

Investigating The Relationship between Writing and Cooperative Learning

Noor Hanim Rahmat¹, Wararat Whancit², Siti Aishah Taib³,
Norhisyam Jenal⁴, Mazura Anuar⁵, Mok Soon Sim⁶, Eliyas S.
Mohandas⁷

^{1,3}Akademi Pengajian Bahasa, Unversiti Teknologi MARA Cawangan Johor, Kampus Pasir Gudang, ²School of Liberal Arts, Walailak University, Tha Sala, Nakhon Si Thammarat, Thailand, ⁴Kolej Pengajian Kejuruteraan, Universiti Teknologi MARA, Cawangan Johor, Kampus Pasir Gudang, ^{5,6,7}Akademi Pengajian Bahasa, Universiti Teknologi MARA, Shah Alam, Malaysia

Email: noorh763@uitm.edu.my, wararatanoi@gmail.com, aishah711@uitm.edu.my, hisyam0324@uitm.edu.my, mazura042@uitm.edu.my, moksoon@uitm.edu.my, eliyas9154@uitm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i8/14575>

DOI:10.6007/IJARBSS/v12-i8/14575

Published Date: 16 August 2022

Abstract

When one thinks of “writing”, the vision of a writer silently writing alone to complete a writing assignment comes to mind. Indeed, writing is act of communication between the writer and the reader. One difficulty of the writer is that of physiology difficulty. This difficulty arises when the writer do not feel the interaction and feedback from the readers during the writing process. Some writing activities can help prepare writers to gain interaction while they wrote (even before the intended audience of the written product reads it) is to encourage communication during the writing process. This communication can take place if the writing is not done alone. This study is done to explore the dynamics of cooperative learning in the writing process. In addition to that, this study is also done to show the relationship between writing process and cooperative learning. Learners of academic writing underwent a semester of learning academic writing through activities that support cooperative learning. At the end of the semester, the learners responded to survey to reveal their perceptions of this approach. The instrument used in this study is s survey. The survey has three sections; section A consists of items on demographic profile, section B has 16 items on writing process and section D has 13 items on cooperative learning. Findings showed that group members depend on one another to make the team work a success and this is important for positive interdependence. For a team to succeed, each team members need to be accountable for his/her part. They need to interact well through the use of appropriate interpersonal skills. Only then can the group work towards group processing to improve on the team efforts.

Keywords: Academic, Writing, Communication, Dynamics, Cooperative Learning.

Introduction

Background of Study

Many language learners can be good at some language skills; but may have less confidence in some skills. With reference to figure 1, according to Brown (2000), language skills can be divided into (a) receptive and (b) productive skills. Receptive skills are listening and reading. These skills are seen as more “passive” skills than productive skills such as (a) speaking and (b) writing. Moreover, productive skills are most used/needed in the classroom context (Abdul Rahman, et.al, 2022). This means the language ability of a learner is often gauged by the productive skills that the learner displays.

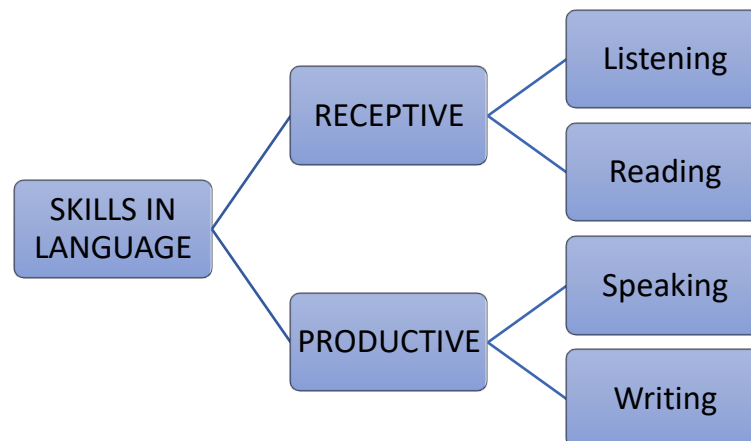


Figure 1- Skills in Language (Source:Brown,2000)

When one thinks of “writing”, the vision of a writer silently writing alone to complete a writing assignment comes to mind. Indeed, writing is act of communication between the writer and the reader. Many still see the process of writing as a solo activity (Rahmat, 2019). The aim of the writing process is to deliver the content to the intended audience in a manner that is presentable and understood to the audience/reader. According to Rahmat (2019), one difficulty of the writer is that of physiology difficulty. This difficulty arises when the writer do not feel the interaction and feedback from the readers during the writing process. Some writing activities can help prepare writers to gain interaction while they wrote (even before the intended audience of the written product reads it) is to encourage communication during the writing process. This communication can take place if the writing is not done alone. The study by Pham (2021) found that collaborative writing had great effects on students’ writing fluency in both collaboratively written papers and individually written papers.

Nevertheless, cooperative work can sometimes take a toll on communication among team members. Team members may not always agree on the same ideas. Conflicts are known to happen in any group discussions. However, according to Rahmat (2020), differences in opinion can be advantageous in some ways. Firstly, the conflicts can push team members to practice problem solving and critical thinking skills. The disagreements can also encourage team members to sharpen their critical thinking skills.

Hence, this study is done to explore the dynamics of cooperative learning in the writing process. Specifically, this study is done to answer the following research questions;

- How do writers perceive the writing process in group work?

- How do writers perceive cooperative learning in group writing?
- What is the relationship between writing process and cooperative learning?

Literature Review

The Nature of the Writing Process

Writing is not a passive activity between the writer and the reader. With reference to figure 2, the writer actively transfers his/her ideas from oral thoughts to written thoughts. Flower and Hayes (1981) presented the writing process as having three main stages. The first stage is the stage known as long-term memory. Writers need their long-term memory to extract content to be used in their essay. The long term memory is where the writers store their knowledge of the topic, and the knowledge of the audience. This is also where writers keep their stored writing plans and also their writing skills.

The stored information from the long-term memory is then used by the next stage -the working memory. This is also known as the monitoring stage. This is the stage where the writers work hard through three important stages. The first sub-stage is the planning stage where writers generate ideas through organising and also setting goals. The second sub-stage is translating where writers translate/convert their oral thoughts into written thoughts/ The third stage is the reviewing stage. This third sub-stage is when the writers reads and edits the written product.

The working memory/monitoring stage functions from content stored in the task environment. The task environment contains information of the (i) writing assignment and (ii) external storage. The (i) writing assignment provides information on the topic, the audience and motivating cues to the writers. The (ii) external storage stores the text produced and other resources used for the working memory.

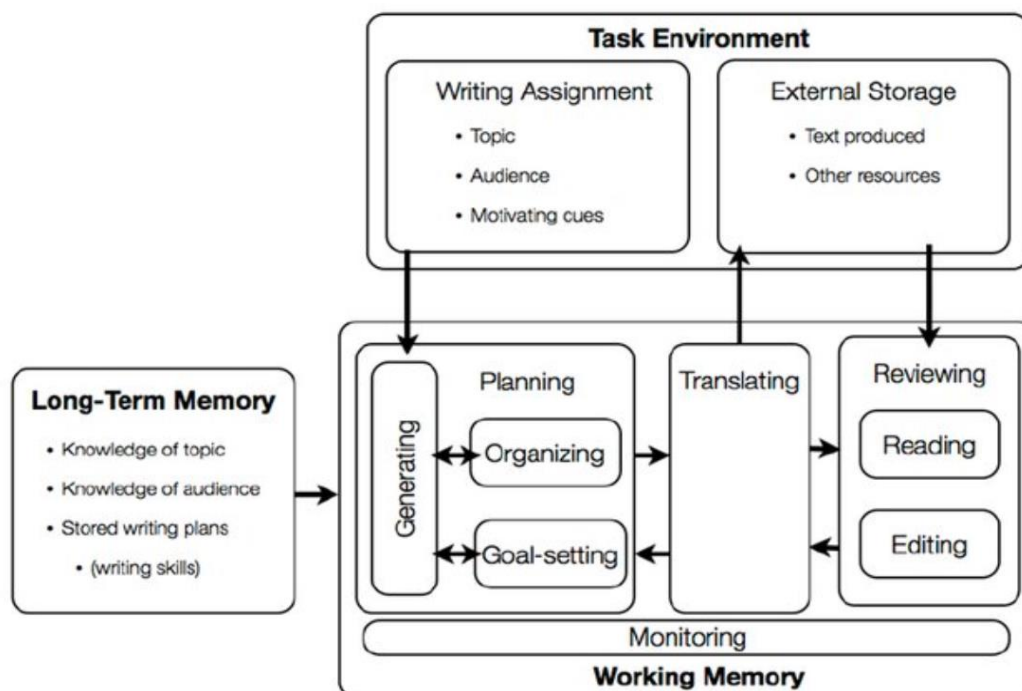


Figure 2- The Writing Process (Source: Flower and Hayes, 1981)

The writing process is indeed a complicated one and writers need to work cooperatively with others at different stages in the writing process. According to Lingard (2021), academic writing is rarely a solo act. Writers will need help from the people around them at some (or all) stages in the writing process. Getting help at some stages in the writing process not only expediate the writing process, the help can also improve the writers' motivation towards writing. This is also agreed by Rahmat (2022) who also found that when it comes to writing, there is direct relation between motivation and satisfaction. Learners should be satisfied of what they achieved during the learning process.

Cooperative Writing

The term collaborative and cooperative are related to one another. Cooperative work is one form of collaborative learning method. According to Lingard (2021), collaborative writing is often done through even core activities: brainstorming, conceptualizing, outlining, drafting, reviewing, revising and editing. Berndt (2011) found that collaborative writing can follow many different strategies, but five are most common. These are (a) one-for-all writing, (b) each-in-sequence writing, (c) all-in-parallel writing, (d) all-in-reaction writing and (e) multi-mode writing. Each offers a different approach to coordinating the work of writing in a group, and each is suited to different collaborative contexts. "One-for-all writing" occurs when one person writes on behalf of the team. "Each-in-sequence" writing occurs when one person starts the writing, completes their task and passes it on to the next person to complete theirs. "All-in-parallel" writing involves dividing the writing work into discrete units and writers working simultaneously rather than in sequence. When researchers create a document together in real time, adjusting to each other's changes and additions without explicit preplanning and coordination, they are using the strategy of "all-in-reaction" writing. Many research teams use a combination of these strategies over the course of a writing project, called "multi-mode writing".

Group writing is also known by other terms. Johnson & Johnson (1999) presented five Basic Elements of Cooperative Learning. The first element is (i) positive interdependence. One benefit of cooperative work is that learners learn to depend on their peers in a positive manner. They help one another to make the work a success. The second element is (ii) group accountability. Team members who work together succeed because they have good group accountability where every team member is responsible to make the teamwork a success. The third element is (iv) interaction. This is also deemed as important by Vygotsky (1978) reports that social learning as the interaction that promotes thinking, develops reasoning, and supports cultural activities like reading and writing. The fourth element is (v) teaching of small-group skills. Well-planned cooperative work allows teachers to teach small groups skills at separate times than the other teams. This gives individual attention to any one team at chosen time. Finally, the fifth element is (vi) group processing. Cooperative work allows team members to clarify work issues to make the work a success.

Past Studies

The study by Ozdemir (2021) compared collaborative writing activities produced on the Padlet website on the internet and in a face-to-face (F2F) environment. The sample consists of two different groups, both of which were formed with four people. For the triangulation of the case study, texts produced F2F and online, video recordings of the F2F writing process and records of the group interviews conducted after the internet practice. Comparative

evaluation regarding various components, such as writing processes, writing achievement, group interaction, creativity, and opinions of participants was done. Findings reveal that that the samples preferred online environment.

Next, Kitjaroonchai & Suppasetsee (2021) investigated the interaction patterns of six ASEAN EFL university students when they worked in small groups on two collaborative writing tasks: a descriptive essay and an argumentative essay. Both groups were homogeneous in terms of gender and heterogeneous in terms of home countries. Data collection included pre- and posttest writing, pre- and post-task questionnaires, participants' work on essays, their reflections, observations, and semi-structured interviews. The students worked on their essays in Google Docs, and the researcher(s) used DocuViz as a tool for visualizations of students' collaborative writing contributions and styles. Findings revealed different interaction patterns (a cooperative revision style for Group A vs. a main writer style for Group B) were shown across the two collaborative writing tasks. While revising, both groups added and corrected their essays and employed almost the same writing change functions and language functions, which were suggesting, agreeing, and stating.

Pham (2021) investigated on the collaborative writing of sixty-two sophomore English-major students at a university in Ho Chi Minh city, Vietnam. One difference in the treatment between the two groups was the composing stage. Twenty-seven students from the control group composed essays individually after they worked together for idea development to make an outline, whereas 35 students from the experimental group composed essays collaboratively. Data collection was from students' pretests, posttests of both individually and collaboratively written papers, and from the semi-structured interviews. The study reveals that collaborative writing had great effects on students' writing fluency in both collaboratively written papers and individually written papers.

The study by Kaweera et al (2019) aimed to to compare between individual and collaborative writing (pair and group of four) activities of 72 EFL students. The subjects of the study were assigned to produce their tasks by these three activities. Qualitative method was employed by using interview of nine students drawn from students with different levels of English proficiency (low, fair and high). It was focused on their perspectives towards skills practiced during working on written tasks: writing, thinking, participation, communication as well as their satisfaction of these activities. The results from content analysis demonstrated that overall the students practiced participation skills when doing individual and pair work. The students practiced writing skills when joining group work. With regard to the students' satisfaction, low proficiency students in low group were likely to enjoy co-authoring activity either pair or group work. Their satisfaction seemed to increase according to the number of group members.

Conceptual Framework of the Study

Figure 3 shows the conceptual framework of the study. This study is done to show the relationship between writing process by Flower & Hayes (1981) and cooperative learning by (Johnson & Johnson, 1999).

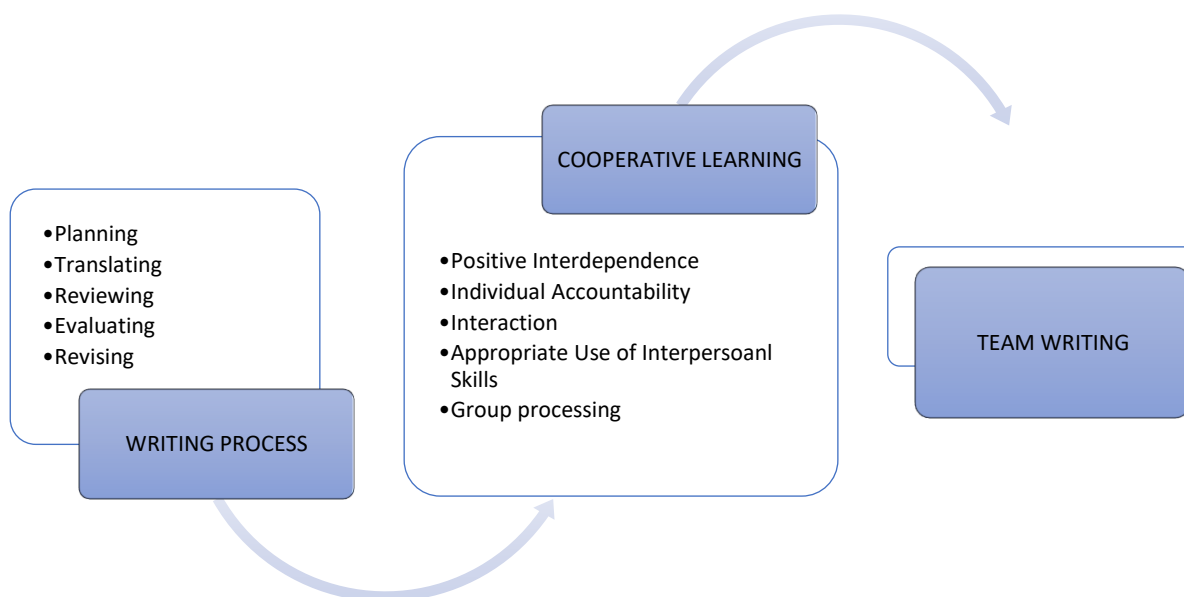


Figure 3- Conceptual Framework of the Study: Combining Writing process and Collaborative Learning to create Team Writing (Source: Flower and Hayes, 1981; Johnson & Johnson, 1999)

Team writing in the classroom is achieved when writers are given the opportunity to work cooperatively during the writing process. In the context of this study, writers worked cooperatively throughout the writing process. The writing process involves stages such as planning, translating, reviewing, evaluation and also revising. Cooperative learning is known to give learners benefits in terms of positive interdependence, individual accountability, interaction, appropriate use of interpersonal skills and also group processing.

Methodology

This quantitative study is done to investigate the relationship between the writing process and cooperative learning. 21 learners underwent a semester of learning academic writing in groups. The instrument to elicit the perception of the respondents is a survey. The items in the constructs were adapted from writing process by Flower and Hayes (1981) and also cooperative learning by Johnson & Johnson (1999). With reference to table 1, Section A consists of items on demographic profile, section B has 16 items on writing process and section D has 13 items on cooperative learning.

Table 1
Distribution of Items in the Survey

SECTION	HEADING	NO OF ITEMS
B	Writing Process	16
C	Cooperative Learning	13
		29

Table 2 shows the reliability statistics for the survey. SPSS analysis revealed that the survey has a Cronbach alpha of .915; thus revealing a high external reliability of the instrument.

Table 2

Reliability Statistics

Cronbach's Alpha Based on Standardized Items	N of Items
.915	29

Findings*Findings for Writing Process*

This section presents data to answer research question 1: How do writers perceive the writing process in group work? According to Flower and Hayes (1981), the during the writing process, writers need to go through (a) planning, (b) translating and (c) reviewing (which includes evaluating and revising)

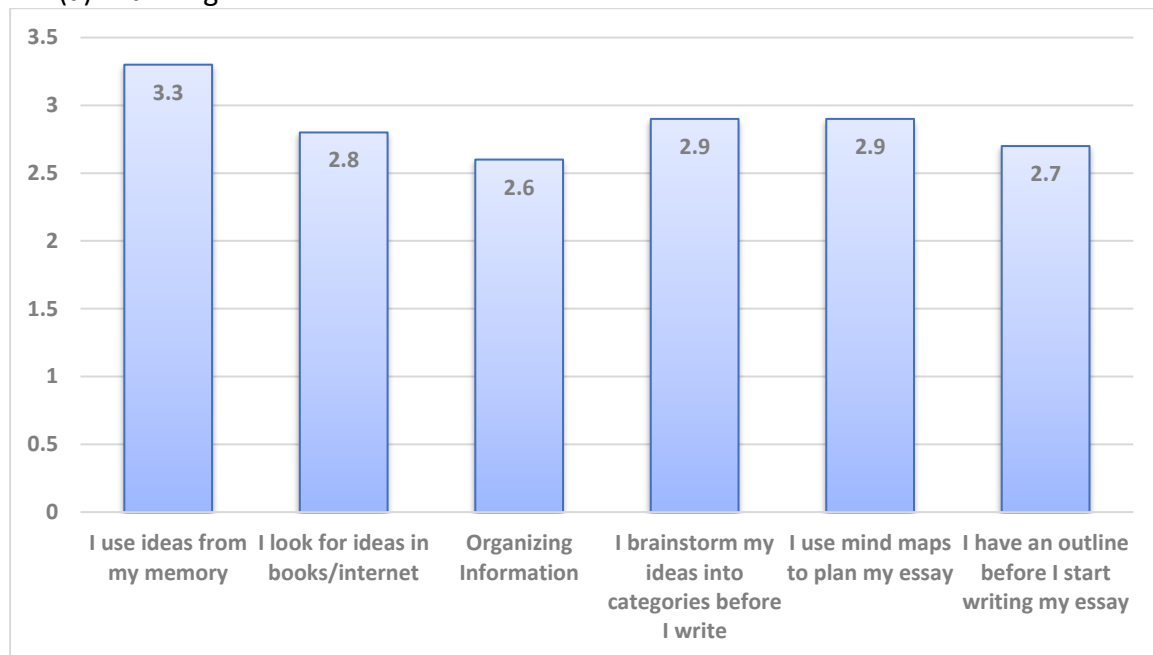
(a) Planning

Figure 4- mean for Planning

Figure 4 shows the mean for planning. The highest mean (3.3) is for “use ideas from memory”. This is followed by a mean of 2.9 for “brainstorm ideas into categories” and also “ use mind maps to plan”.

(b) Translating

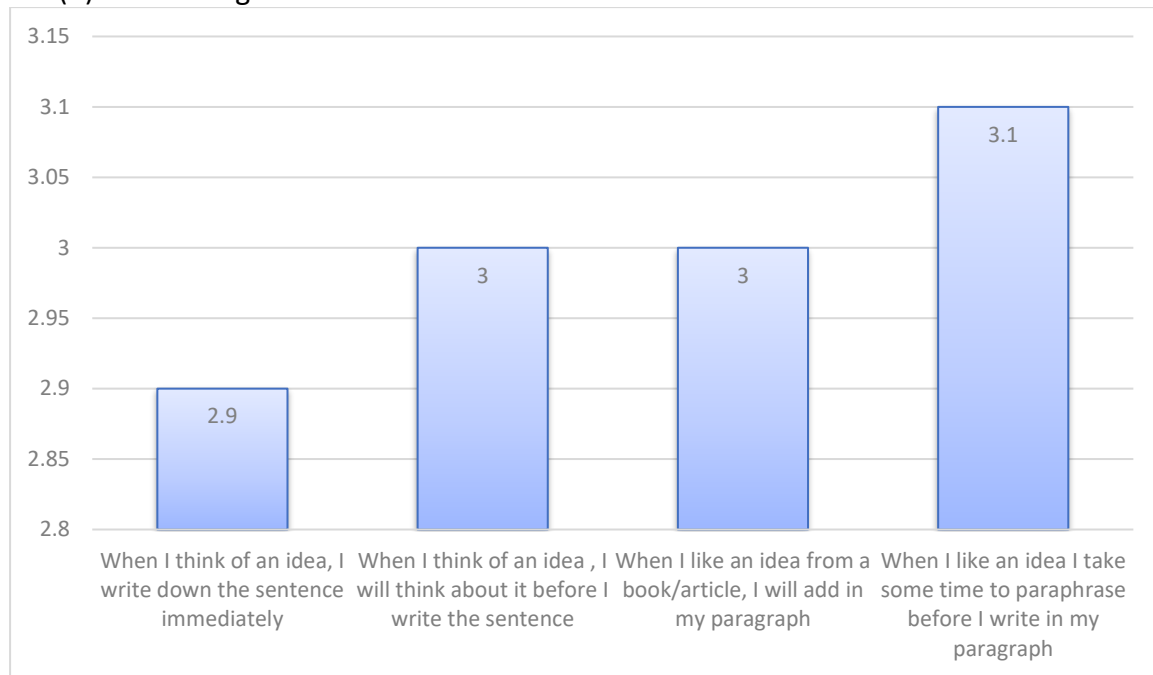


Figure 5- Mean for Translating

Figure 5 shows the mean for translating. The highest mean is 3.1 for “When I like an idea I take some time to paraphrase before I write in my paragraph”. This is followed by a mean of 3 for two items and they are “ When I think of an idea , I will think about it before I write the sentence” and also “ When I like an idea from a book/article, I will add in my paragraph”.

(c) Reviewing

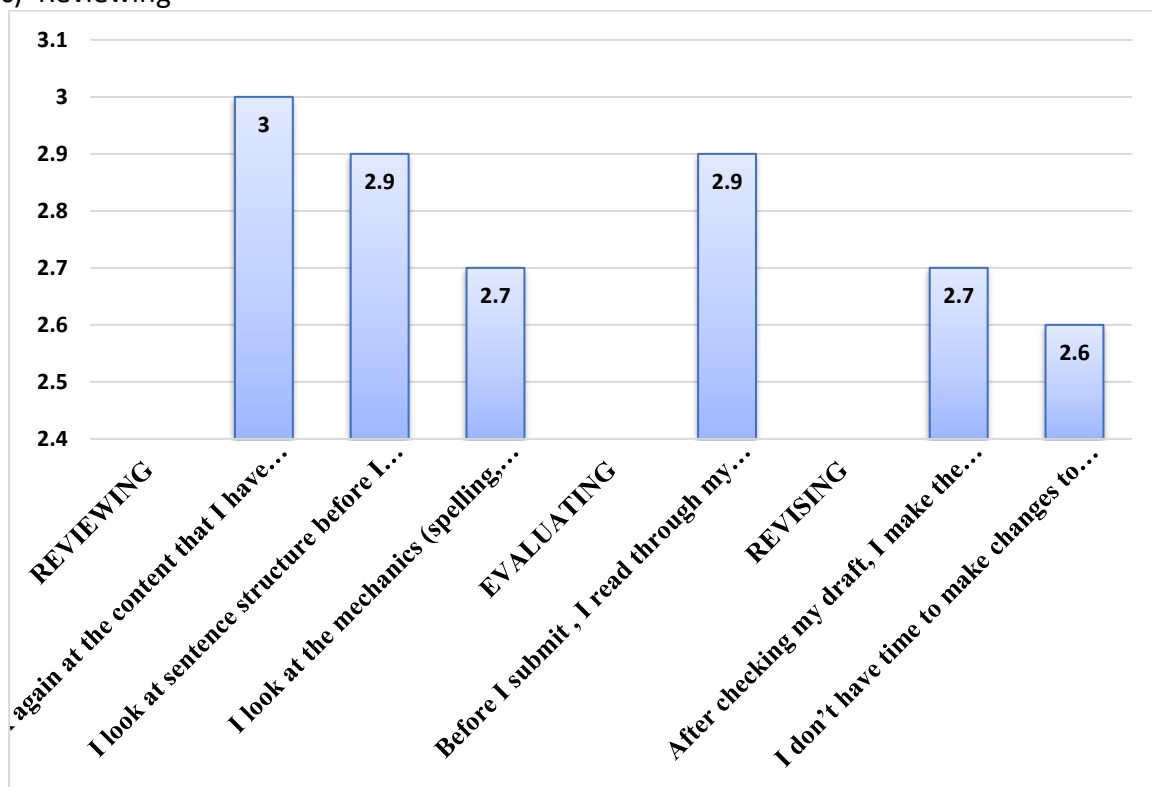


Figure 6- Mean for Reviewing

Figure 6 shows the mean for reviewing. The highest mean of 3 is for “I look again at the content that I have written in each paragraph before I submit my work”. Next is a mean of 2.9 for two items and they are “I look at sentence structure before I submit my essay” and also “Before I submit , I read through my essay and decode if it is a good essay”.

Findings for Cooperative Learning

This section answers research question 2: How do writers perceive cooperative learning in group writing? According to Johnson & Johnson (1999), cooperative learning gives learners (a) positive interdependence, (b) individual accountability, (c) interaction, (d) appropriate use of interpersonal skills, and (e) group processing.

(a) Positive Interdependence

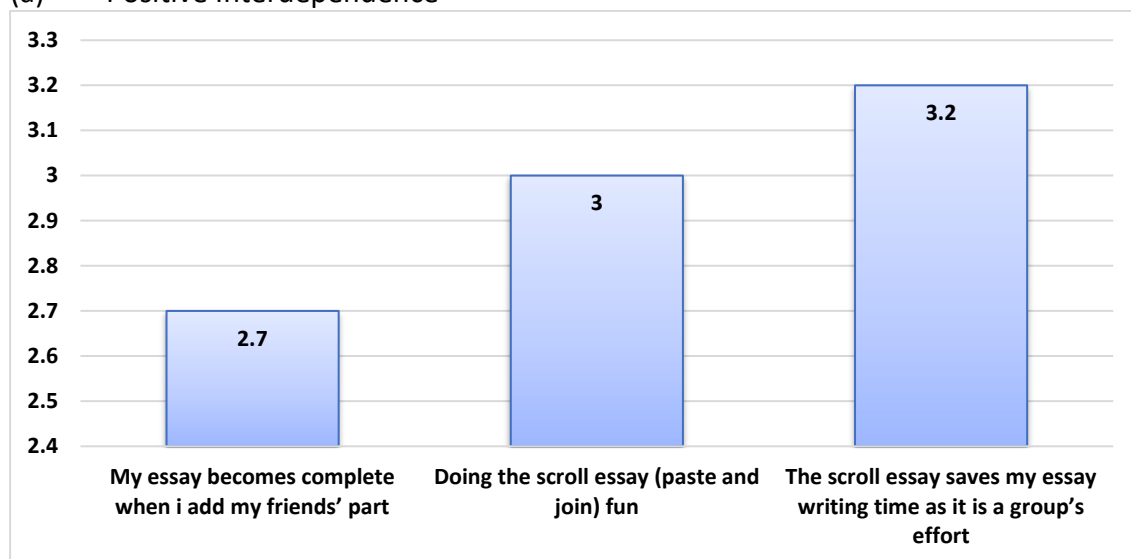


Figure 7- Mean for Positive Interdependence

Figure 7 shows the mean for positive interdependence. The highest mean of 3.2 is for “The scroll essay saves my essay writing time as it is a group’s effort” and also “Doing the scroll essay (paste and join) fun” (mean=3)

(b) individual Accountability

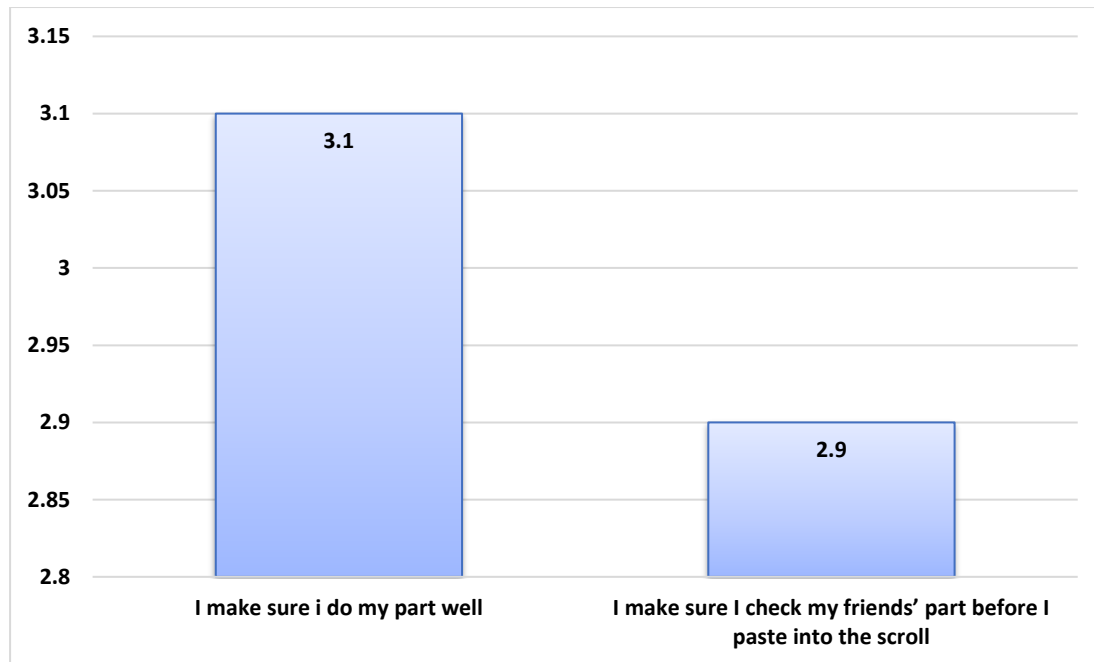


Figure 8- Mean for Individual Accountability

Figure 8 shows the mean for individual accountability. The item “make sure i do my part well” had a mean of 3.1 and the item “I make sure I check my friends’ part before I paste into the scroll”.

(c) interaction

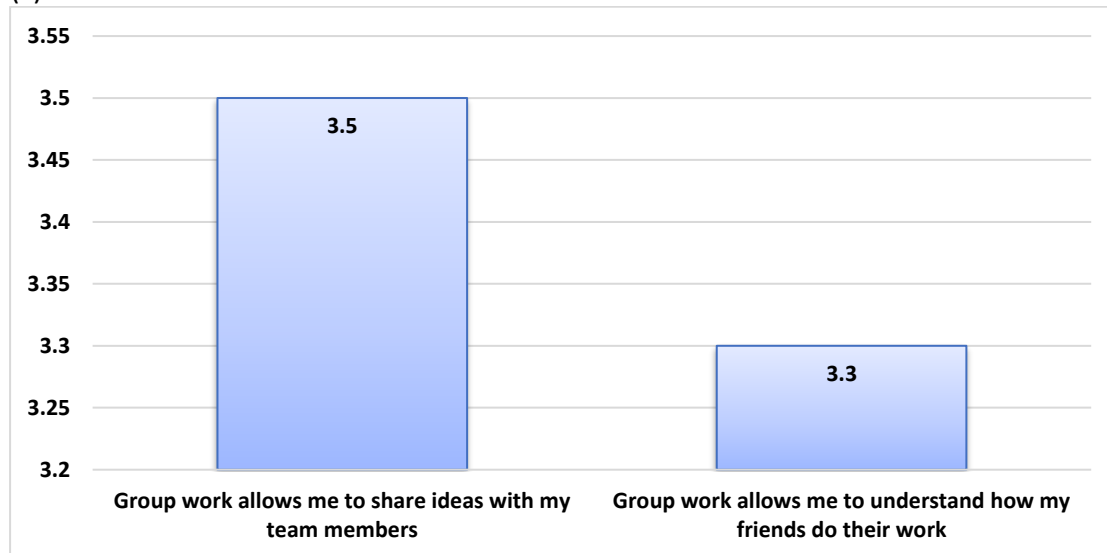


Figure 9- Mean for Interaction

Figure 9 presents the mean for interaction. The item “Group work allows me to share ideas with my team members” had a mean of 3.5 . the item “Group work allows me to understand how my friends do their work” had a mean of 3.3.

(d) appropriate use of interpersonal skills

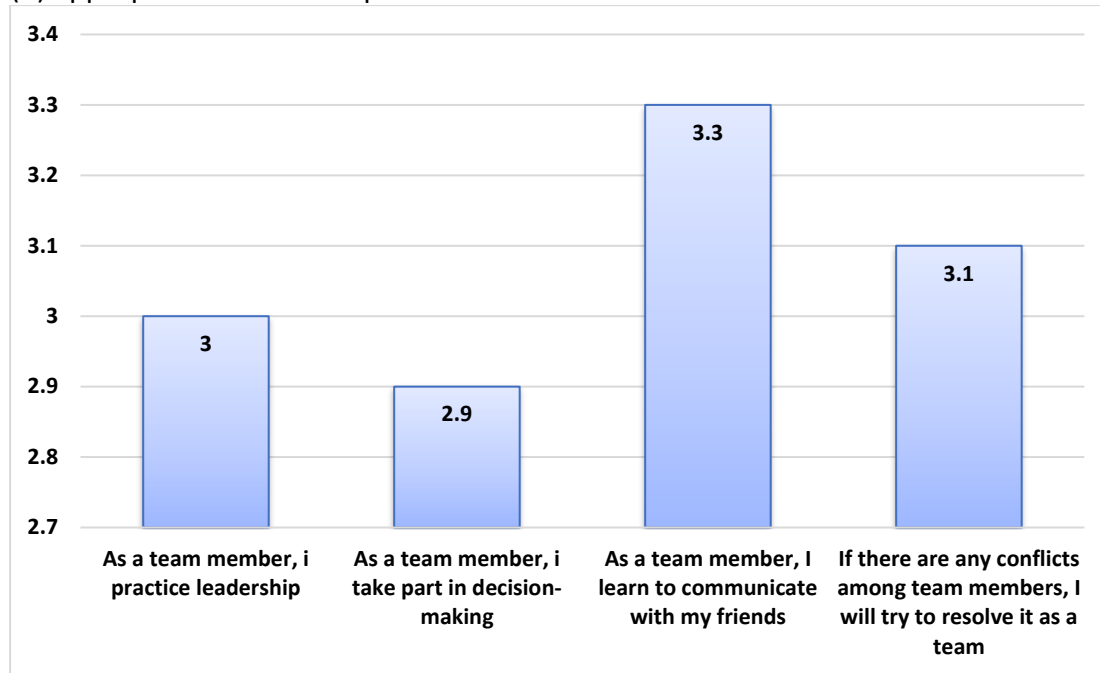


Figure 10- Mean for Appropriate Use of Interpersonal Skills

Figure 10 shows the mean for appropriate use of interpersonal skills. The highest mean at 3.3 is for “As a team member, I learn to communicate with my friends” This is followed by a mean of 3.1 for “If there are any conflicts among team members, I will try to resolve it as a team”.

(e) Group Processing

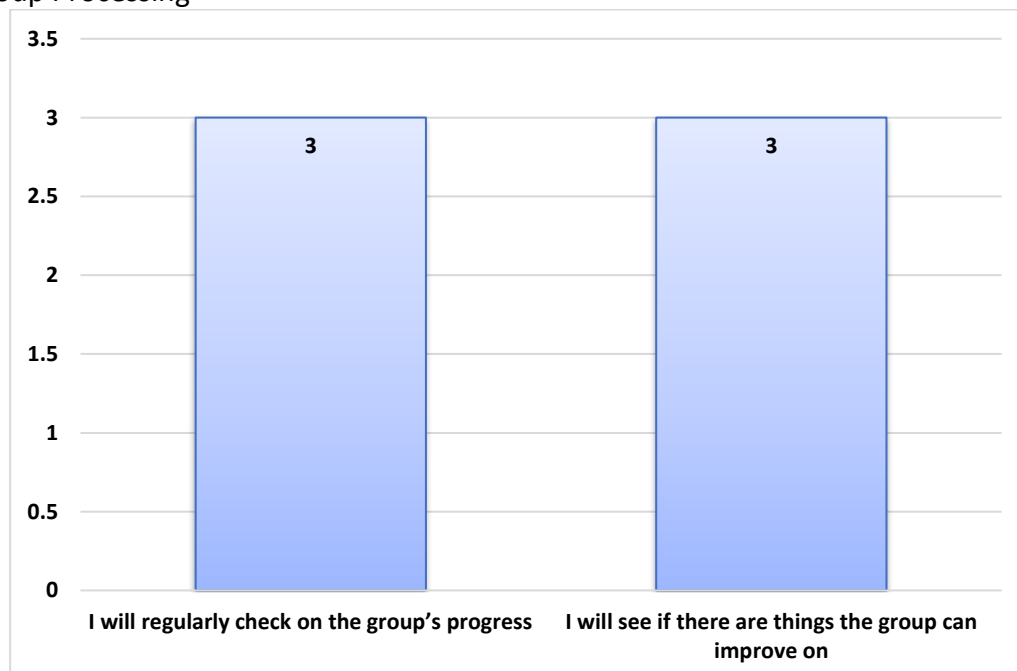


Figure 11-Mean for Group Processing

Figure 11 shows the mean for group processing. Both items share a mean of 3. They are “will regularly check on the group’s progress” and “will see if there are things the group can improve on”.

Findings

This section answers research question 3: What is the relationship between writing process and cooperative learning?

Table 3

Correlations between Writing and Cooperative Learning

		WRITING	COOPERATIVE
WRITING	Pearson Correlation	1	.544*
	Sig. (2-tailed)		.011
	N	21	21
COOPERATIVE	Pearson Correlation	.544*	1
	Sig. (2-tailed)	.011	
	N	21	21

*Correlation is significant at 0.05 level (2-tailed)

To determine if there is a significant association in the mean scores between writing and cooperative, correlation coefficient was conducted. Table 3 shows that there is a moderate significant association between writing and cooperative ($r=.544$) and ($p=.011$). The correlation coefficient is significant at the 0.05 level. According to Jackson (2015), positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. The stronger the positive correlation, the more likely the stocks are to move in the same direction. Hence, there is a strong positive correlation between writing process and cooperative learning.

Conclusion

Summary of Findings and Discussion

Writing Process and Cooperative Learning

When it comes to planning, writers used ideas from memory. They also brainstormed ideas before they made plans. During the translating stage, writers gave some thoughts to the ideas before writing it down. This is the stage where writers used their paraphrasing skills to transfer ideas onto their writing. Writers reviewed their work before they submit their work. The reviewing stage do not only refer to language review; but also review of ideas.

Findings also showed that group members depend on one another to make the team work a success and this is important for positive interdependence. For a team to succeed, each team members need to be accountable for his/her part. They need to interact well through the use of appropriate interpersonal skills. Only then can the group work towards group processing to improve on the team efforts.

The findings of this study is in accordance with the study by Pham (2021) and also Kaweera et al (2019) who also found that composing cooperatively benefits writers in many ways. They found that cooperative writing had great effects on students' writing fluency in both collaboratively written papers and individually written papers.

Pedagogical Implications and Suggestions for Future Research

While the act of composing is individual, the writing tasks can be turned into a cooperative work. Flower and Hayes (1981) presented three main parts of the writing process and they

are (a) planning, (b) translating and (c) reviewing. The parts of the writing tasks can be divided among team members. Each member is responsible only for his/her part. The study by Abidin, et al. (2022) focussed on colouring the writing parts for team members to make the group writing manageable. Vygotsky (1978) emphasised many times on the obvious and subtle benefits of cooperative work. What is obvious, team members are able to share the burden and learn from one another. Subtly, discussions during the cooperative work encourage critical thinking and problem solving skills. It is suggested that future research look into the comparison of individual, pair and group work benefits and drawbacks in writing classrooms.

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