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# Textuality in writing feedback criteria of an adaptive hypermedia: a case study / A textualidade em critérios de correção de texto de uma Plataforma Adaptativa: um estudo de caso

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#### ABSTRACT

This article presents the results of a research that aimed to investigate how textuality is contemplated in the feedback criteria and subcriteria of the opinion article genre adopted by an adaptive hypermedia. On such hypermedia, the evaluator uses digital tools which include several feedback types, including the controlled correction, which can we comprehended as a type of formative feedback. The analysis is based on the concepts of text and textuality criteria arising from Textual Linguistics, as well as on the concept of feedback as a text, a way of dialogue and a scaffold on which students rely to rewrite their production. It is a qualitative research developed in the field of transdisciplinary studies of Applied Linguistics in which the case study is the dominant methodology. The results show that the hypermedia feedback types contemplate aspects of traditional grammar, structural characteristics of the text genre and textuality criteria, especially cohesion. These results are relevant, because they point out that the use of digital tools in feedback practice may cause changes in the ways of thinking and acting in school texts feedback.

KEYWORDS: Textuality criteria; Controlled correction; Digital Information and Communication Technologies (DICTs).

#### RESUMO

Neste artigo, apresentam-se os resultados de uma pesquisa que objetivou investigar como a textualidade é contemplada nos critérios e subcritérios de correção do gênero artigo de opinião adotados por uma Plataforma Adaptativa. Nessa plataforma, o corretor utiliza ferramentas digitais que englobam diversas metodologias de correção de texto, entre elas a classificatória. A análise fundamenta-se nos conceitos de texto e de critérios de textualidade advindos da Linguística Textual, bem como na concepção de correção como um texto, uma forma de diálogo e um andaime no qual o aluno se apoia para reescrever a sua produção. Trata-se de uma pesquisa qualitativa desenvolvida no campo de estudos transdisciplinar da Linguística Aplicada em que o estudo de caso é a metodologia dominante. Os resultados apontam que os critérios de correção da plataforma contemplam aspectos da gramática tradicional, características estruturais do gênero textual e critérios de textualidade, sobretudo, coesão. Esses resultados são relevantes porque indicam que o uso de ferramentas digitais pode provocar mudanças nos modos de pensar sobre a correção de texto e de agir na prática corretiva de textos escolares.

PALAVRAS-CHAVE: Critérios de textualidade; Correção classificatória; Tecnologias Digitais de Informação e Comunicação (TDIC).

#### **1** Introduction

The practice of text feedback is part of the routine of many Portuguese Language (PL) teachers of Basic Education (BE), even though only few teachers reflect on their effects on the writing teaching and learning process in schools. Besides this practical dimension, school texts feedback has also been an investigation object in Linguistics and Applied Linguistics research. Researches with this topic exist for at least four decades, although not being frequent. For example, Serafini (1989), one of the most recognized works on the subject in Brazil, is based on Applebee (1981). Besides Serafini's (1989) work, Ruiz (2010 [2001]) stands out in the Brazilian context.

Comparing the Brazilian academic production about writing teaching and learning and, most recently, about text genres in face of this process, it is possible to verify the lack of work which specifically focuses on the study and the implication of text feedback on the improvement of students' writing skills, especially in BE.

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As mentioned in Bazarim (2018), this may be due to the fact that since the 1980s in Brazil, the investigations, mainly on Applied Linguistics (AL), were mostly focused on criticizing the traditional paradigms on PL teaching – which advocate the decontextualized teaching of metalanguage, which comes from traditional grammar –, and in presenting a new paradigm in which, firstly, the text, and posteriorly, the text genre, would be the megainstrument through which the reading activities, linguistic analysis and textual production would be jointly developed. Thus, while there was not a consensus between researchers and teachers about the thesis that PL teaching would be more productive if realized through text genres and that text production from different genres should be an effective practice on PL classes, themes like text feedback and rewriting little would emerge on academic research.

Similarly, the use of computer and digital information and communication technologies (DICT) in the educational context is not recent. According to Tavares (2002), there are reports that the first use of educational information technology was around the 1960s in the Physics area of the Federal University of Rio de Janeiro. Despite that, Xavier (2001) affirms that it is an increasingly urgent task to comprehend how students and teachers use DICT to learn and teach and how these digital technologies can affect and even transform the teaching and learning process in school context.

The methodologies for opinion article's feedback produced by BE students and their effects on rewriting were already contemplated on Silva and Bazarim (2018), Souza and Bazarim (2018), and Bazarim and Souza (2021). The criteria for feedback of this text genre were also addressed on Passarelli (2012), as well as on Abaurre and Abaurre (2012). However, the incorporation of digital tools to the feedback practice was not addressed in researches until Silva and Vieira (2014), Silva (2020) and Sousa (2020).

Silva and Vieira's (2014) research investigated how the forms of teacher intervention, using both Word, e-mail and quickmail tools, were embedded by undergraduate Language majors in their updated version of opinion articles. The results showed that the mediated feedback through digital tools can facilitate the feedback practice, since they allow the evaluator to change positions in a text, and to insert stretches and comments.

Both Silva (2020) and Sousa (2020) works contemplated the use of WhatsApp (WA), a mobile digital technology (MDT), on the production of interventions. On the former, it was verified that the interactions and suggestions on the WA group influenced the rewriting of the Fanfictions elaborated by

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BE students. On the latter, it was verified that the oral comment via WA acted as a scaffolding on which BE graduates could hold on to take ownership of the argumentation and informativeness criteria necessary for rewriting the essay of the Exame Nacional do Ensino Médio (ENEM)<sup>1</sup>.

These researchers investigated how the mediators used digital tools to produce interventions on students' texts. However, only Sousa (2020) promotes a discussion about text feedback methodologies. The research which results are being presented and discussed in this article, in turn, focuses on controlled correction, in which there is unambiguous identification of problems through error classification on feedback rubrics (using spreadsheets, tables or feedback grids). Besides that, the digital tools used are specific to an adaptive hypermedia (AH).

For a platform to be considered an adaptive hypermedia, computational intelligence used in its development is considered: the AH has to be based on an adaptive hypermedia system and on an intelligent tutor system (BRUSILOVSKY, 2000). In the educational field, an AH consists of a dynamic virtual learning environment (VLE) in which contents, layout and ways of browsing can be adjustable to each user from a model. In this field, the use of the AH allows teaching personalization; in other words, from the use of algorithms and computational tools, it is able to suggest student users the best way to be used so that they learn a given content.

Thereby, an AH is not to be confused with a text feedback website, since, in addition to giving a grade and providing comments, the student is offered an individual learning path based precisely on the inadequacies and errors identified in the writing feedback. Thus, in this VLE, students have access not only to the inventory of these inadequacies and errors, and to reports and graphs that allow them to monitor their performance, but also, and especially, to specific activities, which include video classes, didactic texts and exercises, allowing them to learn the contents in which they have demonstrated difficulty.

In this article, our focus is not to explore how the individual learning path is constructed through feedback nor to explore all the methodologies and digital tools that are used in the AH. Since our objective is to investigate how textuality is included in the text feedback criteria of opinion articles, only the controlled correction is analyzed.

<sup>&</sup>lt;sup>1</sup> An exam taken by lower education graduates in Brazil, it is used for both higher education admission and evaluation of educational systems.

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Thus, theoretically, there was a need for articulation between studies from Textual Linguistics about textuality criteria and research on the applied field of language studies on text feedback. Hence, this article is relevant since it contributes to minimize the gap in academic studies on feedback of school texts produced by BE students.

After this brief introduction, the theoretical framework of the research is presented in two sections; after that, considerations about the functioning of an adaptive hypermedia and, then, about the methodological framework are made; later, the results of the analysis are presented and discussed and, closing the article, there are some final considerations.

### 2 (Re)visiting the conceptions of text and textuality criteria

Considering Marcurschi (1983; 2008) and Bentes (2001), it is possible to perceive that the text is the guiding axis of research on Textual Linguistics (TL). However, in the same way that there are several possibilities of conceiving TL, there is not a single definition of text. It is known, for example, that it is not any set of words that produces a sentence, and that any set of phrases does not produce a text either (CHAROLLES, 1988).

From the origins of TL to the present day, according to Koch (2001, p. 12), the text was conceived in different ways: 1) complex sentence (semantic foundation); 2) thematically centered expansion of macrostructures (semantic foundation); 3) complex sign (semiotic foundation); 4) complex speech act (pragmatic foundation); 5) finished product of a discursive action (discursive-pragmatic foundation); 6) means of verbal communication (communicative foundation); 7) verbalization of operations and cognitive processes (cognitive foundation). Most recently, the text has been conceived as a multifaceted entity (KOCH, 2004) and as a form of social cognition (KOCH; ELIAS, 2016).

To understand the text as a multifaceted entity, means to consider it as "the result of an extremely complex process of social interaction and social construction of subjects, knowledge and language."<sup>2</sup> (our translation<sup>3</sup>) (KOCH, 2004, p. 175); in other words, it means accepting that the text is

<sup>&</sup>lt;sup>2</sup> "Fruto de um processo extremamente complexo de interação social e de construção social de sujeitos, conhecimento e linguagem." (KOCH, 2004, p. 175).

<sup>&</sup>lt;sup>3</sup> Henceforth, all translations are our translations.

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the result of the articulation among linguistic, cognitive and social dimensions, with "linguistic being a necessary but not essential condition for textual processing."<sup>4</sup> (KOCH, ELIAS, 2016, p. 34).

Thus, according to Beaugrande's metaphor (1997), the linguistic materiality of a text would be just the tip of an iceberg. Considering that, in an interactional approach with a socio-cognitive basis, "the text is a realization that involves subjects, their objectives, and knowledge with an interactional purpose."<sup>5</sup> (KOCH; ELIAS, 2016, p.32), the text can also be understood as a form of social cognition.

Considering the text as a multifaceted entity and as a form of social cognition is not an impediment to the study of textuality criteria. However, Marcuschi (2008) warns us that textuality criteria should not be understood as linguistic "laws". The absence of one or the other criterion does not prevent a text to be considered as one, inasmuch as it is a unit of meaning and not a formal and linguistic unit. In our view, the textuality criteria would not be "principles of good text production", instead, they would function as analytical categories, that is, as a possibility to analyze the text, considering not only the linguistic dimension, but also the cognitive and social.

That said, Koch (2004) and Marcuschi (2008)<sup>6</sup> present and (re)discuss the text-oriented textuality criteria with a focus on language (cohesion and coherence); the textuality criteria oriented by the psychological aspect and with a focus on cognition (intentionality and acceptability); the criterion oriented by the computational aspect and with a focus on processing (informativeness) and, finally, the criteria oriented by the sociodiscursive aspect and with a focus on the social aspect (situationality and intertextuality)

In works published until the 1990s, a radical distinction between cohesion and coherence was postulated. Hence, cohesion, which was defined by the presence of elements on the textual surface, was considered as a condition for establishing coherence.

According to Koch (2004),

it was common to identify cohesion as the way in which linguistic elements on the textual surface are interconnected, intertwined, through linguistics resources as well

 <sup>&</sup>lt;sup>4</sup> "Linguístico uma condição necessária, mas não essencial para o processamento textual." (KOCH, ELIAS, 2016, p. 34).
<sup>5</sup> "O texto é uma realização que envolve sujeitos, seus objetivos, e conhecimentos com propósito interacional." (KOCH; ELIAS, 2016, p.32).

<sup>&</sup>lt;sup>6</sup> Marcuschi (2008) based this discussion on Introduction to Text Linguistics by Beaugrande and Dressler (1981).

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as, in order to create a "fabric", a unit of a higher level than the sentence, which differs qualitatively from it.<sup>7</sup> (KOCH, 2004, p. 35).

Still according to Koch (2004), based on the work of Halliday/Hassan<sup>8</sup> (1976), five types of cohesion were postulated: reference; substitution; ellipse; conjunction and sequential cohesion. As the differentiation between some of these types of cohesion was not clear, especially between substitution and ellipse, researchers started grouping them into two major processes that constitute a text: the referential cohesion (remission or reference) and sequential cohesion. The first would be represented by resumes, and the second by continuity. In any case, as well as the sequential, the referential cohesion also collaborates with the continuity and progression of the text.

With regard to coherence, the most popular conception until the 1990s considered that it occurred through the way in which the elements of the textual surface were related to produce meaning. According to Koch (2004), this concept is quite reductive. Several criticisms were made to this concept, now seen as "traditional" (KOCH, 2004).

In the pragmatic-cognitive perspective, there is no reason for the separation between factors centered on the text and factors centered on the user, since all factors are simultaneously centered on both. Thus, cohesion is neither a necessary nor sufficient condition for coherence, since it is not in the text; but it is built by users, in a communicative situation, based on it and with the contribution of all textuality criteria (KOCH, 2004).

Then, how can cohesion and coherence be currently defined in order to not adhere to reducing conceptions? According to Marcuschi (2008), the mechanisms of cohesion account for the sequential structuring of the text, however they do not belong to a syntactic order, but rather to some kind of textual syntactic Semantics. Marcuschi (2008) also informs that the systematic and exhaustive examination of the cohesive markers has given way to the study of the referencing processes (CAVALCANTE; RODRIGUES; CIULA, 2003 and KOCH; MORATO; BENTES, 2005), which, according to this new way of conceiving cohesion, account not only for the formal but also for the pragmatic-cognitive dimension of the phenomenon.

<sup>&</sup>lt;sup>7</sup> "Costumou-se designar por coesão a forma como os elementos linguísticos presentes na superfície textual se interligam, se interconectam, por meio de recursos também linguísticos, de modo a formar um "tecido" (tessitura), uma unidade de nível superior à da frase, que dela difere qualitativamente." (KOCH, 2004, p. 35).

<sup>&</sup>lt;sup>8</sup> HALLIDAY, M.A.K.; HASAN, R. Cohesion in Spoken and Written English. London: Longman, 1976.

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Thus, it is possible to conclude that the distinction between cohesion and coherence cannot be made in a watertight way, as if they were independent phenomena, since "cohesion is not always established univocally between elements on the textual surface"<sup>9</sup> (KOCH, 2004, p. 46) and coherence "is built through cognitive processes operating in the users' minds, triggered by the text and its context"<sup>10</sup>, so that "the absence of cohesive elements is not necessarily an obstacle to this construction."<sup>11</sup> (KOCH, 2004, p.46). Thereby, contemporaneously, coherence has been seen as a "situated construction of the interlocutors."<sup>12</sup> (KOCH, 2004, p. 47).

In relation to intentionality, one of the textuality criteria that is guided by the psychological aspect and with a focus on cognition, the author's intention is considered as a relevant factor for textualization (MARCUSCHI, 2008, p. 126). Thus, "intentionality is related to what text producers intended, had in mind or wanted the reader to do with"<sup>13</sup> what was said or written (MARCUSCHI, 2008, p. 126). However, still according to Marcuschi (2008), it is:

difficult to identify intentionality because it is not clear what to observe. It is also not known whether it is related to the author or the reader, since both have intentions. But the problem is even bigger when intentionality is analyzed as a textuality criterion. It would be more convenient to see it integrated in the global plan of the text and in the processes that produce coherence.<sup>14</sup> (MARCUSCHI, 2008, p. 127).

Acceptability, on the other hand, which is another textuality criterion oriented by the psychological aspect and with a focus on cognition, concerns the reader's attitude towards the text, in other words, whether they accept it as coherent, cohesive, interpretable and meaningful (MARCUSCHI, 2008, p 127-128). As with the other criteria, acceptability cannot be identified only on the surface of linguistic materiality, since it is related to the possibility of construction of meanings attributed to the text by the reader, to pragmatic notions and it would have a close relation with intentionality. Thus, a problem associated with the study of acceptability is related to the definition of its boundaries: whether

 <sup>&</sup>lt;sup>9</sup> "Nem sempre a coesão se estabelece de forma unívoca entre elementos na superfície textual." (KOCH, 2004, p. 46).
<sup>10</sup> "Se constrói por meio de processos cognitivos operantes na mente dos usuários, desencadeados pelo texto e seu contexto." (KOCH, 2004, p. 46).

<sup>&</sup>lt;sup>11</sup> "A ausência de elementos coesivos não é, necessariamente, um obstáculo para essa construção." (KOCH, 2004, p.46). <sup>12</sup> "Construção situada dos interlocutores." (KOCH, 2004, p. 47).

<sup>&</sup>lt;sup>13</sup> "A intencionalidade diz respeito ao que os produtores de texto pretendiam, tinham em mente ou queriam que o leitor fizesse com aquilo." (MARCUSCHI, 2008, p. 126).

<sup>&</sup>lt;sup>14</sup> "Difícil identificar a intencionalidade porque não se sabe ao certo o que observar. Também não se sabe se ela se deve ao autor ou ao leitor, pois ambos têm intenções. Mas o problema fica ainda maior quando queremos analisar a intencionalidade como critério de textualidade. Seria mais conveniente vê-la integrada no plano global do texto e nos processos produtores de coerência." (MARCUSCHI, 2008, p. 127).

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"they are on the part of the system, of cognitive plausibility or of situationality."<sup>15</sup> (MARCUSCHI, 2008, p. 128).

Informativity is guided by the computational aspect and with a focus on processing. Therefore, being informative:

means being able to resolve uncertainties. [...] Information is a type of content presented to the reader/listener, but it is not obvious. Asking for the contents of a text is not the same as asking for the information<sup>16</sup>. (MARCUSCHI, 2008, p. 132).

As a result, this criterion becomes very complex and unspecific, based on a vague and not computationally clear conception of information (MARCUSCHI, 2008).

Finally, there are the two criteria oriented by the sociodiscursive aspect and with a focus on the social: situationality and intertextuality. Situationality refers to the relationship established between the text and the social, cultural situation, etc., in other words, its context. This contextualization acts as a parameter both in the interpretation and in the production of texts. Therefore, "situationality can be seen with a criterion of textual adequacy"<sup>17</sup> (MARCUSCHI, 2008, p. 129) to a certain context. However, situationality cannot be confused with context, since context is one of the central aspects of situationality, but it is distinct from it. As a result, "situationality does not form an autonomous principle, since in many cases it is an aspect of other criteria."<sup>18</sup> (MARCUSCHI, 2008, p. 129).

Based on the assumption that there are no texts that do not establish a relationship with other texts, intertextuality can be understood as a "*constitutive property of any text* and the set of *explicit or implicit relationships that a specific text or group of texts* maintains with other texts." <sup>19</sup> (MARCUSCHI, 2008, p. 130, emphasis added). Intertextuality collaborates with textual coherence, as this criterion of textuality "is also a constitutive principle that treats the text as a communion of discourses and not as something isolated."<sup>20</sup> (MARCUSCHI, 2008, p. 132).

<sup>&</sup>lt;sup>15</sup> "São eles por parte do sistema, da plausibilidade cognitiva ou da situacionalidade." (MARCUSCHI, 2008, p. 128).

<sup>&</sup>lt;sup>16</sup> "Significa, pois, ser capaz de dirimir incertezas. [...] A informação é um tipo de conteúdo apresentado ao leitor/ouvinte, mas não é algo óbvio. Perguntar pelos conteúdos de um texto não é o mesmo que perguntar pelas informações por ele trazidas." (MARCUSCHI, 2008, p. 132).

<sup>&</sup>lt;sup>17</sup> "A situacionalidade pode ser vista com um critério de adequação textual." (MARCUSCHI, 2008, p. 129)

<sup>&</sup>lt;sup>18</sup> "A situacionalidade não forma um princípio autônomo, na medida em que é em muitos casos um aspecto de outros critérios." (MARCUSCHI, 2008, p. 129).

<sup>&</sup>lt;sup>19</sup> "Propriedade constitutiva de qualquer texto e o conjunto das relações explícitas ou implícitas que um texto ou um grupo de textos determinado mantém com outros textos." (MARCUSCHI, 2008, p. 130)

<sup>&</sup>lt;sup>20</sup> "É também um princípio constitutivo que trata o texto como uma comunhão de discursos e não como algo isolado." (MARCUSCHI, 2008, p. 132).

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Before presenting and discussing the concept of text feedback adhered in this article, we emphasize that the criteria of textuality cannot be transformed into rules for the "good formation" of the texts. They need to be observed as principles of access to the sense(s), which are determined by the way they are operated as criteria. Thus, operating with the criteria of textuality does not mean abandoning the concept of text as a multifaceted entity or as a form of social cognition.

### 3 (Re)visiting the text feedback conceptions

In a school context and in common sense, text feedback is generally understood as an "error hunting" activity (RUIZ, 2010 [2001]). In this sense, feedback practice ends up focusing merely on the surface of linguistic materiality and, according to Jesus (1995), being limited to the cleaning of the text, as the errors identified, almost always, refer only to infractions of the rules of standard norms prescribed by traditional/normative grammar.

In an academic context, one of the first works to contemplate feedback that became accessible to the Brazilian public was Serafini's (1989). In this work, the author proposes text feedback as a set of interventions applicable to the teacher to point out the inadequacies present in the student's text. It also presents three feedback trends - indicative, resolutive and controlled.

Posteriorly, Ruiz (2010 [2001], p. 19) conceives feedback as "the text that the teacher makes in writing (and superimposed on) the student's text to speak about that same text"<sup>21</sup>, in other words, it is about making the student aware of any problem identified in their production and which, hopefully, will be corrected in the rewriting. According to this definition, giving a text feedback is not a kind of "error hunting" nor an exam practice, but a strategic way found by the teacher to signal that something in the text is not good and needs to be improved.

Providing text feedback in this conception, however, is not a simple task, but rather a reason for tension and anguish for the PL teacher who will need to define what will or will not be pointed out in the text. Most of the time, they have to choose which criteria will be themed according to the objective of given textual production. And, as a consequence of their choices, the teacher takes the risk of the student not revising or perfecting what was not indicated on the feedback (BAZARIM; SOUZA, 2021).

<sup>&</sup>lt;sup>21</sup> "O texto que o professor faz por escrito no (e de modo sobreposto ao) texto do aluno para falar desse mesmo texto." (RUIZ, 2010 [2001], p. 19).

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Similar to Ruiz's approach (2010 [2001]), in Abaurre and Abaurre (2012) the purpose of feedback is not "linguistic prophylaxis" (JESUS, 1995), but rather guidance on what needs to be done by the student so that the new version of their text is adequate in relation to the "purpose, reader profile, context of circulation, structure of the discursive genre, degree of formality of the language."<sup>22</sup> (ABAURRE; ABAURRE, 2012, p. 44).

In this article, therefore, even more than a "hunt for infractions" to the rules postulated by traditional/normative grammar, feedback is conceived as a fundamental step for rewriting. Through feedback, in addition to just examining and assigning a grade, the teacher can evaluate the text in order to diagnose students' learning needs. The text built about, on the margins or after the student's production allows the construction of a new interactional space, mediated by writing (BAZARIM, 2013), which allows the teacher to dialogue with the student about their production. In this conception, feedback also comes to be understood as a scaffold<sup>23</sup> on which the producer can rely on the production of a new version of their text (COLAÇO; BAZARIM, 2017).

Therefore, to describe how teachers interfere in a student's text, Ruiz (2010 [2001]), based on Serafini (1989), presents and discusses the indicative, resolutive and controlled feedback, as well as proposes the interactive-textual feedback. Unlike Serafini (1989) and Ruiz (2010 [2001]), when dealing with these modes of intervention in the student's text, in this article, the term "methodology" is preferred. It is needed to emphasize, however, that the term "methodology" is not used to designate a set of rigid rules that must be followed during feedback practice, but rather as a set of procedures mobilized, preferably consciously, to achieve a certain objective, which is to help the student to produce a new and better version of their text.

Considering our adherence to the concept of feedback as a text, it was verified that there are several catalyst genres<sup>24</sup> through which feedback practice materializes. In addition to rubrics

<sup>&</sup>lt;sup>22</sup> "Finalidade, perfil de leitor, contexto de circulação, estrutura do gênero discursivo, grau de formalidade da linguagem." (ABAURRE; ABAURRE, 2012, p. 44).

<sup>&</sup>lt;sup>23</sup> Scaffolding is a metaphor created by a group of neo-vygotskyans (WOOD, BRUNER, ROSS, 1976) in order to explain the help offered by the most experienced couple to the child during language acquisition in solving a problem whose solution they are still unable to find alone. In this process of scaffolding, considering that it is through verbal interaction that knowledge is built, the language acts as a mediator.

<sup>&</sup>lt;sup>24</sup> In the terms proposed by Signorini (2006), the catalyst genres are those that "favor the triggering and enhancement of actions and attitudes considered more productive for the training process." Translation for: "*favorecem o desencadeamento e a potencialização de ações e atitudes consideradas mais produtivas para o processo de formação*." (SIGNORINI, 2006, p.8).

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(SERAFINI, 1989; PASSARELLI, 2012; ABAURRE; ABAURRE, 2012 and SOUZA; BAZARIM, 2018) and notes (RUIZ, 2010 [2001] and BUIN, 2006), the use of commentary and listed commentary (BAZARIM, SANTOS, 2021), as well as oral commentary (SOUSA, 2020), were also identified.

Despite this diversity of methodologies, considering the focus and specificities of this article, only the controlled correction is presented and discussed. As proposed by Serafini (1989), this feedback methodology contemplates the unambiguous identification of problems through a classification of errors presented in rubrics.

Considering the characteristics of the analyzed corpus, this meaning was not fully recovered in the work of Ruiz (2010 [2001]), in which the controlled correction contemplated the use of a set of symbols to classify the type of problem found in the student's text. In general, these symbols referred only to conventional and normative aspects (spelling, punctuation, concordance, regency, accentuation, etc.).

It is only with the feedback criteria tables proposed by Passarelli (2012), and with the feedback grids presented in Abaurre and Abaurre (2012) and in Souza and Bazarim (2018) that the controlled correction converges to what was initially proposed by Serafini (1989), starting to incorporate aspects related to compliance with the rules of the standard norm, genre characteristics and textuality criteria.

Rubrics can optimize the teacher's work during feedback, considering that the criteria are previously defined and applicable to all corrected texts, but they can also assist the student during the rewriting, as long as they present an understandable language and are used in conjunction with other methodologies, especially the interactive-textual (RUIZ, 2010 [2001]). However, only the use, even if appropriate, of this methodology without articulation with teaching activities to be implemented in the classroom, as proposed in Gonçalves and Bazarim (2013), may not meet all students' learning needs, making it impossible for them to improve the text when rewriting.

After this brief (re)visit to the feedback concepts, in the following section, the definition of Adaptive Hypermedia and the feedback process in this VLE are presented.

## 4 From the concept to the feedback process on an Adaptive Hypermedia (AH)

Based on the studies carried out (AIRES; PILATTI, 2016; BRUSILOVSKY, 1996; 2000; FERREIRA, 2014; GASPARINI, 2003; GOMES, 2013; SANTOS JÚNIOR, 2010), it was possible to

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understand that AH results from the integration between an adaptive hypermedia system (AHS) and an intelligent tutoring system (ITS). The AHS are systems, architectures, methods and techniques capable of promoting the adaptation of a hypermedia and hyperdocument system to the objectives, needs, preferences and individual desires of its users (BRUSILOVSKY, 1996). Those

Adaptive hypermedia systems build a model of the goals, preferences and knowledge of each individual user, and use this model throughout the interaction with the user, in order to adapt the hypertext to the needs of that user. (BRUSILOVSKY, 2000, n.p.)

These AHS', according to Brusilovsky (2000), arised from a test that combined an ITS and an educational hypermedia. ITS are systems whose main objective is to provide instruction to the student in a similar way to a human teacher (GASPARINI, 2003, p. 16). Initially, they aimed only to support the student to solve problems, so they offered little or no learning material. In addition, this support in the ITS was done in a static and standardized way, that is, the instructions were the same for all users, regardless of preferences, learning objectives or the cognitive development of each user. With the growth of the computer's capacity and the popularization of the Web, it was realized that it was possible to simultaneously offer an ITS and a learning material, and that hypermedia offered the best option for organizing the learning material online, culminating in the emergence of PA.

Thus, in an AH, through the use of an AHS, according to Brusilovsky (2000), there may be an adaptation in the content of the page, which is called an adaptive presentation, and adaptation of the appearance and behavior of the links, known as adaptive navigation support and/or adaptive navigation.

The adaptive presentation or adaptation of content "essentially consists of providing additional, comparative or alternative content, as well as hiding parts of that content for some user group."<sup>25</sup> (GASPARINI, 2003, p. 31). According to Brusilovsky (2000), in the educational area, the adaptive presentation is used in order to allow the connection between the student's previous knowledge and new knowledge to be learned.

In relation to adaptive navigation, its objective, according to Brusilovsky (2000), is to help users to find suitable paths during navigation. To this end, the AHS adapts the presentation and functionality

<sup>&</sup>lt;sup>25</sup> "Consiste essencialmente em prover conteúdos adicionais, comparativos ou alternativos, bem como ocultar partes desse conteúdo para algum grupo de usuário." (GASPARINI, 2003, p. 31).

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of the links to the user model. This can be done through direct guidance, link classification, link annotation, hiding, deactivation and link removal.

In this article, an AH aimed at teaching writing both to students and to graduates of BE is analyzed. The adaptive presentation with the consequent construction of a learning path for each user is made based on the information obtained through writing feedback, which means that, based on the inadequacies and errors identified by the evaluator, the system suggests content, video lessons and specific exercises to each user. Although the entire process of feedback in the AH is mediated by computer and digital tools available in the VLE, including predefined criteria and sub-criteria, the action of the evaluator is necessary, since they effectively correct the student's text. It is not, therefore, an automatic feedback.

Despite the various possibilities of using computational intelligence in the learning of writing that can occur in the investigated AH, the focus of this research is text feedback, more specifically how textuality is contemplated in the feedback criteria and subcriteria of opinion articles adapted in the AH. The following figures illustrate how this process happens.

1	Modia adia, na na faculdade, na woola, un tada a luga	
2 1	res, propagingo, protection au schemo Bulling	
3	Bulling of um problems sorie que a sociadad inferitor que prejudios e acada	
4 a	al squando prothers ravido das proces	
5	la pode ser praticada atraves da talinant, por minagans, procalment.	
6	a Bullyng mae as presidion cagnestore o presidion as por	
7 5	soar in rolto, pais, mais, familiare, profinor, todo.	
8	I Bullyng pode equan laigo water auto-estimo, criss, depressed,	
9 0	survive a latte de presence no familiar triatiza, etc.	
10	They and dia, existen site, practing, bicologo, line, to,	
11	pare as personas que safrementam inece	
12 7	Para que igue ino não gcontiça diremo pratas bastante alenção em	
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14 ,	· Depenson fice trist distance is	
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16	· De la não gasta de filas polos secolo	
17	· A la rive requests.	
18	Ine you down so identificade a brades para um medica especi	
19 g	aline	
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21		
22		
23		

Figure 1: Feedback screen

Source: authors' files.

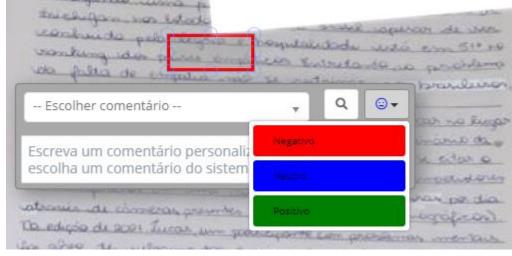
It is possible to notice in Figure 1 that the feedback is made on the digitized image of the student's handwritten text. In this figure, we also verify that the comments are in boxes that are created

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by the evaluator when holding the Ctrl key and holding down the left mouse button, as demonstrated in the following illustration.

#### Figure 2: Creating comment boxes



Source: authors' files.

After creating a comment box, the next step is to select the color. It is possible to use red, blue or green. To indicate inadequacies, deviations and errors already fulfilled in the system, the evaluator must use the color red. After defining a color, they have to choose a subcriterion that refers to that error, inadequacy or deviation among the several already predefined and available in the AH. When selecting this subcriterion, the AH itself suggests a comment that can be changed by the evaluator in order to make the feedback less general and more personalized. Based on these red markings, the AH generates a ranking of the student's difficulties and their individual learning path.

In the feedback tool, therefore, the evaluator has not only the permission to edit the sub-criteria already provided by the system (for any necessary customizations or adjustments), but also the possibility to create their own feedback comments in the body of the text, given the complexity of the processes that involve feedback itself and the linguistic, textual and discursive phenomena to be observed by the evaluator. The difference between using a predicted comment and creating one is in the offer of the individual learning path: in the first case, based on the system's subcriteria, the contents that are offered to the student are indexed (such as grammar topics, exercise lists and video classes);

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in the second case, based on comments made by the evaluator, these contents are not offered to the student.

To ensure that all feedbacks are accompanied by individual learning paths and to encourage evaluators to use the sub-criteria available in the system (although it does not prevent the evaluator from creating comments), the tool operates with a correlation between average proficiency by competence (feedback criterion) and the number of comments indexed in the feedback<sup>26</sup>. Thus, the evaluator is prevented from finalizing a feedback if they do not meet certain minimum requirements of subcriteria already provided by the system by proficiency range, that is, for each 0.4 point interval. This resource, which integrates the tools developed by the AH for quality monitoring, is adjusted according to characteristics of the text genre and segment (Elementary or High School) for which the feedback is intended.

With that said, to indicate inadequacies, deviations and errors not foreseen in the system, the evaluator must select the color red; to offer the student some explanation, or suggestion or rewriting, the color blue. Although the comments made in blue are not considered in the ranking of the students' difficulties or in the creation of the individual learning path, they are essential for the feedback to be established in a dialogue that helps the producer in the elaboration of a new and, hopefully, best version of their text.

In order to make positive assessments, which are also not foreseen by the system, the evaluator must select the color green. Again, although these comments are not considered in the ranking of the student's difficulties or in the creation of the individual learning path, they act as motivators and are essential to engage the student in the rewriting activity.

Inadequacies, deviations and errors marked in red, as mentioned, are located in sub-criteria that are already pre-established in the AH system. These sub-criteria are divided into groups according to the criteria that can be seen in the image below.

<sup>&</sup>lt;sup>26</sup> 10 points, 2 for each competence (criterion), with 0,4 intervals, can be attributed to each text.

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Figure 2: Feedback screen with criteria

SUA AVALIAÇÃO Ξ 1. DOMÍNIO DA MODALIDADE ESCRITA FORMAL 🚱 ๖ C EENSÃO DO TEMA 🚱 3. ATENDIMENTO AO GÊNERO/TIPO . RECURSOS COESIVOS enho ARGUMENTAÇÃO E COERÊNCIA 🚱 2 Nota Final: 10  $\odot$ Oi. ©` Os aspectos positivos do seu texto <u>()</u> Os aspectos negativos do seu texto são 0 Não deixe de conferir o conteúdo de - Une - se dalos mais, ol expressor mo apoio da Plataforma Redigir a respeito

Source: authors' files.

After making comments on the student's text, the evaluator assesses the opinion article and assigns a grade considering the five criteria on the right in Figure 3: 1) mastery of the formal written modality; 2) understanding of the theme; 3) text genre/type fulfillment; 4) cohesive resources; 5) argumentation and coherence.

The platform has several computational resources that help to avoid distortions between the comments made in the text and the final grade attributed to the essays. If, for example, the grade given is very high, but there are no comments in green, before finalizing the feedback, the evaluator will receive a message on the screen asking about the absence of positive comments in the text. To be able to finalize the feedback, they have to review the grade and/or the feedback, including comments in green. The same is true for very low grades: it is necessary that there are several comments in red in the student's text.

Therefore, in such cases, the evaluator is required to reflect on their feedback practice. This is an example of using computational intelligence to ensure quality in the feedback process. In addition to these resources, for certain conditions for finalizing feedback (such as maximum marks, zeros, internal discrepancies between feedback criteria, differences between written and rewritten etc.), the

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corrected text is sent to the pedagogical coordination team, who reviews the feedback before making it available to the student.

In addition, the use of computational resources in AH not only foresees more sub-criteria than rubrics, but it also allows occurrences to be tabulated. This is essential for students, teachers and school managers to be able to work with aggregated proficiency data.

In the AH, students cannot only attend individual learning paths offered by feedback, but they can also access reports of all their accumulated results in the "My performance" menu, where all statistics about all feedback are gathered. The accumulated data of students, by its turn, are again grouped into other categories, such as classes and school units, in order to allow the analysis of teachers and school managers, in an unambiguous or generalized way, about the learning need of each student, class or even school unit.

Thus, considering the fact that the criteria and sub-criteria are pre-established and must be used in the feedback of all texts, we understand that the AH uses both procedures of controlled correction (SERAFINI, 1989), as well as of interactive-textual feedback (RUIZ, 2010 [2001]).

Before ending the feedback, it is mandatory to write a note (RUIZ, 2010 [2001]; BUIN, 2006), whose compositional structure is already suggested by the AH itself. In the example in Figure 3, the note, or final comment, starts with a greeting and the name of the student whose text has been given feedback (information already filled in automatically by the platform). Next, there is a field to mention the positive and negative aspects identified in the text during the feedback; finally, the platform suggests that the evaluator point out themes and/or activities that can assist in solving problems. The computational resources of the AH do not allow the feedback to be completed without writing the note and there is a minimum number of characters pre-established for each field.

Considering what was mentioned in this section, it is possible to understand what is a text feedback and how it occurs in an AH. The complexity of the process and all of the digital tools that are used for feedback in the investigated AH could not be completely covered in this article, since, in addition to the space limits, this is not the objective of the research.

In the following section, some clarifications about the methodological procedures used in the research are made.

#### 5 Methodological framework of research



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This research is not affiliated with an immanent conception of language, whereby the focus of analysis is on the surface of linguistic materiality and the text is treated as a finished and complete product. This would contradict the conception of feedback advocated in this article. The conception of text adhered in this article regards text as a form of social cognition and as a multifaceted entity, in which there is an articulation between the linguistic, cognitive and social aspects. As in the other TL studies that adopt this conception, the centrality of the text does not mean that the focus of the analysis is only on the surface of linguistic materiality; however it is also not neglected, as it is the starting point of the feedback.

Therefore, this article results from a qualitative case study research, a methodology that, according to Stake (1978, p. 5), can focus on any phenomenon or process that one is interested in and that is, in some way, singular or singularisable. Although it may be similar to others, in the case study, only what is unique about the phenomenon or process investigated is highlighted. In this way, the generated knowledge is more concrete, contextualized and focused on the reader's interpretation (ANDRÉ, 2005, p.17). The generalization of what was apprehended for other similar contexts, on the other hand, will depend on the type of reader or user of the study (LÜDKE; ANDRÉ, 1986, p. 23).

Considering what was mentioned, the case study was chosen as a research methodology, because, in addition to being sensitive to the complexity of the real and admitting inter/transdisciplinarity, it enabled an in-depth analysis of the collected records. In general, in case studies it is possible that a great diversity of records is generated and/or collected.

Specifically for this research, a spreadsheet containing all the criteria and subcriteria for giving feedback to the opinion article adopted by the AH was collected in order to verify the textuality criteria they point to. Thus, aiming to verify how textuality is included in the criteria and subcriteria for giving feedback to the opinion article genre adopted by an Adaptive Platform, our analytical categories contemplate the following criteria: 1) oriented by the text genre and centered on the compositional structure: introduction, development and conclusion; 2) oriented by text genre and centered on argumentation: types of argument; flaws in the argument; 3) guided by the text and focused on language: cohesion and coherence; 4) oriented by the psychological aspect and focused on cognition: intentionality and acceptability; 5) oriented by the computational aspect and focused on processing: informativeness; 6) oriented by the sociodiscursive aspect and centered on the social: situationality

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and intertextuality; 7) oriented by traditional grammar and centered on the surface of linguistic materiality: rules of the standard norm.

It is important to emphasize that not all analytical categories correspond to textuality criteria envisaged by the TL. Those oriented by the text genre and traditional grammar emerged during the analysis of the records. In the following section, the results are presented and discussed.

### 6 The textuality in criteria for opinion article's feedback of an AH

The various texts circulating in society belong to different text genres and "each genre, in order to fulfill its social and discursive function, needs to be materialized in a text whose structure corresponds to the requirements of the genre itself."<sup>27</sup> (ABAURRE; ABAURRE, 2012, p. 30).

In the opinion article, the argumentative sequence prevails. For Boff; Köche; Marinello (2009), the genre exposes the opinion of a writer who discusses a current and relevant subject for readers. Although the writer may constitute themself as an authority on the subject to be discussed in the opinion article, they need to seek other voices to support his point of view.

Regarding the structure, the opinion article must present a problem-situation, discussion and solution-evaluation. In the problem-situation, in order to guide the reader, the issue to be developed must be announced; the text also has to present a contextualization of the subject addressed. The discussion is the space in which the author exposes their arguments regarding the issue, usually using data, concrete facts and examples. The solution-evaluation is the moment when the author reaffirms the position taken or appreciates the subject addressed. (BOFF; KÖCHE; MARINELLO, 2009).

In this article, which is aligned with the terminology used in the platform criteria, introduction is termed problem-situation; development is termed discussion; and conclusion, by its turn, solution-evaluation. Although there is no fixed compositional structure, the opinion article needs to have these parts (introduction, development and conclusion), which, as already stated, perform determined functions.

The 130 (one hundred and thirty) subcriteria for giving feedback to the opinion article in the analyzed spreadsheet are associated with the following five criteria: 1) mastery of the formal written

<sup>&</sup>lt;sup>27</sup> "Cada gênero, para cumprir sua função social e discursiva, precisa se materializar em um texto cuja estrutura corresponda às exigências do próprio gênero" (ABAURRE; ABAURRE, 2012, p. 30).

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form; 2) theme's comprehension; 3) genre's fulfillment; 4) cohesive resources and 5) argumentation and coherence.

The first criterion, mastery of the formal written modality, points to the rules of the standard norm, whose orientation is given by traditional grammar and whose attention resides on the surface of linguistic materiality; the second criterion, theme's comprehension, is related to informativeness, which is guided by a computational aspect and focuses on processing; the third criterion, genre's fulfillment, points to the genre, with a focus on the compositional structure; the fourth criterion, cohesive resources, points to a textuality criterion oriented by the text and centered on the language; finally, the fifth criterion, argumentation and coherence, points to both information and interlocutors.

These five criteria are not very specific and can be used to give feedback to texts of different text genres. Considering that it is a feedback mediated by computational resources, being necessary to guarantee tabular and comparable results, it was not expected to be any different. The fact that none of these criteria are guided by the psychological or sociodiscursive aspect ratifies Marcuschi's (2008) position for whom these criteria are difficult to be verified in isolation and from the materiality of the text.

Insofar as the feedback criteria are too general, the specificities of the opinion article genre tend to be considered in the subcriteria. As already said, if some aspect of a text is not foreseen in the system, the evaluator can create a comment in red, blue or green. Below, there is the table with the result of the analysis of the feedback subcriteria of the opinion article genre.

	SUBCRITERION	
CRITERION	QTY	%
1. MASTERY OF THE FORMAL WRITTEN FORM	87	67
2. THEME'S COMPREHENSION	9	7
3. GENRE'S FULFILLMENT	6	5
4. COHESIVE RESOURCES	18	14
5. ARGUMENTATION AND COHERENCE	10	8
TOTAL	130	100

Table 1: Results of the analysis of the subcriteria by criterion

Source: Elaborated by the authors

As the table demonstrates, 67% of the feedback subcriteria (87) are guided by traditional grammar. Here are some examples:

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Chart 1: Subcriteria oriented by traditional grammar<sup>28</sup>

NomeSubcriterio 🔹
VÍRGULA - FALTA
ACENTUAÇÃO - FALTA ACENTO
VÍRGULA - INADEQUADA
ORTOGRAFIA
Concordância verbal
CONSTRUA MELHOR A FRASE
CRASE - FALTA
MAIÚSCULAS E MINÚSCULAS
CONCORDÂNCIA NOMINAL
PONTUAÇÃO INADEQUADA
VÍRGULA - NÃO SEPARE SUJEITO E VERBO
PONTO FINAL - FALTA
FALTA PRECISÃO VOCABULAR
CRASE - NÃO USE
ACENTUAÇÃO - NÃO ACENTUE

Source: Corpus.

From these examples, it is possible to realize that these sub-criteria point only to the surface of linguistic materiality and signal an immanent text conception, through which the focus of analysis is on the surface of linguistic materiality. This would also indicate, specifically in the approach of this competence, a conception of feedback as hygiene of the text (JESUS, 1995), in which the use of the resolutive and indicative methodology prevails (SERAFINI, 1989; RUIZ, 2010 [2001]; SOUZA; BAZARIM, 2018).

Such a conception would be in line with an exam practice and not a feedback practice (LUCKESI, 2011). The feedback, when understood as an exam practice, aims to only point out the student's "mistakes" and assign a grade; there is no concern with the learning process, that is, through the interventions made in the text, the evaluator does not dialogue with the student or build scaffolding on which the producer can rely on to carry out the rewriting. Exam practice does not even antecipate the rewriting. Despite the fact that, at first glance, this may be the perspective adopted by the AH from the analysis of the subcriteria related to the "mastery of the formal written form", it is important to remember that, through the AH, each sub-criterion is indexed to individual learning paths, which promote dialogue with the student and qualify the feedback for guidelines with a focus on rewriting. In addition, as only the possibilities contemplated by the (sub) criteria are analyzed, there are two points

<sup>&</sup>lt;sup>28</sup> Translation of the subcriteria presented on Chart 1: Comma – missing; Accentuation – missing accent; Comma – inadequate; Orthography; Verbal agreement; Improve the sentence; Crasis mark – missing; Capital letter and lower-case letter; Nominal agreement; Inadequate punctuation; Comma – do not separate subject and verb; Period – missing; Lack of vocabular precision; Crasis mark – do not use; Accentuation – do not use an accent mark.

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to be considered: 1) the quality of the student's production and 2) the evaluator's use of the subcriteria and other resources offered by the platform.

From several researches carried out (COSTA-FILHO; BAZARIM, 2019; SOUZA; BAZARIM, 2018; NASCIMENTO; BAZARIM, 2018; SILVA; BAZARIM, 2018), it has been realized that the use of feedback methodologies depends on the quality of the evaluated text: if the student's production already meets the characteristics of the text genre; if there are no problems either in relation to the compositional structure or in relation to the criteria of textuality (cohesion, coherence, informativeness, etc.), it is up to the evaluator to point out (indicative feedback) and resolve (resolutive feedback) any deviations from the standard norm. It is common, therefore, that there is hygiene in the final versions of the texts.

Furthermore, as already mentioned, the evaluator does not need to be restricted to the subcriteria determined by the platform. Although its use is important, as it allows to count occurrences and, with that, to personalize the learning paths, there are other resources that can be used if the identified problem is not properly addressed in the subcriteria: the creation of comments in red, blue or green.

Although the vast majority of criteria still contemplate only the surface of linguistic materiality in an orientation given by traditional/normative grammar, it is worth noting the presence of criteria that are guided by the text genre, by the text, by the sociodiscursive and computational aspect. Below, some examples are presented and discussed.

nei	ited by text genne	
	NomeSubcriterio	-
	FALTA ASSINATURA - TEXTOS DE OPINIÃO	
	FALTA TÍTULO!	
	EVITE TEXTO PREDOMINANTEMENTE EXPOSITIVO	
	PREFIRA USAR A 1ª PESSOA DO DISCURSO (sing ou pl) El	М
	TEXTOS DE OPINIÃO	
	NÃO ATENDIMENTO AO GÊNERO - ARTIGO	

Chart 2: Subcriteria oriented by text genre 29

Source: Corpus.

From these examples, we can see that the subcriteria point to less generalizing aspects with regard to the characteristics of the opinion article genre, including the use of the first person. Once

<sup>&</sup>lt;sup>29</sup> Translation of the subcriteria presented on Chart 2: Missing signature – opinion article; Missing title!; Avoid a predominantly expositive text; Prefer using the first person (singular ou plural) in opinion articles; unfulfillment of text genre – article.

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again, it is evident that it is a challenge for the AH to build sub-criteria that are more specific than the criteria and, at the same time, flexible enough to be used in several genres whose dominant textual sequence is the same. Despite this difficulty, which is more evident in criteria whose focus does not point to the surface of linguistic materiality, the AH resolves this issue from the sub-criterion "non-attendance to genre - article", and the evaluator must specify in the comment what this refers to. This possibility is also available, with the necessary adaptations of content, for as many other genres, according to their linguistic, discursive and structural specificities.

With that, it is evident that the subcriteria have the required flexibility for the specificities of the genres, without losing sight of the generalizing aspect that allows the AH to generate the tabulations that guide the composition of its various performance reports. In this environment, the evaluator still has a key role in preventing comments from remaining abstract and ambiguous.

In the following chart, examples of subcriteria oriented by the text are presented.

Chart 3: Subcriteria oriented by the te
---

by the text	
NomeSubcriterio	-
REPETIÇÕES - CUIDADO	
COESÃO INTERPARÁGRAFOS - FALTA DOMÍNIO	
NÃO CONSTRUA PARÁGRAFOS DE UMA SÓ FRASE	
COESÃO INTRAPARÁGRAFO - FALTA DOMÍNIO	
EVITE PERÍODO LONGO	
FALTA CONECTIVO PARA CONCLUSÃO	
COESÃO - FALTA DOMÍNIO	
DIVERSIFIQUE O CONECTIVO	
COORDENAÇÃO E SUBORDINAÇÃO	
CONJUNÇÃO/LOCUÇÃO CONJUNTIVA INADEQUADA	
ANÁFORA E CATÁFORA	
PRONOMES RELATIVOS	
SUBSTITUA "ISSO", "ESSE", "AQUILO", "AQUELE" POR	
PALAVRAS MAIS ESPECÍFICAS	

Source: Corpus.

As possible to identify, the sub-criteria point to cohesion. There is also suspicion that there may be a link with the conception, already quite academically fought, that cohesion is materially expressed in the text through cohesive mechanisms. Without denying the importance of these mechanisms in the sewing of the text, more recent research, according to Cavalcante, Rodrigues and

<sup>&</sup>lt;sup>30</sup> Translation of the subcriteria presented on Chart 3: Repetitions – caution; Intra-paragraph cohesion – lacking domain; Do not write a one-sentence paragraph; Inter-paragraph cohesion – lacking domain; Avoid long sentences; Missing a connective for the conclusion; Cohesion – lacking domain; Diversify the connectives; Coordination and subordination; Inadequate conjunction/conjunctive locution; Anaphor and cataphor; Relative pronouns; Substitute "this" and "that" with more specific words.

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Ciula (2003), as well as Koch, Morato and Bentes (2005), show that cohesive processes transcend the limits of the surface of linguistic materiality and that, therefore, cohesion and coherence are interwoven phenomena.

Based on the analysis of these subcriteria, it is possible to infer that, although the comments lead to individual learning paths, only marking an excerpt of the text and selecting the subcriterion "COESÃO INTRAPARÁGRAFO – FALTA DOMÍNIO"<sup>31</sup> or "COESÃO INTERPARÁGRAFO – FALTA DOMÍNIO"<sup>32</sup> is not enough for the producer of the text to understand, in fact, what the nature of the problem is and, mainly, what needs to be done so that this is not repeated in rewriting or in other productions. That is why it is so important that, in the box opened below the subcriterion, the evaluator draws up a more specific text. Furthermore, it is essential that this comment is made in red so that the occurrence is tabulated by the AH, becoming part of the student's individual learning path.

Next, the last table presents the examples of subcriteria oriented by the computational and socio-discursive aspect.

Chart 4: Subcriteria oriented by the computational and socio-discursive aspect. <sup>33</sup>	

NomeSubcriterio	-
INTRODUÇÃO - APRESENTE MELHOR O TEMA	
NEM TODOS OS COMANDOS DA PROPOSTA FORAM	
ATENTIDOS	
CÓPIA	
TANGENCIAMENTO AO TEMA - CUIDADO	
RESPONDA À PERGUNTA-TEMA	
EVITE PARAFRASEAR OS TEXTOS DE APOIO	
ABORDE TODAS AS PALAVRAS-CHAVE DO TEMA	
FUGA AO TEMA	

Source: Corpus.

The sub-criteria grouped here point both to intertextuality - whose orientation is sociodiscursive - and to informativeness - oriented by the computational aspect and centered on text processing.

As has already been reported in the theoretical discussion section, the textuality criteria cannot be considered as "principles of good production" of texts. However, in this article, they were taken as categories for the analysis of the criteria and subcriteria for opinion article's feedback of an AH. As it is

<sup>&</sup>lt;sup>31</sup> Intra-paragraph cohesion – lacking domain.

<sup>&</sup>lt;sup>32</sup> Inter-paragraph cohesion – lacking domain.

<sup>&</sup>lt;sup>33</sup> Translation of the subcriteria presented on Chart 4: Introduction – present the theme better; Not all proposal commands were fulfilled; Copy; Tangent to the theme; Answer the theme-question; Avoid paraphrasing supporting texts; Approach all of the theme's key words; Deviation from the theme.

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a case study, this article is not tied to a strict research protocol or to previously defined watertight categories. Thus, our analysis categories were not restricted to the textuality criteria proposed by the TL.

Although the nature of this work is applied, it is verified, in the analysis, the difficulty in identifying each textuality criterion in isolation, since all of them act in the construction of the text as a multifaceted entity and as a form of social cognition. If the linguistic, cognitive and social dimension are articulated in the text, even for research or feedback purposes, the task of discretizing textuality criteria becomes arduous, complex, artificial and generalizing.

Despite these difficulties, from the analysis of the criteria and subcriteria, it was possible to perceive the platform's concern to contemplate some specific characteristics of the text genre, the various textuality criteria (which can be contemplated) and not just rules of traditional/normative grammar. With this, the AH moves towards a conception of text that distances itself from the immanent and approaches a conception of feedback as the construction of a dialogue between evaluator and student in order to build scaffolding on which the text producer can support themselves during rewriting.

## **Final considerations**

In view of our research path regarding text feedback, we perceive some advances and new challenges when analyzing the criteria and subcriteria for feedback of the AH. Although most of the subcriteria are still guided by traditional normative grammar and centered on the micro, on the surface of linguistic materiality, we cannot say that the macro, which is the text genre and the textuality criteria, is not covered.

Evidently, the approach to genre characteristics and textuality criteria can still be improved. However, in addition to reviewing the feedback criteria and subcriteria, the platform has another even greater challenge, which is to ensure effective and efficient feedback by the evaluator. Thus, in addition to investing in the elaboration of increasingly more precise and less ambiguous criteria and sub-criteria that address not only the linguistic dimension, but also point to the cognitive and social dimension, it is necessary to invest in the selection of evaluators and in their continued training. Moreover, even if the platform already has some computational resources for the feedback's quality control, it is important

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that there is not only an investment, but a constant commitment of the AH with the quality of the feedback, considering that its objective is to help its users in improving the writing competence.

This research, in no way, ends the discussion about the use of digital tools in school texts' feedback. On the contrary, it only signals that the use of DICT can be an ally and cause positive changes in the ways of thinking about text feedback and acting in feedback practice. For example, further research is needed to explore the effects of using these digital tools on the student's rewriting.

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