

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

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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.

Index terms— reading assessment. large-scale assessment of the portuguese language. complexity of texts.

1 Introduction

The 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 applied in systemic reading assessments in 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. 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 10 th 2019.

Kleiman (2019, s/p) states that 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 ?rimi (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

3 THE COMPLEXITY OF TEXTS IN COMMUNICATING INTERNATIONAL AND NATIONAL ASSESSMENT RESULTS

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

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

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

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

77 Undoubtedly, the notion of textual genre is relevant to guide the progression of reading teaching practices, as
78 it is possible to think that teaching should start from genres that circulate in spheres closer to the daily lives of
79 students, therefore less complex, and move towards genres that circulate in more specialized spheres, therefore,
80 more complex. Large-scale assessments have also used this notion, both for the construction of the tests and
81 for the dissemination of their results. However, the genre category is not enough to reveal, in greater detail,
82 how students interact with texts, since such interaction process involves different skills that are mobilized by the
83 reader not only in function of the textual genre with which they interact, but also in terms of the structure of
84 the texts and the type of reading task required of the reader.

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

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

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

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

98 2 II.

99 3 The Complexity of Texts in Communicating International and 100 National Assessment Results

101 The Basic Education Assessment System report (SAEB) (BRASIL, 2019) presents the results of the Portuguese
102 Language and Mathematics assessments carried out in 2017, within the scope of the Prova Brasil, throughout
103 the national territory. In this report, students performance in both curricular components is presented using a
104 proficiency scale. 2 2 Proficiency scale: Set of ordered numbers obtained by Item Response Theory (IRT) that

105 represents the measure of proficiency in a given area of knowledge. In the SAEB, in each area of knowledge, there
106 is a single proficiency scale for all school years (grades) and all editions of the assessment (Ex.: the Portuguese
107 language proficiency scale in the 2017 edition is the same as in previous editions and aggregates the proficiencies
108 of students who participated in the tests of the 5th and 9th grade of elementary school and the 3rd grade of high
109 school). Each scale ranges from 0 to 500 points, with a mean of 250 and a standard deviation of 50. Available at
110 [http://portal.inep.gov.br/documents/186968/484421/Relat%C3%B3rio+Saeb+2017/e683ba93-d9ac-4c2c-8f36-](http://portal.inep.gov.br/documents/186968/484421/Relat%C3%B3rio+Saeb+2017/e683ba93-d9ac-4c2c-8f36-10493e99f9b7?version=1.0)
111 [10493e99f9b7?version=1.0](http://portal.inep.gov.br/documents/186968/484421/Relat%C3%B3rio+Saeb+2017/e683ba93-d9ac-4c2c-8f36-10493e99f9b7?version=1.0) Access on Dec. 10 th 2019.

112 scale, these performances are interpreted and described, in the Portuguese Language assessment, reading, in
113 9 (nine) levels. This form of presentation and dissemination of results is the one that has been used by INEP
114 throughout the different editions of Prova Brasil.

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

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

118 4 LEVEL Level Description

119 Level 1 Performance greater than or equal to 125 and less than 150

120 Students are likely to be able to: Locate explicit information in short narrative, informative texts and
121 advertisements. Identify the theme of a text. Find elements such as the main character. Establish relationship
122 between parts of the text: character and action; action and time; action and place. Level 2 Performance greater
123 than or equal to 150 and less than 175

124 In addition to the aforementioned skills, students are likely to be able to: Locate explicit information in short
125 stories. Identify the main subject and the main character in a report and in fables. Recognize the purpose
126 of recipes, manuals and regulations. Infer character characteristics in fables. Interpret verbal and non-verbal
127 language in strips. Level 3 Performance greater than or equal to 175 and less than 200

128 In addition to the aforementioned skills, students are likely to be able to: Locate explicit information in stories
129 and reports and in advertisements with or without the support of graphic resources. Recognize the relationship
130 of cause and consequence in poems, short stories and comic strips. Infer the sense of the word, the sense of
131 expression or the subject in letters, short stories, comic strips and comic books, with the support of verbal and
132 non-verbal language.

133 Source: SAEB 2017 Report.

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

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

159 In the PISA report, student performance in reading is also presented through 6 (six) levels. In the board
160 two, the first three levels of the PISA proficiency scale are presented (OECD, 2019). Readers at Level 1a can
161 locate one or more independent pieces of explicitly stated information; they can recognize the main theme or
162 author's purpose in a text about a familiar topic, or make a simple connection between information in the text
163 and common, everyday knowledge. Typically, the required information in the text is prominent and there is
164 little, if any, competing information. The student is explicitly directed to consider relevant factors in the task
165 and in the text. Level 2

166 Readers at Level 2 can locate one or more pieces of information, which may need to be inferred and may need

167 to meet several conditions. They can recognize the main idea in a text, understand relationships, or construct
168 meaning within a limited part of the text when the information is not prominent and the reader must make low
169 level inferences. Tasks at this level may involve comparisons or contrasts based on a single feature in the text.

170 Typical tasks at this level require readers to make a comparison or several connections between the text and
171 outside knowledge, by drawing on personal experience and attitudes.

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

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

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

5 III. The Definition of Text Complexity

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

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

203 For the analysis of the descriptors of the Reference Matrix for Assessment in Portuguese Language, an
204 explanation of the linguistic nature of the descriptor was initially carried out based on the theories of the
205 text, especially the cognitive-based theories (SMITH 1991;KLEIMAN 1989;KOCH 1998) and in text linguistics
206 (KOCH, 1989; KOCH & TRAVAGLIA 1989).

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

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

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

226 The classification resulting from the criteria defined in the scope of the research considers four levels of
227 complexity of the texts, in whose definition the syntax presents itself as a very defining element of complexity,
228 when considering the first two levels and the lexicon and the theme are presented as very determinants on levels

229 three and four. Based on the criteria of size, syntax, lexicon and theme, the following levels of complexity for the
230 texts below were defined.

231 **6 Texts of level 1:**

232 The texts are not long (up to 15 lines). The syntax is simple, in which short periods and coordinated structures
233 predominate, or even topics; cohesive processes are simple, such as those involving retakes with a close referent
234 -by referencing through subject pronouns or reiteration, by repetition or synonymy; the structure of the texts
235 is conventional and the sentences presented in canonical order. The lexicon is closer to colloquial and suitable
236 for the preferred interlocutor of the text, usually children. The themes are more of daily use, as less familiar
237 themes require treatment that "make it easier" to read the text. The most common texts at this level are of
238 canonical structure, with narratives and expository texts being present: on the former, we can highlight "nursery
239 rhymes", legends, narratives from children's literature, and also poems with narrative structure; among the latter
240 are "scientific curiosities" or "scientific notes", as defined by the BNCC.

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

250 **7 Level 3 Texts:**

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

260 Level 4 Texts: Just like the previous level, level 4 texts are displayed in any size. The syntax is complex and
261 typical of the formal use of language, with subordinate structures, longer intercalations and impersonalizations.
262 Periods are longer, with three lines on average; cohesive processes are more complex, such as those involving
263 retakes by ellipse, objective pronouns and less usual relative pronouns, as well as retakes from more distant
264 referents. The lexicon is characteristic of formal, specialized and literate speech, presented in different texts,
265 with a less canonical structure. The predominance is of texts with more elaborate literary treatment, affecting
266 its structure and resources, and those that deal with specialized themes, mainly in the field of science and life
267 in society. As an example of narrative texts, classic texts stand out: tales, chronicles and fragments of novels,
268 narratives less focused on action and with more complex strategies, such as free indirect speech, descriptions
269 that capture the character's stream of consciousness. At this level, there are also reviews, news and reports,
270 opinion texts with various arguments and poems with a more elaborate literary treatment, with the presence of
271 metaphors, allegories and poetic images.

272 Based on the four levels of complexity of the texts presented here, the items referring to the descriptors
273 mentioned above were analyzed and applied in assessments carried out by CAEd to students from 5th to 12th
274 grade. Tables 3, 4, 5 and 6 below show the distribution of the analyzed items, related to each descriptor, by
275 25-point intervals of the proficiency scale. As can be seen from the analysis of tables 3, 4, 5 and 6, level 1
276 texts are those predominant in items that anchor between 125 and 200 points on the SAEB reading proficiency
277 scale. Level 2 texts predominate as support for items that anchor between 151 and 275 points on the proficiency
278 scale. Level 3 texts appear predominantly in support of items that anchor between 176 and 300 points of the
279 scale. Finally, level 4 texts appear as support for items that anchor above 226 points of the scale, with greater
280 concentration among items that anchor above 250 points of the scale. The comparison between the distribution
281 of texts, according to their level of complexity, among the different descriptors of the reference matrix, indicates a
282 certain regularity of this distribution. Such regularity is indicative of performance standards in reading presented
283 by students who did the tests and who are at different stages of basic education. It is possible to affirm, for
284 example, based on the description of the levels of complexity of the text, that students with proficiency between
285 125 and 200 points read short texts (up to 15 lines), which present simple syntax, in which short periods and
286 coordinating structures predominate, or in topics, with simple cohesive processes, such as those involving retakes
287 with a close referent, by referencing through subject pronouns or reiteration, by repetition or synonymy. The
288 structure of the texts these students read is conventional, with sentences presented in canonical order (subject,

8 FINAL CONSIDERATIONS

289 verb, object), the lexicon is closer to the colloquial and the most everyday themes. Nursery rhymes, legends,
290 narratives from children's literature, poems with narrative structure, "scientific curiosities" or "scientific notes",
291 as defined by the BNCC, are the genres that students with this proficiency read.

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

298 The lexicon was presented, in this investigation, as a defining element of the complexity of level 3 and 4 texts.
299 Level 3 texts usually have a lexicon proper to formal speech, implying a more constant inferential activity. Level
300 4 texts have a specialized lexicon, present in texts whose theme is also specialized, that is, texts that address
301 issues in specific areas of knowledge: science and technology, life in society, etc.

302 However, the consideration of these features the lexicon (whether to formal speech) should not be strict. In
303 some texts, for example, formal uses of the language are followed by "speech facilitation" resources that allow
304 working with an unknown lexicon. Texts that deal with specialized themes and that are aimed at the child or
305 adolescent reader usually display several strategies to facilitate their reception (such as explanatory expressions,
306 synonyms, examples, etc.). Lexicon and theme are therefore important criteria for classifying texts at levels 3
307 and 4.

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

315 IV.

316 8 Final Considerations

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

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

331 Given the above, it is concluded that the description of performance standards in reading should consider a
332 more careful analysis of the supports used in the construction of problem situations proposed by the items, in
333 addition to considering the type of skill assessed. In this sense, it is important that, when describing the ability,
334 for example, to locate explicit information in a text, consider the type of text and the support offered by it so
335 that the reader can carry out the task proposed. If we consider +reading as a process of interaction between
336 reader and text, it is necessary to figure out how the text leads the reader in this interaction, besides considering
337 what the reader brings to it.

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

345 It is also noteworthy the fact that greater clarity regarding the level of difficulty of the texts is relevant
346 knowledge to support the production of items that assess other areas of knowledge, such as natural sciences and

2

Figure 1: Table 2 :

3

| Breaks | D06-TEXT COMPLEXITY QUANTITATIVE BY INTERVAL | | | | | | | | |
|---------------|--|------|---------|-----------|---------|-------|---------|-------|--|
| | LEVEL 1 | | LEVEL 2 | | LEVEL 3 | | LEVEL 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.

Figure 2: Table 3 :

4

| Breaks | D07-TEXT COMPLEXITY QUANTITATIVE BY INTERVAL | | | | | | | | |
|---------|--|------|---------|------|---------|-------|---------|------|--|
| | LEVEL 1 | | LEVEL 2 | | LEVEL 3 | | LEVEL 4 | | |
| | 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 | |

Figure 3: Table 4 :

5

D08-TEXT COMPLEXITY QUANTITATIVE BY INTERVAL

| Breaks | Qty % | | Qty % | | Qty % | | LEVEL 4 |
|---------------|-------|-------|-------|-------|-----------|-------|---------|
| | 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.

Figure 4: Table 5 :

6

D09-TEXT COMPLEXITY QUANTITATIVE BY INTERVAL

| Breaks | LEVEL 1 | | LEVEL 2 | | LEVEL 3 | | LEVEL 4 | |
|---------------|---------|------|---------|-------|---------|-------|---------|-------|
| | 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.

Figure 5: Table 6 :

347 human sciences, since in these areas are also used verbal texts that support the elaboration of the items that
348 assess them. ¹

¹Large-Scale Portuguese Language Evaluations: A Research on the Complexity of Texts that Support Items that Assess Reading

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