1	0	0.0	9	64.3	1	7.1	10	71.4	
		2	0	0.0	0	0.0	0	0.0	0	0.0	
	Total		0	0.0	13	92.9	1	7.1	14	100.0	

McNemar test (p<0.05)

Table 4. Comparison between subjects' mean total score obtained in written productions based on the sequence of pictures and on the picture of an action

	Picture of an action	Sequence of pictures	p-value
Mean	8.14	9.07	
Median	8.00	9.00	0.166
SD	2.38	1.44	
n	14	14	

Wilcoxon test (p<0,05)

DISCUSSION

We opted to conduct the quantitative analysis of each communicative competence separately, because literature[19] indicates that the linguistic competence is hindered in deaf users of LIBRAS, which probably interferes in the other competences. In the generic competence this might make the organization of a more elaborate text difficult, and in the encyclopedic competence, it can hinder the organization of ideas and the adequate use of vocabulary.

With regards to the generic competence, the initial hypothesis that the sequence of pictures would provide written productions with a greater number of narrative elements was not confirmed, since subjects' performance was similar for both visual stimuli. However, the narrative genre predominated in written productions based on the picture of an action, while descriptions predominated when the productions were based on the sequence of pictures, against literature data[20].

In the study mentioned[20], narratives elicited by a sequence of pictures were compared to those elicited by the picture of an action, both produced by children with language disorders. Results evidenced that the subjects achieved better performance in narratives based on the sequence of pictures, which provided previous organization of ideas and, consequently, lower linguistic demand. Moreover, the authors considered a possible training effect, since the task that used a sequence of pictures was applied after that with the picture of an action. In the present study, some arrangements were made so that this effect could not interfere in the written production of the deaf subjects.

Although there was no difference regarding the generic competence, qualitatively, it was observed that students alternated between narrative and description of elements present in the pictures. This may indicate that most deaf individuals have some knowledge regarding the importance to contextualize the writing[2,18,21]. However, it may be that they were not able to register the scenery, which can explain the presence of descriptive data within the narratives. Sometimes, one had the impression that, because the subject could not reference the names of the characters, they were described for their physical characteristics and/or the actions they were carrying out, as a manner to provide a referential cohesion, or to characterize the place where the story took place.

As for the encyclopedic competence, results showed that, for both visual stimuli, most deaf subjects presented partial knowledge, and there was no difference between stimuli. Although deaf individuals can present well developed encyclopedic knowledge in sign language, in general they cannot express their ideas using written Portuguese.

Regarding the other aspects of the encyclopedic competence, even without the possibility of statistical analysis, it was observed that the results were low and similar for both stimuli, showing that none of the subjects was able to use intertextuality knowledge. Moreover, most of them could not use inferences and title, and all of them used simple vocabulary. These results suggest that deaf individuals are estranged to reading and writing habits, since intertextuality, inference and lexical broadening are abilities that are related to textual cohesion and coherence, which are comprehended and used in interactive activities between users in the construction of textuality[22,23].

With regards to the reliability to the theme, most subjects were able to maintain, even if partially, the theme proposed, regardless the visual stimulus presented. This demonstrated that subjects did not lose the thematic focus, probably because this aspect is not very dependent on the knowledge of the written Portuguese language, and because it is expressed in the pictures. The same occurred for the organization of ideas, an item in which most subjects had a partial performance. For the sequence of pictures, it was observed that a few subjects were able to connect their ideas in a more elaborate manner, maybe because they had the support of the sequence of pictures.

As for the linguistic competence, with regards to the length of the text, it is important to emphasize that we used the definition of "paragraph" available in literature[23]: one of the construction units of a written text, composed by one or more sentences related by an idea. When a text is well written, paragraphs are marked by visual resources and delimit a relevant idea.

In the written productions of deaf individuals, most of these visual resources were not observed, since the use of punctuation was absent in many productions and, in general, it was insufficient and/or inadequate for both stimuli. Nevertheless, we used the construction of units around the ideas to determine the number of paragraphs present in each text and, hence, characterize their length.

There was no difference between productions based on the picture of an action and on the sequence of pictures regarding textual length. Generally, for the sequence of pictures, subjects wrote one sentence for each visual element. For the picture of an action, most productions were short. This fact corroborates the discussion regarding the difficulty of deaf individuals in constructing texts using written Portuguese, both because of the distance from the sign language and the unpreparedness of teachers to work with deaf students within the classroom context[24,25].

Still regarding the linguistic competence, concerning the number of orthographic errors, the results were similar in both tasks. Although most deaf individuals presented short written productions, which would result in less orthographic errors, only four subjects reached the maximum score, which corresponds to the presence of a maximum of two errors. This data corroborates literature findings[19,26] that demonstrate that deaf individuals present orthographic errors in writing.

As for the global cohesion, it was noted that most subjects presented partial cohesion for both stimuli. However, we observed that productions based on the sequence of pictures produced slightly better results, confirming the relevance of visual sequence support. Regarding this matter, researchers[6] have found the presence of cohesive elements in the written productions of a group of adult deaf signers, albeit impaired.

Analyzing the encyclopedic competence along with the linguistic competence, results were similar to those found in literature regarding the characteristics of written productions of deaf individuals[7,8,24]. Participants presented productions that were difficult to analyze when only written Portuguese was considered, both when based on the picture of an action and on the sequence of pictures. The fact that there were five judges for the analysis of written productions and a posterior discussion about the disagreements provided greater reliability in the analysis of the results and in the qualitative analysis.

The qualitative analysis complemented the quantitative analysis and showed that most subjects used non-conventional phrasal structures, with inadequate syntax and inversion or absence of elements (articles, prepositions and conjunctions). This fact suggests, besides the influence of the sign language on the written Portuguese, limited reading and writing habits, since textual coherence and cohesion are strongly influenced by them[5,18,22,24]. According to literature, these data must be carefully analyzed, given that the written production by itself might not express the linguistic and encyclopedic knowledge of deaf individuals when the influence of sign language on these productions is not considered[27,28].

In this sense, a comparative study[12] about the differences between the British Sign Language (BLS) and the written English showed that sign language is a multichannel visual language, without "one-to-one" correspondence between signs and written words. Hence, a phrase does not have the same number of words as the number of correspondent signs. Therefore, many authors have decentralized the attention from grammatical aspects in the written productions of deaf individuals, because they consider that deaf children always have difficulties in writing[27].

In Brazil, a study[19] was carried out to analyze the written production of deaf university students based on the communicative competences. The authors concluded that the generic competence was adequate, but the linguistic and encyclopedic competences were below the expected for the subjects' age range.

It is emphasized that the teaching of written Portuguese is essential to this population, since the encyclopedic and linguistic competences can be retrieved if the strategies used by the deaf individuals are considered[13,22]. Thus, the greatest challenge to researchers working with deaf individuals users of sign language is to identify and characterize the possibilities and limitations of the written productions of this population. In this sense, further studies are necessary, with a greater sample of subjects and using different images, in order to obtain a writing standard for deaf signers.

CONCLUSION

None of the two types of visual stimuli used in this study – picture of an action or sequence of pictures – provided better writing performances for deaf signers without complaints of language impairment, for most of the aspects analyzed.

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RESUMO

Objetivo: Analisar a influência do tipo de estímulo visual sobre a produção escrita de surdos sinalizadores sem queixas de alterações na escrita. **Métodos:** Participaram 14 surdos, de ambos os gêneros, com idades entre 8 e 13 anos, usuários da Língua Brasileira de Sinais, alunos da terceira e quarta séries do Ensino Fundamental de uma escola especial para surdos. Foram avaliados por meio de produções escritas baseadas em dois tipos de estímulos: uma sequência de quatro figuras e uma figura de ação. Cada produção foi pontuada de acordo com critérios adaptados da teoria das Competências Comunicativas (Genérica, Enciclopédica, e Linguística). **Resultados:** Na análise da Competência Genérica não houve diferença entre as produções a partir da sequencia ou da figura de ação. Entretanto, notou-se que a figura de ação propiciou mais produções de gênero narrativo, enquanto as figuras em sequência eliciaram mais descrições. Quanto às Competências Enciclopédica e Linguística, ambos os estímulos visuais proporcionaram resultados semelhantes nas produções escritas. Tanto na Competência Enciclopédica quanto na Linguística, o desempenho dos surdos foi aquém do esperado para a faixa de escolaridade, demonstrando conhecimento parcial sobre a língua portuguesa escrita. No entanto, observou-se que as figuras sequenciadas propiciaram organização de ideias e coesão global um pouco mais elaboradas. **Conclusão:** Nenhum dos tipos de estímulo visual, seja figura de ação ou sequência de figuras, propicia melhores desempenhos de produção escrita de surdos sinalizadores sem queixas de alterações na escrita para a maior parte dos aspectos analisados.

Descritores: Linguagem de sinais; Avaliação; Pessoas com deficiência auditiva/educação; Redação; Surdez

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