CHAPTER 5

DISCUSSION AND CONCLUSION

Introduction

This chapter reports the main findings and conclusions on collaborative writing among students with mixed proficiency in English. The chapter is divided into six sections, namely, Insights Raised by Findings from the Research, Implications Based on Key Theories Driving the Research, Implications on the Methods Used, Implications for Pedagogy, Limitations, and Areas for Further Research.

Insights Raised by Findings from the Research

Process and Product in Writing

This study examines both the process and product of collaborative writing. The participants of the study comprised ESL students with mixed proficiency in English. Local researchers, namely, graduate student researchers from University of Malaya who had carried out studies on the process of collaborative writing are Foong (2005), Lee (1999), Letchimanasamy (2005), Mariam (2004), Ng (2004) and Yong (1997). In addition, other studies focusing on the process of collaborative writing include Chung and Walsh (2006); Hodges (2002); Klass-Soffian (2004); Moore-Hart (2005); Passig and Schwartz (2007); Raymond and Yee (1990); Rice (2007); Schindler (2002); Storch (2002); Vass (2007); Yong (2006, 2010).
There are also studies which have been carried out to include both process and product of collaborative writing. Storch (2005) approached the study of collaborative writing holistically by focussing on the process, product and student reflections of their collaborative writing experiences. Kuiken and Vedder (2002) investigated both process and product in collaborative writing with emphasis on the role of group interaction during discussions, linguistic strategies, grammatical and lexical complexities of the texts produced. Dillon (1994) analysed the collaborative writing process of producing a consultancy report and examined a project document. The study emphasises both the process and product of collaborative writing in a Malaysian context. There are several important areas of interest identified from this study.

**Scaffolding**

Scaffolding has been observed in the participants’ interactions. The participants in both Groups 1 and 2 were spontaneous in their interactions during the process of writing their long reports. Similarly, Sim (1998), a graduate student researcher discovered from her study that intermediate-low proficiency students could interact with their peers without prior training. However, in this study, there was a difference in the amount of individual contribution due to the participants’ proficiency and characteristics. The more proficient students played an active role in the discussion while the less proficient ones were passive. On the other hand, some less proficient students still presented their ideas regularly because they were confident and sociable. Their level of participation in the collaboration could be understood through the Vygotskian perspective.
Mutual scaffolding (Donato, 1988, 1994) was identified in the participants’ collaboration. As the participants elicited information from one another to increase their understanding of shared information, they successfully clarified vague points and provided accurate terms to be used. The weaker ones alerted and reminded group members of sub-tasks to perform in order to write a good report.

The participants also scaffolded one another by probing and correcting misconstrued knowledge. Yong (2006) discovered that speakers with better proficiency provided scaffolding by clarifying information and offering alternatives or encoding ideas when their friends experienced difficulty in expressing themselves. Consequently, capable students can stimulate, guide and scaffold the less capable ones to achieve their desired potential level of ZPD as defined by Vygotsky (1978). Asking of questions can also result in knowledge transformation which can lead to new knowledge. Therefore, students should use questions frequently in the collaboration process. Teachers can explain the benefits to the students to prevent them from reacting negatively to questions.

The outline used by Group 2 in this study can be regarded as a form of scaffolding (Donato, 1994). Moragne e Silva (1989, 1991) discovered that an outline or a prompt was constantly referred to by L2 writers. Kellogg (1990) supports the use of an outline due to its benefit in writing. Initially, Corrine who has better proficiency and writing ability than her group suggested writing an outline but her group members disagreed with her. It has been discovered that good L2 writers plan extensively before and during
the composing process than their weak counterparts (Akyel, 1994; Cumming, 1989; Sasaki, 2000; Zimmerman, 2000). Corrine, being the knowledgeable peer, willingly provided assistance to her group members who were novices to reach a higher level of skills and knowledge. Her group members could successfully write their individual sections by referring to Corrine’s outline.

The scaffolded instruction from more capable peers in assisting the weaker ones is performed through their interactions and task negotiations (Kasper, 1997). It enables the group to accelerate in their learning. This process can even create new knowledge and change the way a writer is trying to communicate. This is similar with the findings of Watanabe (2008) on mixed-ability students’ interactions which provided opportunities for them to learn, prioritise ideas over proficiency and co-construct knowledge. Hence, in some circumstances, effective learning can occur with the help of peer interaction. Therefore, collaboration among mixed-ability students should be encouraged as a bid to help them learn effectively.

**Mediators and ZPD**

Mediators and progress in the participants’ ZPD were evident in the study. The findings showed that proficient students played the role of mediators as they acted as gatekeepers in filtering information and asking questions. This increased the group’s understanding of their readings and fulfilling task requirement. As a result, the group’s level of ZPD increased.
Cumulative talk also helped the participants to achieve their ZPD. The findings from this study showed that although some low proficient participants were passive due to their shyness and inability to express their ideas, nonetheless, they listened and learned new knowledge from their peers’ interaction. This shows that learning can still take place even when a student appears to be passive. Therefore, teachers need not be overly concerned when students do not contribute actively during discussions.

The mixed-ability participants also functioned at a higher cognitive level through their collaboration. Initially, they failed to understand the information they had read, but their understanding increased through questions and deliberations. This concurs with Webb et al.’s (1998) study which found that mixed-ability groups provided higher quality explanations to deepen understanding than students in uniform-ability groups. This observation shows that social interaction can result in higher mental functioning (Vygotsky, 1978).

**Researcher’s Guidance**

Some researchers chose not to be physically present during their students’ discussions while some decided to join the students in their collaboration. In the research by Sim (1998) and Yong (2006), they were not present during their students’ collaboration process. In contrast, both Klass-Soffian (2004) and the researcher in this study were present during the students’ collaboration. However, they only provided minimal assistance to the participants.
Group 1 sought the researcher’s help in planning the format of the long report, organising the information and using the mind-map. They were uncertain of how to carry out their task initially. The researcher’s advice was followed closely and it was reflected in their writing.

This suggests that the teacher may have to provide guidance during the students’ collaborative writing especially when they are unable to continue their task. Klass-Soffian (2004) states that the teacher should be aware of students’ problems and seeks time to re-address group procedures. Group leaders can also be a source of information in reporting to the teacher about the progress of their work. When the teacher’s assistance is not provided, the task may be delayed.

*Analysis of Written Products*

Researchers have chosen to focus on different areas when analysing the students’ writing. Dillon (1994) focussed on lines, sentences and paragraphs produced for technical reports required at the workplace while Storch (2005) evaluated the ESL students’ compositions based on fluency, accuracy and complexity. In addition, Kuiken and Vedder (2002) analysed reconstruction of content, grammatical complexity and lexical richness of the students’ collaborative writing. This study, however, analysed the participants’ long reports based on format and organisation, content, and language.

Group 1 managed to use the correct format, appropriate headings and correct sequence of headings due to their discussions on them before writing. Both Groups 1
and 2 failed to write effectively in the areas they had forgotten to discuss during their collaboration. Group 1 left out bibliography in their report while Group 2 only had Introduction and Recommendations headings in their report.

Loh and Corrine made the final decisions on suitable content to be used for their respective groups. It was carried out during the editing and proofreading stages which they carried out individually. However, Loh’s action of totally leaving out the questionnaire findings deprived her group of the depth of information required for the long report.

Both Groups 1 and 2 only edited and proofread their first draft. Some studies have shown that L2 writers in general performed less reviewing and did not emphasise much on re-reading and reflecting on their written work (Chelala, 1981; Dennett, 1985; Gaskill, 1986; Silva, 1990; Skibniewski, 1988). The findings from this study corroborate with the literature because the participants only reviewed their work once before submission.

**Leadership Styles**

Leadership in terms of leadership behaviour and participants’ opinions were analysed in this study. Klass-Soffian (2004) also gauged on the students’ satisfaction on the leadership used in her study. Her findings showed that the groups performed well regardless of having leaders the students were satisfied or dissatisfied with. However, the team members had to assist leaders they were dissatisfied with in order to overcome
their weaknesses. In this study, Loh from Group 1 used a mixed democratic and autocratic behaviour in leadership in comparison with Soh from Group 2 who maintained democratic behaviour in her leadership style.

An egalitarian approach was used to encourage members’ participation. This approach was suitable for both groups due to their emphasis on maintaining harmony (Hofstede, 2005, 2001). However, Group 1 was not negatively affected by Loh’s change of leadership style because they trusted her judgment due to her command of English and they were influenced by the collectivist culture which emphasises on respect towards leaders and group solidarity (Hofstede, 2001). Soh in comparison with Loh even relinquished her control of the group and allowed Corrine to be in charge of the discussions. The group responded positively due to Corrine’s expert power of possessing knowledge and skills important to the group (Galanes et al., 2004).

However, it was also found that Soh’s democratic leadership style was a deterrent in collaboration. Her relaxed leadership resulted in a lack of control over the group. They lacked preparation made for the discussion, side-tracked from the task and dominated the sessions.

It is important to check on the progress of groups during collaborative activities. The teacher need not be present all the time but the group’s work should be monitored. If it is not carried out, unresolved conflicts within the group may hinder the collaboration.
Collectivist Culture

Groups 1 and 2 in this study were influenced by the collectivist culture. They emphasised on group harmony and placed priority on the group’s achievement. The benefits were being agreeable, co-operative and subservient to the leader’s guidance. However, problems such as being prohibited from asking questions to gain understanding, failure to correct tardiness and unpreparedness, and avoiding open communication created a sense of dissatisfaction. Open communication has been highlighted as one of the important elements for successful collaborators (Staenberg & Vanneman, 2009).

The findings on the influence of the collectivist culture concur with the findings of other researchers. Past researchers have found that people belonging to the collectivist culture maintain harmony in the group (Carson & Nelson, 1994, 1996; Hofstede, 2005; Watanabe, 1993; Yong, 2006), conform to the behaviour of group members and self-concept in terms of a group (Asch, 1956; Hofstede, 2001, 2005), show respect to leaders (Hofstede, 2001), and ostracise group members who do not behave like the rest in the group (Hofstede, 2005, 2001).

It is important for teachers and learners to understand how collectivist culture affects the behaviour of group members during collaborative writing. This can be achieved by increasing awareness of positive and negative behaviour through regular open discussions on the collaborative writing which had taken place. Thus, positive behaviour can be encouraged while negative behaviour can be changed.
Power Struggle

Power struggle has been observed in some studies on student collaboration. Similarly, there was power struggle between Corrine and her group members in this study. Corrine was a high-power member while the rest of the group members were low-power members. Monopolisation by group members is one of the problems faced in collaborative writing. Corrine’s utterances and amount of information were more than her group members. Edelsky (1981) explains that when a person has more turns and involvement in the interactions, the person is deemed as having more power in the group.

The participants in this study remained quiet during episodes of power struggle. They would rather be agreeable to prevent negative politeness situations which threatened the solidarity of the group (Brown and Levinson, 1978). Similarly, the findings of a graduate student researcher, Yong (2006), showed the group members remaining silent and allowing a domineering male student to make the final decision during their collaboration. Dale (1994) and Tocalli-Beller (2003) also found adverse effect on the balance of power when a group member plays an authoritative role.

Staenberg and Vanneman (2009) discovered from their study on collaborative conversations that one of the elements for successful collaboration was the willingness to share power. Hence, power struggles need to be resolved successfully, failing which the group members may become unmotivated. Therefore, teachers who use
collaborative writing in the classroom should be aware of power struggle. They may even need to intervene in order to resolve power struggle when it becomes too intense.

**Use of National Language**

The use of national language in discussions can be unavoidable due to the students’ familiarity with it and their limited vocabulary in English. Through its use, the discussion can proceed and the presentation of ideas is made possible. Teachers have to allow other languages to be utilised in the students’ interactions when they face difficulty in expressing themselves. Group 2 used Bahasa Malaysia (Malay), the national language of Malaysia, to express themselves and to clarify their explanations.

Two Malaysian graduate student researchers who found the use of the national language (Malay) in their students’ interactions were Sim (1998) from University of Malaya and Yong (2006) from Massey University. Sim (1998) found that Malay served as a thinking tool to brainstorm ideas while Yong (2006) discovered that Malay was used to soften negotiation process and to make meaning clearer.

**Implications Based on Key Theories Driving the Research**

The social interactions of the participants observed during the collaboration were consistent with the sociocultural theory. The participants’ utterances and behaviour were direct consequences from the participants’ social and cognitive skills operating according to Vygotsky’s premise.
Collaborative writing enabled the participants to improve their personal level of ZPD. The weak participants may not be able to produce a long report on their own due to their poor language and writing skills, but they could perform the task in the end through collective scaffolded assistance from their better peers in the group. This can become a form of internalisation which Vygotsky refers to as actual learning. Ashman and Gillies (2003) describe internalisation as “individual’s ownership of concepts or meaning that has been provided through instruction” (p. 199). Bruffee (1984) believes that interaction greatly aids in the internalisation of cognitive and linguistic skills which in turn, results in improved writing abilities.

In addition, it was found that participants with medium and low proficiency in this study were able to contribute during collaboration with their mixed-ability peers. They performed sub-tasks, such as searching for information on their topic, calculating percentages in the analysis of data and reminding the group to focus on their work when they side-tracked. The shared work among the group members made it possible for exchanges of knowledge to occur and the group to progress in their work.

The study also reveals that participants benefitted cognitively as well as socially from the social interactions. The progress in the level of ZPD is also dependent on social and cultural factors, such as power, culture, leadership, harmony, and co-operation. Therefore, teachers have to consider students’ social and cultural background when placing them in groups for collaborative work.
Implications Based on Methods Used

This study utilised various research instruments in the process of data collection. They were video recordings, formal observations, student interviews, field notes of observations and student diary entries. These instruments recorded data on the process of collaboration and the impact of collaboration on the written text.

The video recordings enabled the researcher to record the collaborative writing sessions effectively. The recordings made it possible to analyse the participants’ verbal and non-verbal expressions when interpreting the critical incidents. In addition, the researcher could focus on significant episodes that she overlooked during the first round of observation by re-playing the video recordings. The recordings were also viewed by the collaborator to help her fill in the checklists during her observations of the sessions.

The interviews and diary entries were used to allow students to describe their feelings and thoughts during the collaborative writing. Since the interviews were conducted on an individual basis, the participants could provide their opinions freely. They could honestly depict their personal feelings and views without fearing that their group members would know about them.

Implications for Pedagogy

There are a number of pedagogical implications from this study. They range from the benefits of peer teaching and learning, monitoring of students’ progress in the task, creating commitment from students before the task and using collaborative writing for
only certain tasks. All of these implications affect the manner in which collaborative writing can be implemented in the classroom.

The findings from this study supported the view that students could teach and learn from others during collaborative writing. Therefore, teachers are encouraged to use them in the classroom so that peer teaching and learning can occur through the students’ interactions. This approach creates a student-centred learning environment which can be more effective than a teacher-centred approach. Harmer (1991) supports the flexible change of the teacher’s role from being controllers to facilitators in the classroom.

It is important to monitor the students’ progress in the implementation of collaborative writing. The findings from Group 2 highlighted the problems that students faced during discussions, namely, the influence of the collectivist culture which caused a lack of communication, and power struggles, which resulted in unresolved conflicts. The discord among the participants influenced the collaboration adversely through their lack of co-operation and interest. Therefore, it cannot be assumed that students are able to solve their problems successfully during collaboration. The teacher may have to intervene in helping the students progress in their collaborative task.

Creating commitment from students prior to collaborative writing is crucial. Students need to regard the collaboration as essential to their learning instead of perceiving it as merely a group activity. It can be created through team contracts for
students (Klass-Soffian, 2004), setting of learning goals by students (Cumming, 2003; Cumming, Busch & Zhou, 2002; Yong, 2006) and motivating them prior to the collaboration. Students invest more effort in performing the task when they are convinced of its importance. On the other hand, a failure to prioritise a collaborative task may result in freeloading (social loafing), arguing and socialising in their L1 (Jacobs et al., 1998).

Finally, collaborative writing need not be carried out for the whole task. Teachers can allow students to collaborate during the brainstorming and writing stages while the editing and proofreading stages can be carried out individually. This is to ensure a strong sense of individual ownership on the work. Collaboration does not automatically lead to a sense of group ownership towards an assignment due to conflicts which may occur. Thus, by allocating some tasks to be carried out individually and some to be carried out as a group, a sense of responsibility and ownership can be developed among the students.

**Limitations**

There are limitations to this study that need to be raised. These limitations affected the collaboration process and the data analysis. The limitations are in the forms of the participants’ dependence on the researcher, having other course assignments to perform and inability to include all contextual factors during data analysis.
Firstly, the participants depended on the researcher’s guidance when they faced problems in their collaboration process especially during the drafting stage. They depended on her to intervene instead of finding solutions to the problems independently. If they had not sought her assistance, they might have learned strategies and problem-solving skills which would benefit them in future collaborations.

Secondly, the participants could not concentrate on writing their long reports. Despite having ten weeks to write them, they found it difficult to perform the various sub-tasks effectively and rushed to complete their work. The students had to juggle time between completing the reports and finishing other course assignments. As a result, they did not have much time to write a quality long report and to reflect on their collaborative experience so that they could improve on their contributions.

Thirdly, the researcher could not include all contextual factors in the data analysis. The researcher did not have access to the participants’ past collaborative experiences, ability to socialise, motivation level, attitude towards the task and friendships formed prior to the collaboration. Hence, the lack of participants’ background information could have hindered accurate interpretations of the episodes in this study. However, this study was carried out to the best ability within the context despite the limitations described in this section.
Areas for Further Research

A number of important matters raised by the findings can be investigated and explored further to extend knowledge in this field in a specific context. This study focuses primarily on the collaborative writing process leading up to the writing of a long report. Future researchers could extend the study by examining monitoring methods to check on the progress of students’ collaborative writing. The methods could be in the forms of oral or written reports or having the teacher physically present. This could provide a deep understanding of the collaborative process.

This study only probed the consequences of having a purely democratic leadership style and a mixed autocratic and democratic style used in groups. Future studies may want to analyse the effects of different leadership styles, namely, democratic, laissez-faire and autocratic (Galanes et al., 2004) on the collaborative writing process. Useful information on the advantages and disadvantages of adopting different leadership styles and mixed leadership styles is warranted.

Since this study focussed on the stages of writing (topic selection and brainstorming, drafting, editing and proofreading) and the criteria in writing (format and organisation, language and content), it will be interesting to investigate another aspect of writing which is creativity. The impact of collaboration on the creativity of writers could be explored. Therefore, teachers can use collaborative writing as a means to foster creativity if the findings are found to be favourable.
Future studies focussing on acts of plagiarism during collaborative writing can be carried out. The impact of collaboration on plagiarism while producing a jointly-written academic text could be investigated. Therefore, the investigation in this area can increase knowledge on how collaborative efforts may result in plagiarised written work in the ESL context.

**Conclusion**

The findings from this study highlight some insights on the impact of collaboration on both the composing process and the written text produced by participants of mixed proficiency in English in the Malaysian setting. The impact is in the forms of positive and negative consequences on the participants’ learning and writing.

The participants did not allow their different abilities to be a hindrance but they collaborated successfully by pooling their knowledge and skills. The process of scaffolding and mutual scaffolding were evident from their interactions. The former was identified through the probing and correcting of misconstrued knowledge and using an outline to guide the low proficiency students in their writing. Mutual scaffolding occurred when the participants elicited information from one another as a bid to increase understanding and remind one another of sub-tasks to be completed during the composing process.
The presence of mediators in the collaborative writing sessions also improved the participants’ learning and mastery of knowledge. Peers with high and medium proficiency played the role of mediators in acting as gatekeepers in filtering the information presented. They asked questions to stimulate thinking and gain understanding of new knowledge. Thus, the group’s level of ZPD was increased.

Cumulative talk also benefited low proficient participants. Despite their shyness which resulted in less contribution when compared to their better peers, they were able to learn from the sharing of information. Their understanding of complex information increased as detailed explanations were provided. They would have failed to comprehend it if they had tried learning on their own.

Participants wrote well in areas they had discussed in their collaborative writing. Group 1 in this study produced the correct format, suitable headings and correct sequence of headings in their long report due to their discussions on these matters. On the other hand, both Groups 1 and 2 failed to write effectively in the areas they had forgotten to discuss such as leaving out bibliography and headings in their written work. This shows that students write better through collaboration with their peers who could guide them in focussing on important areas to write about.

There were also mixed results in the participants’ learning during collaborative writing. They were influenced by factors such as leadership styles, collectivist culture, power struggle and the use of national language. Groups 1 and 2 were provided with a
suitable atmosphere to interact due to the democratic leadership style used. Group 1 even accepted the change of democratic to autocratic leadership styles positively. They were influenced by the collectivist culture which emphasises on group harmony and respect towards the leader.

The positive influence of the collectivist culture was Group 1’s members were agreeable and followed the leader’s guidance closely. Consequently, there was positive group dynamics which promoted the sharing of knowledge and co-operative behaviour. However, in Group 2, the negative results stemming from the collectivist culture were a lack of questions asked to gain deep understanding, failure to address tardiness and unpreparedness to enforce group discipline and the avoidance of open communication which created dissatisfaction among group members. All of these situations adversely affected the group’s efforts in contributing to the writing task.

Power struggle was also detrimental to group collaboration. Corrine in Group 2 was a high-power member who dominated the discussions by interrogating her group members and insisted that her ideas be accepted by her group. It resulted in the group members remaining quiet to maintain group solidarity. Thus, it negatively affected their learning and sharing of information.

On the other hand, the use of national language (Malay) helped Group 2 to express their ideas clearly. Its use made it possible for group members who were
familiar with the national language but have limited vocabulary in English to be able to present their information. Thus, exchanges of information could take place.

This study provides useful information on collaborative writing with emphasis on the process, product and students’ opinions in the Malaysian context. The participants collaborated in the whole process of producing a jointly-written long report. The findings revealed interesting insights on the use of collaborative writing in a local setting.

It is also important for teachers and learners to know the advantages and disadvantages of using collaborative writing. In addition, with the knowledge gained, they can approach and solve problems which arise effectively. This prepares them well for future collaborative writing in the classroom.