

### GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: G LINGUISTICS & EDUCATION

Volume 21 Issue 15 Version 1.0 Year 2021

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-460x & Print ISSN: 0975-587X

# Large-Scale Portuguese Language Evaluations: A Research on the Complexity of Texts that Support Items that Assess Reading

By Barbosa, Begma Tavares, Micarello, Hilda Linhares & Ferreira, Rosângela Veiga

Federal University of Juiz de Fora

Abstract- This article discusses the theme of the complexity of texts that support large-scale assessment items in Portuguese language, based on the results of a survey in which 763 texts used in large-scale assessment items in Portuguese were analyzed. The research methodology consisted of item analysis supported by the theories of cognition, textual linguistics, and statistical parameters of the items based on the Item Response Theory, a three-parameter model. Based on the research carried out, four levels of complexity of the texts were defined. The results point to the relevance of clear criteria to define the complexity of texts in the development of new items and to a more precise description of performance standards based on the reading proficiency presented by the evaluated students.

Keywords: reading assessment. large-scale assessment of the portuguese language. complexity of texts.

GJHSS-G Classification: FOR Code: 200499



Strictly as per the compliance and regulations of:



© 2021. Barbosa, Begma Tavares, Micarello, Hilda Linhares & Ferreira, Rosângela Veiga. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creativecommons.org/licenses/by-nc-nd/4.0/.

# Large-Scale Portuguese Language Evaluations: A Research on the Complexity of Texts that Support Items that Assess Reading

Barbosa, Begma Tavares α, Micarello, Hilda Linhares α & Ferreira, Rosângela Veiga ρ

Abstract- This article discusses the theme of the complexity of texts that support large-scale assessment items in Portuguese language, based on the results of a survey in which 763 texts used in large-scale assessment items in Portuguese were analyzed. The research methodology consisted of item analysis supported by the theories of cognition, textual linguistics, and statistical parameters of the items based on the Item Response Theory, a three-parameter model. Based on the research carried out, four levels of complexity of the texts were defined. The results point to the relevance of clear criteria to define the complexity of texts in the development of new items and to a more precise description of performance standards based on the reading proficiency presented by the evaluated students.

Keywords: reading assessment. large-scale assessment of the portuguese language. complexity of texts.

#### Introduction

he research whose results are presented in this article was supported and financed by the CAEd Foundation, of the Federal University of Juiz de Fora. The objective of the research was to produce knowledge about the validity and reliability of items in systemic reading assessments municipalities and states of the federation and also in national assessments. The research section dealt with in this article refers to the theme of the complexity of the texts that support these items.

Reading assessment is a challenging topic, as this is a complex and multidimensional construct<sup>1</sup>. Kleiman (2019, s/p) states that

Author α: Retired Full Professor at the Federal University of Juiz de Fora, Juiz de Fora, Minas Gerais, Brazil. e-mail: begmatb@gmail.com Author σ: Associate Professor at the Faculty of Education at the Federal University of Juiz de Fora, Juiz de Fora, Minas Gerais, Brazil. e-mail: hilda.micarello@uab.ufjf.br

Author p: Professor at Colegio de Aplicação João XXIII, Federal University of Juiz de Fora, Juiz de Fora, Minas Gerais, Brazil. e-mail: rosangelaveiga.ferreira@ufif.edu.br

in reading comprehension, the following are involved: a text - a linguistic and cultural object that bears a meaning -; a reader - with knowledge, experience, skills and abilities; and a communicative situation of interaction between reader and author via written text, which largely determines what and how you understand.

In the specific case of this research, the focus is placed on the text as a linguistic object that carries a meaning and on the challenges it poses to the reader so that he/she is able to understand what he/she reads.

The theme of the complexity of texts that are used as support for items that assess reading in largescale assessments of the Portuguese language has been presented as relevant, since the consideration of this complexity is essential for understanding the level of difficulty of the tasks proposed by the applied items in order to assess the reading proficiency of students in the different stages of basic education. In addition, clearer criteria for defining the complexity of texts contribute to greater reliability of the assessment instruments and, consequently, to the validity of the tests. According to Primi (2012, p.300), in psychometry the concept of validity "is related to the question that investigates whether the test is measuring the construct it proposes to measure". In this sense, since reading is a multidimensional cognitive activity, greater clarity about the nature of the reading activity that is being required by the items that compose the tests will result in a better adjustment of the test which is intended to be assessed at each stage of schooling.

Sousa and Hübner (2014) state that the option for a type of task to assess reading comprehension requires the clarification of the concept of reading that underlies this option. In the specific case dealt with in this article, the conception of reading has not only as its cornerstone the evaluation processes of this construct, but, mainly, the teaching practices is that reading is a subjective construction of meanings based on the meanings of the text, that is, the readers act on the text based on their experiences in a given culture. Faced with a text, the readers activate more or less formalized knowledge, such as those about texts and the language itself, acquired at school or out of it. In this way, the text does not carry a pre-existing meaning to the reading, that is, the meaning is not in the text, but it is constituted in the interaction between the reader and

<sup>&</sup>lt;sup>1</sup> In psychometrics, the construct is an intangible attribute, with variable manifestation between individuals, which can only be assessed indirectly, when expressed in the form of physical, emotional, attitudinal or cognitive performance. Available at http:// portal.inep.gov.br/documents/186968/484421/Relat%C3%B3rio+Saeb +2017/e683ba93-d9ac-4c2c-8f36-10493e99f9b7?version=1.0. Access on December 10th 2019.

the text. This, in turn, offers a set of clues that guide the reader in the meaning-building task that is reading.

The National Curriculum Parameters for the Portuguese Language (BRASIL, 1998, p.36) established a pragmatic turn in the teaching of the mother tongue by defining the text as a "basic teaching unit". This definition implies assuming that teaching the language is, mainly, teaching how to identify the clues that the text offers and to be guided by these clues to produce meaning for what is read.

More recently, the Common National Curriculum Base (BRASIL, 2017) for the Portuguese Language component maintained the emphasis on the text as a language teaching unit, by organizing the competences and skills of the curriculum in fields of action of the subjects in social life. Underlying the notion of fields of action is the assumption that subjects act in society through the texts that circulate in it and materialize in genres that have common characteristics, given the field of social life in which they circulate. In this sense, it is worth thinking that in teaching practices and, consequently, in assessment, a key issue is to define how the approach to texts progresses and what are the cognitive pathways of students in the interaction they establish with them. This interaction will depend on the structure of the text and the type of signal it offers the reader to build meaning for what is read. Thus, texts of the same genre may have different structures, which will require the reader to mobilize different skills.

In general, the complexity of texts is dealt with, in teaching practices and in large-scale assessments, based on the notion of textual genre. This notion has its origin in the studies of Mikhail Bakhtin, philosopher of language, who states: "Evidently, each particular utterance is individual, but each field of use of language elaborates its relatively stable types of utterances, which we call speech genres." (BAKHTIN, 2003, p. 262 emphasis added). The texts that originate in different spheres of social life have, therefore, common characteristics, resulting from the relative stability of the statements that originate in these spheres. Due to these common characteristics, the textual genre can be identified. A personal letter, for example, has different characteristics compared to a short story.

Undoubtedly, the notion of textual genre is relevant to guide the progression of reading teaching practices, as it is possible to think that teaching should start from genres that circulate in spheres closer to the daily lives of students, therefore less complex, and move towards genres that circulate in more specialized spheres, therefore, more complex. Large-scale assessments have also used this notion, both for the construction of the tests and for the dissemination of their results. However, the genre category is not enough to reveal, in greater detail, how students interact with texts, since such interaction process involves different

skills that are mobilized by the reader not only in function of the textual genre with which they interact, but also in terms of the structure of the texts and the type of reading task required of the reader.

This article intends, based on the results obtained in a research carried out by the Center of Assessment and Public Policies for Education (CAEd) of the Federal University of Juiz de Fora, to present a classification of the complexity of texts into levels. defined from some categories, based on an incursion into a wide range of texts used as items support that assess reading, applied to students from the 5th to the 12th grades of basic education, in different states and municipalities of the federation and also in national assessments, in Brazil.

Initially, some considerations will be presented on how the theme of text complexity has been addressed in the dissemination of the results of the Programme for International Student Assessment (PISA), 2018 report, and in the SAEB/Prova Brasil report, through the Portuguese Language proficiency scale.

Then, it is presented the methodology and the corpus of the research on which this article is based, as well as the classification of the levels of complexity of the text in the light of the data of the research carried

Finally, some considerations are taken into account on the relevance of having greater clarity about the level of complexity of the text for the processes of elaboration of tests that assess reading, as well as for the communication of assessment results to schools and teachers.

## THE COMPLEXITY OF TEXTS IN Communicating International and National Assessment Results

The Basic Education Assessment System report (SAEB) (BRASIL, 2019) presents the results of the Portuguese Language and Mathematics assessments carried out in 2017, within the scope of the Prova Brasil, throughout the national territory. In this report, students performance in both curricular components is presented using a proficiency scale.<sup>2</sup> . Based on the proficiency

<sup>&</sup>lt;sup>2</sup> Proficiency scale: Set of ordered numbers obtained by Item Response Theory (IRT) that represents the measure of proficiency in a given area of knowledge. In the SAEB, in each area of knowledge, there is a single proficiency scale for all school years (grades) and all editions of the assessment (Ex.: the Portuguese language proficiency scale in the 2017 edition is the same as in previous editions and aggregates the proficiencies of students who participated in the tests of the 5th and 9th grade of elementary school and the 3rd grade of high school). Each scale ranges from 0 to 500 points, with a mean of 250 and a standard deviation of 50. Available at http://portal.inep. gov.br/documents/186968/484421/Relat%C3%B3rio+Saeb+2017/e6 83ba93-d9ac-4c2c-8f36-10493e99f9b7?version=1.0 Access on Dec. 10<sup>th</sup> 2019.

these performances are interpreted scale, and described, in the Portuguese Language assessment, reading, in 9 (nine) levels. This form of presentation and dissemination of results is the one that has been used by INEP throughout the different editions of Prova Brasil.

Table 1 presents the descriptions of the first three performance levels of the Portuguese Language proficiency scale, as described in the SAEB report (BRASIL, 2019).

Table 1: Levels of Performance in Portuguese Language according to the SAEB proficiency scale (fragment).

LEVEL	Level Description
Level 1 Performance greater than or equal to 125 and less than 150	Students are likely to be able to: Locate explicit information in short narrative, informative texts and advertisements. Identify the theme of a text. Find elements such as the main character. Establish relationship between parts of the text: character and action; action and time; action and place.
Level 2 Performance greater than or equal to 150 and less than 175	In addition to the aforementioned skills, students are likely to be able to: Locate explicit information in short stories. Identify the main subject and the main character in a report and in fables. Recognize the purpose of recipes, manuals and regulations. Infer character characteristics in fables. Interpret verbal and non-verbal language in strips.
Level 3 Performance greater than or equal to 175 and less than 200	In addition to the aforementioned skills, students are likely to be able to: Locate explicit information in stories and reports and in advertisements with or without the support of graphic resources. Recognize the relationship of cause and consequence in poems, short stories and comic strips. Infer the sense of the word, the sense of expression or the subject in letters, short stories, comic strips and comic books, with the support of verbal and non-verbal language.

Source: SAEB 2017 Report.

The description of the other levels of the scale follows the same pattern as the description of the first three ones, brought here by way of illustration. Based on this example, it is observed that the description of the students's reading performance occurs in an articulation between the assessed reading ability (for example, locating explicit information, inferring, recognizing the purpose of the text) and the textual genre used as support to items that assess skill (report, poems, short stories, fable). The progression between the different levels is given by the addition of skills to those indicated in the previous level, however, in the research we have been developing, we found that in this way it is not possible to understand how the complexity of the reading task changes or what makes a genre more complex than the other, from the point of view of the reader's interaction with the text. For instance, at the most elementary level, the description that the students, probably, "are able to: locate explicit information in short narrative, informative texts and advertisements." At level 2, in which students would have a greater proficiency than those at level 1, it is read that students are probably able to, besides performing the reading tasks of the previous level "find explicit information in short stories". Short stories can be short narrative texts. Furthermore, there is no clue about the position of the information to be located nor how it should be retrieved by the reader, based on the type of problem situation constructed in the item. Thus, regarding the ability to locate information, it is not possible to figure out what distinguishes a student with proficiency compatible with level 1 from those with proficiency compatible with level 2. This same problem is repeated in relation to

other descriptors and in the passage between other levels.

It is concluded, from the above, that narratives, such as short stories, for example, can materialize in texts with different levels of complexity, consequence of the type of syntax, the lexicon, the topic addressed, among other possibilities. In addition, in the case of the ability to locate explicit information, the position of the requested information and also the existence of a greater or lesser amount of information in the text are also factors to consider, in addition to the way in which the information is retrieved in the proposed problem situation by the item: whether through a repetition, an almost repetition, or a simple paraphrase, for example. Thus, the description of reading skills as presented in the SAEB report is not very clear about the nature of reading skills developed by students at different levels of the proficiency scale.

In the PISA report, student performance in reading is also presented through 6 (six) levels. In the board two, the first three levels of the PISA proficiency scale are presented (OECD, 2019).

Table 2: Performance levels in reading literacy proficiency of PISA (fragment).

Level 1 B	Readers at level 1b can locate a single piece of explicitly stated information in a prominent position in a short, syntactically simple text with a familiar context and text type, such as a narrative or a simple list. Texts in level 1b tasks typically provide support to the reader, such as repetitions of information, pictures or familiar symbols. There is minimal competing information. Level 1b readers can interpret texts by making simple connections between adjacent pieces of information.
Level 1B	Readers at Level 1a can locate one or more independent pieces of explicitly stated information; they can recognize the main theme or author's purpose in a text about a familiar topic, or make a simple connection between information in the text and common, everyday knowledge. Typically, the required information in the text is prominent and there is little, if any, competing information. The student is explicitly directed to consider relevant factors in the task and in the text.
Level 2	Readers at Level 2 can locate one or more pieces of information, which may need to be inferred and may need to meet several conditions. They can recognize the main idea in a text, understand relationships, or construct meaning within a limited part of the text when the information is not prominent and the reader must make low level inferences. Tasks at this level may involve comparisons or contrasts based on a single feature in the text.  Typical tasks at this level require readers to make a comparison or several connections between the text and outside knowledge, by drawing on personal experience and attitudes.

Source: Assessment and Analytical Framework, PISA (OECD, 2019, s/p).

In the PISA report, it is possible to find more detail on the reading tasks that students at different levels of proficiency are likely to perform. For example, the ability to locate information is described as a skill that can be more or less complex if the text presents a lot of information that competes with that requested by the item, if the requested information is more or less prominent in the text. There are no references to the textual genre, but to general characteristics of the text, such as the fact that it addresses a more or less familiar theme. In this case, there is a more detailed analysis of the reading task, but such detailing is done without a more precise definition of the nature of the text, its characteristics and microstructure, which can make these reading tasks more or less complex. However, there is an advance in relation to the SAEB report, in the sense of making more evident the reading tasks that students at different levels are likely to perform successfully.

The studies carried out within the scope of the research dealt with in this article have shown that the reading skills developed by students are strongly related to the structure of the text and the type of signaling it offers so that students can perform the required reading task, showing the development of certain skills. A poem, for example, may present a language close to that used in everyday life, which will require a relatively lower reading proficiency for its understanding by the reader; or it can use a metaphorical language, which will demand a high reading proficiency to be understood by the reader.

# III. THE DEFINITION OF TEXT COMPLEXITY Levels in the CAED Assessment Research, Portuguese Language Area

Within the scope of evaluation research, in the Portuguese Language area, four descriptors that make up the CAEd Evaluation Reference Matrix were analyzed over the years 2017 and 2018, namely: D06 - Find explicit information; D07 - Recognize the subject of a text; D08 - Inferring the meaning of a word or expression; D09 - Inferring information in a verbal text. In all these descriptors, different genres are used as support for the construction of the problem situation of the text items. The corpus of the research consisted of 763 texts, which supported items that evaluated these descriptors.

The analyzes undertaken within the scope of the research aimed to identify the progression of the difficulty that each of the skills presents along the SAEB proficiency scale. To understand this progression, the complexity of the texts used to support the elaboration of items that assess each of the skills proved to be a decisive element. This happened because reading presupposes an interaction between reader and text that are relevant factors to the nature of the text and to the reader's experience. The text, the central object of the investigation, is configured as a set of signals that "guide" the reader so that he/she can produce meanings for what he/she reads, and the reader as someone who acts in this process from a range of knowledge - about the world, on specific themes of the world, on texts, on language.

For the analysis of the descriptors of the Reference Matrix for Assessment in Portuguese Language, an explanation of the linguistic nature of the descriptor was initially carried out based on the theories

of the text, especially the cognitive-based theories (SMITH 1991; KLEIMAN 1989; KOCH 1998) and in text linguistics (KOCH, 1989; KOCH & TRAVAGLIA 1989).

The IRT - Item Response Theory - and the three-parameter model were those that supported the analysis of the evaluation results. To identify the levels of complexity of the texts that supported the items, the following were eliminated: items with parameter A less than 0.01, since these items have a weak discriminating power between students who developed the skills assessed and those who did not develop them and also items with a C parameter greater than 0.025, since these items have a strong probability of hitting them by chance. The analysis considered the anchor point of the items in the SAEB reading proficiency scale and the distribution of these items in 25 point intervals.

The second step consisted of an incursion into the items that assess each of the descriptors, seeking to identify the degree of complexity with which these skills are manifested along the scale, which offered evidence of the students' reading proficiency in the different stages of schooling. Such identification was made by comparing texts that supported items that anchored in points close to the proficiency scale, seeking to identify common aspects between these texts. The definitions of the skills assessed, elaborated in the first stage of the research, were also fundamental for the analysis of the texts that supported the items.

The analysis of the tasks proposed by the items considered both the complexity of the text and the nature of the signals it offered to carry out the task. Examples of signs supporting reading are: the presence, in the text, of synonyms that help the task of inferring the meaning of a word; the presence of topical marking that facilitates the reader's task of recognizing the subject of a text; a paraphrastic statement that allows access to information, among other possibilities. On the other hand, the level of complexity of a text defined from criteria such as syntax, lexicon, theme, extension - also has an impact on the complexity of the task.

The classification resulting from the criteria defined in the scope of the research considers four levels of complexity of the texts, in whose definition the syntax presents itself as a very defining element of complexity, when considering the first two levels and the lexicon and the theme are presented as very determinants on levels three and four. Based on the criteria of size, syntax, lexicon and theme, the following levels of complexity for the texts below were defined.

Texts of level 1: The texts are not long (up to 15 lines). The syntax is simple, in which short periods and coordinated structures predominate, or even topics; cohesive processes are simple, such as those involving retakes with a close referent - by referencing through subject pronouns or reiteration, by repetition or

synonymy; the structure of the texts is conventional and the sentences presented in canonical order. The lexicon is closer to colloquial and suitable for the preferred interlocutor of the text, usually children. The themes are more of daily use, as less familiar themes require treatment that "make it easier" to read the text. The most common texts at this level are of canonical structure, with narratives and expository texts being present: on the former, we can highlight "nursery rhymes", legends, narratives from children's literature, and also poems with narrative structure; among the latter are "scientific curiosities" or "scientific notes", as defined by

Level 2 Texts: The texts are not very long (up to 15 lines). The syntax is a little more complex than what is observed in level 1 texts, with small changes in the canonical syntactic structure - reduced relative clauses at the beginning of periods and brief intercalations, for example; there is a predominance of slightly longer periods, with two lines on average; cohesive processes are more complex, such as those involving retakes by ellipse, object pronouns and more usual relative pronouns. There are texts that present more usual lexicon or those whose lexicon is typical of formal speech, but with speech facilitation strategies, as appositive after an unusual word or a scientific or technical term. The themes are related to everyday life and, when less familiar, the text offers clues to identify their content. The most common texts are narratives with a canonical structure and brief arguments with simple structure.

Level 3 Texts: The texts are presented in any size, that is, there are both short and very long texts among those classified at this level. The syntax is complex and typical of the formal use of the language, with dependent clauses, longer intercalations or impersonalizations, for example. Periods are longer, approximately three lines; cohesive processes are more complex, such as those involving retakes by ellipse, objective pronouns and less usual relative pronouns, as well as retakes from more distant referents. The lexicon is characteristic of formal speech, presented in different texts, with a less canonical structure. The themes are unfamiliar and the supports are more varied, aimed at different interlocutors. The narratives that appear at this level are short stories, chronicles, fragments of novels - texts from Brazilian literature. At this level, longer expository or argumentative texts are found, such as news, reports and poems with metaphorical elaboration.

Level 4 Texts: Just like the previous level, level 4 texts are displayed in any size. The syntax is complex and typical of the formal use of language, with subordinate structures, longer intercalations and impersonalizations. Periods are longer, with three lines on average; cohesive processes are more complex, such as those involving retakes by ellipse, objective pronouns and less usual

relative pronouns, as well as retakes from more distant referents. The lexicon is characteristic of formal, specialized and literate speech, presented in different texts, with a less canonical structure. The predominance is of texts with more elaborate literary treatment, affecting its structure and resources, and those that deal with specialized themes, mainly in the field of science and life in society. As an example of narrative texts, classic texts stand out: tales, chronicles and fragments of novels, narratives less focused on action and with more complex strategies, such as free indirect speech, descriptions that capture the character's stream of consciousness. At this level, there are also reviews, news and reports, opinion texts with various arguments and poems with a more elaborate literary treatment, with the presence of metaphors, allegories and poetic images.

Based on the four levels of complexity of the texts presented here, the items referring to the descriptors mentioned above were analyzed and applied in assessments carried out by CAEd to students from 5th to 12th grade. Tables 3, 4, 5 and 6 below show the distribution of the analyzed items, related to each descriptor, by 25-point intervals of the proficiency scale.

Table 3: Distribution of items that assess the ability to locate explicit information in texts by levels of complexity.

D06- TEXT COMPLEXITY QUANTITATIVE BY INTERVAL								
Breaks	LEV	EL 1	LEVE	EL 2	LEVEL 3		LEVE	L 4
	Qty	%	Qty	%	Qty	%	Qty	%
100-125	1	0.31						
126-150	3	0,95	5	1.58				
151-175	16	5.07	29	9,20			1	0.31
176-200	6	1.90	38	12.06	5	1.58		
201-225	3	0,95	51	16.19	17	5,39	2	0.63
226-250			33	10.47	18	5,71	5	1.58
251-275			22	6,98	13	4.12	4	1.26
276-300			9	2,85	3	0,95	7	2.22
301-325			3	0,95	2	0.63	7	2.22
326-350			1	0.31	2	0.63	4	1.26
351-375							3	0,95
376-400								
Above 401					1	0.31	1	0.31
Total	29	9,18	191	60,59	61	19.32	34	10.74
General Total	315 texts							

Source: CAEd Evaluation Survey 2016-2019.

Table 4: Distribution of items that assess the ability to recognize the subject of a text by levels of complexity.

D07- TEXT COMPLEXITY QUANTITATIVE BY INTERVAL									
	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4		
Breaks	Qty	%	Qty	%	Qty	%	Qty	%	
125-150	3	1,33	1	0,54					
151-175	4	1.78	16	7,10	1	0,54			
176-200	3	1,33	17	7.58	11	4,91			
201-225			20	8,92	21	9.37			
226-250			14	6.25	35	15.62	3	1,33	
251-275			5	2.23	14	6.25	16	7,10	
276-300			6	2.67	9	4,01	2	0,89	
301-325			1	0,54	2	0,89	3	1,33	
326-350					7	3.12	6	2.67	
351-375					1	0,54	2	0,89	
376-400									

Above 401					1	0.44		
Total	10	4.44	80	35.83	102	45.25	32	14.21
General Total				224	texts			

Source: CAEd Evaluation Survey 2016-2019.

Table 5: Distribution of items that assess the ability to infer the meaning of a word or expression by levels of complexity.

D08- TEXT COMPLEXITY QUANTITATIVE BY INTERVAL											
	LEVE	EL 1	LEVEL 2		LEVEL 3		LEV	EL 4			
Breaks	Qty	%	Qty	%	Qty	%	Qty	%			
125-150	1	0,65									
151-175	4	2.80	2	1.40							
176-200	7	4,89	12	8.39							
201-225	3	2.09	20	13.98	3	2.09					
226-250	8	5.59	19	13.29	1	0,65					
251-275	1	0,65	19	13.29	8	5.59					
276-300			3	2.09	13	9.09					
301-325			1	0,65	11	7.69					
326-350			2	1.40	2	1.40					
351-375					1	0,65					
376-400			1	0,65	1	0,65					
Above 401											
Totals	24	16,67	79	55.14	40	27.81					
General Total		143 texts									

Source: CAEd Evaluation Survey 2016-2019.

Table 6: Distribution of items that assess the ability to infer information in a verbal text by levels of complexity.

D09- TEXT COMPLEXITY QUANTITATIVE BY INTERVAL										
	LEVEL 1		LEVEL 2		LEVEL 3		LEVEL 4			
Breaks	Qty	%	Qty	%	Qty	%	Qty	%		
125-150	1	1.23	1	1.23						
151-175	2	2.46	1	1.23						
176-200	3	3,70	11	13.58						
201-225			5	6.17	2	2.46	1	1.23		
226-250	1	1.23	7	8.64	7	8.64	2	2.46		
251-275			2	2.46	6	7,40	3	3,70		
276-300			1	1.23	12	14,81	3	3,70		
301-325					1	1.23	2	2.46		
326-350					3	3,70	2	2.46		
351-375					1	1.23	1	1.23		
376-400										
Above 401										
Total	7	8.62	28	34.54	32	39,47	14	17.24		
General Total					81					

Source: CAEd Evaluation Survey 2016-2019.

As can be seen from the analysis of tables 3, 4, 5 and 6, level 1 texts are those predominant in items that anchor between 125 and 200 points on the SAEB reading proficiency scale. Level 2 texts predominate as support for items that anchor between 151 and 275 points on the proficiency scale. Level 3 texts appear

predominantly in support of items that anchor between 176 and 300 points of the scale. Finally, level 4 texts appear as support for items that anchor above 226 points of the scale, with greater concentration among items that anchor above 250 points of the scale. The comparison between the distribution of texts, according to their level of complexity, among the different descriptors of the reference matrix, indicates a certain regularity of this distribution. Such regularity is indicative of performance standards in reading presented by students who did the tests and who are at different stages of basic education. It is possible to affirm, for example, based on the description of the levels of complexity of the text, that students with proficiency between 125 and 200 points read short texts (up to 15 lines), which present simple syntax, in which short periods and coordinating structures predominate, or in topics, with simple cohesive processes, such as those involving retakes with a close referent, by referencing through subject pronouns or reiteration, by repetition or synonymy. The structure of the texts these students read is conventional, with sentences presented in canonical order (subject, verb, object), the lexicon is closer to the colloquial and the most everyday themes. Nursery rhymes, legends, narratives from children's literature. poems with narrative structure, "scientific curiosities" or "scientific notes", as defined by the BNCC, are the genres that students with this proficiency read.

According to the analysis carried out, what distinguishes Level 1 texts from Level 2 texts is fundamentally the syntax. Small changes in the canonical syntactic structure (such as intercalations and anticipations), as well as the extension of sentences can make a text more complex for beginning readers who do not have the strength to read. What is observed is that the length of sentences is a more determining factor for the complexity of the text than, properly, the length of the text. On the other hand, level 1 and 2 texts are characterized by having a more familiar lexicon, close to the colloquial use of language.

The lexicon was presented, in this investigation, as a defining element of the complexity of level 3 and 4 texts. Level 3 texts usually have a lexicon proper to formal speech, implying a more constant inferential activity. Level 4 texts have a specialized lexicon, present in texts whose theme is also specialized, that is, texts that address issues in specific areas of knowledge: science and technology, life in society, etc.

However, the consideration of these features of the lexicon (whether more or less close to formal speech) should not be strict. In some texts, for example, formal uses of the language are followed by "speech facilitation" resources that allow working with an unknown lexicon. Texts that deal with specialized themes and that are aimed at the child or adolescent reader usually display several strategies to facilitate their

reception (such as explanatory expressions, synonyms, examples, etc.). Lexicon and theme are therefore important criteria for classifying texts at levels 3 and 4.

The investigation carried out so far allows us to propose that reading competence is strongly determined, initially, by the domain of the syntax of the language. Beginner readers are, little by little, appropriating the syntax of the language, of its formal use, from the contact with texts that are increasingly complex from the syntactical point of view. The maturation of this reader is consolidated as he expands his/her reading repertoire and, consequently, his/her lexical repertoire, becoming familiar with texts from various fields of knowledge, mastering their structure, approaching more and more specialized topics. This competence is further expanded when one understands the expressive potential of language recreated literarily.

#### FINAL CONSIDERATIONS

The results of the research presented here indicate that the complexity of texts is an important criterion to be considered when describing performance standards in reading, defined on the basis of large-scale assessments. Considering the levels of complexity of the texts that support those used in these assessments. allows us to go beyond the description of the reading tasks proposed by these items and glimpse broader reading skills, possibly developed by students who are in certain proficiency intervals.

The research results also point out that, in defining the levels of complexity that a text can present, it is necessary to consider a set of characteristics, which combine to make a text more or less challenging for the reader and that, throughout the reader formation process, these factors play a different role. For readers with low proficiency, text syntax is a very defining factor in text complexity. For the more experienced ones, the theme plays a more determining role for a text to be considered more or less complex. It can be deduced, from the above, that the genre category and the length of the text are not sufficient for a more consistent description of the reading skills developed by students. For example, a poem, despite its length, can be presented as more or less complex to read, depending on its structure: if it is a narrative poem that uses colloquial language, with simple structured lines, it will be easier to read than presenting a metaphorical language and verses with a less canonical structure.

Given the above, it is concluded that the description of performance standards in reading should consider a more careful analysis of the supports used in the construction of problem situations proposed by the items, in addition to considering the type of skill assessed. In this sense, it is important that, when describing the ability, for example, to locate explicit information in a text, consider the type of text and the

support offered by it so that the reader can carry out the task proposed. If we consider -+reading as a process of interaction between reader and text, it is necessary to figure out how the text leads the reader in this interaction, besides considering what the reader brings

Another important consideration based on the survey data is that greater clarity regarding the characteristics of the texts, obtained by defining clear criteria for classifying their levels of difficulty, favors the production of items that more closely match satisfactory, the reading assessment of students who are in specific stages of schooling, considering what is provided for in the curriculum. Thus, the next stage of the research will consist of comparing the classification of the difficulty levels of the texts, produced based on the incursion into items already used in large-scale assessments, to establish a relationship between these levels and the different stages of basic education.

It is also noteworthy the fact that greater clarity regarding the level of difficulty of the texts is relevant knowledge to support the production of items that assess other areas of knowledge, such as natural sciences and human sciences, since in these areas are also used verbal texts that support the elaboration of the items that assess them.

#### References Références Referencias

- 1. BAKHTIN, M. Estética da criação verbal. São Paulo: Martins Fontes, 2003.
- BRASIL. Base Nacional Comum Curricular (BNCC). Educação é a Base. Brasília, MEC/CONSED/ UNDIME, 2017. Disponível em: 568 http://base nacionalcomum.mec.gov.br/images/BNCC publica cao.pdf. Acesso em: 10 dez. 2019.
- BRASIL. Secretaria de Educação Fundamental. Parâmetros Curriculares Nacionais (PCNs): terceiro e quarto ciclos do ensino fundamental: Língua Portuguesa. Brasília: MEC/SEF, 1998.
- 4. BRASIL. Relatório SAEB 2017. Brasília, 2019. Disponível em: http://portal.inep.gov.br/informacaoda-publicacao/-/asset publisher/6JYIsGMAMkW1/ document/id/6730262. Acesso em: 10 dez. 2019.
- KLEIMAN, A. Texto e leitor: aspectos cognitivos da leitura. Campinas, SP: Pontes, 1989.
- KLEIMAN, A. Compreensão Leitora. In: Glossário CFALE. Disponível em: http://ceale.fae.ufmg.br/ app/webroot/glossarioceale/verbetes/compreensao -leitora. Acesso em: 10 dez. 2019.
- 7. KOCH, I. G. V; TRAVAGLIA, C. Texto e Coerência. São Paulo: Cortez, 1989.
- KOCH, I. G. V. A coesão textual. São Paulo: Contexto, 1989.
- 9. KOCH, I. G. V. O texto e a construção dos sentidos. São Paulo: Contexto, 1998.

- 10. OECD. PISA 2018. Assessment and Analytical Framework, PISA, OECD Publishing, Paris, 2019. Disponível em: https://doi.org/10.1787/b25efab8em. Acesso em: 10 dez. 2019.
- 11. PRIMI, R. Psicometria: fundamentos matemáticos Teoria Clássica dos Testes. Avaliação psicológica, 2012. Disponível em: http://pepsic. bvsalud.org/pdf/avp/v11n2/v11n2a15.pdf. Acesso em: 10 dez. 2019.
- 12. SMITH, F. Compreendendo a leitura: uma análise psicolinguística da leitura e do aprender a ler. Porto Alegre: Artes Médicas, 1991.
- 13. SOUSA, L. B. de; HÜBNER, L.C. Desafios na avaliação da compreensão leitora: demanda leiturabilidade cognitiva е textual. Revista neuropsicologia lationoamericana, 2014. Disponível https://www.neuropsicolatina.org/index.php/ Neuropsicologia Latinoamericana/article/view/237. Acesso em: 10 dez. 2019.