

The Evaluation of Textuality in the Didactic-Academic Writing Process: a case study

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Abstract:

In this article, we investigate the textuality strategies developed in the didactic-academic writing of material used for the specialization courses in the distance modality. The research corpus consists of 25 versions of the original text of the web-class genre produced by 10 professors of the Degree in Professional and Technological Education (EPCT) course of the Institute of Education, Science and Technology of Ceará (IFCE). We discuss the production process of the web-class genre and analyze the way of textualizing and performing the linguistic operations done by the teachers. At the end of the study, we saw that teachers use textualization operations – continuity, progression, non-contradiction, articulation – as well as the informativeness, marked heterogeneity as the main textual-discursive strategies. The direct sum with the collaborative production of the didactic material, the perspective of discursive reversibility and the double audience predicted by the subjects for the text are the foundation of these operations.

Keywords:

Textuality strategies. Didactic-academic writing. Didactic material production.

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INTRODUCTION

In this article, we analyze the textuality strategies developed in the didactic writing of the material used for distance learning specialization courses. We understand that they are practiced in the interactional processes that the subject performs to communicate according to a thematic progression/continuity and the linguistic resources used in this activity. The text, in digital format, is anchored in a situational context based on genre decision-making and didactic-academic discourse¹, considering that the analyzed texts are intended for students of the specialization course. This discourse produced contains semantic and pragmatic relations that occur between the elements within the text itself.

To describe the linguistic activities of textuality, we analyzed 25 versions of original texts written by 10 professors of the Specialization course of the Professional and Technological Education (EPCT) course of the Institute of Education, Science and Technology of Ceará (IFCE), as well as the interferences written by two other subjects (designer and text reviewer) who collaborate with the teacher in the production of didactic material. Our intention is to understand how textualization is evaluated by the subjects during the didactic process of collaborative production of a genre such as web-class and to reflect on how to textualize and carry out linguistic strategies in the written production of didactic material for Distance Education.

To achieve our research objective, we conducted a case study at IFCE, guided by authors such as Val (1999), Matêncio (2002), Marcuschi (2008) and Cavalcante (2014). We chose this institution because it has a multidisciplinary team that collaboratively produces didactic-academic material, both in printed and digital formats. This material is intended for distance learning courses. When analyzing the collaborative production process, we saw that, at first, the work of the multidisciplinary team follows a flow of publishing similar to that of textbook production. In a second moment, we realize that there are differences between these production processes. One difference that caught our attention is the way of evaluating the textuality strategies present in the basic text of the didactic material. It is done through textual interferences marked in the text and reveals the conception that the subjects, who participate in the multidisciplinary team (teachers, designers and textual reviewers), have on the writing of a didactic-academic text such as web-class, for example.

These interferences happen as follows: as soon as the basic text of a course in a DE degree is finished by the specialist² professor, he goes on to other team members who will read it, evaluate it and/or rewrite it from a constant written dialogue made in versions of that same base text. The interlocutions, in turn, follow a path full of comings and goings of versions of the didactic material, composed of classes (in print), web

¹ We understand discourse based on the premises of Fiorin (2012, p. 146). For Fiorin, discourse is a linguistic object and a historical object. This means that it is a linguistic construction generated by a system of rules that define its specificity. The text would thus be the manifestation of a discourse, so the presupposes discourse. Both are products of enunciation, although they are different in terms of semiotic existence. The text is the realization of the discourse through its manifestation.

² Specialist teacher, also known as a content teacher at IFCE, is the teacher responsible for writing the content of a given subject in distance education courses (both undergraduate and graduate).

classes (on the web), involving different subjects, each in their specific area and with a different function determined within the production process. The evaluations and interferences made by the production team colleagues in the base text initiate a process of negotiation of meanings and can be read and seen by all the subjects who produced it.

In the next sections, we present the writing process of the didactic material and the textuality assessment method that happens both mediated by new technologies and orchestrated by the succession of interferences in the base text.

LINGUISTIC STRATEGIES FOR THE EVALUATION OF TEXTUALITY OF TEACHING MATERIAL

Before we know the linguistic strategies perceived in the validation of didactic material for students studying in distance learning, it is important to understand the steps that the basic text goes through. First, the content teacher writes the first version of the material individually, in digital format (Word), and this version constitutes, as the multidisciplinary team calls in the collaborative production process, the raw content of the base text that is being developed. In this text, as in any other, the teacher who prepares the material uses textual strategies to ensure the intelligibility of their writing. Then, the base text is forwarded to the educational designer³ that will make the first evaluation and subsequent validation. Depending on the assessment made by the designer, which takes place through interlocations and interferences in the base text, the didactic material either goes to the text reviewer or returns to the content teacher. The contact of each subject with the text generates new interlocations and interferences, which will be accepted or not by the subjects. This negotiation of meaning is mediated and orchestrated by the educational designer, as we will see in the examples highlighted in this article.

At the end of the production process, there are several versions of the text in which the colleagues discussed, intuitively, aspects of the textuality of a didactic-academic text that will be both printed and distributed in the distance learning centers as published in the Virtual Environment Learning (VLE) in the format of the web-class⁴ genre. In our study, we identified the following textualization and intervention strategies carried out by teachers who write didactic material (from the printed version to the web-class) for specialization courses at IFCE: direct dialogue, focusing, continuity, articulation, thematic progression, non-contradiction, informativeness and constitutive heterogeneity. All these factors that guarantee textuality were observed in the validations made by the subjects who produce the didactic material. They were made from interlocations written through Word comment boxes or within the base text itself.

For the purpose of analyzing collaborative writing, in this article, we consider the meta-words continuity, progression, non-contradiction and articulation (CHAROLLES, 1978), the informativeness textuality factor (VAL, 1999) and the constitutive heterogeneity (AUTHIER-REVUZ, 1990), as textuality operations undertaken by the various text producers of a web class. Therefore, it is possible to identify in the base text first version the occurrence of textuality operations carried out by the content teacher, as its first producer. We know that these operations permeate all phases of collaborative production to a greater or lesser extent, however the analysis of the adequacy, or even the lack of use of these operations, happens properly after the individual writing phase, since, from the second phase, the other producers start to interfere in the base text.

³ Specialist that turns the webaula's text raw didactic content to the multimodal version, with adaptations in hypertextual, interactive, iconic and multimedia resources.

⁴ For this study, we took the webaula as the main didactic material for distance modality, even though we know that, in the IFCE's case, there is also the printed version of the material, in academic book format, which is distributed in the distance learning centers.

Let us start, therefore, by describing and exemplifying the main textuality operations that are present in the first phase of didactic production. We know that a text is (micro and macro-structurally) coherent, if it contains, in its linear development, elements of strict recurrence. These elements guarantee the thematic unit that constitutes the text and are expressed by pronominal resumes, definite articles and demonstrative pronouns, repetitions and lexical substitutions, by indications of recovery of information assumed or considered inferable by the interlocutors. This strategy of resuming/repeating elements and ideas throughout the text is called continuity (VAL, 1999).

Cavalcante (2014, p. 34) clarifies that repetitions give unity to the text, since one of the factors that make the text perceived as a single whole is the permanence of constant elements in the development of the text. The author states that, for a text to be internally coherent, it is also necessary to respect elementary logical principles, which ensure that, in its development, no semantic element that is introduced contradicts a content put or presupposed by a previous, or deductible recurrence this by inference. This is the principle of non-contradiction. This principle does not concern only the internal logic of the text, since, externally, the text cannot contradict the world to which it refers. Cavalcante explains that the world represented does not necessarily have to be the real world, but explains that “the textual world has to be compatible with the world that the text represents in a given genre” (CAVALCANTE, 2014, p. 36). We, therefore, understand that non-contradiction also applies to the relationship between text and context, in the sense that the acceptance of a text as coherent depends on the interlocutor finding compatibility between the textual world and their own knowledge of the world, their set of beliefs and values.

Val (1999, p. 25) also clarifies that a text needs to respect the elementary logical elements and not contradict the world to which it refers, given that the textual world must be compatible with the world that the text represents. According to the author, the principle of non-contradiction applies not only to the conceptual domain, but also to the scope of expression. In the context of non-contradiction, Val brings the term “modality” to the discussion. According to the author, the modality is another element of discursive functioning that alludes to the attitude of the text producer both concerning the propositional content and the truth value of their statement and regarding the interlocutor himself. Thus, if we take into account that the textual world can express itself linguistically through the use of verbs, expressions and textual constructions, the contradictory use of these resources can also cause difficulties in the interpretation of the discourse, since it contradicts the expectations of the interlocutor (VAL, 1999).

We can say that linguistic operations have to do with both co-textual relations (internal relations between text and text), as well as contextual relations (specific sociocultural and situational relations) and that these relations bring a historically and dialogically constructed subject (MARCUSCHI, 2008). Based on Marcuschi, we take text as the maximum unit of language functioning, not the type of formal language units, but rather a functional unit of a discursive nature, whose form is only a specific realization of the text in linguistic constituents of morphosyntactic and lexical nature. In this way, “what makes a text text is the discursiveness, intelligibility and articulation that it sets in motion” (MARCUSCHI, 2008, p. 89). Thus, the texts, from a socio-interactive perspective, operate in communicative contexts whose language functionality occurs as an enunciative activity. For Marcuschi, when you teach someone to deal with texts, you teach more than linguistic uses; the discursive operations of meaning producing within a given culture are taught, which bring certain genres as forms of linguistic action.

For Cavalcante, Custódio Filho and Brito (2014), the recognition of the status of the text and its consequent coherence is only possible if we take into account the context of production. The authors explain that the text is considered coherent, among other reasons, because it adapts to the situation of interaction expected in the context of production. From this premise, we understand that, in the analysis context of this research, textuality strategies are defined by the context of production and not only by properties immanent to

the text. Thus, based on the content teachers' knowledge about the genre that they produce and the socio-interactive context in which they participate as a text producer, they (the content writer) will use textual strategies in their written composition, to satisfy a set of conditions that promote the production of meanings with the text.

Regarding this production of meanings, Cavalcante, Custódio Filho and Brito (2014, p. 21) argue that the existence of a text is dependent on the possibility of attributing coherence to a given communicative occurrence (not exclusively linguistic). To the authors, "coherence arises from the perception of a negotiated unit of meaning that depends on the argumentative interaction of the speaker, the interlocutor's co-participation, the indications marked on the text, and a vast set of shared knowledge." Therefore, in the analysis of textuality strategies observed in a didactic-digital-collaborative production such as the one described in this study, we take into account the contextual and interactional elements presented in the assessment that the subjects make when trying to perceive the unit of meaning. These textualization strategies are made in the individual production phase and evaluated in the production phase mediated by the subjects who collaboratively write the web-class genre. In the following section, we reproduced, in image form, the first page of the original text (the first version of the web-class) written by the content teacher of the Professional, Scientific and Technological Education course at IFCE.

EVALUATION OF THEMATIC SECTIONS OF THE DIDACTIC MATERIAL: FOCUS ON DIALOGUE AND FOCUSING

In the analysis of the didactic material, we saw that there is a characteristic textual sequence both in the printed didactic material and the web-class's texts. Such a sequence is constructed as a text composed of didactic sections, common in textbooks, for example. In this sequence, the teacher develops typical didactic writing sections of didactic material for Distance Education, such as a) class title; b) the class presentation; c) classes general purposes; d) a topic title; e) the topic-specific objectives; f) the topic introduction; and g) the informational content of the class itself. These sections would be what Koch (2004, p. 44) calls prospective contextualization factors, as they allow advancing the reader's expectations about the text, placing it in a contextual universe of interaction. Although these elements seem not to be necessary for the constitution of textuality, they contribute to contextualization (MARCUSCHI, 2012, p. 39) and are often decisive to indicate the progression of the text and to provide the reader with an understanding of the web-class genre.

This way of separating into sections is made to provide readers of the web-class genre (students of the distance education modality) with conditions to understand the text so that it can be interpreted without any major problems. On the other hand, it is not, however, the fact that the text is divided into thematic sections that alone will guarantee its intelligibility, but rather the joint attendance of social conditions of use and the discursively oriented use of textuality operations present in the text, text that will provide a basis for understanding.

In the figures that we present below, we see the first two pages of the raw content of an EPCT course web-class produced by the teacher of the subject of Educational Informatics. The sample refers to the third class of this discipline. Each of the sections requires textualization strategies that refer more specifically to linguistic aspects (the verbally produced act of writing).

**INFORMÁTICA EDUCATIVA
LICENCIATURA EM EPCT**

AULA 3 - Ambientes Informatizados de Ensino e Aprendizagens e Recursos Educacionais Abertos

Olá, aluno(a)!

Estudamos nas aulas anteriores que a Informática Educativa não se restringe ao uso de computadores em sala de aula para armazenamento e transmissão de informações, lembram? Também vimos que os *softwares* e aplicativos não eram animadores didáticos para propostas pseudo-construtivistas.

Pensar em propostas baseadas em concepções emergentes na Sociedade em Rede que valorize os modelos interativos de aprendizagem significativa e colaborativa será o nosso desafio nesta terceira aula!

Conheceremos as potencialidades dos Ambientes Virtuais com o propósito de identificar estratégias de ensino que favoreçam a aprendizagem dos integrantes destes ricos espaços de encontro mediado pelas tecnologias da informação e comunicação. Veremos os Recursos Educacionais Abertos (REA) que permitem o exercício da generosidade intelectual em uma proposta colaborativa. Será uma aula muito produtiva. Vamos começar?

Source: IFCE.

Figure 1 – Class 3 of the subject of Educational Informatics: title and presentation of the class

We know that the first element that triggers expectations about a text is the title. It serves as a guideline for the inferences made by the interlocutors (KOCH; ELIAS, 2009), as an activator of previous knowledge necessary for understanding, as it allows making predictions, raising hypotheses, which will be tested by the interlocutors throughout their interaction with the text.

In Figure 1, we can see that the content professor makes a direct dialogue with the students in the class presentation section, by using the vocative (Hello, student!). The first person plural (we will study, we will know) and rhetorical phrases with direct interrogations (direct questions to students, who try to simulate face-to-face interaction). In this conversation, the teacher takes up what was seen in previous classes and explains what will be studied in class. This type of writing is socially recognized and accepted as common didactic writing in school and academic genres. For this reason, these interlocution strategies are expected and are part of the attempt to maintain the dialogical tone necessary for educational material for distance education. Below, we present the continuation of the class.

Objetivos

- Compreender os ambientes virtuais enquanto interfaces educacionais
- Reconhecer situações didáticas em ambientes informatizados de aprendizagens
- Conhecer tanto estratégias de ensino e aprendizagem em ambientes virtuais como recursos educacionais abertos.

TÓPICO 1 - Ambientes Virtuais de Ensino e Aprendizagem

Objetivos

- Identificar as possibilidades educacionais dos ambientes virtuais de ensino e aprendizagem
- Analisar os limites e as possibilidades de uso das ferramentas dos ambientes virtuais de ensino e aprendizagem

Source: IFCE.

Figure 2 – Class 3 of the subject of Educational Informatics: general objectives and specific objectives of topic 1

After presentation, the general goals, the title of topic 1 and the specific objectives of the classes' topic are placed. In them, the student is recognized as the focus of the objectives, that is, as the one who should reach such goals at the end of the web-class reading. The goals act as a focusing criterion (KOCH, 2004) and summarize the learning actions that must take place by the student. Then, the introduction of informational content (argumentation and exposition of the class topic) begins, which guides the student about the ideas that will be discussed in the topic in question. Here is an example of the introduction of topic 1 of class 3 of the subject of Educational Informatics. In it, the content writer bases their argument on the current scenario of training mediated by media technologies.

Como já foi possível perceber nas aulas anteriores, o dinamismo caracterizado pelos avanços das Tecnologias da Informação e Comunicação – TIC, na sociedade contemporânea, provoca profundas mudanças no mundo do trabalho e no âmbito educacional. São muitas as discussões na busca de novos paradigmas para pensar a organização e estruturação dos contextos atuais de formação mediados pelas tecnologias midiáticas. Neste cenário de ampliação das tecnologias, o que se põe em questão não é o uso dos aparatos tecnológicos e sim as possibilidades múltiplas de interagir com os diversos mundos que se cruzam e as inúmeras oportunidades de articulação entre diferentes formas de saber que precisam ser revistas.

Source: IFCE.

Figure 3 – Class 3 of the subject of Educational Informatics: introduction of topic 1

As we can see, there are, in these textual sequences, textualization strategies developed by the content teacher in the individual didactic production phase, which try to establish and maintain continuity, articulation, thematic progression and informativeness between the set of statements and the discursive topic. For this to happen, it is necessary to take into consideration not only the basic structure of the argumentative-expository typology of introduction → development → conclusion present in academic genres, but also the previously established didactic sections that mark didactic genres as the web-class (in addition to the multisemiotic resources) so that the statements are interpretable as a thematic unit. In Figure 4, on the next page, we have an example of the development of Class 3 of the Educational Informatics Discipline, in which the content writer textures the didactic content through elements that guarantee the unity of meaning and that make clear the communicative purpose of the text.

When we analyze the content present in Figure 4, we see that the direct dialogue strategies perceived in the presentation and introduction of the topic give rise to a traditional structure of argumentation seen in academic genres. This structure is marked by the topic presentation, discussed based on general opinion, and the demonstration of facts and events to the interlocutor. This presentation forms the basis for the progression and continuity of the arguments that will be articulated in the development, in order to arrive at the synthesis of the class in the last thematic section dedicated to the closing of the topic.

In the web-class, there are also icons, links, audios and videos that are posted in the virtual learning environment in the last stage of collaborative production (hypertextual didactic phase). In figure 5, below, it is possible to notice the indication that the content teacher makes in his text of an icon called “Keep it well”. The informational content of this icon must obviously follow the same criteria of textuality, although when it is posted on the Virtual Learning Environment (VLE), it undergoes a transformation of the written material (printed material) into a web-class (hypertextual material) in the last phase of production.

Repensar a educação nesse contexto ultrapassa a perspectiva tecnicista de aprender a lidar com as tecnologias, armazenando, transmitindo e estocando informações em uma via única de comunicação. O grande desafio da educação centra-se exatamente na produção de conhecimento em rede, em que todos os sujeitos conectados são responsáveis e participantes coletivos da construção de saberes significativos e contextualizados. Nessa formação, incentiva-se o pensar crítico e criativo pautado em noções de ética, solidariedade e colaboração.

As técnicas de comunicação e o papel da informática com base digital não seria o de criar as máquinas de ensinar ou, ainda, de substituir o homem, promovendo uma pseudo "inteligência artificial, mas promover a construção de coletivos inteligentes, nos quais as potencialidades sociais e cognitivas de cada um poderão desenvolver-se e ampliar-se de maneira recíproca" (LÉVY, 2000, p. 25).

Source: IFCE.

Figure 4 – Class 3 of Educational Informatics: informational content

A realidade das interações e do convívio das pessoas em redes online estabelece novos espaços de convivência, construção coletiva, debates sociais e de aprendizagem que fazem emergir os **Ambientes Virtuais**. Esses espaços de sociabilidade na rede de computadores se efetivam pelo encontro de sujeitos dispostos a compartilhar informações e saberes, através da atual infraestrutura da *internet* que deteritorializa e liberta a comunicação dos limites impostos pelas noções de tempo e espaço, podendo implementar uma comunicação dinâmica com grande potencial para a interatividade.

ICONE GUARDE BEM ISSO

As redes sociais (facebook, youtube, twitter, whatsApps, flickr...) são ambientes de trânsito e fluxo de pessoas e informações podendo se constituir em ambientes virtuais de aprendizagens, no entanto para se caracterizarem como ambientes virtuais de ensino necessitam de uma intencionalidade educativa explícita e compartilhada.

Source: IFCE.

Figure 5 – Educational Informatics Class 3: content with icon indication

In the analyzed figures, we saw then that there are sections that act as prospective contextualization factors and contextualization factors that highlight the discursive topic, such as icons, which favor the thematic continuity and textual progression. For Koch and Elias (2009), textual support also acts as a contextualization factor, as it helps to anchor the text in a communicative situation and helps to establish coherence. In the case of the web-class, then, both the didactic sections, the multisemiotic resources, and the support (the virtual learning environment) stand out as contextualizers that offer important clues to the students for the construction of the meanings of the text.

In Figures 4 and 5, which illustrate the informational content of topic 1, of Class 3 of Educational Informatics, we see that there is an attempt to maintain the discursive topic (central theme of a text) that revolves around the discussion about the Virtual Environments of Learning. Cavalcante, Custódio Filho and Brito (2014, p. 25) explain that one of the ways to establish a connection between parts of the text is through the resumption of textual elements through nominal expressions (referential expressions). This set of nominal expressions contributes to establish the referents of the text.

Thus, we understand, according to Cavalcante, Custódio Filho and Brito that the take up from the same referent – as in this scenario, in this context, these spaces – mark the course of a referential chain. This

route is built by the content writer to indicate a chain around a referent – <new living spaces>. Thus, it is common for the development of referents in the text to trigger new lexical expressions. These expressions can be accompanied by the definite article (the use of technological devices, the technicist perspective, the great challenge of education); they can come as lexical repetitions in the text (education, communication, spaces, technologies); or as lexical substitutions (new paradigms → different forms of knowledge, the world of work → diverse worlds that intersect, media technologies → technological devices, production of networked knowledge → collective participants in the construction of meaningful knowledge, etc.). Establishing and maintaining thematic information like that seeks to guarantee the maintenance of textual continuity. The examples given show how the content teacher aims to comply with the thematic continuity principle.

EVALUATION OF THEMATIC SECTIONS OF TEACHING MATERIAL: FOCUS ON META-LINES

As we saw in the previous section, regarding the establishment of textual coherence, Cavalcante (2014) explains that a good tool for evaluating the localized gaps in the text's coherence are the meta-words formulated by Charolles (1978) and disseminated by Val (1999) in Brazil. Cavalcante (2014) highlights the meta-lines of continuity, progression, non-contradiction and articulation⁵.

Thus, with regard to the element “modality” in the study of the criterion of non-contradiction, we can evaluate this discursive strategy when the content teacher makes a close relationship between the general objectives of the class, the specific objectives of the topic and what he developed in the informational content of the text. This means that the propositional content indicated by the objectives generates a truth value that will be (or not) confirmed not only by the students (final interlocutors of the web-class genre), but also by the other subjects who participate in the collaborative writing process. Otherwise, that is, if the interlocutor's expectations in the construction of the argumentation of the text intended in the objectives are not confirmed, the non-contradiction strategy will have been disrespected by the producer of the text in the first phase of collaborative writing.

We will represent Figure 6, on the next page, in order to analyze the criterion of non-contradiction. Our focus is to perceive the contradiction (since the principle of non-contradiction must be a notifier for textuality) that exists between what was planned as general and specific objectives for both class 3 and topic 1 by the content teacher and the possibility of achievement of these objectives at the end of the web-class reading by students studying in distance learning.

When analyzing Figure 6, we understand that the purposes developed in the web-class create a horizon of compatibility between what is proposed and what is effective in the text. The manifestation of this range of compatibility between what is proposed as a goal and what is done verbatim to achieve these intentions also occurs through the verbs chosen for each of the targets (understand, recognize, know – general objectives of class 3; identify and analyze – specific objectives of topic 1), which create, in the people who participate in the web-class, an expectation that has a close relationship with the principle of non-contradiction. Thus, at the end of the web-class reading on Computerized Teaching and Learning Environments and Open Educational Resources, both the interlocutors that collaboratively produce the web-class (designer, reviewer, content writer⁶) and the predicted interlocutors that access the web-class (the students of the course EPCT) take the objectives

⁵ Val (1999) made an adaptation of Charolles' meta-rule (1978). In this research, we take Val (1999) and Cavalcante (2014) as a reference, which follows Val's adaptation, not Charolles' original text (1978).

⁶ The content teacher makes, in the reversibility procedure, an evaluation on the raw content they wrote. They observe the inferences made in their text and takes a responsive attitude about the evaluative intonation made by the other subjects. This responsive attitude can be to change the text according to the evaluative indications; accept changes made in their text; or keep the original text produced at the individual stage.

proposed in the web-class as north and expect them to be fulfilled, taking into account also the other textuality strategies.

<p>Objetivos</p> <ul style="list-style-type: none">• Compreender os ambientes virtuais enquanto interfaces educacionais• Reconhecer situações didáticas em ambientes informatizados de aprendizagens• Conhecer tanto estratégias de ensino e aprendizagem em ambientes virtuais como recursos educacionais abertos. <p>TÓPICO 1 - Ambientes Virtuais de Ensino e Aprendizagem</p> <p>Objetivos</p> <ul style="list-style-type: none">• Identificar as possibilidades educacionais dos ambientes virtuais de ensino e aprendizagem• Analisar os limites e as possibilidades de uso das ferramentas dos ambientes virtuais de ensino e aprendizagem
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Source: IFCE.

Figure 6 – Class 3 of Educational Informatics: analysis of non-contradiction

Let us take as an example the second specific objective of topic 1, *to analyze the limits and possibilities of using the tools of the virtual teaching and learning environments*. According to the compatibility ideal established by what is expected from the genre, the expectation created by the target is that, at the end of topic 1 of class 3 (which add up to seven pages written by the content teacher), the limits and possibilities of using the tools of the virtual teaching and learning environments will be analyzed. In this context of enunciation, is it possible for students to observe the limits and possibilities of using the tools of virtual environments in a textbook similar to the web-class just by the discursive content of the web-class? In other words: is it possible to analyze limits and possibilities without extensive research involving a methodology that addresses objectives like this? We believe not.

These reflections help us to understand how the objectives assume a truth value in the statement proposed by the content teacher and how the relationship between the interlocutor(s) is established concerning the propositional content. We are, therefore, considering the discourse functioning and making a close relationship with the principle of non-contradiction. As it is still the first version of the raw text produced in the individual didactic phase, this contradiction may be indicated or corrected by the other subjects who participate in the collaborative production (designer and reviewer). We know, then, that the facts that denote the textually represented world must be directly related, linked, articulated. This relation with the arguments are presented in the text, and the way how they are linked with each other is characteristic of the 'meta-rule' articulation.

Val (1999, p. 27) explains that the articulation has to do with the way the facts and concepts presented are linked in the text, how they are organized, how they exercise correlations with each other and how these relations can be evaluated. For Val, evaluating the articulation involves verifying whether the ideas developed in the discursive level of the text have to do with the other ideas presented in it and analyzing what specific type of relationship these ideas establish. If we focus on the microstructural plan, we will see that the articulation takes place in terms of the use of connectors and articulators, which signal the semantic relations between the sentences and parts of the text and indicate to the interlocutor the ordering and organization conceived by the speaker.

On the textual articulators in the argument, Koch and Elias (2016, p. 121) explain that the brands responsible for linking textual segments (sentences, periods, paragraphs, longer sequences) of any length are

called textual articulators, discourse operators or discursive markers. These articulators operate at three different levels and have a significant role in establishing cohesion, coherence and argumentative organization in the text. The three levels of articulators are the level of the overall organization of the text (articulations between sequences or lengthier parts of the text), the intermediate level (chaining between paragraphs and periods) and the microstructural level (chaining between clauses and clauses).

Also, according to Koch and Elias, textual articulators can assume various functions in the text. In the case of didactic-digital texts produced for students studying in distance education, as well as in other argumentative texts, the articulation strategy made by the content teacher would be based on the establishment of the relationship between two different statements, in which the second is linked with the first that was taken as a theme. In this case, we would have as focus of analysis of the discursive operators used in the text not only the logical-semantic relations that occur between the content of two sentences, but also the discursive-argumentative articulators that determine precisely the relationship between different statements.

These articulators, according to Koch and Elias (2016), determine the argumentative orientation of the statement that they introduce and establish the *conjunction* as relations (operators that link arguments that point to the same conclusion); the *disjunction* (operators who link arguments that lead the interlocutor to either accept the opinion present in the first argument or to refute it); the *counterjunction* (operators that link arguments that point to different argumentative orientations, the orientation of the statement introduced by the articulator – such as the “but”, for example) should prevail; the *explanation* (operators who start an argument for the thesis / opinion expressed in the previous statement); the *proof* (operators who link arguments that present evidence on what was expressed in the related statement is true); the *conclusion* (operators who introduce a statement of conclusive value in relation to the previous statement); *comparison* (operators that establish a relationship between a comparative term and a comparative term of equality, superiority and inferiority); *generalization* (operators that establish a relationship in which the second statement expresses a generalization of the fact contained in the first); the *specification* (operators that establish a relationship in which the second statement particularizes a more general statement presented in the first); and *correction* (operators that establish a relationship in which the second statement corrects or redefines the content of the first).

Other type of articulators very present in the text of the web-class are the textual organization and the metadiscursive articulators. The articulators of a textual organization guide the interpretation of the text and spatial organization, signaling the opening, intermediation and closing of the written composition in the genre. As examples of these organizational articulators, we have the following passages written by the content writer in the basic text of class 3 of Educational Informatics:

- a) At this point in our studies and investigations, we **already** understand that the Web enables the availability of global platforms for access and creation of a large quantity and variety of content from an all-everyone perspective [...].
- b) We studied in **previous** classes that Educational Informatics is not restricted to the use of computers in the classroom for storage and transmission of information, do you remember?
- c) We will **now** investigate, search and discover repositories and sites that provide OER with possibilities for permanent exchanges, remixes, creative and ethical recreations in the socialization of knowledge.
- d) **In recent years**, we have had computers inserted in classrooms and the demystification of Skinner’s teaching machines [...].
- e) We **currently** have OERs that advance in the proposal of learning objects due to the possibilities of sharing and adaptation, promoting a reconfiguration in terms of authorship [...].

Metadiscursive articulators, on the other hand, sometimes introduce comments about the way the statement was formulated, sometimes about the statement itself. Koch and Elias explain that, according to the role that these articulators assume, they can be modalizers (really, logically, obviously, etc.), domain delimiters (pedagogically, linguistically, sociologically, etc.), focused on textual⁷ formulation (in summary, first, in addition, etc.) and evidence of the self-reflective property of language (that is, in other words, so to speak, etc.).

This study of the principle of articulation and the articulators used in argumentation, as a discursive strategy undertaken by the content teacher in the first phase of the web-class text production, is interesting to observe how the textual producer links their statements to the construction of the senses in a didactic-academic text. Through the articulators' analysis, we can get an idea of how the dialogical and stylistic character is developed. The study of progression is very well related to this analysis, as an attempt to maintain the thematic unity and to offer a constantly renewed semantic contribution.

We already know that the text needs to maintain the thematic unity and that it needs to develop in order to show that it has something to say. The texts' progression is precisely the presentation of new themes or sub-themes related to the central theme, bringing new comments on the motif already introduced. According to Cavalcante (2014, p. 34), it is necessary, in addition to taking up concepts, that the text presents new information about the elements taken up so that the meaning of the text progresses. For the author, progression is obtained from the adhesion of new concepts and information to the elements responsible for continuity.

Koch and Elias (2016) explain that, when we read an argumentative text,

we follow the author's reasoning, identify their arguments, activate various knowledge, fill in gaps and build meaning. And everything happens because the author, thinking about the objective and the reader of their text, chooses a theme or subject and develops it, observing a variable balance between two fundamental requirements: repetition (retroaction) and progression. In other words, the author refers to something already present in the reader's memory, and, considering this basis, adds new information, which, in turn, will become support for subsequent information (KOCH; ELIAS, 2016, p. 85).

This activation of knowledge for the construction of meanings and the addition of new information concerns any text as a socio-cultural construct. However, before we move forward in the discussion on the evaluation of material for Distance Education in a collaborative way, it is crucial, once again, to highlight another difference concerning the writing of didactic-academic material produced for distance education and the writing process of a didactic book. This difference is due to the genre (and support) that the subjects are producing: a web class that will be published in the Virtual Learning Environment (VLE). This means that the version of the printed material produced gains, at the end of the textuality assessment process by the subjects, interactivity, colors, images, animations, videos, links and specific icons, in order to acquire a format suitable for the virtual environment and to be, then, posted on Moodle⁸. In this VLE, students and teachers interact through texts that belong to textual genres such as discussion forums, wikis, chats, quizzes, etc. All of these genres are part of the VLE, including the web-class genre. In the next section, we will analyze the evaluative dialogues made by the subjects of the multidisciplinary team in the text versions of the web-class.

⁷ The articulators focused on the textual formulation, according to Koch and Elias (2016, p. 148), perform three functions: a) to indicate the status of a textual segment in relation to the previous ones, as occurs when we use bookmarks; b) to introduce topic; and c) to interrupt or reintroduce the topic.

⁸ Moodle is the virtual learning environment used by IFCE to post the web classes of distance courses.

EVALUATION OF TEACHING MATERIAL: FOCUS ON INFORMATIVENESS

After discussing the coherence meta-rules, in this topic, we highlight informativeness as a factor of textuality that constitutes the didactic-academic text. This is because many of the evaluative interlocutions made by members of the multidisciplinary team at IFCE are based on this textuality factor. Informativity concerns the degree of predictability of the information conveyed by the text. A text will be less informative the more predictable the information brought by it. Val (1999) states that the interlocutor's interest in the text will depend on the degree of informativeness present in the textual composition. Thus, depending on the progression and informativeness, the producer selects the words and distributes the information in the text, being up to the interlocutor to calculate the meaning of the information more or less easily. The subject who writes the didactic-academic text, therefore, organizes the thematic progression according to the sufficiency of data foreseen for the theme.

Regarding the sufficiency of data, Antunes (2010, p. 74) highlights information and its relationship with the highest and lowest degree of novelty, whether expressed by form or content. For the author, the more the text presents news and evades obviousness, the more it is relevant. Antunes, however, points out that the degree of novelty required for the text is determined by contextual reasons and that, in each socio-discursive situation, the information to be provided is evaluated. In the text of the web-class, for example, the subjects who write the didactic-digital text commonly seek to simulate dialogues with the interlocutors when they intend to announce conceptual news, that is, when they intend to bring new information to the text. In figure 7 below, we see that there is a rupture in the flow of the text's indirect discourse so that a direct question (direct discourse) is brought to the student to simulate a dialogue and provoke them about new information on the topic.

The image shows a screenshot of a web-class interface. The main text is in Portuguese and discusses educational demands. A specific sentence is highlighted in blue: "Mas quais demandas seriam estas?". A callout box with a black border and white background points to this sentence, containing the text "Interlocução direta no corpo do texto". To the right of the main text, there is a list of search filters: "Excluído: Você deve estar a perguntar: Que", "Excluído: ão", "Excluído: o", "Excluído: -", "Excluído: .", "Excluído: e", "Excluído: !", and "Formatado: Recuo: Primeira linha: 0 cm". At the bottom left, there is a green box with the text "Você sabia?" followed by a quote from Marx: "Para Marx, 'o trabalho é um processo entre homem e natureza, um processo em que o homem, por sua própria ação, medeia, regula e controla seu metabolismo com a Natureza [...]'. Ao atuar,". At the bottom right, there is a text box with the text: "Art. 2º-A educação, dever da família e do Estado, inspirada nos princípios de liberdade e nos ideais de solidariedade humana, tem por finalidade o pleno desenvolvimento do educando, seu preparo para o exercício da cidadania e sua qualificação profissional (Brasil, 2005)."

Source: IFCE.

Figure 7 – Class 3 of Political Pedagogical Projects: informative search and direct dialogue

In this example, we see that, in addition to the elements already seen so far and that build the texture, there is still in this enunciative game of text production from the web-class a dialogue strategy used by the text producer that is worth noting. It meets the other textualization operations used by the content teacher in this phase of individual didactic production and establishes a marked dialogue in the text with the students who will read it. It is the *enunciative heterogeneity* defined by Authier-Revuz (1990) when analyzing the enunciative processes from the Bakhtinian perspective of the presence of the other in the enunciation.

Authier-Revuz (1990, p. 26) makes a close relationship between the concept of enunciative heterogeneity and the concept of dialogism undertaken by Bakhtin. According to her, the dialogism of Bakhtin's

circle does not have face-to-face dialogue as a central concern, but constitutes, through a multiform, semiotic and literary reflection, a theory of internal dialogization of discourse. That's because words are, in part, always and inevitably, the words of others. The problem of heterogeneity, then, is formulated from the notion of enunciative heterogeneities, presented as being of two types: the constitutive and the shown, considered as distinct processes.

Constitutive heterogeneity refers to the real processes of constituting a discourse and is similar to Bakhtinian dialogism constituted in the debate with otherness. Authier-Revuz explains that this concept is based on the idea that no word is neutral, since every discourse is carried by the discourses in which its socially sustained existence lived. The discourses of others would be an external constitutive center with which the fabric of the discourse itself is woven. Hence the idea of *constitutive* heterogeneity.

In this analysis of the enunciative strategies, the concept of heterogeneity shown as a resource of textualization and style used by the text producers of the web-class called our attention. It concerns the processes of representing a discourse in another localizable and identifiable discourse. This heterogeneity can appear in marked (direct discourse, for example) or unmarked (paraphrase, for example). Authier-Revuz explains that the heterogeneity shown is constituted as a fragment in the text, among the linguistic elements used by the interlocutor, who accompanies a syntactic rupture. For example, when the content writer introduces a mark shown from a direct discourse in the form of a dialogic rhetorical question – as in

a) We studied in previous classes that Educational Informatics is not restricted to the use of computers in the classroom for storage and transmission of information, **remember?**

b) We will see the Open Educational Resources (OER) that allow the exercise of intellectual generosity in a collaborative proposal. It will be a very productive class. **Let's start?**

– we have a direct discourse introduced by a verb or a verbal expression clearly delimited in the argumentative discursive chain, which refers to another place: that of another act of enunciation (AUTHIER-REVUZ, 1990, p. 29). Thus, this strategy used by the producer to mark the interlocutor's presence in their text takes the place of a fragment of different status in the linearity of the textual chain and identify the explicitly specified otherness to which the fragment refers.

This heterogeneity shown can also be admitted as an articulator that determines the argumentative orientation of the statement that establish the conjunction relationship, for example. Thus, in this perspective of chaining, it also acts with an element of marked progression and helps in the construction of informativeness when it relates a data already known by the interlocutors to a data that will be the theme of the web-class in question.

With the description and exemplification of the heterogeneity shown, we close this subtopic on the textualization strategies used by content teachers in the individual didactic production phase. We have seen, in this section, that the factors of prospective contextualization and focusing allow advancing expectations about the text – such as the class title, class presentation, objectives, topic introduction and informational content –, as well as the coherence meta-words: continuity, articulation, thematic progression and the *informativeness* textuality factor. We also discussed in this subtopic the idea of enunciative heterogeneity, with an emphasis on heterogeneity shown as a resource for interlocution that is in line with other forms of textuality.

Below, we present a table that summarizes the main textual validation operations in the didactic-academic material produced by IFCE, which were described and analyzed in this article. They give us a dimension of the aspects that are taken into account when writing the basic text of the web-class and also of the aspects that are evaluated in the stages of collaborative writing of a web-class.

Table 1 – Operations of textuality, description and discursive implications

Textualization operations	Description	Discursive implication
Focusing	It concerns the general objectives of the class, titles of the topics and specific objectives of the topic, icons, VLE	Contextualization factors
Continuity	It concerns the resumption of elements and ideas throughout the text, as well as the construction of referents in the text.	Maintaining the discursive topic
No contradiction	It concerns the internal logic of the text. It also applies to the relationship between text and context.	Expectations generated by the objectives of the text
Articulation	It concerns the facts and concepts that are linked in the text, its organization, relations with each other	Discursive-argumentative articulators (textual organization and metadiscursives)
Progression	It concerns the presentation of new themes or sub-themes related to the central theme from the adhesion of new concepts and information to the elements responsible for continuity and referencing.	Relation titles, objectives and themes
Informativity	It concerns the degree of predictability of the information conveyed by the text	Relation titles, objectives and themes
Enunciative heterogeneity (shown)	It concerns the vocative, first person plural verbs and rhetorical phrases with direct interrogations.	Direct dialogue

Source: IFCE.

We are aware that all aspects of the composition of a text could be guided by an evaluation of the textuality of didactic-academic production. However, in this study, we pointed out a snapshot of what can serve as an initial parameter for the analysis of the elaboration of web classes and, consequently, as a north of work for the subjects involved in this collaborative production, more specifically the content teacher and the educational designer who works with distance education.

FINAL CONSIDERATIONS

In this article, we analyzed the basic texts of the didactic-academic material produced to be published in the VLE in the web-class format of the Specialization courses of the Professional and Technological Education (EPCT) degree course, as well as the interferences written by two other subjects (designer and text reviewer) who collaborate with the teacher in the production of teaching material. We saw that teachers use textualization operations – continuity, progression, non-contradiction, articulation, informativeness, heterogeneity marked as the main textual-discursive strategies. Such operations take place from a direct articulation with the collaborative production method of the didactic material, the perspective of discursive reversibility and the double audience expected by the subjects for the text. They give us a dimension of the aspects that are taken into account when writing the basic text of the web-class and also of the aspects that will be evaluated in the following stages of collaborative writing.

In our study, we saw that in the interlocutions between the subjects there is a relationship between the evaluative dialogues – written both in the comments and in the base text itself –, and the recursion of roles that occurs in the production process (sometimes a subject is a reader, sometimes a writer, other times evaluator of the same teaching material). Such a relationship determines both the identity construction process of the subjects who write collaboratively and marks the authorship of the web-class genre, which is consolidated

by the content teacher. This relationship reveals that the construction of the web-class text occurs through a continuous movement of interference from the subjects in which the content teacher, the designer, the reviewer deliberately respond and, at the same time, pass the word on to the other.

In this dynamic activity of written composition, we have two texts that intersect: the didactic text referring to the content of the web-class and the evaluative text(s) referring to the interlocutions between the subjects present in the comment boxes in the different versions of the text. As a result, we have two planned audiences: one that deals with the subjects that collaboratively participate in the production process (either evaluating, rewriting, revising, correcting or retextualizing), and another that deals with students who study through didactic-digital material. These two perspectives on the text and the interactants organize all the didactic transposition made for an academic and didactic text such as the web-class.

This construction of the text in the collaborative writing chain made from otherness characterizes a metacognitive attitude on the part of the participating subjects, who participate in a game of responsive understandings. This game is marked in the assessment made by the subjects in each dialogue and their verbal actions happen according to the relationship established between the interlocutors. We also saw that the evaluative dialogues denote, in collaborative writing, the empowerment of voices, hierarchization of the subjects regarding the authorship of the text.

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