

READING AND WRITING IN PAIRS

A peer tutoring programme to improve writing skills in secondary education

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Abstract

Learning effective writing skills is a priority in secondary education due to its crucial role in academic success and lifelong development. This study evaluated the effectiveness of *Reading and Writing in Pairs*; a peer tutoring programme aimed at improving writing skills. Using a quasi-experimental pretest-posttest design, 90 secondary students were divided into an intervention group (45) and a comparison group (45). Both groups completed pre-post writing assessments and the Self-Efficacy for Writing Scale, while the intervention group also participated in a final learning perceptions survey. The intervention focused on the narrative genre, with peer tutoring sessions over six weeks (15 hours), including explicit genre and writing instruction. Results showed the intervention group outperformed the comparison group in writing performance ($.001 < p \leq .029$; $.05 \leq \eta^2_p \leq .14$), except for spelling ($p = .875$; $\eta^2_p = .00$), with no significant differences in writing self-efficacy ($.137 \leq p \leq .324$; $.01 \leq \eta^2_p \leq .03$). Students reported learning benefits, regardless of their role as tutor or tutee, and faced minimal difficulties. These findings suggest that the programme is effective for enhancing writing proficiency but may require more time to impact self-writing beliefs. Future interventions should emphasise tutor training and ensure active participation in tutor-tutee dynamics.

Keywords: Writing skills, peer tutoring, writing self-efficacy, secondary education, learning by teaching

1. INTRODUCTION

The development of effective writing skills during secondary education is crucial for academic success and lifelong development (UNESCO, 2017). Writing enhances students' comprehension of subject matter and significantly influences their academic grades, given the prevalent use of written assessments (Bangert-Drowns et al., 2004; Graham, 2006). Moreover, proficiency in writing extends beyond academic contexts, impacting an individual's civic engagement and participation in the broader community.

Despite the acknowledged importance of writing as a fundamental skill, global concerns persist regarding students' writing skills (De Abreu Malpique et al., 2023; Graham & Perin, 2007; Graham et al., 2014; Graham et al., 2023). For instance, recent basic skills tests in Catalonia revealed that 58.4 % of 14-15-year-old students exhibit low or medium-low levels of writing proficiency (Consell Superior d'Avaluació del Sistema Educatiu, 2024). This alarming trend indicates that many students fail to achieve adequate writing skills by the end of compulsory education.

From a sociocultural constructivist perspective (Bazerman, 2003; Vanderburg, 2006; Wigglesworth & Storch, 2012) and following the revised writer(s)-within-community (WWC) model, writing is conceived as a multifaceted, socially situated, and goal-oriented activity shaped by the communities in which writers participate. This view highlights how writers mobilise cognitive resources—such as genre and linguistic knowledge and planning or revision strategies—together with motivational factors, including self-efficacy, goals, and writer identity, all embedded within authentic social practices (Bazerman, 2003; Graham, 2018). Writing therefore entails activating different forms of knowledge (e.g., subject matter, language code, discursive genres, communicative situations) and deploying strategies to regulate the process, such as recursive planning, textualisation, revision, and the management of motivation and authorial voice (Castelló et al., 2011; Graham, 2018). Within this process, writing self-efficacy—beliefs about one's confidence in the ability to write (Zimmerman & Bandura, 1994)—plays a key role (e.g., Klassen, 2002; Pajares, 2003; Zumbunn et al., 2020). However, regulating these cognitive and emotional demands can overwhelm novice writers and impede their ability to process information simultaneously (Cutler & Graham, 2008; De Smedt et al., 2016).

To address this challenge, social interaction—particularly peer learning—has proven to be a powerful tool for supporting writing, especially for novice writers. Meta-analyses have found that peer learning—where students work together to plan, draft, edit, and/or revise their compositions, as well as engage in peer tutoring—has a significant and positive impact on writing quality (Graham & Harris, 2018; Graham et al., 2023; Graham & Perin, 2007). This consistent finding across multiple studies underscores the value of interventions that incorporate peer-assisted learning.

Various practices can include peer learning in writing. In many interventions, such as peer review, peer learning occurs only during the revision of the individual text

(e.g., Boscolo & Ascorti, 2004; Corcelles-Seuba et al., 2017; Topping et al., 2012). In contrast, some interventions incorporate collaboration throughout the writing process. In collaborative writing, two or more students must cooperate to achieve the shared goal of producing a joint text. They need to discuss and agree on the content and form of the text and share decisions and responsibilities in the processes of planning, textualisation, and revision (Allen et al., 1987; Corcelles-Seuba & Castelló, 2015; Lowry et al., 2004; Saunders, 1989). Unlike individual writing, collaborative writing allows writers to externalise and discuss their ideas, requiring the co-construction of knowledge to jointly reformulate them. Therefore, collaborative writing becomes a valuable opportunity for peer learning. Peer discussions can encourage critical thinking and reflection about writing, providing support and immediate feedback to enhance writing (Corcelles-Seuba & Castelló, 2015). Furthermore, peers can serve as an authentic audience, increasing students' motivation to write (De Smedt et al., 2018; Hyland, 2015; Yarrow & Topping, 2001). Nonetheless, collaborative writing is also one of the most challenging activities because it demands a high level of commitment, conflict resolution to integrate diverse perspectives, coordination and teamwork abilities, collective decision-making, and effective communication from all co-authors (Allen et al., 1987; Corcelles-Seuba & Castelló, 2015; Lowry et al., 2004; Saunders, 1989).

The majority of collaborative writing interventions typically entail symmetrical interactions among participants, where individuals collaborate on writing tasks (e.g., Corcelles-Seuba & Castelló, 2015; Ferguson-Patrick, 2007; Stevens, 2003; Stevens & Slavin, 1995; Storch, 2005). However, a less common approach involves peer tutoring in collaborative writing, characterised by a highly structured asymmetrical interaction between students to scaffold the process of collaborative writing (Duran, 2010; Nixon & Topping, 2001; Sutherland & Topping, 1995; Topping et al., 2000; Yarrow & Topping, 2001). The intervention described in this study adopts the latter approach—peer tutoring for writing.

1.1 Peer tutoring in collaborative writing

Peer tutoring is a peer learning method wherein pairs of students with a shared goal engage in structured asymmetrical interaction—where one acts as the tutor and the other acts as the tutee—to enhance learning (Thurston et al., 2021; Topping et al., 2016). Previous research has demonstrated benefits for tutors and tutees (Cohen et al., 1982; Flores & Duran, 2013; 2016; Leung, 2015; Thurston et al., 2021; Topping, 2005). Peer tutoring may promote active learning and students' motivation to deeply engage with the material and take responsibility for their role. Tutees benefit from the personal scaffolding provided by their tutors within the zone of proximal development (Vygotsky, 1978), while tutors enhance their understanding by teaching their tutees, creating instructional materials, explaining concepts, and addressing questions raised (Duran, 2016, 2017; Ribosa & Duran, 2022). Peer tutoring requires communication and teamwork skills and can boost students'

confidence in their abilities. It also provides valuable social and emotional support by fostering positive student relationships. Tutors serve as mentors and role models, offering encouragement and guidance to their peers, and tutees benefit from a supportive learning environment where they feel comfortable asking questions and seeking help (Topping, 2005). Tutoring interactions can occur between students of the same or different ages, and the roles can be fixed or reciprocal (Thurston et al., 2021; Topping et al., 2016).

In the case of writing, the *Paired Writing* method (Topping et al., 2000; Yarrow & Topping, 2001) is a peer tutoring proposal that has been considerably investigated. It incorporates metacognitive prompting and scaffolding for the interactive process of collaborative writing. Based on a diagram, the tutor-tutee interaction is structured in the six phases of the writing process to learn cognitive and metacognitive strategies related to writing, such as generating ideas, drafting, reading, editing, producing an improved version, and evaluating. In each stage of the process, there is a clear division of tasks for each role to modulate information processing, promote peer scaffolding and motivation to write, and reduce writing anxiety (Nixon & Topping, 2001; Sutherland & Topping, 1999; Topping, 1995; Topping et al., 2000; Yarrow & Topping, 2001). Grounded in *Paired Writing*, the programme *Llegim i Escrivim en Parella* (in English, *Reading and Writing in Pairs*) emerged, which is the focus of the present study.

1.2 *Explicit writing instruction*

Research recommends combining collaborative writing practices with explicit instruction in genre-specific knowledge and writing strategies to enhance their effectiveness (De Smedt et al., 2020; De Smedt & Van Keer, 2014, 2018, 2019; Graham, 2020; Graham et al., 2023; Graham & Perin, 2007). Explicit writing instruction refers to a structured and systematic approach that guides students through the writing process (breaking it down in steps) and the development of genre-specific knowledge (through modelling and analysing examples). This process-oriented method fosters metacognitive reflection, reduces cognitive load, and accelerates learning by providing clear declarative and procedural knowledge alongside guided practice, ultimately empowering students to become independent writers (Graham & Perin, 2007; Hughes et al. 2017; Rosenshine, 2009).

1.3 *Aims of the study*

Peer tutoring effectiveness has been widely demonstrated (e.g., Bowman-Perrott et al., 2013; Cohen et al., 1982; Leung, 2015). Specifically, research provides robust evidence that peer tutoring is effective in improving reading comprehension. For instance, this is shown in the study by Flores et al. (2024), which analysed 8,128 students (aged 6–12) from 58 schools that participated in the programme between 2012 and 2022. Similarly, the studies by Flores and Duran (2013, 2016) offer evidence

of improvements in reading comprehension and self-concept across different roles and formats—reciprocal and fixed roles, as well as same-age and cross-age pairings.

Despite the effectiveness of peer tutoring in reading comprehension, few interventions have used peer tutoring combined with explicit writing instruction to improve writing skills. Research on *Paired Writing* shows evidence of its effectiveness with positive effects on the quality of writing and attitudes towards writing in both formats—fixed and reciprocal—compared to control groups that wrote the text individually (Nixon & Topping, 2001; Sutherland & Topping, 1999; Yarrow & Topping, 2001). However, those interventions have primarily focused on primary education settings rather than secondary students and did not incorporate reading into the process. Duran and Monereo (2008) used peer tutoring for reading comprehension and writing in secondary education, but no comparison group was included. In addition to improvements in writing expression, the results revealed an increase in students' self-concept as writers when they had the opportunity to act as tutors. Nonetheless, up to date, no research was found on peer tutoring in writing has collected students' perceptions about their roles and evaluated, using a comparison group, the effectiveness of combining reading and writing in pairs with explicit writing instruction to enhance writing performance and self-efficacy in secondary students. Therefore, the overarching aim of this study is to evaluate the effectiveness of the *Reading and Writing in Pairs* peer tutoring programme in secondary education within the framework of the writer(s)-within-community (WWC) model. The research questions are the following:

- 1) To what extent does the programme improve students' writing performance and writing self-efficacy compared to a comparison group following traditional instruction?
- 2) How do students perceive their learning when participating in the programme, both in the role of tutor and in the role of tutee?

In this study, the WWC model informs both the design and the rationale of the *Reading and Writing in Pairs* programme: (a) by emphasising writing as a collaborative and socially situated activity supported by peer interaction, and (b) by integrating explicit instruction in genre and writing strategies with authentic communicative purposes (e.g., preparing texts for a real audience). Through this alignment, peer tutoring becomes a mechanism through which students participate in a writing community, take on meaningful roles, and develop the cognitive and motivational resources described in the WWC framework.

2. METHOD

2.1 *Reading and writing in pairs: A peer tutoring programme*

Reading and Writing in Pairs proposes a structured guide with a sequence of tasks for the tutor and tutee to facilitate the processes of reading comprehension and writing (Corcelles-Seuba et al., 2023; Duran et al., 2018b) (see Table 1). The

programme includes a brief text to read, before each writing task, of the same genre to enhance both processes (see Appendix A as an example of reading and writing activity). Research shows that reading and writing are closely connected and reciprocally supportive, as both rely on shared cognitive and linguistic skills to create meaning. Reading introduces ideas and genre features that support writing, while writing about what is read deepens understanding and engagement with the text (Philippakos & Graham, 2023; Philippakos et al., 2023; Shanahan, 2019; Graham et al., 2018; Graham, 2020). In the programme, the reading provides the context and objective for writing, while also offering a model to analyse genre characteristics to support writing. The reading process is organised into three stages based on the structured interaction between the tutor and the tutee (Table 1). Firstly, the tutor asks questions before reading to activate the tutee's prior knowledge and formulate hypotheses. Secondly, the reading-aloud activities take place: tutor's modelled reading, joint reading, and tutee's reading monitored by the tutor using the pause-prompt-praise technique (Wheldall & Colmar, 1990; Duran et al., 2018b). Thirdly, after reading, the tutor asks literal, inferential, and evaluative questions to improve reading and genre comprehension. Finally, with a deep understanding of the text, expressive reading by the tutee takes place. After the reading task, the writing process begins and is organised into three stages. First, the tutor guides the tutee in planning and drafting the text. Second, text revision takes place. Unlike the previously described *Paired Writing* method (Nixon & Topping, 2001; Sutherland & Topping, 1999; Topping, 1995; Topping et al., 2000; Yarrow & Topping, 2001), the programme *Reading and Writing in Pairs* extends the revision stage by requiring tutors to individually revise their joint draft, using a previously negotiated checklist for writing assessment quality, named the Writing Assessment Checklist (WAC) (Appendix B). The checklist allows tutors to identify text limitations and to prepare two activities for their tutees to improve the text (Corcelles-Seuba et al., 2023). Three possible activities are suggested: thinking about different alternatives to a specific word or sentence, using the pause-prompt-praise technique to correct mistakes (Wheldall & Colmar, 1990), and using writing resources (e.g., a thesaurus). Thirdly, the tutor teaches these activities to their tutee. The programme aims to enhance tutors' learning and motivation by revising the text and acting as a real teacher who proposes teaching activities to their tutee.

The overall structured process for each reading and writing activity involves two sessions (1 hour each) of tutor-tutee interaction and one intermediate session (30 minutes) for text revision by the tutor (see Table 1).

Table 1. Programme structure

1st session: Tutor-tutee interaction to write a draft (1h)	
Tutor Role	Tutee Role
READING PROCESS	
Ask prior knowledge questions	Answer prior knowledge questions
Read aloud as a model	Listen to the tutor reading aloud
Joint reading	Joint reading
Pause-prompt-praise	Read aloud
Ask comprehension questions	Answer comprehension questions
Listen to tutee's expressive reading	Expressive reading
WRITING PROCESS	
Tutor Role	Tutee Role
1. PLANNING	
Ask questions about the title, introduction, conflict and conclusion of the story	Propose ideas
Write ideas following the genre structure	
Praise	
2. DRAFTING	
Detect errors and scaffold genre, coherence, cohesion, vocabulary, grammar and spelling using the WAC	Write the first draft of the story
Praise	
3. EXPRESSIVE READING	
Listen	Read aloud
Read aloud	Listen
4. REVISING	
Ask questions using WAC	Answer

Intermediate session: Tutor draft revision (30 min)

Tutor Role	Tutee Role
Individually assess the draft with WAC Propose two activities for improvement based on specific limitations of the text	Work on a different task assigned by the teacher

2nd session: Tutor-tutee interaction for revision (1 h)

Tutor Role	Tutee Role
5. EXPRESSIVE READING	
Listen	Read aloud
6. REVISING: Activities to improve the text	
Explain the limitations of the text through WAC and teach Activity 1 and 2 to improve the text	Do activities to improve the text
7. EXPRESSIVE READING	
Read Listen and revise using WAC	Listen and revise using WAC Read

The *Reading and Writing in Pairs* programme integrates both collaborative writing and explicit instruction in genre and writing strategies from the outset and throughout its implementation, as are explored in detail in the following sections. This combination aims to strengthen writers' skills, promote their autonomy, and facilitate the creation of meaningful connections between reading and writing, while fostering peer learning.

2.1.1 *Specific-genre instruction: Narrative genre*

Genres are forms of language use that are socially recognised by a community and relatively stable, each with a communicative purpose, structure and specific linguistic characteristics (Bazerman, 2003; Chapman, 1999; Hyland, 2015). According to the WWC model (Graham, 2018), explicit genre instruction is a key component, providing students with an awareness of the text's purpose, content, and structure (Graham & Perin, 2007). In the present study, we selected the narrative genre. Students were asked to write a short story of 70 to 120 words that comprises three main elements: introduction, conflict, and resolution (Nelles, 2012). Short stories are

an outstanding narrative genre for teaching writing since their short nature allows the quality of the writing to be elaborated and reviewed in a few sessions.

The genre-based approach to writing instruction in the Programme was based on *model instruction* (Abbuhl, 2011; Camps & Fontich, 2021; Macbeth, 2010). At the beginning of the programme, genre characteristics and examples of short stories were presented and analysed together with the teacher and students concerning their genre structure and rhetorical features, coherence, cohesion, vocabulary, grammar, and spelling. This analysis serves to negotiate and agree on the checklist to assess future students' writing quality (see Appendix A). This approach is useful for reducing anxiety linked to writing a new genre (e.g., Macbeth, 2010; Abbuhl, 2011), sharing writing expectations, and enhancing students' awareness of rhetorical conventions and overall writing quality. Throughout the programme, participants were instructed in genre by engaging with short stories as prewriting reading material and analysing their features to foster a connection between reading and writing tasks (Graham, 2020; Philippakos & Graham, 2023; Philippakos et al., 2023; Shanahan, 2019).

2.1.2 *Writing strategies instruction: Tutor and tutee roles*

Explicitly teaching writing strategies is one of the most effective approaches for reducing cognitive load and achieving better writing outcomes (Graham, 2018; Graham & Perin, 2007). Students need to learn how, when, and why to plan, write, and revise in order to develop effective writing skills (Flower & Hayes, 1981; Graham, 2018). Throughout the programme, students apply and internalise writing strategies by performing the roles of tutor and tutee in each reading and writing task (Appendix A). A key emphasis of the programme is on iteratively revising the text using the negotiated Writing Assessment Checklist (WAC) (Appendix B), as this is recognised as a crucial aspect of proficient writing (Graham & Harris, 2018).

2.2 *Participants and design*

A quasi-experimental pretest-posttest comparison group design was used. One school with three Catalan language teachers and their students participated in the study. Each teacher taught two classes (i.e., two groups) of second-grade compulsory secondary education students (aged 13–14). The educational system in Spain is organised in Early Childhood Education (0–6 years), Primary Education (6–12 years), Compulsory Secondary Education (12–16 years), Baccalaureate or Vocational Training (16–18 years), and Higher Education. In Catalonia, the educational system follows this model but includes particularities derived from its competencies in education and the use of Catalan as the main vehicular language, while ensuring the learning of Spanish and a foreign language (usually English).

The two classes of each teacher were randomly assigned to the intervention group (i.e., performing the *Reading and Writing in Pairs* programme in the Catalan

language class) or the comparison group (i.e., performing the ordinary classes of Catalan language following textbook activities that involve individual writing). Thus, each teacher taught one class belonging to the intervention group and one class belonging to the comparison group. A total of 113 students participated, but complete pretest-posttest data were collected from 90 students: 45 from the intervention group (24 girls and 21 boys) and 45 from the comparison group (22 girls and 23 boys).

The school was part of the Network of Schools within the *Reading and Writing in Pairs Programme*. Teachers participated in a training course provided by the Research Group on Peer Learning (GRAI, by its acronym in Catalan). The training consisted of three in-person sessions of three-hour (one per trimester), focusing on 1) programme planning, 2) supervision during its implementation, and 3) evaluation and sharing of experiences with other teachers involved in the programme. Additionally, the training included virtual follow-up and both independent and supervised activities, with the implementation of the programme as the main focus.

At the participating school, the first author and a research assistant maintained weekly contact with the three teachers to guide the programme's implementation, address questions, and ensure adherence to the intervention protocol (i.e., treatment fidelity). Researchers observed classes and collected qualitative data. In the weekly meetings, researchers and teachers also tracked the comparison group—which was following the textbook activities and the individual writing tasks—by discussing their progress regarding the planned writing sessions.

2.3 Intervention and materials

The intervention was carried out for 6 weeks (15 hours) in the second term of the academic year (Table 2). Before starting the programme, teachers participated in a 6-hour training course to learn how to implement the *Reading and Writing in Pairs* programme.

Seven activity sheets (ASs) were used as the material to structure pair interaction during reading and genre comprehension (AS1 to AS4) and for the whole task of *Reading and Writing in Pairs* (AS5 to AS7). The programme focused on the narrative genre (short stories ranging from 70 to 120 words). The topics of the stories were open-ended, but students were required to fulfil the writing aim outlined in the activity sheet (see Appendix A). This genre is commonly included in the secondary education curriculum in Catalonia and Spain, and many high schools regularly incorporate it into their language classes.

Students used computers to write their stories, and they were allowed to use online spelling checkers only during the intervention (not on the pretest-posttest).

Table 2. *Intervention structure*

<i>Week</i>	<i>Materials</i>
	Pretest (writing performance and self-efficacy for writing)
<i>W1</i>	Activity sheet 1: Training students in peer tutoring roles and genre characteristics (1 h) Activity sheet 2: Training students in genre-based knowledge: Analysis of 3 examples of short stories (0.5 h) Negotiation WAC: Analysis of good and bad stories (1 h)
<i>W2</i>	Activity Sheet 3: Reading comprehension and genre analysis (1 h) Training tutors in preparing activities for the tutee (0.5 h) Activity Sheet 4: Reading comprehension and genre analysis (1 h)
<i>W3</i>	Activity Sheet 5: Reading and writing the first story (2.5 h)
<i>W4</i>	Activity Sheet 6: Reading and writing the second story (2.5 h)
<i>W5</i>	Activity Sheet 7: Reading and writing the third story (2.5 h)
<i>W6</i>	Selection and improvement of one of the three stories to be read aloud on the local radio (3 h) Reading the selected stories aloud on the local radio. Posttest (writing performance and self-efficacy for writing) + students' perception of learning survey

2.3.1 *Writing test*

As a pretest and posttest, students were asked to write a short story of 70–120 words before and after the intervention. They were provided with the following definition: “In a short story a narrative is told with the essential elements. Like a tale, it must have an introduction, a conflict, and a resolution. An appealing title should be provided”.

2.3.2 *Writing assessment checklist (WAC)*

An assessment checklist for the narrative genre was developed by adapting the instrument originally proposed by Calaforra-Faubel (2018). The newly developed instrument comprises six dimensions, with 20 binary items: narrative genre (7 items), coherence (3 items), cohesion (3 items), vocabulary (2 items), grammar (3 items), and spelling (2 items) (Appendix B). Initially, the checklist was validated through expert consensus involving three teachers and two writing researchers.

Subsequently, interrater agreement was assessed by two independent researchers who coded a sample of 30 pretest-posttest texts, constituting 30% of the

total sample. The agreement between the raters reached 86%, with a Cohen's kappa coefficient of 0.85, indicating substantial agreement. Disagreements were resolved through discussion until a consensus was reached. The checklist was then utilised to evaluate all pretest-posttest texts. Each item could be scored as 0 or 1, resulting in a total maximum score of 20 points (see Appendix B). Student tutors also used WAC to revise their short stories throughout the intervention. Considering the items with negative scores, they were instructed to select two aspects for improvement following the order of the dimensions in WAC (i.e., genre, coherence, cohesion, vocabulary, grammar and spelling) and plan two activities for their tutee.

2.3.3 *Writing self-efficacy*

The Self-Efficacy for Writing Scale (SEWS; Bruning et al., 2013) was used as a pretest-posttest. It consists of 16 items grouped into three dimensions: ideation (5 items; e.g., 'I can think of many ideas for my writing'), conventions (5 items; e.g., 'I can spell my words correctly'), and self-regulation (6 items; e.g., 'I can avoid distractions while I write'). Students were asked to rate each item from 1 to 5 on a Likert scale based on their degree of agreement with the statement. Overall, a minimum of 16 points and a maximum of 80 points could be obtained. In this study, reliability of the subscales based on the pretest data was acceptable or good: alpha was 0.858 for ideation, 0.732 for conventions, and 0.817 for self-regulation. In Bruning et al. (2013), alpha values were 0.903, 0.847, and 0.884, respectively.

2.3.4 *Students' perceptions of learning survey*

At the end of the programme, students from the intervention group were asked to rate several items from 1 to 5 on a Likert scale based on their degree of agreement with the statements. One item referred to their overall enjoyment of the programme: "I liked reading and writing with my partner". Two items referred to their learning perceptions as tutors and tutees, respectively: "I have learned when carrying out the role of tutor/tutee". Two items referred to the difficulties as tutors and tutees, respectively: "I had difficulties carrying out the role of tutor/tutee". After these items, two open questions (i.e., one per role) were included for students to justify their answers, which were later coded in terms of learning facilitators and barriers for each role. In the case of the open questions, thematic analysis was carried out (Terry et al., 2017). The three researchers jointly defined the emerging categories. Then, two researchers independently coded all the answers. Interrater agreement was calculated. The following degrees of agreement were reached: for learning facilitators, 85.71% for tutors (Cohen's kappa = 0.82) and 93.33% for tutees (Cohen's kappa = 0.90); for learning barriers, 88.46% for tutors (Cohen's kappa = 0.86) and 91.30% for tutees (Cohen's kappa = 0.87). Disagreements were discussed upon reaching a consensus.

2.4 Procedure

First, students from the intervention and comparison groups completed the pretest (i.e., writing test and Self-Efficacy for Writing Scale). During the following 6 weeks, students from the intervention group took part in the programme within the Catalan language subject, while students in the comparison group took part in the usual lessons within the Catalan subject (i.e., following the textbook and writing individually). Second, in the intervention group, teachers decided to implement the programme using a reciprocal peer tutoring format (i.e., exchanging the roles of tutor and tutee within the pair from one activity sheet to another). Pretest scores were used to create pairs by joining students with similar competency levels so that both students could carry out both roles successfully. Third, after creating the pairs, the students received initial training to define the roles of tutor and tutee and familiarise them with the materials of the programme (see Table 4). Fourth, throughout the 6 weeks, the students in the intervention group completed 8 activity sheets of the programme (see Table 4), and each pair produced three stories (70–120 words). In the comparison group, students engaged in textbook activities which involved individually writing three stories (70–120 words) in the classroom. Fifth, at week 6 of the programme, students from the intervention group selected and revised one of these short stories to be read on the local radio. Staff from the local radio trained students to read aloud their texts and record the stories for a special programme on Saint George's Day (April 23), a national celebration in Catalonia with people exchanging books and roses to celebrate literature and love. Finally, after the intervention, students from the intervention and comparison groups completed the posttest (i.e., writing test and Self-Efficacy for Writing Scale) and students from the intervention group were asked to complete the learning perceptions survey. Data analysis was carried out with Jamovi 2.3.21.

3. RESULTS

3.1 Effectiveness of the peer tutoring programme

An overview of descriptive statistics is provided in Table 3.

Table 3. Overview of descriptive statistics of pretest and posttest data

	Maximum score	Pretest		Posttest	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<u>Writing performance</u>					
<u>Overall</u>					
Comparison group	20	11.09	3.02	11.31	3.16
Intervention group	20	9.98	4.10	13.36	3.54
<u>Genre</u>					
Comparison group	7	2.36	1.11	2.47	1.18
Intervention group	7	2.40	1.74	3.38	1.61
<u>Coherence</u>					
Comparison group	3	2.11	0.83	2.24	0.77
Intervention group	3	1.98	0.75	2.58	0.72
<u>Cohesion</u>					
Comparison group	3	1.64	1.11	1.56	1.20
Intervention group	3	1.22	1.02	1.96	1.04
<u>Vocabulary</u>					
Comparison group	2	1.13	0.76	1.24	0.74
Intervention group	2	1.02	0.66	1.49	0.63
<u>Grammar</u>					
Comparison group	3	2.31	0.82	2.42	1.01
Intervention group	3	2.04	1.19	2.62	0.61
<u>Spelling</u>					
Comparison group	2	1.53	0.69	1.38	0.68
Intervention group	2	1.31	0.82	1.33	0.71
<u>Writing Self-Efficacy</u>					
<u>Overall</u>					
Comparison group	80	51.80	10.51	54.29	11.12
Intervention group	80	53.60	10.68	52.13	12.55
<u>Ideation</u>					
Comparison group	25	16.53	4.41	17.64	4.11
Intervention group	25	17.56	4.38	16.58	5.19
<u>Conventions</u>					
Comparison group	25	16.64	3.13	17.62	3.88
Intervention group	25	17.00	3.49	17.07	4.20
<u>Self-regulation</u>					
Comparison group	30	18.62	5.24	19.02	4.75
Intervention group	30	19.04	4.93	18.49	4.97

The correlation between the two target variables (i.e., writing performance and writing self-efficacy) is not significant in the pretest (Pearson's $r = .18$; $p = .086$) and significant but weak in the posttest (Pearson's $r = .25$; $p = .016$).

3.1.1 Writing performance

To check for the impact of the intervention when compared to the comparison group, an ANCOVA was carried out with the writing performance posttest score as

the dependent variable, the intervention/comparison group as an independent variable, and the writing performance pretest score as a covariate (Table 4).

Table 4. ANVOAs for writing performance

	Sum of squares	df	Mean Square	F	p	η^2_p
<u>Overall</u>						
Pretest	154.00	1	154.00	15.99	< .001	.16
Group	132.14	1	132.14	13.72	< .001	.14
Residuals	837.96	87	9.63			
<u>Genre</u>						
Pretest	1.88	1	1.88	0.94	.335	.01
Group	18.49	1	18.49	9.25	.003	.10
Residuals	173.90	87	2.00			
<u>Coherence</u>						
Pretest	0.98	1	0.98	1.76	.188	.02
Group	2.75	1	2.75	4.96	.029	.05
Residuals	48.31	87	0.56			
<u>Cohesion</u>						
Pretest	20.45	1	20.45	21.04	< .001	.20
Group	12.08	1	12.08	12.43	< .001	.13
Pretest*Group	5.05	1	5.05	5.20	.025	.06
Residuals	83.58	86	0.97			
<u>Vocabulary</u>						
Pretest	3.95	1	3.95	10.23	.002	.11
Group	5.04	1	5.04	13.06	< .001	.13
Pretest*Group	3.27	1	3.27	8.49	.005	.09
Residuals	33.16	86	0.39			
<u>Grammar</u>						
Pretest	10.33	1	10.33	17.61	< .001	.17
Group	5.29	1	5.29	9.02	.004	.10
Pretest*Group	3.79	1	3.79	6.47	.013	.07
Residuals	50.47	86	0.59			
<u>Spelling</u>						
Pretest	4.584	1	4.58	10.50	.002	.11
Group	0.011	1	0.01	0.03	.875	.00
Residuals	37.994	87	0.44			

The interaction between the pretest and the group was not significant ($F = 0.96$; $p = .329$), and it was thus not included. After controlling for pretest scores, the results showed that in the posttest, students from the intervention group ($MM = 13.56$; $SE = 0.47$) scored significantly higher than those from the comparison group ($MM = 11.11$; $SE = 0.47$). Marginal means for each dimension are reported in Table 5.

Table 5. Marginal means of the posttest after ANCOVAs

	Maximum score	Intervention group		Comparison group	
		MM	SE	MM	SE
Overall	20	13.56	0.47	11.11	0.47
Genre	7	3.38	0.21	2.47	0.21
Coherence	3	2.59	0.11	2.24	0.11
Cohesion	3	2.00	0.15	1.41	0.15
Vocabulary	2	1.49	0.09	1.21	0.09
Grammar	3	2.64	0.12	2.35	0.12

A separate ANCOVA for each writing performance dimension (Table 1) showed significant differences between the intervention and comparison groups in all dimensions, except for spelling. In the case of cohesion, vocabulary and grammar, the interaction between pretest and group was significant. Subgroup analyses showed that in those dimensions, the difference between the intervention group and comparison group was significant for those students who had a 0-score in the pretest ($9.72 \leq F \leq 15.47$; $p \leq .017$), but not for those who had higher initial scores ($0.08 \leq F \leq 1.70$; $.206 \leq p \leq .786$).

3.1.2 Writing self-efficacy

To assess the impact of the intervention, an ANCOVA was carried out with the writing self-efficacy posttest score as the dependent variable, the intervention/comparison group as the independent variable, and the writing self-efficacy pretest score as the covariate (Table 6). The interaction between pretest and group was not significant ($F = 0.25$; $p = .621$), and it was thus not included. After controlling for pretest scores, the results showed no significant differences between the intervention group ($MM = 51.61$; $SE = 1.52$) and the comparison group ($MM = 54.82$; $SE = 1.52$).

Table 6. ANCOVAs for writing self-efficacy

	Sum of squares	df	Mean Square	F	p	η^2_p
<u>Overall</u>						
Pretest	3404.86	1	3404.86	33.02	< .001	.28
Group	230.47	1	230.47	2.24	.139	.03
Residuals	8971.59	87	103.12			
<u>Ideation</u>						
Pretest	200.88	1	200.88	10.12	.002	.10
Group	44.64	1	44.64	2.25	.137	.03
Residuals	1726.41	87	19.84			
<u>Conventions</u>						
Pretest	382.50	1	382.50	31.55	< .001	.27
Group	13.62	1	13.62	1.12	.292	.01
Residuals	1054.88	87	12.13			
<u>Self-regulation</u>						
Pretest	838.25	1	838.25	58.91	< .001	.40
Group	14.00	1	14.00	0.98	.324	.01
Residuals	1237.97	87	14.23			

A separate ANCOVA for each writing self-efficacy dimension (Table 6) also showed no significant differences in terms of ideation ($p = .137$), conventions ($p = .292$), and self-regulation ($p = .324$). Interactions between pretest and group were not significant ($0.08 \leq F \leq 1.16$; $.285 \leq p \leq .779$) and they were thus not included.

3.2 Students' learning perceptions

The students mostly reported that they liked reading and writing with their partner ($Mdn = 5$; $IQR = 1$). The learning perception was rather high for both roles ($Mdn_{tutor} = 4$; $IQR_{tutor} = 2$; $Mdn_{tutee} = 4$; $IQR_{tutee} = 3$). The Wilcoxon signed-rank test showed no significant differences between roles in terms of student learning perceptions ($W = 166.50$; $p = .639$). Thematic analysis was conducted on the open-ended questions about the learning facilitators (Table 7).

Table 7. Learning facilitators per role reported by the students

Category	Definition	Examples	f	%
Tutor (32 students who answered the question, 35 utterances coded)				
<i>Teaching</i>	Learning by teaching, that is, by explaining and interacting with the tutee.	<i>Because when I explained things that he didn't understand to the tutee, I learned. Because when I helped her, I also learned things. I've learned because I could learn from my mentor's mistakes.</i>	13	37.14
<i>Preparing to teach</i>	Learning by preparing to teach, when preparing the activity sheet, revising the first draft, or preparing the activities.	<i>Because of having to prepare the texts and look for improvement activities. Because you help your partner and you learn it first so you can teach it well. Because I learned to prepare the text and pay more attention to the revision.</i>	12	34.29
<i>Responsibility</i>	Learning to be more responsible, given the role of the tutor in the task.	<i>Because I wasn't very responsible before, and being a tutor has helped me to improve. Because I've learned to be more organised. Because you are responsible for doing the activity sheets.</i>	8	22.86
<i>Patience</i>	Learning to be more patient in the interaction with the tutee.	<i>I've learned to be patient.</i>	2	5.71
<i>Total tutor</i>			35	100

Category	Definition	Examples	f	%
Tutee (28 students who answered the question, 28 utterances coded)				
Tutor's help	Learning thanks to the personalised help provided by the tutor.	<i>Because my partner helped me and it became easier. Because my tutor has helped me pay more attention when I read and write. Because she corrected mistakes that I made a lot and I didn't know they were wrong.</i>	15	53.57
Improvement in reading and writing skills	Specific reading and writing aspects that students perceive they have improved in.	<i>I've learned how to structure a short story. Because I have improved my reading and I have also [learned to] organise my ideas well when writing. Because now I don't repeat the words so much.</i>	9	32.14
Active listening and participation	Learning thanks to their own involvement in the activity as a tutee.	<i>Because I've learned how to work as a team and to listen to things to improve. Because I've given ideas and helped in the work. Yes, because I've paid more attention.</i>	4	14.29
Total tutee			28	100

The perceived difficulties when carrying out the two roles were very low for both roles ($Mdn_{tutor} = 1$; $IQR_{tutor} = 1$; $Mdn_{tutee} = 1$; $IQR_{tutee} = 1$). A Wilcoxon signed-rank test showed no significant differences between roles regarding perceived difficulties ($W = 110.00$; $p = .099$). Thematic analysis was carried out on the open-ended questions about learning barriers (Table 8).

Table 8. Learning barriers per role reported by the students

Category	Definition	Examples	f	%
Tutor (23 students who answered the question, 25 utterances coded)				
<i>Limited knowledge for teaching</i>	Difficulties in terms of reading and writing skills as a tutor.	<i>Answering the reading comprehension questions. Sometimes, I had a hard time correcting her spelling mistakes. I didn't know how it [the text] could be improved.</i>	8	32.00
<i>Not learning</i>	General statements that state not learning.	<i>Just because. Because I already knew. Because it was a little hard to learn.</i>	7	28.00
<i>Tutee not responding</i>	Lack of involvement by the tutee.	<i>Because my partner was doing nothing, she was daydreaming all day. [It was difficult] that my partner focused. The partner does nothing.</i>	4	16.00
<i>Teaching, not learning</i>	The belief that the tutor teaches rather than learning, and the tutee is the one who learns the most.	<i>Because I have learned more as a tutee, because they correct the mistakes I make. I think the tutee has learned more, since he is given help (a tutor). I didn't learn anything, I was just correcting.</i>	3	12.00
<i>Demotivation</i>	Lack of motivation or enjoyment.	<i>It's boring. I don't like it.</i>	2	8.00
<i>Preparation homework</i>	Lack of preparation of the activity sheet before class.	<i>That I didn't remember to prepare the text.</i>	1	4.00
<i>Total tutor</i>			25	100
Tutee (20 students who answered the question, 20 utterances coded)				
<i>Demotivation</i>	Lack of motivation or enjoyment.	<i>I have been a tutee all my life. Because that's what I do every day in class. I didn't like it.</i>	8	40.00
<i>Tutor not responding</i>	Tutor's lack of ability to carry out the role and respond to the tutee's needs.	<i>My tutor was not good enough, but it was ok. Because there were things I knew and the tutor didn't, so I didn't learn many new things. Because my tutor did not help me at all.</i>	8	40.00
<i>Reading and writing difficulties</i>	Difficulties in terms of reading and writing skills.	<i>Looking for ideas to make the story. Sometimes, it was hard for me to come up with ideas to write and I got stuck reading. Thinking about the ideas first and putting them well in the text.</i>	4	20.00
<i>Total tutee</i>			20	100

4. DISCUSSION AND CONCLUSIONS

This study aimed to evaluate the effectiveness of the *Reading and Writing in Pairs* programme within WWC framework, addressing two research questions concerning (a) its impact on students' writing performance and writing self-efficacy, and (b) students' perceptions of learning in the roles of tutor and tutee.

The findings confirm the programme's effectiveness in improving writing performance. Significant improvements were observed within the intervention group, as well as significant differences when compared to the comparison group in all dimensions (i.e., genre, cohesion, coherence, vocabulary, grammar) except for spelling.

The lack of changes in spelling could be attributed to at least three factors. First, as for the measurement instrument, having to assess spelling through binary items required setting a threshold, which prevents the measurement of nuanced improvements beyond it. As for the intervention, two explanations may lie behind: a) the tutors were instructed to revise the draft and plan the activities following the order of the WAC dimensions (Appendix A), where spelling was the last dimension, and b) they were allowed to use spelling checkers throughout the intervention but were not trained to do so with metalinguistic reflection, which may have led to a shallow use of the tool.

Focusing on the other dimensions, in genre and coherence, the differences between the intervention and comparison groups were not dependent on the pretest scores, meaning that the intervention was equally beneficial for students with different levels of writing competency. In contrast, for cohesion, vocabulary, and grammar, the interaction between pretest scores and group was significant, indicating that the intervention was particularly beneficial for students with the lowest initial scores. This finding indicates that the structured scaffolding provided through peer tutoring and explicit instruction may be especially effective in addressing the learning needs of at-risk students—a trend consistent with prior research demonstrating the potential of peer tutoring to foster inclusion (e.g., Topping et al., 2016; Toulia et al., 2023). In contrast, students with higher initial scores did not show significant improvements in these dimensions, a result that may reflect limitations of the measuring instrument—including a ceiling effect—or the possibility that the intervention did not provide sufficient challenge for more advanced students, suggesting that future iterations of the programme should incorporate more complex tasks for higher-achieving writers.

Regarding students' learning perceptions, those in the intervention group reported positive learning experiences in both tutor and tutee roles, with no significant differences between roles.

Several key aspects of the intervention may help explain students' positive learning experience and improvements in writing performance. Consistent with prior research, the combination of explicit writing instruction (De Smedt et al., 2020; De Smedt & Van Keer, 2014, 2018, 2019; Graham & Perin, 2007), the use of reading to

support writing (Philippakos & Graham, 2023; Shanahan, 2019), and collaborative writing structured through peer tutoring within a WWC framework, played a crucial role.

Firstly, the intervention incorporated explicit genre instruction both at the outset, through *model instruction* (Abbuhl, 2011; Camps & Fontich, 2021; Macbeth, 2010), and throughout the programme, by the reading of short stories as prewriting activities (Graham, 2023; Philippakos & Graham, 2023; Shanahan, 2019). Reading before writing not only provided context for setting writing goals but also offered models for analysing and applying genre characteristics in students' own writing. This aligns with prior evidence of the supportive relationship between reading and writing (Graham et al., 2018; Graham, 2020; Philippakos & Graham, 2023; Philippakos et al., 2023; Shanahan, 2019).

Secondly, collaborative writing was structured through peer tutoring interactions. The tutor and tutee roles facilitated explicit writing instruction with a clear division of tasks, which helped reduce cognitive load and break down the complex writing process into manageable steps. This approach enabled peer scaffolding and supported students in acquiring both cognitive and metacognitive writing strategies for planning, drafting, and revising, ultimately improving their writing quality and helping them become independent writers (Graham & Perin, 2007; Hughes et al. 2017; Nixon & Topping, 2001; Rosenshine, 2009; Yarrow & Topping, 2001). Furthermore, the reciprocal nature of the peer tutoring allowed students to engage in both tutor and tutee roles, thereby expanding their learning opportunities. Tutors reported learning gains through the process of preparation (i.e., preparing the activity sheet, revising initial drafts, and preparing the activities for their tutee) and during teaching (i.e., explaining and interacting with their tutee), underscoring the transformative power of assuming a teaching role, which encompasses greater responsibility and the opportunity to learn by teaching (Duran, 2016, 2017; Ribosa & Duran, 2022). Tutees reported learning from the personalised support provided by their tutors (Vygotsky, 1978), which helped them improve various aspects of reading and writing while increasing their engagement with the task.

Finally, the WWC programme's writing approach, which views writing as a social and situated activity within a community, integrates authentic writing tasks (e.g., engaging local radio as a real audience) and combines them with peer tutoring interactions. This approach helped students attribute meaning to writing by framing it as a functional activity with a clear sense of audience (Hyland, 2015) and contributed to their motivation for writing (Graham, 2018). Because this audience condition was not present in the comparison group, the observed improvements should be interpreted as reflecting the combined influence of peer tutoring, explicit instruction, and the motivational affordances associated with writing for a real audience.

Despite students' improvements in writing, their perceptions of writing self-efficacy did not change, and no significant differences were found between the

intervention and comparison groups. The short duration of the programme, which took place for only 6 weeks, may explain the lack of changes in self-efficacy. Duran and Monereo (2008) found an increase in self-concept as a writer for tutors, but their intervention was longer (35 h) and self-concept has proven to differ from self-efficacy (Marsch et al., 2019). More time might be needed to impact self-writing beliefs (Bulut, 2017; Zumbrunn et al., 2020).

Concerning the practical implications of the study, students in both tutoring roles generally reported low levels of difficulty throughout the programme, highlighting the importance of sharing the teaching activity with students to facilitate learning (Duran, 2016, 2017; Ribosa & Duran, 2022). However, the study identified certain learning barriers associated with reciprocal peer tutoring that should be considered in future interventions. Notably, in the role of tutor, some students identified difficulties in performing their role due to their limited knowledge. This may be attributed to the similarity in competency levels between tutors and tutees in reciprocal peer tutoring contexts. In reciprocal tutoring, where both students in a pair have a similar level of competence, it is vital for the tutor to prepare the material in advance to create the asymmetry needed to be able to teach the partner (Duran, 2016). Consequently, teachers need to focus on meticulous preparation by tutors before teaching sessions. For example, online resources can be offered to analyse the dimensions of the revision guidelines and/or guides for using artificial intelligence with the aim of revising the text and helping the tutor to plan improvement activities for the tutee. Furthermore, comprehensive training on the tutor role could equip tutors with the necessary skills and confidence to execute their teaching responsibilities more proficiently (De Backer et al., 2015; Duran, 2016, 2017; Topping, 2005). Such training should address and rectify any misconceptions held by tutors, particularly those regarding the distribution of learning between tutors and tutees, as our study revealed instances where students incorrectly believed that tutees were the primary beneficiaries of the tutoring process. Active participation by both tutors and tutees is crucial for the success of the programme. When either party fails to fully engage in their role, students may experience demotivation and a sense of ineffectiveness in their learning endeavours. Therefore, teachers should emphasise and facilitate students' active involvement in fulfilling their respective roles within the tutoring framework.

While the study yielded promising results, limitations need to be considered. Firstly, the intervention targeted two groups of secondary students, potentially limiting the generalisability of findings to a broader population. Secondly, as the study focused on writing improvements, the impact of the intervention on reading was not assessed. Future research should explore the reciprocal connections between reading and writing to provide a more comprehensive understanding of their interrelationship. Thirdly, the reciprocal nature of the intervention and the absence of an analysis of tutor-tutee interactions limited our ability to distinguish the specific contributions and outcomes of each role. Future studies employing fixed roles and examining interaction dynamics (e.g., Duran & Monereo, 2005) could

provide deeper insights into the benefits associated with each role. In addition, more nuanced measures for spelling—such as the spelling mistakes index by Fontich (2024)—can provide a more accurate assessment of spelling dimension. Furthermore, the assessment instrument used to evaluate cohesion, vocabulary, and grammar may have lacked the sensitivity needed to detect more subtle improvements among higher-achieving students; future research should therefore employ more precise and fine-grained measures to capture progress across the full range of writing proficiency.

Despite the limitations of the study, this research offers valuable insights into the effectiveness of the *Reading and Writing in Pairs* programme for enhancing writing skills and provides practical guidance for teachers to implement it in their educational settings.

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REFERENCES

- Abbuhl, R. (2011). Using models in writing instruction: A comparison with native and nonnative speakers of English. *SAGE Open*, 1(3), 1-12. <https://doi.org/10.1177/2158244011426295>
- Allen, N. J., Atkinson, D., Morgan, M., Moore, T., & Snow, C. (1987). What experienced collaborators say about collaborative writing. *Journal of Business and Technical Communication*, 1(2), 70–90. <http://doi.org/10.1177/105065198700100206>
- Bangert-Drowns, R. L., Hurley, M. M., & Wilkinson, B. (2004). The effects of school-based writing-to-learn interventions on academic achievement: A meta-analysis. *Review of Educational Research*, 74(1), 29–58. <https://doi.org/10.3102/00346543074001029>
- Bazerman, C. (2003). Speech acts, genres, and activity systems: How texts organize activity and people. In C. Bazerman & P. Prior (Eds.), *What writing does and how it does it: An introduction to analyzing texts and textual practices* (pp. 309–339). Erlbaum. <https://doi.org/10.4324/9781410609526>
- Boscolo, P., & Ascorti, K. (2004). Effects of collaborative revision on children's ability to write understandable narrative texts. In L. Allal, L. Chanquoy, & P. Largy (Eds.), *Revision cognitive and instructional processes: Studies in writing, Vol. 13* (pp. 157–170). Springer. https://doi.org/10.1007/978-94-007-1048-1_10
- Bowman-Perrott, L., Davis, H., Vannest, K., Williams, L., Greenwood, C., & Parker, R. (2013). Academic benefits of peer tutoring: A meta-analytic review of single-case research. *School Psychology Review*, 42(1), 39–55. <https://doi.org/10.1080/02796015.2013.12087490>
- Bruning, R., Dempsey, M., Kauffman, D. F., McKim, C., & Zumbunn, S. (2013). Examining dimensions of self-efficacy for writing. *Journal of Educational Psychology*, 105(1), 25–38. <https://doi.org/10.1037/a0029692>
- Bulut, P. (2017). The effect of primary school students' writing attitudes and writing self-efficacy beliefs on their summary writing achievement. *International Electronic Journal of Elementary Education*, 10(2), 281–285. <https://doi.org/10.26822/iejee.2017236123>
- Calaforra Faubel, P. J. (2018). *Elaboración de un instrumento para evaluar la escritura espontánea en niños de edades comprendidas entre los 10 y los 14 años* [Doctoral Dissertation]. <https://hdl.handle.net/20.500.14352/15568>

- Camps, A., & Fontich, X. (Eds.) (2021). *La actividad metalingüística como espacio de encuentro de la escritura y la gramática: Un itinerario de enseñanza e investigación en educación lingüística*. UNSJ. <https://doi.org/10.7764/onomazein.60.12>
- Castelló, M., Corcelles, M., Iñesta, A., Vega, N., & Bañales, G. (2011). La voz del autor en la escritura académica: Una propuesta para su análisis. *Revista Signos*, 44(76), 105–117. <http://doi.org/10.4067/S0718-09342011000200001>
- Chapman, M. L. (1999). Situated, social, active: Rewriting genre in the elementary classroom. *Written Communication*, 16(4), 469–490. <https://doi.org/10.1177/0741088399016004003>
- Cohen, P. A., Kulik, J. A., & Kulik, C. L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 19(2), 237–248. <https://doi.org/10.3102/00028312019002237>
- Consell Superior d'Avaluació del Sistema Educatiu (2024). *L'avaluació de final d'etapa a 4rt d'ESO 2024* (Quaderns d'avaluació 61). Generalitat de Catalunya. Departament d'Educació i Formació Professional. https://repositori.educacio.gencat.cat/bitstream/handle/20.500.12694/7363/quaderns_avaluacio_61_2024.pdf?sequence=1&isAllowed=y
- Corcelles-Seuba, M., & Castelló, M. (2015). Learning philosophical thinking through collaborative writing in secondary education. *Journal of Writing Research*, 7(1), 157–200. <https://doi.org/10.17239/jowr-2015.07.01.07>
- Corcelles-Seuba, M., Cano, M., Mayoral, P., & Castelló, M. (2017). Enseñar a escribir un artículo de investigación mediante la revisión colaborativa: Percepciones de los estudiantes. *Revista Signos*, 50(95), 337–360. <http://doi.org/10.4067/S0718-09342017000300337>
- Corcelles-Seuba, M., Ribosa, J., Oller, M., & Duran, D. (2023). Escrivim en parella a través de la tutoria entre iguals. *Articles: Revista de Didàctica de la Llengua i de la Literatura*, (96), 81–90. <https://dialnet.unirioja.es/servlet/articulo?codigo=8773830>
- Cutler, L., & Graham, S. (2008). Primary grade writing instruction: A national survey. *Journal of Educational Psychology*, 100(4), 907–919. <https://doi.org/10.1037/a0012656>
- De Abreu Malpique, A., Valcan, D., Pino-Pasternak, D., & Ledger, S. (2023). Teaching writing in primary education (grades 1–6) in Australia: A national survey. *Reading and Writing*, 36(1), 119–145. <https://doi.org/10.1007/s11145-022-10294-2>
- De Backer, L., Van Keer, H., & Valcke, M. (2015). Promoting university students' metacognitive regulation through peer learning: The potential of reciprocal peer tutoring. *Higher Education*, 70(3), 469–486. <https://doi.org/10.1007/s10734-014-9849-3>
- De Smedt, F., Graham, S., & Van Keer, H. (2020). "It takes two": The added value of structured peer-assisted writing in explicit writing instruction. *Contemporary Educational Psychology*, 60, 101835. <https://doi.org/10.1016/j.cedpsych.2019.101835>
- De Smedt, F., Merchie, E., Barendse, M., Rosseel, Y., De Naeghel, J., & Van Keer, H. (2018). Cognitive and motivational challenges in writing: Studying the relationship with writing performance across students' gender and achievement level. *Reading Research Quarterly*, 53(2), 249–272. <https://psycnet.apa.org/doi/10.1002/rrq.193>
- De Smedt, F., & Van Keer, H. (2014). A research synthesis on effective writing instruction in primary education. *Procedia: Social and Behavioral Sciences*, 112, 693–701. <https://doi.org/10.1016/j.sbspro.2014.01.1219>
- De Smedt, F., & Van Keer, H. (2018). An analytic description of an instructional writing program combining explicit writing instruction and peer-assisted writing. *Journal of Writing Research*, 10(2), 225–277. <https://doi.org/10.17239/jowr-2018.10.02.04>
- De Smedt, F., & Van Keer, H. (2019). Fostering writing in upper primary grades: A study into the distinct and combined impact of explicit instruction and peer assistance. *Reading and Writing*, 31(2), 325–354. <https://doi.org/10.1007/s11145-017-9787-4>
- De Smedt, F., Van Keer, H., & Merchie, E. (2016). Student, teacher and class-level correlates of Flemish late elementary school children's writing performance. *Reading and Writing*, 29, 833–868. <https://doi.org/10.1007/s11145-015-9590-z>
- Duran, D. (2010). Cooperative interactions in peer tutoring: Patterns and sequences in paired writing. *Middle Grades Research Journal*, 5(1), 47–60.

- <https://webs.uab.cat/grai/wp-content/uploads/sites/353/2016/11/cooperativeinteractions.pdf>
- Duran, D. (2016). *Aprensenyar: Evidències i implicacions educatives d'aprendre ensenyant*. Hòrsori.
- Duran, D. (2017). Learning-by-teaching. Evidence and implications as a pedagogical mechanism. *Innovations in Education and Teaching International*, 54(5), 476–484. <https://doi.org/10.1080/14703297.2016.1156011>
- Duran, D. (Coord.), Flores, M., Oller, M., Corcelles, M., Miquel, E., & Blanch, S. (2018). *Llegim i escrivim en parella: Tutoria entre iguals, amb implicació familiar, per a la competència comunicativa*. Hòrsori.
- Duran, D., & Monereo, C. (2005). Styles and sequences of cooperative interaction in fixed and reciprocal peer tutoring. *Learning and Instruction*, 15, 179–199. <https://doi.org/10.1016/j.learninstruc.2005.04.002>
- Duran, D., & Monereo, C. (2008). The impact of peer tutoring on the improvement of linguistic competence, self-concept as a writer and pedagogical satisfaction. *School Psychology International*, 29(4), 481–499. <https://doi.org/10.1177/0143034308096437>
- Ferguson-Patrick, K. (2007). Writers develop skills through collaboration: An action research approach. *Educational Action Research*, 15(2), 159–180. <https://doi.org/10.1080/09650790701314585>
- Flores, M., Ribosa, J., & Duran, D. (2024). How does peer tutoring contribute to the development of reading comprehension? Evidence from ten years of practice. *Revista de Psicodidáctica*, 29(2), 176–184. <https://doi.org/10.1016/j.psicoe.2024.05.003>
- Flores, M., & Duran, D. (2013). Effects of peer tutoring on reading self-concept. *International Journal of Educational Psychology*, 2(3), 297–324. <https://doi.org/10.4471/ijep.2013.29>
- Flores, M., & Duran, D. (2016). Influence of a Catalan peer tutoring programme on reading comprehension and self-concept as a reader. *Journal of Research in Reading*, 39(3), 330–346. <https://doi.org/10.1111/1467-9817.12044>
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365–388. <http://doi.org/10.2307/356600>
- Fontich, X. (2024). *“Peix al cove!”: Mètode per aprendre ortografia a primària i secundària basat en la reflexió, el diàleg i la recerca a l'aula* [“Peix al cove!”: Method for learning spelling in primary and secondary schools based on reflection, dialogue and research in the classroom] [Teaching material]. <https://ddd.uab.cat/record/289115>
- Graham, S. (2006). Writing. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 457–477). Erlbaum. <https://doi.org/10.4324/9780203874790>
- Graham, S. (2018). A revised writer (s)-within-community model of writing. *Educational Psychologist*, 53(4), 258–279. <https://doi.org/10.1080/00461520.2018.1481406>
- Graham, S. (2020). The sciences of reading and writing must become more fully integrated. *Reading Research Quarterly*, 55, 35–44. <https://doi.org/10.1002/rrq.332>
- Graham, S., Capizzi, A., Harris, K. R., Hebert, M., & Morphy, P. (2014). Teaching writing to middle school students: A national survey. *Reading and Writing*, 27(6), 1015–1042. <https://doi.org/10.1007/s11145-013-9495-7>
- Graham, S., & Harris, K. R. (2018). Evidence-based writing practices: A meta-analysis of existing meta-analyses. In R. Fidalgo, K. R. Harris, & M. Braaksma (Eds.), *Design principles for teaching effective writing: Theoretical and empirical grounded principles* (pp. 13–37). Brill Editions. https://doi.org/10.1163/9789004270480_003
- Graham, S., Kim, Y.-S., Cao, Y., Lee, W., Tate, T., Collins, P., Cho, M., Moon, Y., Chung, H. Q., & Olson, C. B. (2023). A meta-analysis of writing treatments for students in grades 6–12. *Journal of Educational Psychology*, 115(7), 1004–1027. <https://doi.org/10.1037/edu0000819>
- Graham, S., Liu, X., Aitken, A., Ng, C., Bartlett, B., Harris, K. R., & Holzapfel, J. (2018). Effectiveness of literacy programs balancing reading and writing instruction: A meta-analysis. *Reading Research Quarterly*, 53(3), 279–304. <https://doi.org/10.1002/rrq.194>
- Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, 99(3), 445–476. <https://doi.org/10.1037/0022-0663.99.3.445>
- Hyland, K. (2015). *Teaching and researching writing* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315717203>
- Hughes, C. A., Morris, J. R., Therrien, W. J., & Benson, S. K. (2017). Explicit instruction: Historical and contemporary contexts. *Learning Disabilities Research & Practice*, 32(3), 140–148.

- <https://doi.org/10.1111/ldrp.12142>
- Klassen, R. (2002). Writing in early adolescence: A review of the role of self-efficacy beliefs. *Educational Psychology Review*, 14, 173–203. <https://doi.org/10.1023/A:1014626805572>
- Leung, K. C. (2015). Preliminary empirical model of crucial determinants of best practice for peer tutoring on academic achievement. *Journal of Educational Psychology*, 107, 558–579. <https://doi.org/10.1037/a0037698>
- Lowry, P., Curtis, A., & Lowry, M. (2004). Building a taxonomy and nomenclature of collaborative writing to improve interdisciplinary research and practice. *Journal of Business Communication*, 41(1), 66–99. <http://doi.org/10.1177/0021943603259363>
- Macbeth, K. P. (2010). Deliberate false provisions: The use and usefulness of models in learning academic writing. *Journal of Second Language Writing*, 19(1), 33–48. <http://doi.org/10.1016/j.jslw.2009.08.002>
- Marsh, H. W., Pekrun, R., Parker, P. D., Murayama, K., Guo, J., Dicke, T., & Arens, A. K. (2019). The murky distinction between self-concept and self-efficacy: Beware of lurking jingle-jangle fallacies. *Journal of Educational Psychology*, 111(2), 331–353. <https://doi.org/10.1037/edu0000281>
- Nelles, W. (2012). Microfiction: What makes a very short story very short? *Narrative*, 20(1), 87–104. <https://doi.org/10.1353/nar.2012.0002>
- Nixon, J. G., & Topping, K. J. (2001). Emergent writing: The impact of structured peer interaction. *Educational Psychology*, 21(1), 41–58. <https://doi.org/10.1080/01443410123268>
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly*, 19(2), 139–158. <https://doi.org/10.1080/10573560308222>
- Philippakos, Z. A., & Graham, S. (Eds.) (2023). *Writing and reading connections: Bridging research and practice*. Guilford Press.
- Philippakos, Z. A., Wiese, P., & Davis, A. (2023). Writing and reading connections: Giving value to both sides of the same literacy coin. *The Language and Literacy Spectrum*, 33(1), 6. <https://digitalcommons.buffalostate.edu/lls/vol33/iss1/6>
- Ribosa, J., & Duran, D. (2022). Do students learn what they teach when generating teaching materials for others? A meta-analysis through the lens of learning by teaching. *Educational Research Review*, 37, 100475. <https://doi.org/10.1016/j.edurev.2022.100475>
- Rosenshine, B. (2009). The empirical support for direct instruction. In S. Tobias & T. M. Duffy (Eds.), *Constructivist instruction: Success or failure?* (pp. 213–232). Routledge.
- Saunders, W. (1989). Collaborative writing tasks and peer interaction. *International Journal of Educational Research*, 13, 101–112. [http://doi.org/10.1016/0883-0355\(89\)90019-0](http://doi.org/10.1016/0883-0355(89)90019-0)
- Shanahan, T. (2019). Relationships between Reading and writing development. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (2nd ed., pp. 194–207). Guilford Press. http://doi.org/10.1207/S15326985EP3501_5
- Stevens, R. J. (2003). Student team reading and writing: A cooperative learning approach to middle school literacy instruction. *Educational Research and Evaluation*, 9(2), 137–160. <https://doi.org/10.1076/edre.9.2.137.14212>
- Stevens, R. J., & Slavin, R. E. (1995). Effects of a cooperative learning approach in reading and writing on academically handicapped and nonhandicapped students. *The Elementary School Journal*, 95(3), 241–262. <https://doi.org/10.1086/461801>
- Storch, N. (2005). Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing*, 14(3), 153–173. <https://doi.org/10.1016/j.jslw.2005.05.002>
- Sutherland, J. A., & Topping, K. J. (1999). Collaborative creative writing in eight-year-olds: Comparing cross-ability fixed role and same-ability reciprocal role pairing. *Journal of Research in Reading*, 22(2), 154–179. <https://doi.org/10.1111/1467-9817.00080>
- Thurston, A., Cockerill, M., & Chiang, T. H. (2021). Assessing the differential effects of peer tutoring for tutors and tutees. *Education Sciences*, 11(3), 97. <https://doi.org/10.3390/educsci11030097>
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, 2, 17–37. <https://doi.org/10.4135/9781526405555.n2>
- Topping, K. J. (1995). *Paired reading, spelling & writing: The handbook for teachers and parents*. Cassell.
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631–645. <https://doi.org/10.1080/01443410500345172>

- Topping, K., Duran, D., & Van Keer, H. (2016). *Using peer tutoring to improve reading skills*. Routledge.
- Topping, K., Nixon, J., Sutherland, J., & Yarrow, F. (2000). Paired writing: A framework for effective collaboration. *Reading, 34*(2), 79–89. <https://doi.org/10.1111/1467-9345.00139>
- Touli, A., Strogilos, V., & Avramidis, E. (2023). Peer tutoring as a means to inclusion: A collaborative action research project. *Educational Action Research, 31*(2), 213–229. <https://doi.org/10.1080/09650792.2021.1911821>
- UNESCO (2017). *Reading the past, writing the future: Fifty years of promoting literacy*. <https://unesdoc.unesco.org/ark:/48223/pf0000247563>
- Vanderburg, R. M. (2006). Reviewing research on teaching writing based on Vygotsky's theories: What we can learn. *Reading & Writing Quarterly, 22*(4), 375–393. <https://doi.org/10.1080/10573560500455778>
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>
- Wheldall, K., & Colmar, S. (1990). Peer-tutoring of low-progress readers using pause, prompt and praise. In H. Foot, H. Morgan & R. Shute (Eds.), *Children helping children* (pp.117–134). John Wiley and Sons. <https://researchers.mq.edu.au/en/publications/peer-tutoring-of-low-progress-readers-using-pause-prompt-and-prai>
- Wigglesworth, G., & Storch, N. (2012). What role for collaboration in writing and writing feedback. *Journal of Second Language Writing, 21*(4), 364–374. <https://doi.org/10.1016/j.jslw.2012.09.005>
- Willingham, D. T., & Daniel, D. (2021). Making education research relevant. *Education Next, 21*(2). <https://www.educationnext.org/making-education-research-relevant-how-researchers-can-give-teachers-more-choices/>
- Yarrow, F., & Topping, K. J. (2001). Collaborative writing: The effects of metacognitive prompting and structured peer interaction. *British Journal of Educational Psychology, 71*(2), 261–282. <https://doi.org/10.1348/00070990115851>
- Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal, 31*(4), 845–862. <https://doi.org/10.3102/00028312031004845>
- Zumbrunn, S., Broda, M., Varier, D., & Conklin, S. (2020). Examining the multidimensional role of self-efficacy for writing on student writing self-regulation and grades in elementary and high school. *British Journal of Educational Psychology, 90*(3), 580–603. <https://doi.org/10.1111/bjep.12>

APPENDIX A – ACTIVITY SHEET 6

Before reading...

Have you ever received an anonymous gift, without knowing who gave it to you?
If you had received one, would you try to guess who gave it to you?

Judici precipitat

Una vegada vaig rebre una flor roja, i no sabia si era una amenaça o el testimoni delicat d'una admiradora. Posats a triar, vaig quedar-me amb això darrer (perquè vaig més curt d'enamorades que d'enemics) i ja em feia tot de càlculs feliços a base d'entrevistes deliqüescents, quan va trucar a la porta i aparegué un missatger d'aquests que van amb moto. El cor em va bategar de pressa. Però no: el noi em va dir que s'havia equivocat de pis i em va demanar que li tornés la flor.

PERE CALDERS

Translation to English:

Hasty judgment

One time I received a red flower, and I didn't know whether it was a threat or a delicate token from an admirer. Given the choice, I decided to go with the latter (since I have fewer lovers than enemies) and I started imagining all sorts of happy scenarios based on deliquescent interviews, when there was a knock at the door and a messenger appeared, one of those who ride motorcycles. My heart raced. But no: the guy told me he had the wrong apartment and asked me to return the flower.

Extracted from: <https://rodamots.cat/escreix/pere-calders-44-contes-molt-breus/>

Reading comprehension

- 1) How does the protagonist feel upon receiving the red flower?
- 2) How does the protagonist feel when the messenger arrives?

- 3) Short stories often play with uncertainty, that is, with doubt. Please comment on the following questions:
- At the beginning, what are the protagonist's two possible explanations for the red flower they have received?
 - What impact does it have on the reader that the ending is neither of the two initial explanations the protagonist considers?
- 4) Do you think the text meets the following characteristics of a short story?

<i>SHORT STORY</i>	<i>Yes</i>	<i>No</i>
It is a short story, allowing for quick reading.		
It only explains what is essential.		
There are few characters.		
It makes the reader think.		
It captures the reader's attention.		
It uses the element of surprise.		
It suggests rather than explains.		
It achieves an impactful ending		

- 5) Why do you think the author titled the story "Hasty Judgment"? Think of other titles that would also work well.
- 6) The protagonist says that he is "shorter of lovers than of enemies". What does it mean to 'fall short of something'?

Writing Activity

- 7) Write a short story of 70-120 words with a surprising or unexpected ending as in the text we have read.

When writing, remember to follow the guide for tutor and tutee roles.

APPENDIX B – WRITING ASSESSMENT CHECKLIST (WAC)

Author/s:

Title:

Date:

<i>DIMENSIONS AND INDICATORS</i>	<i>REACHED</i>		<i>COMMENTS</i>
<i>1. NARRATIVE GENRE: SHORT STORY</i>			
1.1 Is the content of the story original and impactful to the reader?	Yes	No	
1.2 Does it contain the three parts: introduction, conflict and resolution?	Yes	No	
1.3 Does it have elements of surprise, fiction, or humor?	Yes	No	
1.4 Is the ending unexpected or suggestive (inviting the reader to think about it)?	Yes	No	
1.5 If necessary, are exclamation and/or question marks used in the text?	Yes	No	
1.6 Is the title original?	Yes	No	
1.7 Is it a brief text? Does the text contain between 70 and 120 words?	Yes	No	How many?
<i>2. COHERENCE</i>			
2.1 Is the narrative understandable?	Yes	No	

2.2 Are the ideas well organised?	Yes	No	
2.3 Does the title relate to what the narrative explains?	Yes	No	
3. COHESION			
3.1 Are punctuation marks in the appropriate places? (More than 3 errors score 0)	Yes	No	
3.2 Are repetitions of words that already appear in previous sentences avoided?	Yes	No	
3.3 Are connectors used correctly? (time, place, cause, consequence, opposition)	Yes	No	
4. VOCABULARY			
4.1 Is there precise vocabulary with varied words? (not always the same)	Yes	No	
4.2 Is the use of words or expressions from other languages avoided? (More than 1 interference scores 0)	Yes	No	
5. GRAMMAR			
5.1 Do the sentences in the text contain all the elements to make sense? (More than 1 error scores 0)	Yes	No	
5.2 Is there agreement between the elements? (subject and verb; noun and complements) (More than 1 error scores 0)	Yes	No	
5.3 Are verb tenses used correctly? (e.g., past, present, future, conditional) (More than 1 error scores 0)	Yes	No	

6. SPELLING			
6.1 Are there fewer than five spelling mistakes? (excluding accents)	Yes	No	How many?
6.2 Are there fewer than five errors in accent marks? (when missing or not properly placed)	Yes	No	How many?

Once the indicators have been evaluated, review in order those that have been marked as not achieved. Before meeting with your partner, prepare *two improvement activities* for the first two indicators on the list that are marked as not achieved.

<p><u>IMPROVEMENT ACTIVITY (1).</u> What needs improvement? Indicator __. __</p>	<p><u>IMPROVEMENT ACTIVITY (2).</u> What needs improvement? Indicator __. __</p>
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