The dialogic nature of regulation in collaborative digital argumentative writing practices

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Abstract
This article discusses the dialogic nature of regulating perspectives on a controversial topic during students’ argumentative writing in remote teaching. The emerging collaborative writing processes mediated by digital technology are importantly changed as responses to physical distancing in education, as demanded by the measures of biosecurity established by the national government to prevent the transmission of COVID-19. Our analysis is framed in a sociocultural perspective, which contributes to our understanding of the concepts related to dialogism, regulation, positionings on a topic, collaborative writing, and digital technology as a tool for dialogic interaction. Our qualitative, idiographic study analyzes the argumentative utterances produced by a dyad of students enrolled in a Textual Production course at a Colombian public university who write a critical commentary over four (4) weeks using Google Docs application. The findings indicate that the participants discuss and negotiate decisions in the group writing situation and that during this dialogic interaction, the ideas are influenced by the thoughts of the other. When they communicate with each other, their discourses regulate their positionings on the social situation that is the subject of the dialogue. It is also possible to identify both the possibilities of the pedagogical mode and its potential limitations for dialogic interaction, which synchronously and asynchronously facilitate or restrict the performance of the joint writing activity. It can be concluded that within the framework of remote teaching, digital technology has become a flexible mode of pedagogical practice that supports dialogic interaction, enables regulation among peers for discussion, negotiation, and positioning on a topic, and facilitates the construction of collective knowledge that emerges in argumentative collaborative writing.

Keywords: social regulation, positionings, dialogic interaction, collaborative writing, digital technology.

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Introduction

The COVID-19 pandemic has led to the declaration of biosecurity measures by health entities and governments around the world, which have impacted many areas of our lives. In the case of the educational system, this phenomenon has produced a massive transition of learning practices to environments mediated by digital technologies. Thus, it became important to understand educational challenges imposed by physical distancing, resulting in the impossibility of face-to-face interaction. This posed new challenges for education, particularly when digital technology became an alternative for creating spaces for dialogic interaction to encourage reflective thinking and the construction of joint knowledge.

This article is framed in the situated learning approach, emphasizing argumentative collaborative writing as a social practice influenced by the sociocultural context (O’Brien & Battista, 2020). We are especially focused on the students’ joint regulation of positionings on a topic when this regulation is mediated by digital technology as a tool for dialogic interaction in the textual production process. Within the framework of these concepts, there is an interest in understanding how the students position themselves on a topic, how the regulation can produce transformations in the students’ positionings on the topic, and how positionings on a topic are negotiated during collaborative writing mediated by digital environments.

Dialogism in the regulation of collaborative writing

The concept of dialogism implies that all utterances are addressed to others, seeking their understanding, response, consensus, or dissent (Bakhtin, 1993). Moreover, it brings together a plurality of voices, consciences, ideologies, and worldviews immersed in the same discourse. In this approach, it is understood that self-regulation, co-regulation and shared social regulation are distributed among multiple agents and emerge during the process, taking different forms throughout a collaborative activity. This understanding assumption that learning is a social process regardless of whether regulation is seen as
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influenced by environmental context, appropriated through participation, or situated in social activity systems (Järvelä & Hadwin, 2013).

Consequently, collaborative writing is understood as a collective process from the beginning to the end. All the participants adopt an active position to perform a task, with a horizontal differentiation of roles, in which exchange, commitment, and participation are encouraged (Roselli, 2016). These concepts are found in the argumentation theory. They are part of this discursive dialogic phenomenon, in which writing subjects interact and self-regulate to defend or negotiate their points of view with their interlocutors (Leitão, 2001).

We see argumentative writing as the continuous and dynamic dialogic process where every discursive perspective is constantly being constructed and becomes more complex as it evolves (Caron, 1983; Chabrol, 1994; De Chiaro, 2006). It is important to emphasize how the writing process develops through constant negotiations between voices about what will be written and how it will be written (Brandão, 1997), particularly when done collaboratively.

The literature proposes that in collaborative writing, writers can participate equitably in the production of the text. They should share the responsibility to perform the task considering the plans, suggestions, and ideas that they each conceive, negotiate and discuss with the others. They are expected to arrive at a unified perspective that will allow the writing to proceed (Nykopp et al., 2019). Nevertheless, a dialogic perspective recognizes that participation is informed by the background and experience of each subject, which results in different forms of participation. This understanding involves a dynamic analysis of the regulation of writing. A socially shared approach to writing is understood as how the members of a group collectively regulate their collaborative process, which establishes an interdependence during the production of the text, a joint monitoring process is used to complete the writing activity (Volet et al., 2009).

The joint writing activity is understood as a situated practice, as it is a form of discourse that has specific demands framed within a concrete situation (Linnell, 1998). According to O’Brien & Battista (2020). A situated practice involves understanding the learning and writing process that includes the proposed activity, context, and culture in a social framework concerning student participation. From this perspective, regulation is influenced by the environmental context, which is appropriated through participation, or situated in social activity systems (Järvelä & Hadwin, 2013). This becomes highly relevant when the context makes it necessary to rethink modes of collaboration and interaction, which occurred due to the recent pandemic.

Insofar as concrete situations impose specific demands, it is important to analyze how the context of physical isolation caused by the pandemic influenced the argumentative collaborative writing process. This is particularly significant since the digital environment—as an interface—has important properties that make it possible to observe the internal dialogic process emerging in such digitally mediated writing practices.

**Argumentative writing: regulation of positionings**

Argumentation is a discursive organization intended for negotiating ways the audience would end up representing a topic. Argumentation is an action that can increase the acceptability of a proposed statement (Leitão, 2001). This conception describes argumentation from a historical-cultural perspective as a form of dialogue between two or more points of view on a topic (Ruiz & Leitão, 2010). It is also understood that argumentation plays a prominent role in enabling reflective thinking insofar as the discursive actions
that constitute it1 lead to an examination of one’s own thinking and the consideration of alternative perspectives, which confirm or modify the positioning or the reasons that substantiate it (Ramírez et al., 2013; Ruiz & Leitão, 2010). As such, argumentation involves a number of highly complex cognitive skills, such as analysis, inferences, planning, self-regulation, and the examination and evaluation of information, among other reasoning skills (Leitão, 2007b).

In this article, positioning is understood as taking a position on a topic under discussion when the arguer is called upon to defend either side in a controversy. This positioning depends on how the arguer uses their beliefs and prior information to reinforce, maintain, reject, accept, counter-argue, or integrate elements of the opposing point of view into their understandings (Ramírez, 2018).

From this perspective, argumentative dialogue is an encounter between alternative positions rather than a monological approach without opposition. Arguing implies intentionally addressing others as an audience in a chain of utterances that preserve a dialogic principle, demonstrating that subjects interact and self-regulate as writers to defend or negotiate their points of view with those of their interlocutors (Goulart, 2007; Ruiz & Leitão, 2010).

Consequently, the composition of knowledge, ideas, beliefs, concerns, and points of view are part of a dialogic interaction produced through the participation of other voices, even if the subjects are not present in the immediate or remote context (Kolikant & Pollack, 2019). This idea is based on the dialogic nature of arguments resulting from the interrelation between utterances (Bakhtin, 1989). Bakhtin emphasized the internal dialogization of every utterance, i.e., every utterance responds to other past and anticipated utterances. In addition, every utterance is addressed to another person, who is not always the same as the initial interlocutor. Thus, the dialogic dimension is inherent to the process of argumentative exchange insofar as it presents the justification of views and the consideration of those in opposition; this directs the focus toward the process of discursive negotiation between the one who argues and the one to whom it is addressed: the audience. Dialogic interaction does not occur without one of the two parties; the presence of the other is essential (Leitão, 2001).

This understanding of argumentation underscores the significance of the concept of “heteroglossia,” i.e., double-voicedness, even multi-voicedness of each utterance, as two or more interlocutors imbue it with the meaning (Borges da Silva, 2019; Huang & Archer, 2017; Kolikant & Pollack, 2019).

In short, argumentation is conceived as a social practice within a dialogic process, which imbues writing and text with a meaning that transcends communicative significance. It is interpreted according to its cultural context and within the limits of the dialogic interaction. The text is understood as a part of extratextual dynamic. It engages in a continuous dialogue in the sociocultural environment in which it is immersed, bringing together countless voices. The flow of written production and the processes involved in writing can become an object of linguistic analysis due to the richness and plurality that emerge from social practice (Aiolfi et al., 2020; Severina & Milkevich, 2019).

Digital technology as an alternative for dialogic interaction

The COVID-19 pandemic posed an adaptive challenge that has transformed the educational system (Cabero & Valencia, 2021). The need to maintain physical distancing and prevent the spread of the virus led educational institutions to make a swift and dizzying transition to the alternative education using

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1 For instance, justifying one’s own point of view, considering opposing elements—objection or critique aimed at a divergence of opinion—and responding to those objections—reaction of the initial proponent to an objection, etc.
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...the online media (Burns, 2020). It was necessary to ensure educational continuity and, consequently, connection and contact between students and teachers, which could be partly realized through technology. This is why the researchers needed to focus on identifying certain tools, such as chatrooms, forums, online word processors, and a number of other potential modes of sharing discussion and construction, to analyze their capacity to enrich the cognitive experience of students (Cueva Gaibor, 2020).

At the same time, studies have shown that the use of technological media leads to a change in the way people interact and perceive the voices in the exchange of knowledge, representations, and concepts. As a “meta-medium,” technology involves not just a change in the way experience is transmitted but, as it is a context with different characteristics, it also generates other ways of giving meaning to communication; it represents a drastic change in the intertextuality itself (Severina & Milkevich, 2019).

As a result, the incorporation of digital technology in teaching-learning processes creates new opportunities that require transcendental changes (Cueva Gaibor, 2020), including the field of writing. The complexity of the writing field—whether related to an epistemic, communicative, interpersonal, or transactional function—is particularly evident in its role in thinking (Saneleuterio & Gómez-Devis, 2020). It also has a major impact on collaborative argumentative writing practices.

While the field of collaborative writing in digital spaces has been explored and investigated before (with studies such as Zapata et al., 2017, Ludvigsen et al., 2019, among others), the context of the pandemic and the massive transition to the digital environment became new points to consider when thinking about studying collaborative spaces for argumentative writing.

The role of the technological interface in dialogical interactions can be analyzed within the concept of the public square postulated by Bakhtin. The writer in a public square is an interpreter of culture who maintains a condition of social critique by offering utterances that they publish in the technological environment in which they interact with many other interlocutors. The technological interface understood as a world where everyday discourses and intersubjectivities abound reiterates the possibilities offered by digital technology as a tool that supports and encourages dialogic interaction (Hynes, 2014).

Understanding the digital environment through the concept of the technological interface contributes to our understanding of the negotiation, meaning, changes, and identity of writing in public spaces for debate, for example, online writing communities. It is important to examine the architecture of the online writing communities considering not only technological but also sociohistorical and cultural aspects, through which it is possible to understand internal dialogism.

Dialogism also recognises that utterances are enriched by the words of others and that utterances become active participants in social dialogue (Monea, 2020). In this way, the writing activity is not only a simple mode of interaction, but rather, it actively shapes dialogues in writing. The digital text becomes, in this perspective, an ongoing dialogue, now mediated by a logic of the interface that also acts as a new cultural metalanguage. This also involves a double logic, both that of the technological context itself and the culture in which it is immersed, opening up a new field of study: the sociocultural contexts mediated by the information and communication technologies (ICTs) (Severina & Milkevich, 2019).

To summarize, digital technologies in learning have diversified over the last several decades. All the more so when humanity experienced a rapid need to adapt and change educational methods using virtual mediation to respond to the demands of the health emergency. Digital technologies and their different applications in education play a key role in new ways of teaching, learning, writing, communicating, and...
living together. Pedagogical strategies designed for digital environments take on a new meaning and confront new challenges that involve understanding these practices in higher education.

Hence, it is important to explore and discuss the dialogic interactions established in these educational environments for situated learning activities designed with the intervention of technological mediations. In this contemporary world, young people are increasingly engaged in collaborative academic activities, requiring them to develop regulation strategies to interact effectively with their peers, i.e., recognize them as co-responsible and co-authors. They need to manage, plan, evaluate, negotiate and make decisions leading to learning achievements and producing knowledge.

It, therefore, becomes necessary to identify methodologies that make it possible to capture and understand the strategies students use to perform their tasks when they are unable to have face-to-face interactions. This can help ensure the creation of pedagogical practices that promote meaningful use of digital technology that can promote dialogicity and the applications of such technology related to educational objectives and teaching-learning processes.

The methodological approach of the study

This qualitative, idiographic case study seeks to understand the regulation of positionings on a topic. To this end, it analyzes the case of a pair of university students who collaboratively write a critical commentary. For this purpose, a digital writing activity is designed using the Google Docs application, which the participants utilized over four weeks within the context of an elective course.

The case we analyze involves two students at a Colombian public university in the 8th semester of the Bachelor’s Degree in Computer Science, enrolled in the Professional Elective: Textual Production. The presented case offers different dynamics in the processes of the regulation of positioning during the collaborative practice of argumentative writing. Regularity in the dialogic interaction, variety of published argumentative utterances, and permanence of the two participants during the entire development of the activity.

The students of the course get to know each other in the classroom. To establish the pairs in this mediated activity the teacher invites them to create pseudonyms. The students decide on their pseudonyms and when to stop using them. The dyad we analyzed created a pseudonym to keep their identity anonymous during the development of the digital activity designed in Google Docs. The decision to create pseudonyms is justified because it allows for interaction between the members of the dyad. It also minimizes possible bias or coercive actions due to the proximity or affiliation between the writers. Pseudonyms also bring a particular motivation to the practice of writing given the mystery that is generated over the interlocutor.

The construction of the corpus was carried out during the joint writing process using the Google Docs tool. Over four (4) weeks was registered the dialogic interaction. Examining the corpus, it was possible to capture the actions of each participant, the duration of each participating move, the editing of the writing, and the publishing of comments.

It is important to note that digital writing became the only alternative for continuing educational processes, which included academic activities involving collaborative work, given the restrictions imposed by physical distancing. The impossibility of interacting face-to-face in the classroom, meeting in a physical space, and dialoguing about what they would do left only one option for collaborative textual production. It meant transforming their learning space by incorporating devices known by the students and their different self-regulation, co-regulation strategies, and shared social regulation, demanding them to construct a joint positioning in the production of the final text.
The course Professional Elective: Textual Production in which the writing activity is proposed follows a model based on dialogic pedagogy, which recognizes discourse as polyphonic, a space in which different actors coexist with their own positions that may be convergent or divergent, which implies permanent negotiation processes. This dynamic encourages critical reflection through educational praxis, where divergence promotes the construction of knowledge and reciprocal interactions and promotes a participatory, democratic, and pluralistic education (Ferrada, 2020; Teo, 2019). Dialogue has an intrinsic value, where the relationship with the other creates a possibility of growing, transforming oneself, of becoming someone different through the joint experience (Matusov, 2009).

Using the Google Docs application, collaborative writing activity is designed for the students: to write a critical commentary about a controversial social topic. The participants enter the dialogue and interact synchronously and asynchronously during the writing of the text. Three texts addressing the same social problem: the poverty present in the Department of Chocó, Colombia, were proposed to encourage discussion among the participants. The chosen genres included a cartoon (Vladdo, 2016) and two opinion pieces (Mosquera, 2015; Moreno, 2014) published in the digital spaces of the national newspapers “Las2Orillas” and “El Tiempo.”

These two genres were chosen because they promote critical assessment of a news event, guiding and inviting the participants to express their opinions. By presenting different perspectives on a well-known and controversial social problem, these texts require the participants to be engaged and discuss their opinions to produce arguments for their joint textual production and become the starting point for constructing their positions on the topic.

Additionally, the students were asked to publish their final text on the Blogger application, part of the Google platform. This created a situation of sharing their writing with potential readers. These readers do not belong to the learning situation created. Still, they are part of an external community with which they could share their writing, in a publicly accessible space that invites them to reflect as citizens on the country’s reality and the problems it faces. The decision to publish the text on an open-access platform was intended to ensure that it could be read beyond the classroom space by the professor or classmates. This also contributed to motivating and further legitimizing the writer's role and encouraging the writing process with greater significance, commitment, and willingness for the university students.¹

Analysis

The analytical procedure begins with the pre-analysis, making it possible to become familiar with the data, identify the argumentative utterances under analysis and capture the proposed analytical categories. Subsequently, we carried out microanalysis of the discourse using analytical categories that let us capture the students’ strategies regulating their positionings on the topic during the collaborative argumentative writing process.

Table 1 describes the categories, indicators, and discursive marks used in the microanalysis. To analyze the regulation of positioning on the subject matter during the writing activity, we first identify the unit of analysis proposed by Leitão (2007a). This unit of analysis consists of arguments, counterarguments, and responses. Different marks (modalizers and tonalities) are identified that enrich the analytical and interpretative process focussed on understanding how regulation is defined in these discursive actions.

¹ The corpus constructed is protected under Resolution 008430, of 1993, of the Colombian Ministry of Health on research on human beings and the principles enshrined in Law 1090, which governs the practice of psychology in the Colombian territory. The present study is considered to be an investigation with minimal risk, as it does not involve physical or psychological risks for the participants. The data collected was treated according to the rules of habeas data and was only used for research purposes. It was approved by the Research Ethics Committee (Comité de Ética para la investigación) at the University of Magdalena (Universidad del Magdalena).
These analytic categories allow us to recognize the subject in the framework of an enunciative dynamic, constructed as a discursive subject who, through diverse forms of enunciation, configures an intonational social metaphor of ontological-cognitive, emotional, and axiological values (Martínez, 2013).

Diverse tonalities are revealed through images that the author of the text constructs about him/herself, those who interact with him/her, and what is said. The intentional, appreciative, and predictive tonalities present in the argumentative utterances are captured. On the other hand, the discursive modalizers - epistemic, deontic, and affective/evaluative - serve as clues in the discourse to capture specific actions of regulation of the positionings on the topic (Castilho & Castilho, 2002). These modalizers make it possible to identify the degree of certainty and the strength with which the views are supported.

### Table 1

<table>
<thead>
<tr>
<th>Categories of analysis</th>
<th>Actions that indicate regulation in positionings on the topic (Leitão, 2007a)</th>
<th>Discourse modalizers (Castilho &amp; Castilho, 2002)</th>
<th>Tonalities (Martínez, 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulation through Argument</strong></td>
<td>- Produces utterances that offer a point of view and its justification based on a regulation of the individual or other's positioning. - Uses authoritative citations. - Presents causes, consequences, examples, figures and data, personal judgments, and opinions. - Creates hypotheses through references. - Traces similarities between terms or situations, giving value to specific aspects.</td>
<td>Modalizers indicate regulation in points of view and the degree of certainty and strength the ideas are substantiated.</td>
<td>Appreciative: Uses expressions that establish an appreciative relationship with another person's discourse. For example: colleague, I like your opinion, your idea is excellent.</td>
</tr>
<tr>
<td><strong>Regulation through Counterarguments</strong></td>
<td>- Produces utterances that critique or present objections to an argument, based on the regulation of the individual or other's positionings. - Uses divergent or contrary arguments. - Partially or totally rejects the argument. - Attacks the reasons or point of view of the other. - Weakens some justification of the argument. - Questions the relationship between reasons and point of view.</td>
<td>Deontic: Deontics is about expressing the necessity or convenience of acting, obligation, prohibition, permission, and volition. For example, expressions such as: we should, we would have to, it would be appropriate to, we can, we know, it is necessary.</td>
<td>Predictive: Uses expressions that anticipate the potential utterances of their interlocutor, seeking agreement. For example: you agree, I would like to hear your opinion, you can change it.</td>
</tr>
<tr>
<td><strong>Regulation through Response</strong></td>
<td>- Executes actions or produces utterances that offer a response to the objections raised by the other, based on the regulation of the other's positioning or co-regulation.</td>
<td>Epistemic: It is used to express the evaluation of the other's discourse, the degree of certainty about what was said. For example, assertive expressions such as: really, in fact, undoubtedly. Quasi-assertive expressions: I suppose, it is possible, probably; and qualifying expressions such as: theoretically, from the point of view of, according to the author, in agreement with, I concur with the idea.</td>
<td>Intentional: Uses expressions that demonstrate the construction of an image of themselves related to their intention or aim. For example: it is better, some other time, today, I will think about it, I will do it.</td>
</tr>
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| -Uses arguments that demonstrate a direct reaction to the counterargument. -Performs actions in response to partial or total opposition that invites negotiation and joint decision making. | good, consistently, bad, exactly, sincerely, without a doubt, regretfully, honestly, approximately. |

Additionally, a macro-analysis was carried out that made it possible to establish how moments of variability and stability occur in the forms of regulation of positionings on the topic that emerge during the writing process and the implications this had for the writing of the final text that they published in the Blogger digital environment. Moments of stability correspond to utterances produced by the subject, which are partial or final products of reflections and consensus. Moments of variability occur when the point of view and the reasons that substantiate it are transformed, complemented, or clarified (Santa-Clara, 2005; Santa-Clara & Leitão, 2011).

We studied the utterances in the discursive chain to identify the moments when the regulation strategies change. We looked at the negotiation spaces and decision making with respect to the argumentation on the topic, as they were established by the voices of the participants and the other dialogic actors involved in the activity, e.g., the authors of the referenced sources and the instructions that the professor includes in the proposed writing activity. All of these are closely linked to the negotiations of positionings on the topic, their validation, and whether these positions were retained in the final text published on the blog.

For the analysis, the utterances were temporally grouped into episodes. Each interlocutor’s types of regulation were identified. As the writing activity progressed, we analyzed the movements, strategies, and transformations in the social orientation of the argumentation, identifying the meaning given to the moments of textual production in the co-authorship. In addition, the analysis shows the forms of synchronous or asynchronous communication that define each moment of interaction. This enabled us to have a macro vision of the regulation process. We present various alternative forms of collective decision-making that lead to stability in using a particular type of regulation. It is recognized that the variability of positionings is articulated with changes in the situation of enunciation and the valuation of the other’s discourse. These changes also demarcate a hierarchy between discursive subjects and establish individual strategies for regulating the other, especially shared regulation processes established during the writing.

Results

To explain the processes of regulating positionings on the topic, which emerge during the collaborative argumentative writing practice among university students, we provide examples of relevant moments in the beginning, the middle, and the end of the dialogic interaction. It is, thus, possible to see how the students position themselves in relation to the topic under discussion and how they negotiate and co-construct their positioning to produce the text (arguments, counterarguments, responses, and other discursive resources).

Below, the results of the macroanalysis are presented, as well as several examples of the moments from the microanalysis that capture the processes of regulating positionings on the topic during the collaborative writing. The utterances shown are taken verbatim, as published by the participants, and the lines are numbered to facilitate the analytic process.
At a general level, the positionings on the topic presented during the dialogic interaction are regulated by the proposed writing activity, which means that the instructions and generative texts become the point of reference for establishing the positionings of the dyad.

Likewise, there is evidence of negotiation mechanisms that allow the review of different alternatives to collective decision-making. An atmosphere of collaborative writing is generated. This leads to the construction of discursive subjects with the capacity for discernment that seeks to regulate the other, mobilize reasoning and influence the understanding of the other to convince him/her to accept a point of view, but considering that he/she has freedom of choice.

Transformations in positioning are related to changes in the enunciation and social evaluation of the interlocutor, their reasoning and evaluations. The capacity and strategies for accepting arguments create different relationships between discursive subjects. Joint understanding between the interlocutors is related to the forms of regulation used by the individual, the other, or shared regulation established during the writing process.

The proposed writing activity regulates the students’ positionings on the topic presented during the dialogic interaction. In this sense, the slogans and the generative texts become the point of reference for establishing the positionings of the dyad. The following is the microanalysis of the processes of regulation of the positionings on the topic during the collaborative writing process.

At the microanalytical level, the understanding of texts, as regulators of writing activity is demonstrated when Subject 1 (S1) opens the interaction, offering their positioning: “Chocó has been abandoned.” Figure 1 shows how S1 uses the cartoon as explicit support for his positioning and he says: “each panel of the cartoon shows the reality of the department of Chocó, neglect, abandonment, backwardness, false promises from politicians…” Likewise, S1 ratifies its position when it takes up information provided by opinion texts: “...there are ther conditions such as its geographical location so far away from the rest of the country that there is little access to transportation, which prevents it from developing economically with the rest of the country…”

**Figure 1.**
Guidelines and Reference Texts for the Activity
A few days after the comment from S1, S2 intervenes, restating and reiterating S1’s positioning: “the image in the cartoon is a portrait of the history of neglect…” This positioning is co-regulated through both what was previously written by S1 and the professor’s generative sources. The reiteration of the positioning by S2 expands the justifications for the abandonment of Chocó, such as: “has been plagued by corruption, abandonment…government failures and political figures” (L2-L3) and “has a biological, natural and cultural wealth that makes it extraordinary” (L5). The justification offered in L5 makes it possible to infer that S2 demonstrates the tradeoff between the negative of what is occurring in the department and the positive aspects, which are not being used to escape from the situation. Assertive epistemic modalizers, “it is no secret” (L2), give certainty and strength to the positioning, which the two writers now share. This position is further reinforced by the use of authoritative resources, such as the figures for the number of departments that have been abandoned by the state government (L2) (see Table 2).

### Table 2

| L1 | the image in the cartoon is a portrait of the history of neglect in the department of Chocó, as it is no secret that it is one of the 32 departments that has been plagued by corruption, abandonment, insecurity, government failures and political figures that have adversely affected the progress of this beautiful department which has a biological, natural and cultural wealth that makes it extraordinary, but which undoubtedly continues to be mired in neglect and the hope for a better future.

**Note:** Research corpus. This utterance illustrates how the S2’s argument is based on the cartoon referenced by the professor in the writing activity.

The co-regulation is also marked by the use of the appreciative tonality by S2, recognizing the value of S1’s discourse when they introduce the epistemic modalizer “undoubtedly” (L6) and reaffirming that Chocó “continues to be mired in neglect.” Similarly, this justification offered in L5-L6 strengthens their position and introduces anticipation of a potential counterargument when they use the discursive modifier “but,” pointing out that although it has riches, it has not been able to escape from this situation of neglect, which also indicates self-regulation of their own positioning.

At the end of the utterance, S2 add the statement “and the hope for a better future” (L6), which is taken as a mark of deontic modalization, as it connotes subjunctive. This inference is, in turn, substantiated by the assessment presented in the proposed cartoon: “in Chocó, the best is yet to come, for two centuries.”

In addition to the professor’s generative sources and instructions, it is clear that reiterations, expansions of justifications, and deontic epistemic modalizers of certainty become important discursive resources for regulating the other’s positions and, consequently, constructing a joint position.

At the beginning of the interaction, the dyad retells historical elements to understand the discussed social phenomenon presented in the reference texts, with a new reading of the situation of Chocó under the current conditions of the pandemic. This shows new shades of positioning that account for the authorial thought and novelty. At table 3 is illustrated in the utterance by S2 when he offer reasons that justify their position on “the abandonment of Chocó.” Through their justifications, they reiterate and expand the explanatory line of this position, saying: “it can be inferred that in these instances, the department is experiencing one of the most unfortunate tragedies, coupled with the COVID-19 problem and crisis” (L3-L4), demonstrating how the poverty in the department has been present for a long period and has been
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exacerbated by the global pandemic. This position, in turn, becomes a point of view to be justified by “the lack of biosafety supplies,” “deficiencies in hospital infrastructure” and “a lack of tests” (L6-L7).

Similarly, there is a use of affective/evaluative modalizers, such as “most unfortunate tragedies” (L4); “this situation is very difficult” (L5); “precarious and unfortunate situations” (L6); “is sad and regrettable” (L9); “so much scarcity and negligence” (L10), which S2 uses in their discourse to mark the evaluation they want to make of the content of their argument, giving emotional force to their positioning.

<table>
<thead>
<tr>
<th>Argumentative Utterance expressing S2’s Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
</tr>
<tr>
<td>L2</td>
</tr>
</tbody>
</table>

Note. This table shows an example of an argumentative utterance by S2, in which they present their positioning on the topic.

In addition to the affective/evaluative modalizers, during subsequent dialogic interactions, S2 is observed to reiterate their point of view using an intentional tonality, which allows them to construct an image of themselves concerning their position. This understanding is confirmed by the epistemic/asseverative modalisers, “Surely” and “certainly,” which express the degree of certainty of their positioning. This is also true for the reiterations in the justifications, e.g., “many resources that should ensure equity and equality for all do not reach the communities”; “many children and communities are dying of hunger and a lack of opportunities that would provide care and protection in all integral aspects such as health, optimal conditions in services such as drinking water, education." The use of epistemic/asseverative and affective/evaluative modalisers becomes an important discursive resource in the process of co-regulation by this dyad.

After these successive interventions by S2, made asynchronously, it is understood that the arguer consolidates their position in a poetic way, reexamining an external reference that they themselves had explored. S2 says: “First and foremost, there is the saying that the state has typified for this population throughout history: ‘The village of my birth remained far from Colombia, from the entire homeland, mute and forgotten’ -Rogelio Velásquez Murillo." The voice that conveys this text regulates its positioning, and there is also simultaneously a process of identification with it. The affective evaluation through the condensation of this utterance reverberates with such force that it is adopted as the conclusion of the critical commentary.

From the beginning of the dialogic interaction up to this point of the analysis, it is possible to identify moments of stability in the positioning taken by the two writers (the abandonment of Chocó). Variability is
observed in the justifications, with different explanatory lines and an expansion of justifications that had already been presented to further strengthen and reiterate that initial positioning.

Although the writers have maintained a consensus on their positioning and the reasons that justify it, at the end of the writing process, a distancing is observed, in which S1 explicitly requests a more solid justification for one of the points of view already offered. It is a response of partial agreement, in which S1 explains that they share the point of view put forward by S2 “the faith that conditions in Chocó will improve and that the leaders will contribute to their people” (L1-L3 – table 4). However, in L4, he anticipates potential counterarguments to the strength and solidity of this point of view: “partner on this point, if we were to choose it, we would have to find more arguments” (L4). The use of the deontic modalizer “we would have to” (L4) conditions and expresses the need to perform a certain action to make the decision. One of the sources proposed for the activity would express a possible counterargument (cartoon): “In Chocó, the best is yet to come…for two centuries.”

The use of this intentional tonality and the deontic modalizer “there would be” (L6) accentuates the understanding of the regulation of S2’s positioning, as it urges them to reinforce the argument with more reasons. The anticipation of potential counterarguments and the need to write a critical commentary with solid reasons is evidence of reflective thinking. The writer examines the limits and possibilities of the reasons offered in their points of view and recognizes the argumentative force of the text under construction. In this regulation of positionings, there is a reexamination of perspectives spurred by the influence of different voices, i.e., that of their fellow writer and the analytical voices that have previously addressed the topic.

| L1 | I am sharing this opinion with you in this document because I believe that as humans, we |
| L2 | always have faith that everything will improve, thinking that those in power |
| L3 | will generally help the people. |
| L4 | partner on this point, if we were to choose it, we would have to find more arguments, I |
| L5 | suggest that if we choose this point of view of yours in particular, we should do more research, |
| L6 | here there would be more material to work with, honey |

*Note.* This table shows an example of the partial acceptance of S2’s point of view by S1.

This argumentative cycle constituted by the partial response demanding a greater solidity in the argumentation, leads S2 to searching for new bibliographic references that, by citing authoritative sources (author, figures, and data), reiterate the justification of corruption as a central cause of the abandonment of Chocó, making the position advocated more reliable and acceptable. S2 says: “According to Gamarra (2006)... one of the highest rates of poverty in the country...approximately 35% of the department’s product in recent years presents a high degree of corruption.” Similarly, S2 shares hyperlink to the source to engage their partner in reexamining positions and the reliability of the offered material and in the decision-making about the argumentative approach of the text. In this way, S2 enables a shared practice of hypertextuality. The use of hyperlinks to other texts reveals a new meaning, which situates the collaboration as part of a process that aims to put into practice the principles of dialogism reflected in the sense of co-responsibility in the management, planning, and evaluation of the writing process.

Up to this point of the analysis, at a macroanalytical level, there is a significant shift from individual positions—at the beginning of the interaction—to collective positions, which are reinforced as the dialogic interaction unfolds during the writing process. An example of this would be the identification of
commonalities and differences leading to important moments of negotiation and decision-making about the most solid arguments that should be included in the final text. For instance: “...we have some common criteria, which means that we can begin to define the text…”; “I am sharing this opinion with you” (L1). The use of the plural—we have, we can—reiterates the emergence of a shared, legitimate voice in digital writing, demonstrating the convergence of the writers’ voices.

This evolution of the writers’ collective voice leads to the socially shared regulation of the positioning. They jointly make decisions about the choice of the arguments that will be presented in the final version of the critical commentary. We observed that toward the middle and end of the participants’ dialogic interaction, the regulation of positioning consist of more synchronous (8) than asynchronous moments (4). This is analyzed in terms of the timestamp (date and time) when each subject publishes their argumentative utterance and the thematic thread followed by the utterances.

Finally, the version published on the blog indicates that there is stability in the positionings on the topic under discussion, negotiated, and adopted throughout the writing process by the dyad of students. The initial positioning—the abandonment of Chocó—adopted in the dialogic interaction is reworked and restated in the title as “Chocó, far from Colombia: a mute and forgotten homeland” (see Figure 2). From this title, it is possible to infer that the meaning is maintained, and the written reworking is more in line with the characteristics of the discursive genre, the critical commentary. This positioning is substantiated through the reiterative use of justifications based on facts, data, and citations of reliable sources, which, similar to the positioning, are negotiated and expanded during the writing process.

It is also important to emphasize that the activity designed, through digital technology, provides a writing environment that strengthens the dialogic interaction with other voices, which can contribute to the text and structure the positionings of the university students. Online word processors, such as Google Docs, make it possible to engage in synchronous and asynchronous relationships (leaving comments in the margins, embedding objects, links, online messages). They encourage the use of different resources that stimulate the development of reflective thinking and resourcefulness, such as browsing online to search and analyze other information sources, evaluate them and select the ideas that best substantiate their positions.

As the interaction progresses, it becomes necessary to reach a consensus and make decisions that enable the construction of the joint positioning, which will be part of the final text; the participants thus find synchronous interaction to be an easier and faster form of negotiation. This need is reaffirmed when one of the participants proposes using a different technological mediation (WhatsApp), which would allow them to respond to each other immediately and directly, as they observe that the negotiation is being delayed. They have limited time to define their position as writers. S2 says: “...my name is /.../, my number is /.../ we can contact each other on WhatsApp to get a better agreement...” It is inferred that, for one of the participants in the dyad, the online word processor Google Docs constrained the performance of the activity, and they thus sought out a different resource to overcome that difficulty.
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Discussion

The analysis of the processes for regulating positionings on a topic in the collaborative argumentative writing activity between dyads of university students allowed us to explore how students position themselves on a controversial issue when they are asked to engage in a joint writing activity. The writer-subjects use different discursive-reflective forms of regulation to validate their positions; for example, anticipating potential counterarguments, requesting and expanding justifications, mentioning authoritative citations, reiterating and emphasizing points of view or reasons, and using hyperlinks, figures and data.

These actions seek to regulate the other’s positioning more forcefully, using information that gives greater credibility to the positions presented and, therefore, may be more convincing and accepted by their writing partner. In response to the request to strengthen positions, the regulation process privileges authoritative sources. It excludes new ideas produced by the writers, who establish a relationship between

Note. This figure contains the critical commentary published by the dyad of students on the Blogger. Original data corpus (in Spanish).
the problems in Chocó and the recent COVID-19 pandemic, which was beginning to be experienced at the moment of the textual production.

In the enunciative dynamic that the students construct during the dialogic interaction in the writing activity, the subjects use epistemic, deontic, and affective/evaluative modalizers (Castilho & Castilho, 2002). They strategically utilize these modalizers in the argumentative utterances they produce to express their points of view. In the case under analysis, the modalizers are used to communicate the degree of certainty and the strength with which the ideas are substantiated and to express emotions about or assessments of the content of the discourse or about the speaker. The use of affective/evaluative and epistemic modalizers is privileged to contribute to constructing an utterance that achieves the objective of regulating the positioning on the topic during the writing practice.

At the same time, the participants produce and use other mechanisms to express their points of view and construct an image of themselves as co-authors. For example, they evaluate and respond to previous statements that they support or contradict; anticipate potential utterances by their writing partner to identify agreement or disagreement; construct an image of their writing partner insofar as it involves the co-responsibility of producing a text collaboratively. Each participant adopts an active response position: if they agree, they accept the arguments and reasons and sometimes supplement them; if they partially accept them, they request justifications to strengthen the text.

In this case, it is possible to observe the different evaluative positions constructed in the text, which constitute what is defined as tonality (Martínez, 2013). In the analyzed case, it is possible to identify three tonalities that comprise the evaluative act of enunciation and reflect the social relationships established among the students. The predictive tonality is rarely used, while the appreciative and intentional tonality appear regularly. Thus, we can conclude that these tonalities are selected to regulate positionings because they are expressly linked to presenting points of view, recognizing oneself and the other as joint authors, and working toward negotiating those positionings, enabling the construction of a collective position to write the critical commentary.

The analysis also allows us to confirm that argumentation is constructed in the mutual relationship of discursive subjects in specific social practices and that, to the extent that the topics under discussion are related to real situations from the historical and sociocultural context surrounding the writers. It enables them to position themselves as responsible citizens committed to the problems of their community and, as a result, contributes to enhancing their capacity for critical thinking and action.

Furthermore, it is especially relevant to reflect on the collaborative practice of writing mediated by a digital environment, its possibilities, and limitations to generate a dialogic interaction that facilitates the realization of collaborative argumentative writing activity. Within the context of remote teaching, digital technology becomes a mode of a flexible pedagogical practice that, to a great extent, enables regulation among peers for discussion, negotiation, and positioning on a topic and, consequently, facilitates the construction of collective knowledge.

During the writing process, it was found that self-regulation and co-regulation of the positioning were supported, for the most part, by asynchronous communication. Toward the end of the writing process, when the demands for negotiations, consensus, and decision-making increase, socially shared regulation processes become more frequent, requiring more synchronous encounters in order to complete the textual production.
The university students adapt to the digital writing pedagogical mode created for the activity (Google Docs), use the options offered by this technology, and interact to finish the task. They also identify the restrictions that affect the completion of the textual production, i.e., they mention the possibility of using other applications to make decisions smoothly and more quickly about the positionings on the issue under discussion.

The sociocultural aspects involved in socially shared regulation processes in argumentative collaborative writing practices require the design of pedagogical mode that incorporate digital technologies, encouraging dialogic interactions through situated practice, and recognizing each subject's background and sociocultural experiences and the needs of the discursive communities. This leads to diverse forms of participation and construction of regulation dynamics, which bring together a multiplicity of voices, reasons, knowledge, values, ideologies, and positions toward the world that give an identity to the discourse and, therefore, to the writer-subject.

The social activity of writing, understood as a situated social practice, has specific demands that indicate the integration of context and culture in a social framework specific to the learning pedagogical mode, which takes on new importance at a time when the current situation has limited physical encounters, as a result of the COVID-19 pandemic. Consequently, it is essential to rethink alternative for collaboration and dialogical interaction to create educational environments that respond to students' realities, needs, and contemporary uses of digital technologies and lead to flexibility in pedagogical processes and the collective construction of knowledge.

Thus, it is essential to recognize that writing is a social practice, which allows us to understand that the utterances produced by the writing subjects transform the discourses, modifying both what is said about something or someone and the writing participants' thoughts and points of view. The thoughts and ideas of some are intertwined with others. In this communicative process, the positioning on the topics discussed and dialogued is regulated during collaboration in the writing of the argumentative text.

The writers who participate in the collaborative writing activity use the statements to dialogue and situate a critical position on the topic. Their discursive acts shape the type of their social enunciation and its tonalities. In this way, the enunciative social intonation establishes among the participants the recognition of the other and their co-authorship through the utterances they produce and exchange.

In addition, the use of digital resources and discursive moves in this situated activity promote the development of regulation strategies and dialogic interaction. Our research results explain how students implement discursive moves to manage their argumentative writing tasks and what they do to self-regulate and regulate the positioning of other participants collaborating in a textual production. Our findings could provide guidelines for teachers to propose the joint construction of digital pedagogical mode that promote meaningful spaces for writing, the dialogic construction of knowledge, and the development of critical thinking that contribute to the sense of citizenship in young people.

In this line, from a shared sociocultural and social understanding, the regulation of positioning in digital collaborative writing needs to be understood from the context of those who participate and relate in digital collaborative writing. This opens a path of study in new emerging contexts, in which the Bakhtinian perspective contributes to the conception of language. It highlights the role of sociocultural interaction not as a context that acts as a simple vessel for the statements but as a fundamental part of the dialogic process with the other and the social character of language, which acquires relevance in the study of writing processes.
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