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Exploring the relationships among student preferences, prewriting tasks, and text quality in an EAP context

Heike Neumann*, Kim McDonough

Department of Education, Concordia University, 1455 De Maisonneuve Blvd, West, LB 579, Montreal, Quebec, H3G 1M8, Canada

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ABSTRACT

Despite their prevalence in second language (L2) writing classrooms, prewriting discussions have not been widely investigated in terms of their relationship to students' written texts. Furthermore, students' preferences for individual or collaborative work have not been considered in terms of their potential impact on the quality of either prewriting tasks or written texts. The current study investigates the relationships among students' preferences for collaboration, the format of prewriting tasks (collaborative or individual) and student text quality in an English for Academic Purposes (EAP) course ($N = 21$). The students carried out three collaborative and three individual prewriting tasks, submitted six written texts, and completed a questionnaire about their learning preferences. Analysis of two focal participants with divergent preferences for collaboration revealed that the collaboratively-oriented student reflected more on content during the collaborative discussions than the individually-oriented student. However, the individually-oriented students did not engage in more reflection during individual prewriting tasks. In addition, the texts both students produced after collaborative prewriting discussions received higher ratings than the texts they wrote after individual prewriting tasks. The findings suggest that collaborative prewriting may be beneficial for text quality, even for students who prefer to work individually.

1. Introduction

Collaborative writing activities have received increased attention in second language (L2) writing research in recent years fueled by their sound theoretical basis and a body of empirical research that supports their effectiveness at promoting writing development (see Storch, 2013 for a recent overview). From the perspective of sociocultural theory, collaborative writing tasks can help learners perform beyond their individual abilities through the help of an expert who scaffolds their performance (Vygotsky, 1978). Although the expert is often conceived of as the instructor, researchers have argued that peers can take on the role of expert and scaffold each other when co-constructing written texts in English. Empirical studies have found that co-constructed texts are linguistically more accurate, more complex, and contain more relevant ideas for a given assignment than the texts written by individual students (Storch, 2005; Storch & Wigglesworth, 2007; Wigglesworth & Storch, 2009, 2012).

Despite these benefits of collaborative writing, instructors may be reluctant to implement collaborative writing tasks due to the fact that pairs require up to twice the amount of time to complete the same writing task compared to individuals

* Corresponding author. Tel.: +1 514 848 2424x2443.
E-mail addresses: heike.neumann@concordia.ca (H. Neumann), kim.mcdonough@concordia.ca (K. McDonough).

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(Storch, 2005). In many writing courses, especially in an English for Academic Purposes (EAP) context in tertiary educational settings, instructors simply do not have sufficient instructional hours to set aside class time for collaborative writing. Another potential problem with the use of collaborative writing tasks in EAP contexts concerns the reliability, validity and fairness of group assessment (Kagan, 1995). In other words, it is difficult for instructors to determine how and how much each individual student contributed to a collaborative writing task (Johnston & Miles, 2004; Strauss, 2007). This is an important concern in EAP settings where course grades count towards students' degrees and may be integrated into their grade point averages in the North American system, for example. Because this is often not the case in pre-university intensive English programs, concerns with the assessment of collaborative writing tasks may be less important in those contexts.

An alternative activity that may harness some of the benefits of working collaboratively but simultaneously addresses EAP instructors' assessment concerns is collaborative prewriting tasks. Little L2 writing research has focused on the effect of planning on writing performance, and the few studies that have done so have investigated individual rather than collaborative planning (Ellis & Yuan, 2004; Kroll, 1990; Ojima, 2006). A few studies, however, have investigated collaborative planning in L1 and L2 writing by comparing different prewriting conditions. These studies found that student-led discussions in L1 writing classrooms led to better text comprehension (Sweigart, 1991), but in L2 contexts there were no advantages for student-led discussions compared to teacher-led discussions or no prewriting activities (Shi, 1998). Other studies have explored the nature of collaborative prewriting discussions and their impact on individually-written texts in L1 (Higgins, Flower, & Petraglia, 1992) and L2 writing classrooms (Neumann & McDonough, 2014). Both studies found that structured prewriting tasks encourage students to engage with others' ideas and elicit reflective comments about the content and organization of texts. However, both studies found a tenuous link between the quality of the collaborative prewriting discussion and the quality of the individually produced texts.

Another important consideration in the use of prewriting tasks is whether EAP students have a preference for individual or collaborative work. This preference for individual or group work is one of the dimensions identified in measures of students learning style preference (e.g., Dunn, Dunn, & Price, 1975, 1991; Griffiths, 2012; Oxford, 1993 in Reid, 1995; Reid, 1984 in Reid, 1995). Although research on learning style preference has not identified a "best" learning style or uncovered clear links between learning style preferences and success (e.g., Bailey, Onwuegbuzie, & Daley, 2000; Dörnyei, 2005; Ellis, 1994; Griffiths, 2012), instructors need to consider that students in a certain course will have a variety of learning styles (Dörnyei, 2005; Nel, 2008; Zhou, 2011). Both Griffiths (2012) and Nel (2008) argue that teachers cannot ignore students' preferences; instead, students should be given the opportunity to work in a style that suits their individual preferences (Griffiths, 2012; Kinsella, 1995; Nel, 2008; Pritchard, 2009). Some L2 writing researchers (e.g., Storch, 2002a; Watanabe & Swain, 2007) agree with this point of view and reason that students should be allowed to work according to their preference and choose whether they would like to work with a partner or alone, although the majority of students feels generally positive about collaborating with their peers on a writing task (Elola & Oskoz, 2010; Fernández Dobao, 2012; Fernández Dobao & Blum, 2013; Shehadeh, 2011; Storch, 2005). Nevertheless, most studies investigating collaborative tasks oblige all students in the study to work collaboratively (e.g., Fernández Dobao, 2012; Fernández Dobao & Blum, 2013; Neumann & McDonough, 2014; Shehadeh, 2011; Storch, 2008; Wigglesworth & Storch, 2009), and only some researchers allow students to choose whether they prefer to work collaboratively or individually according to their preference (e.g., Storch, 2005, 2007; Storch & Wigglesworth, 2007).

In sum, whereas previous research has found that students in general have positive attitudes towards collaborative tasks, there is also evidence that some students prefer to work alone when given the choice (Storch, 2005, 2007; Storch & Wigglesworth, 2007). This raises the question as to whether text quality is impacted by the format of prewriting discussions. It is possible that students write more effective texts when their preference for individual or collaborative prewriting tasks is satisfied. Contributing to this area of investigation, the current study addresses the following research questions:

1. Does student preference for collaborative or individual work impact on their reflection on content during prewriting tasks?
2. Does student preference for collaborative or individual prewriting tasks impact the quality of their written texts?

We expected that students would engage in more evaluation when the type of prewriting task matched their preference for collaborative or individual work, and that text quality would be higher when students carried out prewriting tasks that complemented their preference for collaborative or individual work. In order to address these questions in depth, we adopted a descriptive approach involving two focal students in an EAP class.

2. Method

2.1. Participants

The focal participants were two international students who were enrolled in a six-credit, intensive EAP writing course (two 2¾-hour classes per week for 13 weeks) taught by the first researcher. The course focuses on helping students develop the language skills necessary to function well in an academic context through an integrated program of grammar, vocabulary, reading and writing. Each of the eleven units in the course begins with a reading text that contextualizes the target vocabulary followed by the review of certain grammatical structures and finishes with a theme-based writing task. Students often work in pairs or small groups to discuss reading texts and compare answers to grammar or vocabulary exercises. All students in this

course have already partially met the university's English language proficiency requirement by submitting a TOEFL iBT score of at least 75 or equivalent but were required to take the first course in a two-level sequence of required EAP courses based on their performance of an in-house placement test.

Potential focal participants were identified from the pool of 21 students who had agreed to participate in the study using the following criteria: (a) completion of all six prewriting activities, (b) submission of all six paragraphs and prewriting task handouts, (c) similar amount of previous English instruction, and (d) similar length of residence in Canada. After potential candidates were identified, two focal participants were selected based on self-report data that indicated either a collaborative or individual orientation. The self-report data was collected using a background questionnaire that solicited students' opinions about the helpfulness of collaborating with their peers. There were four Likert-scale items (1 = not helpful; 9 = very helpful) for students to indicate how valuable it was to work with peers in order to understand an assignment, audience, and purpose; brainstorm ideas; evaluate which ideas to write about; and organize ideas into a prewriting plan. The mean rating for all four items (6.60, SD = 1.22) was used to select two focal participants, Rachel and Carlos,[1] who showed different orientations toward collaboration. Whereas Rachel's mean rating for the four items was 7.50, Carlos' mean rating was only 5.00. Both Rachel and Carlos were representative of the international students in the course in terms of age, L1 background, length of previous instruction, and length of residence in Canada, which differs from the profile of students who are permanent residents of Canada, who tend to be older (mid-20s to mid-30s) and have resided in Canada for several years.

Rachel was a 20-year old student from China majoring in Business. She reported having studied English previously for 12 years, beginning in primary school when she was eight years old. She had been in Canada for only two weeks when the course began. She self-rated her English proficiency on a 9-point Likert scale (1 = poor, 9 = fluent) as 5 for speaking, and 6 for listening, reading, and writing. In terms of her English usage per week, she reported spending 40% of her time for speaking and writing and 60% for listening and reading. Rachel used English at home 40% of the time and 80% at school, but did not speak English at work because she did not have a job. On a Likert scale (1 = not helpful/important, 9 = very helpful/important), Rachel rated peer collaboration as helpful (8) for evaluating which ideas to write about and organizing those ideas, and believed that selecting relevant main and supporting ideas was an important area for her to improve over the semester (7). In terms of her prior experience with pair and group activities, Rachel reported having engaged in group discussions in her previous English courses and that these activities were useful for developing her speaking and cooperation skills. In sum, Rachel showed a collaborative orientation.

Carlos was a 22-year old student from Brazil. He did not report his major, but he was enrolled in an undergraduate degree program. He reported 11 years of prior English instruction, beginning when he was 11 years old. He had been in Canada for only 8 days when the course began. He self-rated his English proficiency on a 9-point Likert scale (1 = poor, 9 = fluent) as 5 for speaking, 7 for listening and reading, and 4 for writing. In terms of his English usage per week, he reported spending 50% of his time for speaking and 70% for listening and reading, but only 20% for writing. Carlos did not use English at home or work, but used it 90% of the time at school. On a Likert scale (1 = not helpful/important, 9 = very helpful/important) Carlos rated peer collaboration as not very helpful (4) for evaluating which ideas to write about or organizing ideas (5), and he did not believe that selecting relevant main and supporting ideas was an important area for improvement over the semester (5). Although the questionnaire specifically asked about the students' previous experience with collaboration in L2 writing classes, Carlos only reported having participated in group activities for conversation practice, which helped him develop his listening skills. In sum, although Carlos had previously participated in group activities to improve his speaking and listening skills, his orientation to L2 writing was individual.

Both focus participants worked in the same groups for the three collaborative prewriting tasks for the duration of the semester. In both cases, the composition of these groups was mixed in terms of students' collaborative or individual orientation. Rachel had both a collaboratively- and an individually-oriented peer as members of her group, and Carlos worked with one individually- and two collaboratively-oriented peers.

2.2. Materials

Based on the findings from previous research (Higgins et al., 1992; Neumann & McDonough, 2014; Shi, 1998), prewriting discussion tasks were designed for six of the end-of-unit writing tasks that form part of the regular course curriculum, with an equal number of collaborative and individual tasks. The three collaborative prewriting discussions followed the same basic format: (a) statement of the writing topic, (b) Part 1 with instructions for the generation and evaluation of ideas for the assignment, and (c) Part 2 with instructions for the selection and organization of ideas in preparation for writing the assignment. Both Part 1 and 2 were divided further into two subsections. In the first, students worked individually to generate (Part 1) and select ideas (Part 2). Part 1 always encouraged students to review the related text or texts in the textbook and look for relevant ideas as a starting point for the brainstorming process. This individual work was then followed by a group discussion during which students shared their ideas for the writing (Part 1) with and presented their writing plan (Part 2) to their group members. For both parts, students were instructed to provide feedback on the quality of the ideas and the writing plan to others in their group.

[1] All names are pseudonyms.

The individual versions of the prewriting tasks followed the basic format of the collaborative tasks as closely as possible and therefore contained the same three aspects: (a) statement of the writing topic, (b) Part 1 with instructions to generate and evaluate ideas for the writing task, and (c) Part 2 with instructions to select and organize ideas into a writing plan. The individual tasks differed in how the evaluation of ideas and writing plans proceeded. For the collaborative tasks, students looked to their peers. For the individual tasks, students were instructed to evaluate their own ideas and writing plans using the same criteria students were given for the collaborative tasks and asked to note down the strong and weak points of their ideas and writing plans on the handout. This last aspect served mainly the research purpose of obtaining a record of students' thought processes that could be analyzed for the purposes of this study. Table 1 presents an overview of the topics for the six writing assignments and whether the prewriting tasks were collaborative or individual. Appendix A provides examples of one collaborative and one individual prewriting discussion activity.

2.3. Procedure

For the three collaborative tasks, the instructor first distributed the handouts and explained the writing topic and the instructions for Parts 1 and 2 to the students. Students then formed self-selected groups of two to four students, and the majority of students worked in the same groups for the three tasks. The groups then worked through the individual section of Part 1 of the task and moved to the collaborative portion as soon as all group members were ready. Students continued on to Part 2 of the prewriting task when they determined they had concluded their discussion of Part 1. As for Part 1, groups determined themselves how long they spent on the two sections of Part 2 of the prewriting tasks, but all groups spend about 20–30 min on all aspects of the task. For the three individual tasks, the procedure also started with the instructor's explanation of the writing topic and the instructions for Parts 1 and 2 after the handout had been distributed to the students. Then, however, the students worked individually and independently through both sections of Parts 1 and 2. Students took about 15–20 min to complete the individual tasks. After having completed Parts 1 and 2 collaboratively or individually, students left class to complete the assignment at home (topics 1–2) or started writing their texts in class (topics 3–6). When students wrote their texts in class, they had 1 h to produce their text, but many did not require the whole time allotted. Reliable information about how long students took to write their texts at home is not available. Students submitted their completed prewriting task handouts with their texts, and the handouts were photocopied for analysis before being returned to the students.

2.4. Analysis

Research assistants transcribed and verified the audio-recordings of the collaborative prewriting discussions for Topics 1, 3, and 5, and the transcripts were analyzed to identify episodes in which students generated main ideas, supporting reasons, and examples, which were referred to as content episodes. Each content episode had one main idea along with any reasons, details, or examples. Transitions between content episodes typically occurred in the form of questions (*okay, what else? so what's the next one? any other ideas?*) or suggestions (*okay so we go to the next one*). Following previous research (Higgins et al., 1992), all content episodes were further classified as reflective (involving explicit evaluation, consideration of alternatives, or justification) or non-reflective (having none of the features of reflective episodes).

For evaluative comments to be considered reflective, they had to be more substantial than short responses (such as *yeah* or *good*), which could simply function to move the conversation forward. Evaluation also involved recognition of a gap or potential problem with the ideas that had been generated. Reflective comments that were a consideration of alternative plans involved a critical choice or comparison among options and were often signaled by *or* and *instead*. However, simple lists of options that were not discussed or explained at length were not coded as reflective. Lastly, reflective comments in the form of justification involved explanation of ideas and reasoning and were marked linguistically by conjunctions such as *because*, *so* and *since*.

An example of a reflective content episode with justification is shown in (1), in which Aurora is explaining why family size has decreased in China, but Rachel offers alternate reasons.

(1) Reflective content episode with justification
Aurora: And second one is the money because the people uh can uh because uh
Rachel: Raise of children—the child maybe spend a lot
Aurora: Yeah because they don't have enough money to pay the second one to let them grow in

Table 1
Overview of the prewriting discussions and writing topics.

Topic	Prewriting format	Writing topic
Overcoming obstacles	Collaborative	Describe a person from your life who experienced an obstacle, and how he/she overcame it.
Socialization	Individual	Explain how one factor (family, schooling, peers, or media) has most influenced you.
Collective living	Collaborative	Explain whether the benefits of social living outweigh the costs for humans.
Education	Individual	Explain your opinion about home schooling.
Family living	Collaborative	Discuss changes in family size (nuclear/extended or number of children)
Vaccines	Individual	Compare and contrast human life before and after the invention of vaccines

Rachel: I think it's because the education fee and tuition become more and more higher because maybe uh 20 years ago uh you don't have to pay much money to go to school because the government afford that
Aurora: Uh
Rachel: But maybe now they have more and more private school and uh tuition fee is more and more expensive

In contrast to the reflective episode, (2) illustrates a non-reflective content episode in which Carlos and his peers were generating ideas about the costs and benefits of collective living. Although the students are stating ideas and examples, they are not engaging in any critical reflection of the ideas in the form of evaluation or proposing alternatives.

(2) Non-reflective content episode
Andrei: What are the costs?
Zia: Infections
Carlos: Competition
Zia: There's an example in the text that I think that not for the it's us the cost
Rafael: Yeah lion … difference lion what?
Zia: Pair of birds
Rafael: Yeah

Episodes in which students shared personal experiences related to the course themes that did not contain any evaluation, alternative plans, justification, or an explicit link to the writing assignment were coded as non-reflective. Following a training session with the second researcher, which consisted of a review of the coding categories, practice coding, and discussion of coding decisions, a research assistant coded all 19 prewriting discussions. The second researcher coded a subset of the data (8/19 transcripts or 42% of the data) and Cohen's kappa was .88. Disagreements were resolved through discussion and included in the analysis.

For the individual prewriting tasks, notes on students' handouts were analyzed to determine if the handout generated any reflection as evidenced in written notes. Students had been instructed to evaluate their ideas and to make notes on the strong and weak points of their ideas and examples. The absence of any comments on the students' ideas was coded as *no reflection*. A simple checkmark or *yes* or *no* in the evaluative column on Part 1 of the prewriting worksheet was coded as *evaluative action*. If the student wrote more than a simple checkmark or *yes*/*no*, this was coded as *evaluative comment*. After having developed this coding scheme, both researchers coded all individual prewriting tasks independently, and Cohen's kappa was .99.

The students' written texts for all six assignments were rated by two trained raters using an analytical rating scale (see Appendix B) with subscores for content, organization, grammar/vocabulary, and mechanics/form which had been adapted from the EAP program's scale. The raters were trained by the first researcher using the benchmark papers employed for the regular rater training session for the EAP program followed by practice ratings and a discussion of coding decisions. The two raters independently rated all of the texts in the current study, and the two-way mixed average-measures intraclass correlation coefficient for interrater reliability was .86. The mean of the four subscores assigned by the two raters for each text was calculated, and these mean scores were used for subsequent analyses.

3. Results

The data from all 21 students who agreed to participate in the research was analyzed in order to contextualize the performance of the two focal participants, but the results section focuses on the data from Rachel and Carlos. The first research question asked whether student preference for collaborative or individual work impacted their reflection on ideas during prewriting tasks. Table 2 provides the amount of reflection the two focal participants engaged in during the collaborative and individual prewriting tasks. As predicted, Rachel, the collaboratively-oriented student, engaged in more reflection during collaborative prewriting tasks than she did during individual prewriting tasks. Her peer group consistently engaged in more reflective content episodes than the mean of the other students because of the reflective comments generated by Rachel herself on her peers' ideas and vice versa. Furthermore, she had more reflective content episodes than Carlos, the individually-oriented student, in his collaborative prewriting groups, as was expected. When she worked alone, Rachel engaged in only one evaluative action across the three tasks, which is lower than the mean of the other students. Contrary to expectations, Carlos did not engage in more reflection during the individual prewriting tasks than the collaborative ones. He did not take

Table 2
Reflection by task type and topic.

Task type	Topic	Coding category	Carlos	Rachel	Other students Mean (*SD*)
Collaborative	Overcoming obstacles	Reflective content episodes	0	3	1.60 (1.14)
	Collective living	Reflective content episodes	2	10	3.50 (1.92)
	Family living	Reflective content episodes	0	6	2.00 (1.41)
Individual	Socialization	Evaluative action	0	1	1.46 (2.33)
	Education	Evaluative action	0	0	1.44 (2.12)
	Vaccines	Evaluative action	0	0	.05 (.23)

any evaluative action during all three individual prewriting tasks, which was below the mean of the other students. Carlos' tendency not to reflect was also apparent in the collaborative prewriting discussions, where his groups consistently had fewer reflective content episodes than the mean of the other students. In brief, data from the two focal participants indicate that students' preference for individual or collaborative work somewhat impacts the amount of reflection that students engage in. Whereas Rachel clearly reflected more in her preferred working condition, Carlos did not engage in reflection regardless of whether his preference was met. In other words, we found the expected relationship for the collaboratively-oriented student but not for the individually-oriented student.

The groups that Carlos and Rachel worked in also functioned very differently, with Rachel's group having a greater tendency for collaboration. In Rachel's group, the members often co-constructed ideas that could be used as a main idea or support for the writing assignment they were preparing for. In episode (3) during the prewriting discussion for Topic 3, Rachel started explaining her ideas about the benefits of social living for animals. Her partner Aurora then challenged Rachel to extrapolate to humans and then actually herself explained how this idea might apply to humans. This idea was then further supported by Rachel through a concrete example. The episode concluded with the two students working together to find the best wording to express their idea.

(3) Co-construction of ideas

Rachel: Uh, maybe in our world, and some animals are tiny and small. Maybe they can … become a group and to protect themself, like if, if … a, a lion can easy – easy catch a deer – a small deer, but if a group of deer … that maybe …
Aurora: Ah, can get more big meat …
Rachel: Yeah they can get the power and stress to conflict with the …
Aurora: Yes, so you means is uh get the more benefit.
Rachel: Yeah. This is the benefit to protect themselves … in a group.
Aurora: And … what about human?
Rachel: Uh … human
Aurora: Uh, … I think human also protect themselves when they're … no?
Rachel: Yes, if you see accident or – uh – or a rob in the, in the –on the street and one people cannot fight with the robber, but if a group of people can easily catch them and …
Aurora: Yah. So how can we say that if …
Rachel: Uh …
Aurora: Group work make – uh – make – uh – can make us more strong (*chuckle*).
Rachel: We can work more efficiency, right?
Aurora: More, make us more …
Rachel: Make the – we can do this job more efficiently.

In contrast, members in Carlos' group just took turns sharing their ideas, without offering any feedback, comments, or evaluation. The ideas are simply acknowledged, as the following episode from the *Overcoming obstacles* prewriting task illustrates, where students had been asked to provide their peers with feedback on which of the proposed people would be most suitable to write about for the assignment. Rafael describes three people and their obstacles, but his peers (among them Carlos) do not offer any comments on the most suitable choice; they simply acknowledge the information he shared with them.

(4) Simple acknowledgment of ideas

Rafael: Ok. My first is Felipe. The ob – obstacle is … sexual – sexual orientation. He's gay. Uh … he overcame the – this obstacle, does – doesn't worry about what people say about him. And the benefits, he have been himself. The second is João. The obstacle is racist. And to overcome this obstacle, he study and work had, and show to everyone that skin color is not important. So he … he got a – a good job. And, and the third is Maria. And … the obstacle is to get a job after 50s, and – and she didn't give up. And after she tried a lot, she got a good job.
Carlos: Ok
Afonso: Ok

In the rare case when Carlos turned to his group to request feedback during the *Social living* prewriting task, his request for help was ignored. His group members simply continued with their discussion despite the fact that he made two attempts to have his questions answered. It seems as if there were two parallel conversations taking place. Zia appears to have reacted to Carlos' question, but the other two members simply continued with their discussion, possibly after having consulted the book (*brood* is a word from that unit's reading text):

(5) Episode lacking peer support

Rafael: If there, there are more costs than benefits.
Andrei: ha about uh/—/

Carlos: In human?
Rafael: Reproductive competition
Andrei: But what does that mean? It's one family relatives or …
Carlos: But, but in the text how to – to put like the cost, and the benefits and say oh there's more benefits than costs. I have, have to say that in the text? … Or just …
Zia: Mm …
Carlos: I didn't understand … and like, uh …
Andrei: Brood not blood. Brood, here.
Rafael: It's competition, but uh I don't know the …
Andrei: Brood is means uh …
Rafael: Like a group?
Andrei: Yeah.

In the end, Carlos turned to the instructor for help to get an answer to his question.

During the individual prewriting tasks, both Rachel and Carlos took notes on their worksheets although Rachel to a greater extent than Carlos. However, Carlos did not take any evaluative action or write down evaluative comments, and Rachel did so only once. Both students had more than one idea to choose from after the brainstorming, which set up conditions for evaluation and decision-making, but the students' worksheets did not provide any evidence of their decision-making process. Although Carlos had expressed a preference for individual work, he did not appear to engage with the individual task in a manner that differed from Rachel's approach. For the other 19 students in the class, there was no significant correlation between their ratings about the usefulness of peer collaboration for evaluating which ideas to write about and either (a) the occurrence of content-reflection episodes during their collaborative prewriting tasks or (b) their evaluative actions during individual prewriting tasks.

The second research question asked whether student preference for collaborative or individual prewriting tasks impacted the quality of their written texts. Table 3 presents an overview of the content scores by prewriting task type (collaborative or individual) and topic. As predicted, the quality of Rachel's texts was higher when she engaged in collaborative prewriting tasks ($M = 7.42$) than when she carried out individual prewriting tasks ($M = 6.50$). This was also true for the other 19 students, although the difference in content ratings for their texts written following a collaborative versus individual prewriting task was smaller ($M = 8.22$ versus $M = 7.99$). Contrary to our prediction, Carlos did not obtain higher content ratings for the texts he wrote after individual prewriting tasks ($M = 6.54$) compared to following collaborative prewriting tasks ($M = 8.08$). Similar to Rachel and the other students, Carlos had higher ratings for the collaborative tasks, and his mean score for texts written after the individual planning were lower than the mean of other students. As for the other students, there was no significant correlation between their ratings of peer collaboration as being helpful for evaluating which ideas to write about and their content scores.

One possible explanation for why Carlos obtained higher scores on the collaborative tasks is that he benefited from the process of verbalizing his writing plans despite his preference for individual work and his group's lack of reflection during the collaborative discussions. During all three collaborative discussions, Carlos explained his ideas for the assigned writing topic before writing his texts. In these texts, he included the ideas that he had explained to his peers and used the examples and details he had mentioned. Although the content of his written texts was appropriate, it lacked some supporting details, and his group did not challenge him to go into more detail or provide him with feedback that his ideas needed greater development. For example, in his text on Topic 7 *Family living*, Carlos failed to support one of his main ideas, which was "The labor market changed so fast that women started to work full time out of home in order to do domestic work and take care of her children." In his texts on Topic 5 *Social living*, he only included a short phrase of support within the following general statement: "First, humans working together could both produce a greater variety of food and a larger amount of provisions, for example in a big farm with a lot of people working is possible to cultivate a big variety and amount of food."

Carlos might have benefitted more from the collaborative prewriting discussions if his group had functioned like Rachel's group. The two excerpts that follow, from the prewriting discussions for Topic 1 *Overcoming obstacles*, illustrate differences in how Carlos' and Rachel's groups interacted. The excerpts occurred when the students were providing each other with feedback about which person was their best choice to write about. In Carlos' group, the students only named the person who they believed was most appropriate to write about by number (the first, the second, etc.). Carlos' attempt to propose another good choice ("But the … the fourth one") was not taken up by the group.

Table 3
Content scores by task type & topic.

Discussion type	Topic	Carlos	Rachel	Other students Mean (*SD*)
Collaborative	Overcoming obstacles	8.50	6.50	8.24 (.67)
	Collective living	8.00	8.50	8.20 (.83)
	Family living	7.75	7.25	7.64 (1.88)
	All three	8.08 (.38)	7.42 (1.01)	8.22 (.49)
Individual	Socialization	8.50	5.25	7.66 (2.00)
	Education	4.25	7.50	7.56 (.67)
	Vaccines	6.88	6.75	7.05 (1.81)
	All three	6.54 (2.14)	6.50 (1.15)	7.99 (.45)

(5) Episode with minimal feedback and ignored suggestion

Carlos: And my … first … the better for you … for my composition. What do you think?
Afonso: The second, the second maybe the … my one …
Rafael: The third?
Afonso: The third?
Rafael: Yes.
Carlos: But the … the fourth one.
Rafael: Mine?
Afonso: You, I think could the … first or second one.
Carlos: Yes.

In Rachel's group, on the other hand, the same discussion involved reasoned justification for the peers' preferred choice for each writer. Episode (6) illustrates the group's feedback for Rachel:

(6) Episode with well-supported feedback

Aurora: For you, I think that – that …
Rachel: Your grandfather [referring to Rachel's grandfather]
Ali: Yeah. It's more strong.
Rachel: Yeah.
Ali: It's very, very strong. I know the – I know people in our history, and – uh – famous people that learn French in three months. He was an author. Yeah, he travel to France and … and he learned it. He's so famous … uh … popular … uh … at the 2 weeks, learn a foreign language in two weeks … miracle. (*laughing*) You have to … you have to …
Aurora: Yeah.
Ali: You have to write – read – write about it.

Just as her group recommended, Rachel wrote about her grandfather. Her composition was not highly rated because it exhibited problems unrelated to the discussion with her group, namely that she focused on telling her grandfather's story rather than using him as an example to illustrate the process of overcoming of an obstacle.

Despite their differing preferences for individual and collaborative work, both Rachel and Carlos provided valuable feedback to their peers, albeit much more frequently for Rachel than Carlos (see frequency counts for reflective episodes in Table 2). The example provided previously in (1) illustrated how Rachel contributed to her peers' ideas by proposing an alternative. Similarly, Carlos corrected his peers' ideas about the cost and benefits of social living for humans during the prewriting discussion for Topic 3 in Episode (7). The textbook reading passage discussed how hunting in groups was a key benefit for social animals, and Andrei was ready to apply this idea to humans without any modifications or restrictions. Carlos, however, realized the inappropriateness of this idea for human society and suggested how this concept might be more suitably applied to humans.

(7) Episode with proposition of alternatives

Andrei: So you decided that uh hunting is same with the human, right?
Zia: Yeah.
Carlos: That's not hunting.
Rafael: More people produce more food.
Carlos: More … ideal food.
Andrei: But the point of animal is to hunt with the, with the partner. They can hunt more effectively with the … partner.
Carlos: The group not, not the partner. Just not the partner. If the group like animals with the group and in humans you can produce more food, more variety food, it's benefit … I don't know.
Andrei: Ok

Carlos included the idea he contributed here to his group's discussion in his own text. Similarly, Andrei and Rafael also referred to the idea. However, none of the students explained the idea in any more detail in their written texts than what is mentioned here orally. Furthermore, Andrei's text was not well focused on the topic since he also discussed the disadvantages of social living as much as he discussed the benefits, which was not appropriate for the writing assignment.

4. Discussion

The current study confirmed that collaborative prewriting tasks encouraged students to engage in reflection about their own and their peers' ideas, but also confirmed that the relationship between students' reflection during prewriting tasks and text quality may be tenuous (Higgins et al., 1992; Neumann & McDonough, 2014). Although L2 writing researchers have suggested that students should be allowed to work individually or collaboratively based on their own preferences (e.g., Storch, 2005, 2007; Storch & Wigglesworth, 2007; Watanabe & Swain, 2007), our findings indicated that texts produced following collaborative prewriting tasks were scored higher than texts produced following the individual tasks. This

finding suggests that all students, independently of their self-reported preferences for collaborative or individual work, may benefit from collaborating with their peers.

As expected, the data show that Rachel, the collaboratively-oriented learner, engaged more in reflection and evaluation during the collaborative prewriting tasks than the individual tasks. Surprisingly, the inverse was not the case for Carlos, the individually-oriented learner. We would have expected him to engage more with individual prewriting tasks than the other students, but the data did not provide any evidence of greater engagement. There are a number of possible explanations for this. The design of the individual task may have been insufficient to promote or document students' evaluative actions. The overall low quantity of evaluation demonstrated by all students during the individual prewriting tasks provides some support for this explanation. During the individual prewriting task, students tended to simply brainstorm ideas and write them down without noting any evaluative actions on their handouts. However, it is also possible that the students did engage in evaluation but simply chose not to write down their thoughts on the worksheets. In the absence of any evaluative comments, it is impossible to know whether they engaged in reflection. Therefore, one advantage of collaborative prewriting tasks may be that they are more effective at 'pushing' students to articulate their evaluative comments. Because of the obligation to express ideas and thoughts in the presence of other students, collaborative prewriting discussions may have a positive impact on students' evaluation of content and ideas, independent of their preference for collaborative or individual work.

As predicted, Rachel, the collaboratively-oriented learner, had higher text quality scores after collaborative prewriting than after individual ones. However, the same was true for Carlos, the individually-oriented learner, as well as the other students in the class, although their differences were smaller. One possible explanation for this finding may be that the topics chosen for the collaborative prewriting tasks were easier to write about than the topics chosen for the individual prewriting tasks. However, data from a previous study using these same writing topics exclusively with collaborative prewriting tasks (Neumann & McDonough, 2014) did not give an indication that those topics were associated with higher content scores. An alternative explanation is that collaboration may be beneficial by encouraging students to verbalize their ideas, even if they do not engage in overt reflection and evaluation. Carlos' group, for example, did not generate many reflective content episodes. However, the group members, including Carlos, appear to have benefited nonetheless from the exchange of information and ideas.

For this study, we decided to select two focal participants to examine the relationship between preferences for individual or collaborative work during prewriting tasks and text quality in terms of content ratings. This allowed us to focus in detail on two individuals with opposite preferences and divergent participation patterns in the collaborative and individual prewriting tasks. However, it also means that most of the data that we discuss in the article stems from two individuals, which may be too narrow in focus for some researchers. It could also be argued that the findings from just two participants cannot be generalized to a larger population without further empirical research. However, as Yin (2009) argues, this is true for all empirical research and not just for descriptive case studies. Furthermore, as Storch (2002a, 2002b) has pointed out, group dynamics can play an important role in how individual students interact during collaborative tasks. Although it was beyond the scope of the current study, it would be interesting to explore in future studies how collaboratively- and individually-oriented students interact when asked to work with peers who have either a similar or different orientation.

Our analysis of differences between the collaborative and individual prewriting tasks rests upon the quantity of reflection and evaluation during these tasks. For the individual tasks, this was operationalized as a written comment or mark on the participants' worksheet. A lack thereof was coded as the absence of evaluative comments. However, we cannot be certain that the absence of a reflective comment can be equated with the absence of reflection; there is simply no record of an evaluative action or comment for researchers to analyze. A differing methodology might have yielded richer insights into individual student's thought processes. Through the use of think-aloud protocols, for example, we could have gained great insight into the thought-processes of these students during the individual prewriting task. However, relying on such protocols would have interfered with the regular classroom environment because students would have had to conduct these tasks individually in a laboratory setting. Secondly, the process of asking students to think-aloud may have also interfered with their natural tendency to reflect and evaluate or not to do so.

Finally, the topics may have played a bigger role in text quality than individual student's preference for collaborative or individual work or the format of the prewriting tasks. It is possible that some topics may have been easier to write about or to discuss. As a result, students may have obtained higher scores regardless of what type of prewriting task they did, and some topics may have generated more reflection than others. In order to ascertain whether there is a topic effect, the same study would have to be conducted by reversing the topic and format combinations. In other words, topics 1, 3, and 5 would have to be preceded by individual prewriting, and Topics 2, 4, and 6 preceded by collaborative prewriting tasks. Pooling the data across the two studies would then shed light on how the topics may have influenced students' reflection and the quality of their texts.

5. Concluding remarks

The current study provides some evidence that despite their expressed preferences for collaborative or individual work, students may benefit from collaboration during prewriting tasks in the L2 writing classroom. Combined with the research findings that students generally have positive attitudes towards collaboration, our findings suggest that providing students the option to choose between collaborative or individual work may not necessarily lead to more engagement during prewriting tasks or higher text quality. Future research with larger sample sizes and different populations in terms of age and proficiency level should explore whether this finding also holds true for other contexts.

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Appendix A. Unit 5 "Living Together: Advantages or Disadvantages": Prewriting Task [collaborative]

Writing Topic:

You will write a paragraph in which you discuss whether the costs of social living outweigh the benefits for human beings. In your paragraph, you will …

… state your opinion.
… explain the reasons for your opinion.

Part 1: Generating & Evaluating Ideas

a) Review the costs and benefits discussed in the reading text in Unit 5 on pp. 139–140. Using the table below, decide which costs and benefits also apply to humans and give appropriate examples.

Benefits	Example: Animals	Example: Humans	Evaluation: Relevant to humans? good example?
COSTS	Example: Animals	Example: Humans	Evaluation: Relevant to humans? Good example?

b) Review the list of costs and benefits for humans and decide whether you think the costs of social living outweigh the costs. Tell your group your opinion and the reasons for your opinion.
c) As you listen to members of your group explaining their opinions and the reasons for their opinions, evaluate whether they have used good examples to support their reasons. Explain your reasons for your evaluation of their reasons. As you receive feedback, record your team members' feedback in the table above.

Part 2: Selecting & Organizing Ideas

a) Based on your group's feedback, choose what information you will include in your paragraph. What information will you mention in which order? Make an outline, and then share it with your group.

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b) As you listen to your group's writing plans, give them feedback about whether their outline is well organized.

Unit 6 "Homing in on Education": Prewriting Task [individual]

Writing Topic:

You will write a paragraph in which you explain whether homeschooling is a good option for educating children. In your paragraph, you will …

… state your point of view;
… explain the reasons for your opinion.

Part 1: Generating & Evaluating Ideas

d) Review the reading texts in Unit 6 on pp. 201–202 and pp. 203–207, and read the text "How to decide whether or not to homeschool" on the handout. Using the table below, make a list of the reasons why people believe it is a good option or not a good option for educating children. Give a specific example for each reason you list. You can use information from the texts (mention source) and your own ideas.

Reasons: Good option	Specific example	Review your ideas: Good reason & example?
Reasons: Not a good option	**Specific Example**	**Review your Ideas: Good reason & example?**

e) After you finished brainstorming ideas, evaluate your reasons and examples. Make notes of the strong and weak points of each one in the "review your ideas" column above. Decide whether you think homeschooling is a good option for educating children.

Part 2: Selecting & Organizing Ideas

c) Considering your decision and evaluation of your reasons and examples, what information will you include in your paragraph, and in what order? Make an outline.

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d) After you finished your writing plan, evaluate whether your outline is well-organized. Make notes of the strong and weak points of your outline in the space below.

Appendix B. Paragraph Evaluation Grid

		Content	Organization	Grammar and vocabulary	Mechanics and form
10 9	**Above standard**	**C** Topic sentence clear & focused **C** Strong, convincing support **C** Specific secondary support **C** Appropriate conclusion	**O** Logical organization & effective sequencing **O** Effective & varied use of transitions	**G** Good variety of sentence types **G** No major problems with sentence combination **G** No errors in phrase structure/ parallelism **G** Few errors (1–5) in grammatical forms **V** Good range and variety in vocabulary **V** Few errors (1–2) in word choice, word form, or idiomatic phrasing **V** Precise and effective word choice and register	**M** A few minor errors in spelling, punctuation, and/ or capitalization (1–2) but meaning is clear **F** Proper paragraph form **F** Neat presentation

(*continued*)

		Content	Organization	Grammar and vocabulary	Mechanics and form
8 7	**Standard**	**C** Topic sentence present; controlling idea imprecise **C** Mostly relevant and appropriate support **C** Occasional minor problems with depth of development and/or unity **C** Conclusion present	**O** Mostly logical organization & effective sequencing **O** Mostly effective & varied use of transitions	**G** Adequate variety of sentence types **G** One or two sentence combination problems **G** Few errors in phrase structure/ parallelism **G** Occasional errors (6–12) in grammatical forms **V** Adequate range and variety in vocabulary **V** Occasional errors (3–6) in word form, word choice, or idiomatic phrasing **V** Meaning rarely unclear	**M** Several errors in spelling, punctuation, and/or capitalization (3–6) but meaning is mostly clear **F** No indentation **F** Mostly neat presentation
6 5	**Approaching standard**	**C** Controlling idea not evident in topic sentence OR topic sentence not present/ appropriate **C** Some supporting points vague, insufficient, unconvincing, and/or off-topic **C** Problems with unity and/or focus or development of topic **C** Conclusion not present/ appropriate	**O** Loosely organized **O** Relationship between ideas sometimes unclear **O** Several problems with cohesion, sequencing, and flow of ideas	**G** Basic sentence variety **G** Two or three sentence combination problems **G** Several errors in phrase structure/ parallelism **G** Frequent errors in grammatical forms **G** Several missing constituents or function words **V** Adequate basic vocabulary but lacks sophistication and range. **V** Repetition of basic vocabulary **V** Many errors (7+) in word form, word choice, or idiomatic phrasing **V** Meaning is sometimes unclear	**M** Frequent errors in spelling, punctuation, and/ or capitalization (7+); errors make meaning unclear **F** Problems with paragraph form **F** Messy presentation
4	**Below standard**	**C** No clear central theme **C** Poor development of topic **C** Support is mostly vague, insufficient, unconvincing, and/or off-topic Not enough to evaluate	**O** Ideas not organized **O** Relationship between ideas often unclear **O** Difficult to follow	**G** Absence of complex sentences **G** Several sentence combination problems **G** Problems with simple sentences **G** Frequent errors in phrase structure/parallelism **G** Frequent errors in noun or verb forms **G** Many missing constituents or function words **V** Problems with basic vocabulary **V** Frequent errors in word choice and word form **V** Very narrow range of vocabulary **V** Meaning is often unclear	**M** Poor mastery of two or more of the following: spelling, punctuation, and/ or capitalization; errors often make meaning unclear **F** Writing is illegible

C: ___/10 O: ___/10 GV: ___/10 FM: ___/5.
Legend: **C** = Content; **O** = Organization; **G** = Grammar; **V** = Vocabulary; F = Form; and **M** = Mechanics.

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Heike Neumann is a lecturer of English as a second language and a language test developer in the Department of Education at Concordia University. Her research interests include second-language writing pedagogy, writing assessment, and language assessment.

Kim McDonough is an associate professor and Canada Research Chair in applied linguistics in the Department of Education at Concordia University. Her research interests include interaction, task-based language teaching, and psycholinguistic approaches to second language acquisition.