

## INTERACTIONS AND TEXT PRODUCTION: BENEFITS FOR BOYS AND GIRLS

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### Abstract

Learning to write is challenging for elementary school pupils, particularly boys, who show poorer writing performance than girls (Herbert & Stipek, 2005, MELS, 2012). Offering pupils motivating and meaningful writing activities thus represents a significant challenge for teachers (Colognesi & Lucchini, 2018). Since boys generally enjoy interacting with their peers, why not take advantage of this interest and allow them to write in pairs? When this opportunity is given to them, what kinds of spoken exchanges occur between them? Do these exchanges differ from those of girls? And are the texts produced in pairs of better quality? To date, few studies have compared boys' interactions with those of girls or the impact of these interactions on the quality of the texts produced. The aim of this study was thus to 1) describe the content of the interactions of girls and boys in Grade 6 (11-12 years old) when producing texts in dyads and 2) compare the quality of the texts produced by these pupils according to the writing context (individually and in dyads). Thirty-three (33) dyads participated in this study (N = 66, 35 girls and 31 boys). The pupils planned, wrote and edited/corrected a story individually and then in dyads. Their writing performance (syntax, punctuation, vocabulary, narrative structure, lexical and grammatical spelling) and interactions (number, content) were evaluated and compared. The results are presented and discussed in light of the benefits of collaborative writing activities for boys and girls.

*Keywords: Interactions, writing performance, gender, elementary school, collaborative writing activities.*

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### 1. Introduction

Learning to write is challenging for elementary school pupils, particularly boys, who show poorer writing performance than girls (Herbert & Stipek, 2005; MELS, 2012). The rate of failure on the Quebec Ministry of Education writing exam at the end of elementary school (11-12 years old) has been found to be 28.2% among boys compared to 12.9% among girls. This situation is a cause for concern and points to the relevance of examining writing instruction practices (Graham & Perin, 2007; Homsy & Savard, 2018). Since boys generally enjoy interacting with their peers (Järvelä et al., 2010; Johnson & Johnson, 2002), why not take advantage of this interest and allow them to write in pairs? When this opportunity is given to them, what do the exchanges between them focus on? And are the texts produced in pairs of better quality?

Collaborative writing activities give rise to spoken exchanges regarding the text being produced. Collaborative writing is defined as a socio-cognitive process whereby several writers negotiate, coordinate their actions and share responsibility for the writing of a text (Lowry et al., 2004; Rubiae et al., 2016). Studies examining this practice have shown that it leads to some improvement in the quality of the texts produced (Ferguson-Patrick, 2007; Graham et al., 2012; Lavoie et al., 2011), appears to be beneficial to weaker pupils (Yarrow & Topping, 2001) and to be appreciated by boys, and that boys interact to the same extent as girls (Lavoie et al., 2008). Studies have investigated the nature of the interactions that take place between pupils during collaborative writing activities (e.g. asking for help, explaining, giving examples, negotiating), but not the content of these interactions (Fitzpatrick & Hardman, 2000; Jones, 2003; Rojas-Drummond et al., 2006). Moreover, studies examining this issue have focused on beginner writers (Ferguson-Patrick, 2007; Jones, 2003; Lavoie et al., 2008; Marin, 2010). Interactions among boys and girls in a collaborative writing context at the end of elementary school merit examination, in particular, to provide insight on the content of such interactions and their impact on the texts produced. This study thus aimed to examine the relevance of collaborative writing activities.

### 2. Method

#### 2.1. Participants

Thirty-three (33) dyads of pupils in Grade 6 (11-12 years old) participated in this study (N= 66, 31 boys and 35 girls). Once the necessary authorizations had been received, the pupils took the

*Repérage Orthographique Collectif* (ROC) test, involving a spelling discrimination task and a dictation (Allal et al., 2006). Based on the results on this test, heterogeneous dyads of pupils were created using the pairing procedure proposed by Fuchs et al. (1997).

## 2.2. Procedure

The pupils planned, wrote and edited/corrected a story, first individually and then in dyads. In writing these texts, they referred to pictures containing some elements of the story (e.g. main character, secondary characters, place, triggering event). There was only a two-week interval between these two writing activities to ensure that the pupils' writing skills had not had time to improve. During the writing activity in dyads, the pupils were filmed to capture their interactions. They were given only one sheet of paper to write on to encourage discussion and prevent them from each working on the story separately. The pupils were also each given a different coloured pencil, making it possible to determine who had written which part of the story. They were given 60 minutes to write the story.

## 2.3. Data analysis

The pupils' interactions were analyzed based on the video recordings, using Van der Maren's (2014) method of systematic data analysis. A coding grid was used to record the number of interactions and their content. This made it possible to identify whether the pupils were discussing the conventions of the written language (e.g. spelling, punctuation, text structure) or narrative structure (e.g. We could say..., The story could end like this...) (Lavoie et al., 2007; Lefebvre & Daudelin, 2001). As for the texts themselves, a grid including the following elements was used: narrative structure, vocabulary, punctuation, syntax, and lexical and grammatical spelling (Gagnon & Lemonnier, 2010). To ensure objectivity in the analysis, all the texts were corrected by two evaluators. Means and standard deviations were calculated for the interactions and writing performance criteria.

## 3. Results

The interactions recorded among the boys were similar to those among the girls (see Table 1). The highest means were for narrative structure and lexical and grammatical spelling. Moreover, like the girls, the boys talked very little about syntax and punctuation. The differences between the means for the boys and girls were small (between 0.15 and 2.19), except for the "narrative structure" criterion, for which the boys presented 12.20 fewer interactions than the girls.

Table 1. Mean number of interactions between the boys and girls for each of the criteria.

	Narrative structure	Vocabulary	Punctuation	Syntax	Lexical spelling	Gramm. spelling	Overall
<b>B.</b> (n=31)	102.77	8.47	5.47	0.56	16.67	13.42	147.36
<b>G.</b> (n=35)	114.97	10.37	7.66	0.71	17.66	15.4	166.86

The results concerning the texts themselves (see Table 2) revealed that, individually, compared to the girls, the boys made a greater number of errors in syntax, punctuation and spelling, used a less rich vocabulary and structured their narrative less well. Moreover, it was observed that when the boys wrote in dyads, their performance improved with respect to all of the evaluation criteria.

Table 2. Mean percentages obtained by the boys and girls for each of the evaluation criteria on their written texts.

	Narrative structure	Vocabulary	Punctuation	Syntax	Lexical spelling	Gramm. spelling	Overall
<b>B.</b> (n=31)	69.52	67.10	76.02	74.56	93.51	90.83	77.29
<b>G.</b> (n=35)	75.57	76.00	88.97	84.21	95.64	93.02	84.14
<b>Dyads</b>	81.22	72.12	94.62	86.92	96.87	94.82	86.83

## 4. Discussion

First, it was observed that the boys discussed the same aspects of their written texts as the girls and also that they interacted almost as often as the girls, which is consistent with other studies involving younger writers (Lavoie et al., 2008). This finding is nevertheless surprising. Since boys generally produce texts of lesser quality, we might have expected to see much less involvement on their part in the discussions. Moreover, it was revealed that most of the interactions, that is, 114.97 for the girls and 102.77 for the boys, dealt with narrative structure. The girls put forward a few more ideas than the boys. Surprisingly, the pupils were very engaged in discussing the content of their stories, although studies have shown that this aspect of text production is given little attention in class (Lavieue-Gwozdz, 2013). The pupils also focused, to a lesser degree, on spelling (lexical spelling: B = 16.67, G = 17.66; grammatical spelling: B = 13.42, G = 15.49). It appeared to be particularly difficult for them to discuss how to spell words and use correction

tools (e.g. Pupil A: Can you look up how to spell “sea vessel” in the dictionary? Pupil B: I can’t find it, but I’ve spelled it “sea vessal” before and it wasn’t marked wrong so that must be how you spell it. Pupil A: Okay.).

With regard to the texts themselves, in line with other studies (Herbert & Stipek, 2005; MELS, 2012), it was observed that these boys, at the end of elementary school, performed less well than the girls, on all the criteria analyzed. Moreover, the overall quality of the texts produced in dyads (86.83%) was better than that of those produced individually. Both the boys (77.29%) and girls (84.14%) thus benefited from writing collaboratively. However, collaborative writing proved to be even more advantageous for the boys, who saw their performance increase more than that of the girls for each of the criteria evaluated. As also found by other researchers (e.g. Ferguson-Patrick, 2007; Graham et al., 2012; Lavoie et al., 2011), this practice led to some improvement in the quality of the texts produced. Moreover, a sizeable difference was observed with regard to narrative structure, for which the boys obtained a mean score of 81.22% when they wrote in dyads (a difference of 11.7% for the boys and 5.65% for the girls). The pupils’ spoken interactions also focused more often on this element, suggesting that their discussions had a positive impact, for both the boys and girls.

## 5. Conclusion

Our study shows that the number of interactions between the boys and the content of these interactions were similar to those for the girls and that the boys performed less well and benefited more from writing in dyads than the girls. These findings suggest that, when it comes to writing, especially for boys, working in pairs in class could help lead to better results. While writing texts in dyads is more time consuming and requires more energy, the discussions that such collaboration gives rise to help boys and girls come up with and organize ideas and identify errors. Using this collaborative mode more often could thus foster the production of better texts and the development of writing skills more generally.

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