Collaborative writing and teaching: a mapping of academic publications post-BNCC and post-pandemic

Eliana Maria Severino Donaio Ruiz 1  
Antonio Lemes Guerra Junior 2  
Claudia de Faria Barbeta 3  
Paula Baracat De Grande 4

Abstract
In order to comprehend how collaborative writing has been understood and studied in the contemporary national academic environment, this paper provides an excerpt from a mapping on the subject in Capes portals between 2019 and 2023. The time span was defined due to the publication of the BNCC and the surge of the Covid-19 pandemic, significant events that impacted Portuguese language teaching and learning practices in Brazil. As this is a bibliographic meta-research, the methodological path was centered on defining search terms and criteria for selecting publications that were representative of the analytical categories created. In view of the diversity of theoretical-methodological perspectives in which the treatment of collaborative writing is anchored, both in the productions investigated and in the previous ones with which they dialogue, the data were categorized into three main thematic axes. The analyses presented here focus on articles, theses, and dissertations that illustrate the academic approaches to collaborative writing in terms of the following aspects: development processes, resources for implementation, and practical applications. The results obtained from the mapping highlight trends in research on collaborative writing, primarily focused on discussing these aspects and driven by the use of digital technologies in Portuguese language teaching.

Keywords: collaborative writing; text production; BNCC; pandemic.

Escritura colaborativa y enseñanza: un mapeo de publicaciones académicas post-BNCC y post-pandemia

Resumen
Siguiendo el propósito de entender cómo se ha comprendido y estudiado la escritura colaborativa en el medio académico nacional contemporáneo, este trabajo presenta un extracto de un mapeo de publicaciones sobre el tema en los portales de la Capes, entre los años 2019 y 2023. El recorte temporal se definió en función de la publicación de la BNCC y la institución de la pandemia de Covid-19, eventos significativos que impactaron las prácticas de enseñanza y aprendizaje del idioma portugués en el contexto brasileño. Al tratarse de una metainvestigación de naturaleza bibliográfica, el enfoque metodológico se centró en la definición de términos de búsqueda y criterios para la selección de trabajos representativos de las categorías analíticas creadas. Dada la diversidad de perspectivas teórico-metodológicas en las que se basa el tratamiento de la escritura colaborativa, tanto en las producciones investigadas como en los trabajos anteriores con los que dialogan, los datos se categorizaron en tres grandes ejes temáticos. Los análisis aquí presentados inciden, por lo tanto, en artículos y tesis de maestría y doctorado ilustrativas del enfoque académico de la escritura colaborativa en términos de los siguientes aspectos: procesos de desarrollo, recursos para realización y aplicaciones prácticas. Los resultados obtenidos del mapeo resaltan tendencias en la investigación sobre escritura colaborativa.

---

1 Postdoctoral researcher in Applied Linguistics, State University of Londrina - UEL, Londrina, Paraná, Brazil. ORCID: https://orcid.org/0000-0002-7169-8464. E-mail: elianaruiz@uel.br.
2 PhD in Language Studies, State University of Londrina - UEL, Londrina, Paraná, Brazil.. ORCID: https://orcid.org/0000-0002-8771-908X. E-mail: guerrajr@uel.br.
3 PhD in Language Studies, State University of Londrina - UEL, Londrina, Paraná, Brazil. ORCID: https://orcid.org/0000-0002-2931-5933. E-mail: claudiaabarbeta@uel.br.
4 PhD in Applied Linguistics, State University of Londrina - UEL, Londrina, Paraná, Brazil. ORCID: https://orcid.org/0009-0004-7570-0906. E-mail: pauladegrande@uel.br.

DOI: https://doi.org/10.31417/educitec.v10.2354
centradas principalmente en discutir estos aspectos y impulsadas por el uso de tecnologías digitales en la enseñanza del idioma portugués.

**Palabras clave:** escritura colaborativa; producción textual; BNCC; pandemia.

**Introduction**

Collaborative work has played a crucial role in the survival and evolution of human species throughout history, promoting solidarity and sharing. Cooperation in activities such as hunting and protection strengthened social bonds, while agriculture required joint efforts for food production. Specialization led to the division of labor, driving societies to become more interdependent in trade, science, and innovation. In contemporary times, global collaboration facilitated by digital connectivity has become critical in addressing challenges such as climate change and pandemics, like Covid-19.

In the corporate realm, there is recognition that collaborative dynamics offer significant benefits to organizations, advancing continuous development by fostering skills considered fundamental for professional success in increasingly interconnected environments (Colen; Petelin, 2004). In the educational context, influenced by changes in understanding the learning process and the emergence of pedagogical theories such as Piagetian constructivism and Vygotskian socioconstructivism, schools have transitioned to a model more centered on student agency, gradually more engaged in practical and interactive experiences, including collaborative activities (Moran, 2018).

Moreover, the recognition of skills demanded by the 21st century, such as critical thinking, creativity, and communication, has led to understanding group work as an effective way to develop such skills (Lankshear; Knobel, 2007). Technological advancements have facilitates collaboration among students, even beyond the physical classroom environment, with online tools and joint textual editing platforms in order to expand opportunities for active and flexible group work.

It is within this context that the concept of “collaborative writing” emerges, a communicative modality that has garnered increasing interest in recent years, especially among researchers in the educational field. Understanding how this form of communication has been conceived and academically investigated was the broadest action developed under the scope of the research project from which this article
originates\textsuperscript{5}.

The initial research of the aforementioned project aimed at examining how this phenomenon had been understood and studied in the national academic community, especially from 2004 onwards (the year of publication of the taxonomy on collaborative writing proposed by Lowry, Curtis, and Lowry), encompassing publications up to 2018, the year before the study started (Ruiz \textit{et al.}, forthcoming). However, the identification of new events that generated publications – the approval of the final version of the National Common Core Curriculum (BNCC – Portuguese acronym) and the pandemic caused by the spread of SARS-CoV-2 – prompted the continuity of the research, including the period between 2019 and 2023.

The justification for this new temporal focus lies in understanding how the BNCC (Brasil, 2018) and the pandemic have affected the scientific production on collaborative writing, the object of study of the group. This understanding is crucial for discussing the impact of the legal document (viz. BNCC) on teaching practices and the transformations in language education, which result from this historical moment. After all, the document guidance for the use of “collaborative writing tools” (Brasil, 2018, p. 187, our translation) and the pandemic, a globally declared event in 2020, led to the implementation of emergency remote teaching (ERT), characterized by an escalation of teaching practices mediated by digital technologies. Hence, the following research question arose: how has this phenomenon been academically investigated? This article presents the findings of the most recent phase of the research, mapping publications on collaborative writing conducted within the context of the aforementioned project, initially considering the theoretical frameworks presented, which are introduced subsequently.

Research on collaborative writing: theoretical frameworks

The topic of “collaborative writing” (CW) extends across theoretical approaches conducted from multiple perspectives, primarily due to the possibility of anchoring studies in different aspects when investigation this language practice (viz. CW), such

\textsuperscript{5} Project “TDIC-ENALP (Portuguese acronym): Digital Information and Communication Technologies and Portuguese Language Teaching-Learning”, developed by researchers from the State University of Londrina (UEL – Portuguese acronym) and the Federal Institute of Paraná (IFPR (Portuguese acronym) – Londrina Campus), along with educators affiliated with the State Department of Education of Paraná (SEED-PR – Portuguese acronym).
as how it is developed, the resources through which it is conducted, and the situations in which it is manifested. Accordingly, this section explores the dialogue among theoretical assumptions that address these foundational aspects for categorizing publications, namely: (i) the processes of CW; (ii) the technologies for CW; and (iii) the contexts and applications of CW.

**Processes of collaborative writing**

Assuming as a starting point the taxonomy proposed by Lowry, Curtis, and Lowry (2004), CW is understood as “[...] an iterative and social process that involves a team focused on a common objective that negotiates, coordinates, and communicates during the creation of a common document” (Lowry; Curtis; Lowry, 2004, pp. 73-74). This process, previously considered a simple act of composition, encompasses a series of pre- and post-task activities, which include writing strategies, document control methods, defining roles, and modes of participant’s engagement.

Lowry, Curtis, and Lowry (2004) identify four main strategies of CW: (i) single-author writing (one member writes alone); (ii) sequential single writing (everyone writes, one after another); (iii) parallel writing (everyone writes simultaneously); and (iv) reactive writing (everyone writes, intervening in each other’s writing). The selection among these strategies is determined by variables, such as group size, time availability, task complexity, available tools, and members’ competencies. However, the authors’ analysis suggests that strategic diversity can lead to varied outcomes, some of which may enhance task effectiveness (e.g., stylistic consistency, organizational ease, better use of individual capabilities, and consensus promotion), while others may compromise team performance (e.g., biasing production towards one member’s perspective, information overload or redundancy, and lack of editorial unity).

The activities inherent to CW extend across three distinct phases, according to Lowry, Curtis, and Lowry (2004): pre-writing, task execution, and post-writing. These phases encompass planning, tool selection, goal definition, drafting, revising, editing, and final document evaluation. It is worth noting that cross-cutting activities (e.g., socialization, research, communication, negotiation, and coordination) play crucial supporting roles fundamental to the effective development of the CW process.

The authors also address document control in CW. As they do so, it is highlighted four models that define how responsibilities are distributed among
participants: (i) centralized (i.e., one member manages the entire process); (ii) relay (i.e., management passes from one member to another); (iii) independent (i.e., each member manages their part); and (iv) shared (i.e., everyone moderates the process). This distribution is critical for efficient project management and ensuring that all members contribute, based on their abilities and responsibilities.

Furthermore, roles within CW are diverse, including leader, facilitator, consultant, writer, reviewer, and editor, each with specific responsibilities. Proper allocation of these roles is vital to optimize project outcomes, it provides assurance that each participant can effectively contribute their competencies. Therefore, the CW appropriate strategy selection, coupled with clear activity definition, document control, and role distribution, emerges as a decisive factor for the success of collaborative projects. Consequently, it promotes not only efficiency but also group cohesion in achieving objectives.

Lowry, Curtis, and Lowry (2004) emphasize that modes of engagement in CW are defined by participants’ physical proximity and the synchronicity of their writings, whether they are together or apart, and whether they write simultaneously or at different times. These dynamics significantly influence “group awareness”, which is crucial for CW success. The effectiveness of these processes, in our view, depends – to some extent – on the resources mobilized in contemporary CW practices, as they may involve digital platforms, text editors, and writing applications, with specific tools highlighted, which are discussed next.

Technologies for collaborative writing

Digital tools, including Google Docs, wikis, WhatsApp, and Wattpad, have become invaluable resources for CW, as they enable real-time creation, editing, and content sharing; as a result, they serve as knowledge spaces for communities of practice (Cattafi; Metzner, 2007). On the one hand, Google Docs stands out for promoting simultaneous cooperation, because it supports digital writing workshops and collaborative editing (Bottentuit Junior; Lisbôa; Coutinho, 2011; Sharp, 2009), whereas it also affords student-centered learning through collaborative revision and feedback-based learning (Oxnevad, 2012). Wikis, on the other hand, allows multiple users to share and modify knowledge, which reflects the dynamics of CW (Wolfe, 2005). These tools promote a critical and flexible approach to writing and they are also
valuable in education due to their diversity and accessibility, facilitating collaborative development, supplementation, or information revision.

Messaging apps, particularly WhatsApp, have emerged as significant tools in promoting CW in educational settings, as they offer a dynamic alternative to traditional methods. According to Ruiz (2022), WhatsApp, despite challenges such as content management, can enrich the CW learning process when used with clear educational objectives. Integrating methodological strategies is necessary to fully harness its potential.

Additionally, Wattpad serves as a complementary resource, establishing a space for literary expression and textual collaboration. This platform facilitates publication and literary interaction because it promotes innovative educational dynamics through feedback exchange between readers and writers, as highlighted by Costa, Coelho, and Tavares (2020) and Bold (2018). Thus, both Wattpad and WhatsApp can represent important pedagogical instruments that, despite their specificities, collectively contribute to the evolution of CW teaching practices, underscoring the importance of technological adaptability in contemporary education.

However, in the educational context, it is crucial to consider critical aspects related to the use of digital tools in collaborative text production by learners. Privacy and security issues are prominent in public platforms, where there is a risk of exposing students’ personal data. Other challenges include connectivity dependence, which impacts the efficiency of these tools, and the need for effective management and supervision by teachers to address inappropriate behaviors in the online environment. Evaluating individual contributions in collaborative contexts also proves to be challenging as it requires meticulous teaching planning to ensure a balance in assessing collective and individual work.

In the next section, we explore the contexts and applications of CW and highlight the facets and potentialities of this communication modality.

**Contexts and applications of collaborative writing**

Lowry, Curtis, and Lowry (2004) explore CW applicability in various institutional contexts (e.g., industry, academia, and government) and draw attention to its relevance across different spheres of human activity. The authors emphasize CW ability to foster learning, socialization, generation of innovative ideas, emergence of
diverse perspectives, argument balance, knowledge co-production, and development of writing skills. The modality is also valued for producing high-quality texts and strengthening interpersonal bonds.

Specifically in the corporate realm, CW is pointed out by the authors due to the teamwork prevalence, with globalization and the Internet expanding collaboration possibilities. This form of writing is noted in professional interactions where sharing discoveries and negotiating meanings occur. Tasks that require creativity (e.g., scriptwriting and new project development) also benefit from CW, especially when supported by digital technologies.

Another area in which CW is widely used is the educational sphere. In such a context, it stimulates critical thinking and negotiation of ideas among students. Barroso and Coutinho (2009) indicate that practicing CW in education promotes interaction and critical reflection. Consequently, it is positioned as an effective didactic strategy for collective textual development. By means of CW, students combine knowledge, skills, and diverse perspectives in order to enrich the learning process and facilitate innovative solutions to common problems (Horton et al., 1991 cited in Ruiz, 2021). This approach not only enhances the quality of produced texts but also prepares students for future challenges because it boosts essential skills (viz. teamwork, respect for diverse opinions, and problem-solving abilities).

CW holds equivalent educational value in the academic sphere, applied both in undergraduate education across various fields and in learning academic and technical written genres, as well as collaborative scientific production that results in published research articles by scholars, which is exemplified by this article itself. This process represents a form of learning to write that may (not) incorporate digital resources for facilitation. In sum, in education, it is crucial to consider CW as a means to foster collective authorship, involving both students and teachers, with the latter acting as mediators and co-authors of written productions. Such practices encourage participants’ engagement in meaningful CW activities, particularly in academic settings (Pinheiro, 2011).

Given our primary interest in the educational context of CW use, we present the methodology of our investigation next.

Methodological journey on research mapping
Considering that this article presents a mapping of national research on collaborative writing from 2019 to 2023, this section focuses on the investigation characterization, data collection, and analytical procedures.

Following the methodological concepts proposed by Paiva (2019), the research is categorized as basic, with the purpose of generating new knowledge not immediately applied in empirical contexts. It is a theoretical and secondary study centred on reviewing existing academic literature. The approach adopted is qualitative-quantitative as it allows for interpretative analysis of statistical data. The main objective is to develop descriptive research aimed at systematically describing and evaluating the available information on the topic; hence, it is classified as bibliographic research in terms of methods or procedures used.

Furthermore, this study is a meta-research, as described by Paiva (2019), that analyzes researches on CW. This approach allows the investigation of themes, theories, and methods adopted in research, highlighting the complexity of the mapping carried out on CW.

For data collection, specific descriptors were employed in line with bibliometric principles, essential for defining key concepts to be explored, as indicated by Treinta et al. (2014). The research employed resources provided by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), specifically the Portal de Periódicos for seeking articles and the Catálogo de Teses & Dissertações for theses and dissertations.

As shown in Table 1 below, the search procedure was divided into two stages: initially focusing on the descriptor “collaborative writing” and subsequently expanding to its synonyms to ensure comprehensive and accurate capture of CW relevant publications.

<table>
<thead>
<tr>
<th>Primary search (focal point)</th>
<th>Secondary search (synonymous terms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>collaborative writing</td>
<td>shared writing / shared text production</td>
</tr>
<tr>
<td></td>
<td>collaborative composition / collaborative text production</td>
</tr>
<tr>
<td></td>
<td>joint writing / joint text production</td>
</tr>
<tr>
<td></td>
<td>cooperative writing / cooperative text production</td>
</tr>
<tr>
<td></td>
<td>group writing / group text production</td>
</tr>
<tr>
<td></td>
<td>collective writing / collective text production</td>
</tr>
</tbody>
</table>

Source: Research data (2023).
The delineation of selected publications for analysis involved a process of refining the collected data, which included: (i) reading metadata from the research reports (titles, abstracts, keywords); (ii) excluding those not adhering to the research objectives (primarily the ones not related to CW); and (iii) excluding publications that, although related to the theme, focused on foreign language teaching or originated from international sources. Table 2 below presents the volume of data reached after this refinement:

<table>
<thead>
<tr>
<th>Period</th>
<th>Type of Production</th>
<th>Article</th>
<th>Dissertation</th>
<th>Thesis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td>6</td>
<td>12</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>20</td>
<td>21</td>
<td>12</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: Research data (2023).

As indicated, a preliminary analysis reveals a slight prevalence of dissertations, with a higher concentration in the year 2019. Based on this dataset, specific criteria were defined for the analysis, which we will explain in the following sections.

Once the academic productions were surveyed, as an integral part of the analytical procedures, a categorization process began, identifying notions potentially discussed academically in relation to CW. These aspects built up semantic fields, whose grouping gave rise to specific thematic axes, as shown in Table 3:

<table>
<thead>
<tr>
<th>Semantic field</th>
<th>Thematic axis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications highlighting reflections related to sharing, co-authorship, collaboration, co-production, writing, team, group, and related notions.</td>
<td>Axis 1: Processes of collaborative writing</td>
</tr>
<tr>
<td>Publications highlighting reflections related to digital platforms, technology, text editors, applications, wiki, Google Docs, and related notions.</td>
<td>Axis 2: Technologies and tools for collaborative writing</td>
</tr>
</tbody>
</table>
Publications highlighting reflections related to teaching, learning, teaching-learning, education, work, research, and related notions.

Axis 3: Contexts and applications of collaborative writing

Source: Research data (2023).

With the three analytical axes defined, the metadata of the research reports were revisited and explored once again to facilitate categorical distribution. In a process of double-checking, with validation of the categorization carried out collaboratively by us, the researchers, we arrived at the final configuration of publications eligible for analysis, as presented in Table 4 below:

<table>
<thead>
<tr>
<th>Thematic axis</th>
<th>Type of Production</th>
<th>Article</th>
<th>Dissertation</th>
<th>Thesis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>20</td>
<td>21</td>
<td>12</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: Research data (2023).

The analysis presented in the next section is part of the examination of these research reports, and it reveals the essence of CW recent national production on the topic.

**Research on collaborative writing from 2019 to 2023**

Based on the mapping conducted, grounded in the discussed theoretical assumptions, and the delineated methodological approach, this section presents the fundamental aspects of three texts considered representative of each axis — one article, one dissertation, and one thesis. These selections are based on their strong adherence to the semantic fields defined in the search process (as per Table 3).

**Investigations on collaborative writing processes**

In examining Axis 1 of the mapping, focusing on processes for carrying out CW, investigations that stand out are those focused on joint writing activities and interaction...
among participants. Three of them considered representatives of this grouping are: the article by Paiva (2020), the dissertation by Prado (2019), and the thesis by Moreira (2020).

In his investigation, Paiva (2020) aims at verifying, considering concepts from Textual Linguistics, whether and how the discursive topic is maintained in collaborative production of reviews by vocational high school students. In doing so, drawing on reflections from previous studies (Lowry; Curtis; Lowry, 2004), the author understands CW as an activity that articulates specific characteristics, for instance: “consensus building,” “joint authorship,” and “collaboration among partners throughout the writing process” (Paiva, 2020, p. 16, our translation). Thus, according to him, it is possible to evaluate the CW practice from a socio-interactional perspective, in dialogue with Bakhtinian assumptions linked to the dialogical nature of social practices mediated by language.

Paiva’s (2020) research mobilizes data resulting from the implementation of a CW project with high school students, through which movies and books reviews are produced using wiki digital tool. The author’s analyses calls attention to the challenges for participants in the CW task to construct a text in which marks of articulation, continuity, and textual progression are identified. In this regard, according to him, applying individual authorship processes in a collaborative practice would be a mistake. In order to this mistake not to happen, it requires extra attention by the participant:

He needs (i) to identify the topic and topic segments of the text, which was initiated by other members; (ii) to think about how his contributions would fit into the ongoing text [...] and (iii) to create the articulation between the utterances of his contributions and the utterances of the group partners, as well as the articulation between the segments of the text (Paiva, 2020, p. 23, our translation).

Prado (2019), on the other hand, investigates, drawing on Genetic Criticism theoretical framework, how “joint writing” (i.e., “collaborative writing”) occurs in the process of constructing reviews by university students. The author’s research emphasis lies primarily in the negotiation strategies of participants. Furthermore, the aim is at verifying, in the interaction for CW practice, the degree of influence of each one in the choices for the text or even the greater prominence of one subject over another. For this purpose, based on transcriptions of interactional paths and different versions of produced texts, the performances of two pairs of students are compared, one from the Computer Science course and another from the Portuguese Language
undergraduate program. For analytical purposes, the following aspects were observed: text length in relation to production time, prior knowledge regarding the genre, and negotiation indexes, among others.

The contrast established by Prado (2019) among the analyzed subjects allows verifying that negotiation directly affects the outcome of CW practice. According to the author, even if one participant presents a relatively more dominant attitude (typical of a leader), as evident in the interaction of Literature students, it is the negotiated contribution between the parties that allows the joint writing. In the specific case of the analyzed pairs, the findings indicate that “there was intense responsive activity”, allowing the perception that “the subjects guided the entire enunciation, influencing and being influenced in their choices” (Prado, 2019, p. 141, our translation).

Finally, in Moreira’s study (2020), the objective includes understanding, in the interaction among high school students, the collaborative construction process of texts using the Google Docs digital tool. Departing from a theoretical framework linked to the transformation of writing practices due to digital technologies development, which consequently led to the need for new multiliteracies, the author highlights CW processes as a means for developing (multi)authorship, which is in line with assumptions BNCC (Brasil, 2018) assumptions.

Based on data collected through access to the “version history” feature available in the Google Docs tool, the researcher evaluates some aspects of collaboration, namely: (i) type of collaborative process (functions of team members, document control forms, and writing strategies); (ii) collaborative resources used (insertion of comments and chat usage); and (iii) type of text editing operation (deletion, insertion, replacement, and segment shifting). Moreira’s (2020) analyses thus point to the prominence of asynchronous productions, in a centralized manner (with definition of a leader), with greater recurrence of comments for interaction, and with higher application of addition and substitution as editing strategies.

As Moreira (2020, p. 93) concludes, “[...] collaborative writing depends on many conditions, including (and especially) technological ones” (our translation). Thus, it is essential to verify productions that encompass CW with emphasis on the technological/digital resources mobilized for its implementation, as shown in the following section.
Investigations on collaborative writing technologies

The analysis of scientific production on CW and technologies, in Axis 2, draws attention to activities of textual production on digital platforms and tools. These studies emphasize the integration of such technologies in collective writing processes, addressing pedagogical and sociocultural implications. Three publications represent this spectrum: the article by Pirezan and Castela (2020); the dissertation by Rosa (2021); and the thesis by Silva (2022).

Pirezan and Castela’s article (2020) evaluates the effectiveness of Google Docs in fostering collaboration among high school students in the process of textual production. By emphasizing how CW can enhance the production of the “online comment” discourse genre, the authors find out that this practice stimulates both idea connection and mutual learning. Initially, a reactive writing strategy was implemented, as defined by Lowry, Curtis, and Lowry (2004), in which students wrote simultaneously, responding to edits and changes made by peers. Whereas rewriting the text, another strategy was adopted, that is, the sequential one (Lowry; Curtis; Lowry, 2004), characterized by a dynamic in which one group member started writing the text, subsequently receiving contributions by others.

Collaborative activities occurred synchronously and asynchronously, mainly at a distance. Students played roles as writers, editors, and leaders (Lowry; Curtis; Lowry, 2004), with active participation from all, evidenced by the version history on the platform. Productions aligned with genre characteristics, demonstrating the effective incorporation of Information and Communication Digital Technologies (ICTs) by students (e.g., images, hyperlinks, and videos). The practice proved that CW through Google Docs promotes mutual learning, individual contributions, and collective knowledge construction. Furthermore, it is evident that multiliteracies, coupled with collaborative writing practices, represent a beneficial potential for learning textual elaboration, although significant obstacles need to be overcome. Some of them are limited internet access, access to technological devices, use of applications external to the school environment, challenges inherent in organizing, and effectively participating in group activities by learners.

Rosa’s dissertation (2021) emphasizes the development of a pedagogical project based on the use of the wiki platform. Aimed at 9th-grade students in Middle School, the project’s goal was to employ the wiki as an innovative resource to enhance...
students’ reading and writing skills as a way to promote both digital literacy and multiliteracies in order to integrate digital technologies into the educational process. The research points up the wiki relevance as a dynamic and interactive tool in text creation and edition, stimulating an environment of active and participatory learning.

The study also underlines the need for careful planning in assigning explicit roles to students, to ensure CW success and digital communication effectiveness. In sum, it demonstrates that the use of the wiki platform in the educational context can inspire teachers to adopt more interactive and collaborative teaching methods, significantly contributing to the development of students’ digital and writing skills, as well as promoting a more meaningful and engaging learning experience.

Regarding Silva’s thesis (2022), the main objective focuses on investigating the multireferential elements in fictional narratives created by young people on Wattpad online platform. The study seeks to understand how these digital spaces have established themselves as collaborative environments in the context of cyberculture, emerging as relevant for interaction among youth. Using a qualitative and netnographic research methodology, based on the epistemological current of Media Ecology, the methodological path includes the selection of online fictional narratives, with a particular focus on the fanfic genre.

The research reveals that young people are engaged in creating new forms of textual production and consuming fictional stories in the digital medium, characterized by the incorporation of multireferential elements, connectivism, transmedia intertextuality, and digital literacies. These practices are assimilated as intermodal, fostering an environment conducive to collaboration, meaning-making, and discussion of themes involving social markers of difference. The investigation contributes significantly to understanding how collaborative digital narratives can generate new knowledge, encourage critical debate, and expand understanding of various topics.

Moreover, the research foregrounds the importance of continuing to investigate, reflect upon, and debate practices of reading and writing potentiated by ICTs. The results provide a solid foundation for understanding the relationship between youth and digital reading and writing practices, used to challenge, disrupt, and transform perspectives in an increasingly interconnected world. The Wattpad platform, acting as a vast online repository of stories, represents a fertile space for such interactions and creations, contributing through education to enriching youth cultural repertoires in
contemporary times. The following discussions give prominence to these contexts of CW application.

**Investigations on collaborative writing contexts and applications**

Analysis of CW Scientific Production in Axis 3 highlights a focus on teaching and learning situations. A single study explores CW in creative work, specifically in writing series scripts. The others concentrate on the following contexts: teacher education, Higher Education, and Elementary, Middle, and High School Education. Aspects such as pedagogical mediation, use of technologies, and active methodologies in CW, as well as practices in student dyads in literacy phases, are examined. Three publications stand out: the article by Costa Filho and Silva (2022); the dissertation by Falcão (2021); and the thesis by Cavalcante (2022).

Costa Filho and Silva’s study (2022), for example, analyzes the impact of Covid-19 pandemic on higher education and the use of digital technologies for text production and correction in a Literature course. The authors use semi-structured interviews with professors and students to investigate adaptations to literacy practices during remote teaching, underlining narrative research as an approach to understanding participants’ experiences.

The authors identify that the main (re)contextualizations of literacy practices, due to remote teaching, were linked to mediation by digital technologies, directly impacting collaborative textual production by students. Writing planning and execution adapted to these new means of communication. Although participants’ perceptions indicated significant learning and satisfactory results in textual productions, difficulties emerged related to the absence of face-to-face contact and the formation of interpersonal bonds in the educational environment.

The authors point out that CW experience, the use of digital platforms, and the adoption of innovative pedagogical strategies (e.g., online text correction) were valued elements by teachers and students. Such practices proved to be effective in maintaining engagement with writing activities, considering both the institutional context and the challenging socio-historical period, revealing the adaptation capability and commitment of those involved in the educational process under atypical circumstances.
Falcão (2021) focuses on teaching digital culture and the use of media as advocated by the BNCC (Brasil, 2018) with the aim at developing activities to structure transmedia narratives in Portuguese Language Education. This initiative seeks to educate critical citizens through practical application with 9th-grade students, analyzing their participation in narrative creation. Anchored in the New London Group’s Multiliteracies Pedagogy (1996), the methodology adopted is participatory action research. Considering the prevalence of digital media among students and the expansion of their functions during the Covid-19 pandemic, Falcão (2021) points up the importance of integrating new technologies (e.g., smartphones) with more traditional tools to encourage the development of language skills and students’ critical reflection on their realities.

Falcão (2021) addresses transmedia narrative, which is defined by Jenkins (2009) as a story distributed across multiple media platforms in which each part contributes uniquely to the whole. His pedagogical proposal includes diversified activities: readings of stories, creation of mini-stories, collective elaboration of mind maps, audiovisual scripts, production and editing of videos, as well as comics. The use of WhatsApp facilitated interactions outside the classroom. Although not explicitly referring to CW, Falcão (2021) emphasizes collaborative work as a joint effort towards a common goal.

The results indicate that the implementation of transmedia narratives meets BNCC (Brasil, 2018) objectives, promoting multiliteracy skills and enriching the teaching of Portuguese Language through reader and producer practices of multimodal texts. The integration with narrative texts and digital media, according to the author, not only increased students’ motivation but also favored the expression of their authorial voices, whereas also highlighted the pedagogical potential of this approach in fostering students’ critical and creative education.

Cavalcante (2022) investigates collaborative textual production in a discipline of the technical course in Electrotechnics, implemented during remote teaching. Using collaborative action research as methodology, the investigation is based on studies on textual types and sequences, textual/discursive genres, and CW. The CW was carried out through screen sharing between the researcher and dyads of 4th-year students, with the didactic experience considered positive. Students produced texts with technical descriptions and equipment operation processes, meeting the demands of the course.
During the analysis of interactions in CW, Cavalcante (2022) identifies the following categories: anticipation, revision, erasure, and metalinguistic awareness, among other aspects. The research reveals that CW not only favors textual production in the technical area but also enriches the learning process, which promotes effective sharing of knowledge and writing skills among participants.

From this analytical process, we present our concluding reflections in the following section.

**Final remarks**

Understanding how the phenomenon of CW has been understood and studied in the contemporary national academic environment goes beyond the scope of this study, limited to selected databases and time spans. However, the analyses conducted allow us to identify CW research trends, focusing on three main aspects: processes, technologies, and applications. In our understanding, these elements interact, focusing attention on the complexity of collaborative text production, both for scientific research and teaching methodology.

Simultaneously, the categorized research offers some considerations regarding the possible impacts that BNCC (Brasil, 2018) and Covid-19 pandemic may have had on contemporary practices of teaching and learning Portuguese. Two of these impacts seem to stand out, namely: the intensification of digital technology use and the increase in CW practices in school textual production.

It is worth noting that long before the outbreak of the pandemic, digital technology was already transforming education, driven by studies connected to social changes brought about by different web generations, pointing out its benefits and challenges. It is within this scenario that the BNCC (Brasil, 2018) emerges, proposing curriculum guidelines updates. At its core, the document already advocated, prior to the pandemic, for the use of digital technology in school education, advocating for the “necessary assumption of multiliteracies” (Brasil, 2018, p. 487, our translation) and new literacies.

The relationships between Digital Information and Communication Technologies and education were further intensified by the pandemic event, which drove disruptive changes in patterns long embedded in our daily lives, allowing CW produced with the mediation of digital tools to emerge more vigorously in educational
practices. The publications gathered under Axis 2 attest to this commonplace technological integration in educational practices in which CW is present, making a point of the importance of deeper understanding of the relationship between CW and technology.

Furthermore, it is in the wake of this exacerbated growth in the use of digital technology in education that an increase in collaborative textual production practices in school settings has emerged; symptomatic of this fact are the research reports affiliated with Axis 3 as described in the analyses.

This increase in collaborative school writing practices, notably since remote teaching began, can also be inferred from the interest in the research reports gathered under Axis 1, which investigate the procedural nature of this linguistic form. An encouraging fact is that such interest reveals important issues for the dynamics of pedagogical work with CW.

Although a significant period has passed since the promulgation of BNCC (Brasil, 2018) and the experience of the Covid-19 pandemic, in the realm of education, there is always room to cultivate pedagogical patience regarding the well-known gap between desired and achievable changes. Therefore, much remains to be built in terms of academic research in the CW modality. The challenge now is to find paths for investigations that contribute not only to students’ learning to work and write collaboratively, but especially for teachers to act as mediators in the learning of collaborative and socially meaningful writing.

References


