Journal of Sustainability Science and Management 2008 Volume 3 (1): 30-40

SUSTAINING ESL STUDENTS' INTERACTIONS IN A COLLABORATIVE LEARNING VIA EMAIL DISCUSSION: A CASE STUDY AT UMT

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Abstract : The primary focus of this study centres on how participants communicate via email in a collaborative learning environment incorporating process writing approach and pair work activity. The study addresses these concerns by investigating students' interactions through email messages. Findings are that participants' interactions are focused predominantly on task-related activity and active correspondence occurred at the early stages of the writing process activity. The task framework, involving a procedure for process writing development through e-mail interaction, the banded marking scheme for the argumentative essay, online interview questions, and the analytical framework are intended to aid researchers to conduct related research in future. The findings will contribute to the development and testing of the efficacy and flexibility of process approaches to ESL writing instruction through e-mail. The study offers positive views for further study to be explored in order to attain a better understanding of how learners interact in a collaborative learning environment via email discussions.

Introduction

In recent years, the proliferation of the Internet and innovations in computer technology has infected teaching and learning process and creates a distinctive breakthrough in education. In a society or country where seeking higher education and qualification contributes to the need for skilled and educated workforce, students are exposed to learning strategies and approaches that are able to assist the students' learning needs and learning capabilities. One of the learning approaches that has penetrated the Malaysian Educational system is collaborative learning. Collaborative learning provides an environment which enlivens and enriches the learning process because students interact with their peers in a realistic social context. This helps to increase and sustain students' interest and provides a more natural learning environment.

Curtis and Lawson (2001) stated that one way to implement high levels of interaction among students, and thereby increase both the quality of students' learning experiences and the efficiency of delivery is to implement collaborative learning. Thus, the present study attempts to investigate online interaction via email discussions among students in higher education. The investigation focuses on the interaction activity, task-related and not-task-related activity among the students involved in a collaborative writing assignment. The main objective of this study is to examine the students' interactions in a collaborative learning environment. The prime interest of the study centres on how participants communicate via email in a collaborative writing process to facilitate writing tasks and writing performance.

Method

The case study comprising twelve learners from Universiti Malaysia Terengganu, gathered data via email messages and essay writing documents. The conceptual framework set up for this study integrates social-constructivist theory, writing process approach and collaborative learning environment to assist in the investigation of the main concern of the study. The analysis involves a model developed by the researcher (Table 1 & 2). The following is a graphical representation of the conceptual framework underlying this study (Figure 1).

Figure 1: Conceptual Framework of Study

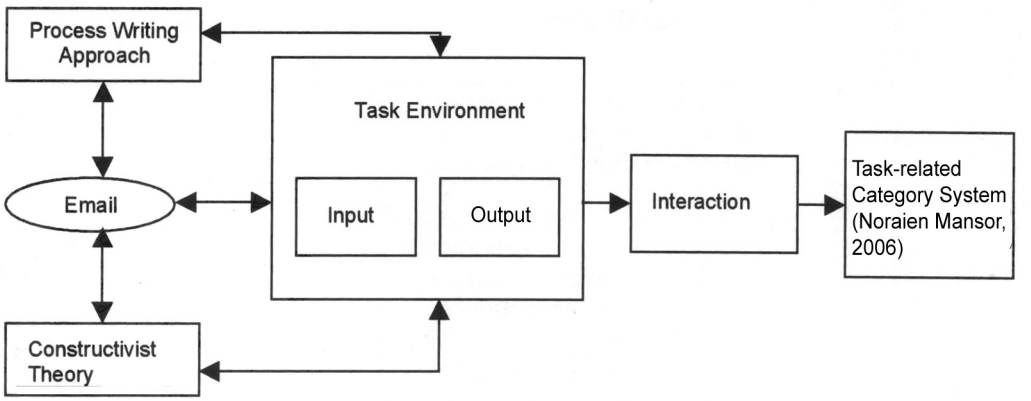


Table 1: Task-related Category System (Noraien Mansor, 2006)

Category	Indicators
Presentation of new information	• ideas • experiences • theoretical ideas • problems, inquiries instructions
Explicitation	• elaborating ideas and views for clarification
Evaluation	• asking for and giving feedback • judgement • other comments • suggestions
Total	

Table 2: Not-task-oriented Category System (Noraien Mansor, 2006)

Category	Indicators
Planning	• planning to start a discussion • planning to end a discussion • planning for future discussion
Technical	Messages related to: • computer • Internet/websites • network system • time
Social	• social comments • social expressions • greetings
Nonsense	Messages not related to the task at all
Total	

The research began with the participants seeking arguments for and against the implementation of English language in all subjects at the university level in order to produce quality graduates. The theme chosen is based on an authentic situation, which is in line with the constructivist principles. The researcher sent the instructions for each stage in the writing process approach, which consists of six stages – generating ideas, focusing, structuring, drafting, evaluation and reviewing. The respondents were given a specific duration to complete their discussion at each stage. They were requested to mail as frequently as possible. All their mail entries were forwarded to the researcher to enable a record to be kept of the messages sent and also for the messages to be collected for data analysis purposes. The email messages were used to collect data concerning the students' interactions which included the frequency of respondents' participation and the focus of interaction involving "task-related" and "not-task-related" categories.

Research Findings

Students' interaction process involves participation and interaction. The students' participation was examined in terms of the following:

- amount of contribution
- frequency of contribution
- duration of contribution

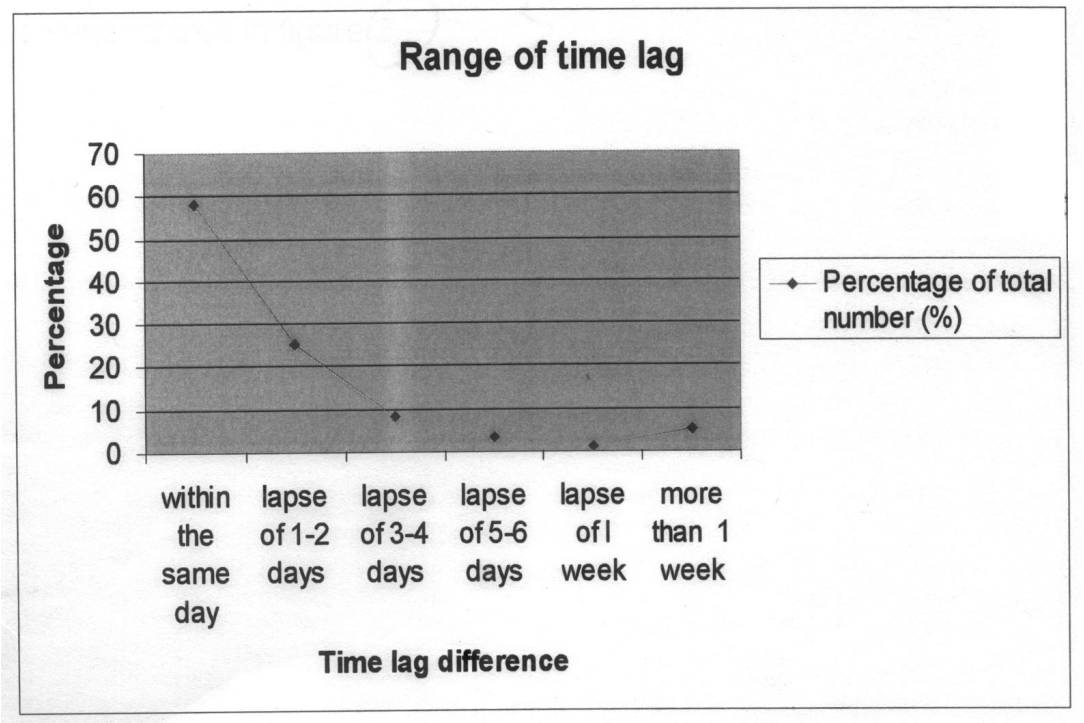
The emphasis on the students' interaction process examined a combination of two categories, "task-related" and "not-task-related". Task-related refers to any interaction focusing on the task at hand whereas not-task-related refers to any interaction which is not related to the immediate task.

The basic unit of analysis selected for the present study is sentences within messages. The first part of investigation focuses on students' participation. The investigation involved peer examination in order to determine if the text had been coded consistently using the Nvivo program. Two colleagues read all the messages, both 'sent' and 'replied', to analyse the frequency of students' participation. This was to identify whether participation is active, regular or infrequent. These can be examined through the frequency of time lag differences for correspondences in email discussions.

a. Range of time lag in responding messages

The highest number of responding messages falls under the category "within the same day", specifically 58%. This is followed by those with a lapse of "one to two days" (25%) and "three to four days" (8%). Responding messages exceeding more than one week comprise 5% and only 4% falls within a lapse of "5-7 days". The data indicate that the respondents are generally active in sending and responding to messages via email either on the same day or with a lapse of one to two days. Nevertheless, the 5% whose time lapse is more than one week is not encouraging as this will delay the respondents' completion of the task given the specific duration. Furthermore, the smooth flow of the discussion is jeopardized by the lengthy time differences. The frequency of time lag differences is summarized in figure 2.

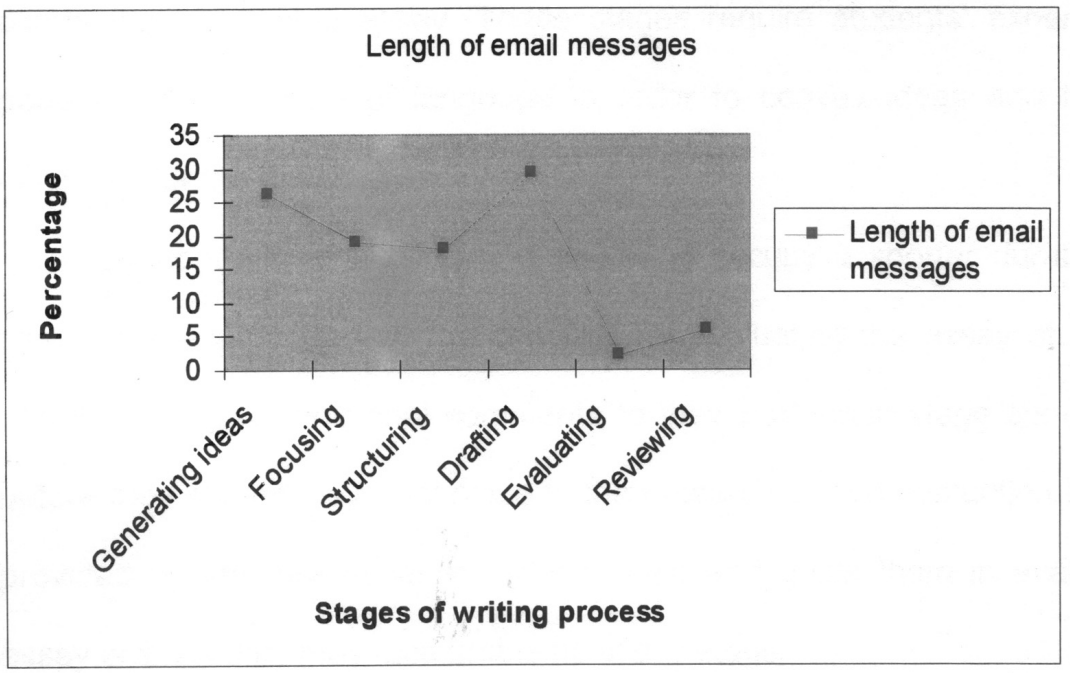
Figure 2: Range of Time Lag in Responding Messages



b. Length of email messages

The length of email messages posted varied throughout the stages involved in the writing process approach. Discussions for stages involving generating ideas and drafting, which contribute 26% and 29% of the messages respectively, dominated the task. Further, focusing and structuring stages occupied 19% and 18% of the email discussion. The length of messages decreased towards the fifth stage involving 2% but increased slightly at the final stage, reviewing (6%). Therefore, the data illustrate that participation is active at the initial stage compared with the end of the discussion. Undoubtedly, the initial stage needs more collaboration in order to generate ideas for the given task. Then they need to focus on their stance to develop a clear thesis statement for the argumentative essay, and further structure their ideas to substantiate this or their topic sentence. Thus, the length of email messages did not increase over the period of time. The length of the email messages contributed during the email discussions is summarized in figure 3.

Figure 3: Length of email messages



c. Duration of participation

The longest discussion for the writing activity was on average 7 days for the first stage, generating ideas, and the third stage, structuring. This is followed by stage four, drafting (6 days), stage two, focusing (4 days) and stage three, structuring (4 days). The fifth and sixth stages (evaluating and reviewing) took two days to complete the discussion. The data show that the respondents are generally very active in discussing ideas for the first four stages as these are the basic foundation in pursuing their writing task. This finding parallels the results of Pena-Shaff and Nichols (2003), who conducted a research using the computer bulletin board system (BBS) to discuss course-related content. They found that, although the length varied throughout, discussions at the beginning tended to last longer than those toward the end. Generating ideas and drafting stages occupy a longer

duration, as well as developing a concrete paragraph to be discussed before completing the whole essay. These stages require students' experience and good proficiency level of language in order to convey ideas and information efficiently for the discussions.

By contrast, evaluating and reviewing occupy a shorter duration as the students are supported by the checklist for evaluating the essay at stage five, and have to give their final comments to their partner at stage six (reviewing) before they submit their final piece to the researcher. The evaluation checklist is provided by the researcher in order to help and guide them in evaluating the essay draft as they may face problems at this stage.

The shorter duration occurs for several reasons. Firstly, this can be related to the students understanding of the instruction given at stage five. Since the students are classified as modest users in the MUET (Malaysian University English Test), they are supported by the evaluation checklist and therefore focused on the instrument per se, rather than giving their own evaluation. Secondly, the students had limited experience and knowledge in revising, and did not have the opportunity to evaluate essays.

Thirdly, the students are incapable of doing the task given individually as structured in the "Framework for the writing process approach" for these stages (Figure 3). The framework devised for this study requires the students to evaluate and give their own comments to enable their partners to detect their weaknesses and therefore allow them to rectify their mistakes before the final submission. Out of four main categories to be evaluated in the checklist (Figure 5), only 23% of comments under the column "notes" were retrieved from the students involved.

Figure 4: Framework for the Process Writing Approach (Noraien Mansor, 2006)

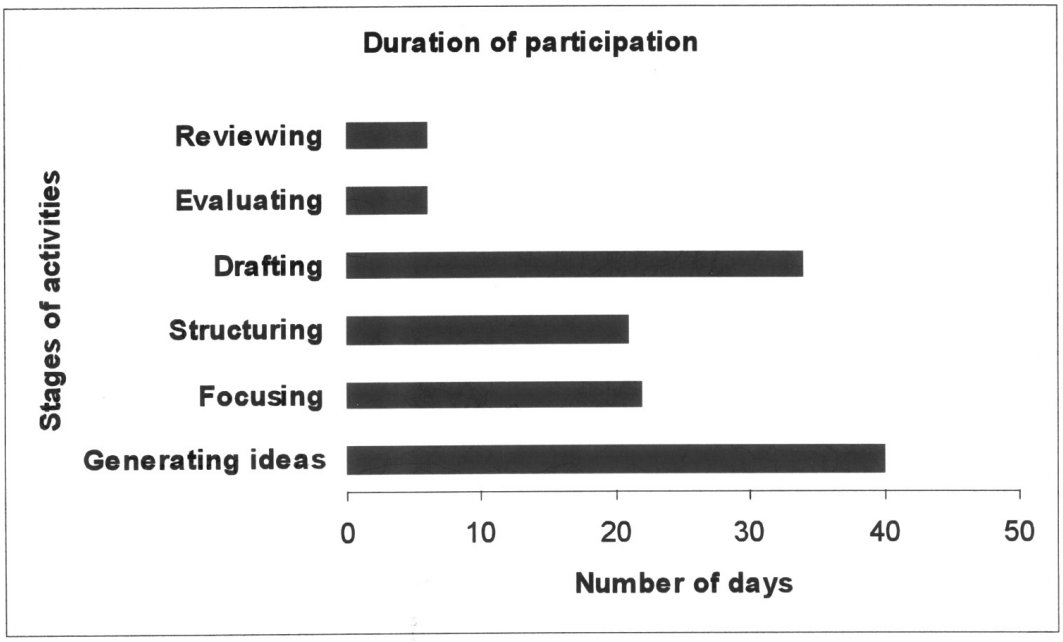
Stages	**Process Writing Activity**		
Generating Ideas	Pair work Discussion	Prewriting techniques: brainstorming/clustering	Prompts on argumentative genre
Focusing	Pair work Discussion	Developing thesis statement	Sample of a thesis statement from website address
Structuring	Pair work Discussion	Paragraphing: Topic sentence Supporting sentences Concluding sentence	Sample of a paragraph writing from website address
Drafting	Individual Work	Writing the draft/drafts	Sample of essays from website address
Evaluating	Individual Work	Peer feedback	Evaluation checklist
Re-viewing	Individual Work	Peer feedback	Final views/comments

Figure 5: Draft Evaluation Checklist (adapted from White and Arndt, 1991)

CHECKLIST	YES	NO	NOTES
Type of Writing: • Is this an argumentative type of writing? • Has writer observed conventions expected of this type of writing?			
Purpose and ideas: • The purpose of this essay is clear. • Are the main ideas clear? What are they?			
Structure of text: • Do relations between ideas need to be made clearer? Where? • Do ideas need to be resequenced? How? • Is text segmented into suitable paragraphs? If not, where is adjustment needed?			
Response as reader: • Is beginning suitable? If not, why? • Is ending suitable? If not, why? • Any points unnecessary? Which? • Any points need to be clarified? Which? • Any points need to be expanded? Which?			

Finally, the time allocated for the activities at stage five (evaluating) and six (revising) is very limited for modest users of English language for them to evaluate and revise effectively. Nevertheless, all the students involved managed to submit their evaluation checklist to their partners and the researcher despite the constraints that confronted them. Consequently, there is a need for learner training to overcome the problems revealed and this will be discussed in the final chapter. The duration of students' participation is illustrated in figure 6.

Figure 6: Duration of participation



Task-related activity including presentation of new ideas, explication and evaluation represented 72% of the total number of messages analysed. Of the categories identified, presentation of new ideas formed 43% of the total number of task-oriented messages analysed, followed by 34% of explication. These illustrate that the respondents spent most of their time presenting their new ideas together with elaborating ideas and views for clarification. Evaluation of task-related activity, which focuses on asking and giving feedback, making judgements, giving suggestions and other comments formed 23% of the total number of task-related messages analysed.

On the other hand, not-task-related activity, which comprises planning, technical, social (social expressions, greetings, praises) and nonsense (messages not related to the task at all) represented 28% of the total number of messages analysed. The social category, comprising greetings, praises and social expressions, dominated the not-task-related activities with 42% of the total number of not-task-related messages analysed. The data revealed that greetings in emails, which occurred in almost all posted messages, are similar to those used in traditional informal letter writing. Apart from social category, the respondents discussed plans of actions to be taken before they proceeded with further discussions. This is illustrated by the "planning" category, which formed 28% of the total number of not-task-related messages analyzed. The "nonsense" category which implies messages not related to the task at all formed 26%, showing that the respondents discussed other matters before they proceeded with further serious discussion. Only a small percentage of messages (3%) focused on the technical category including discussion on problems encountered with the computer, network system, time and the internet. Figure 7 summarizes the results on task-related and not-task-related activities.

Figure 7: Percentage of Students' Interactionn

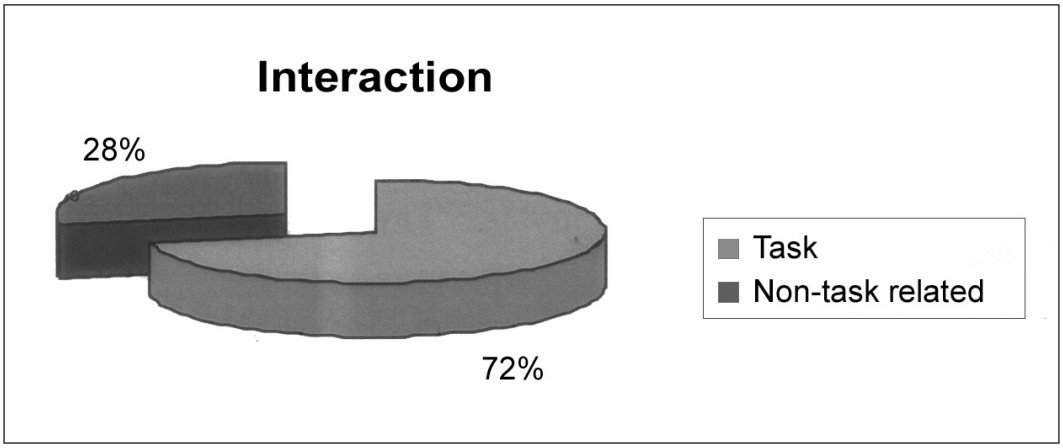


Figure 8: Percentage of Students' Interactions

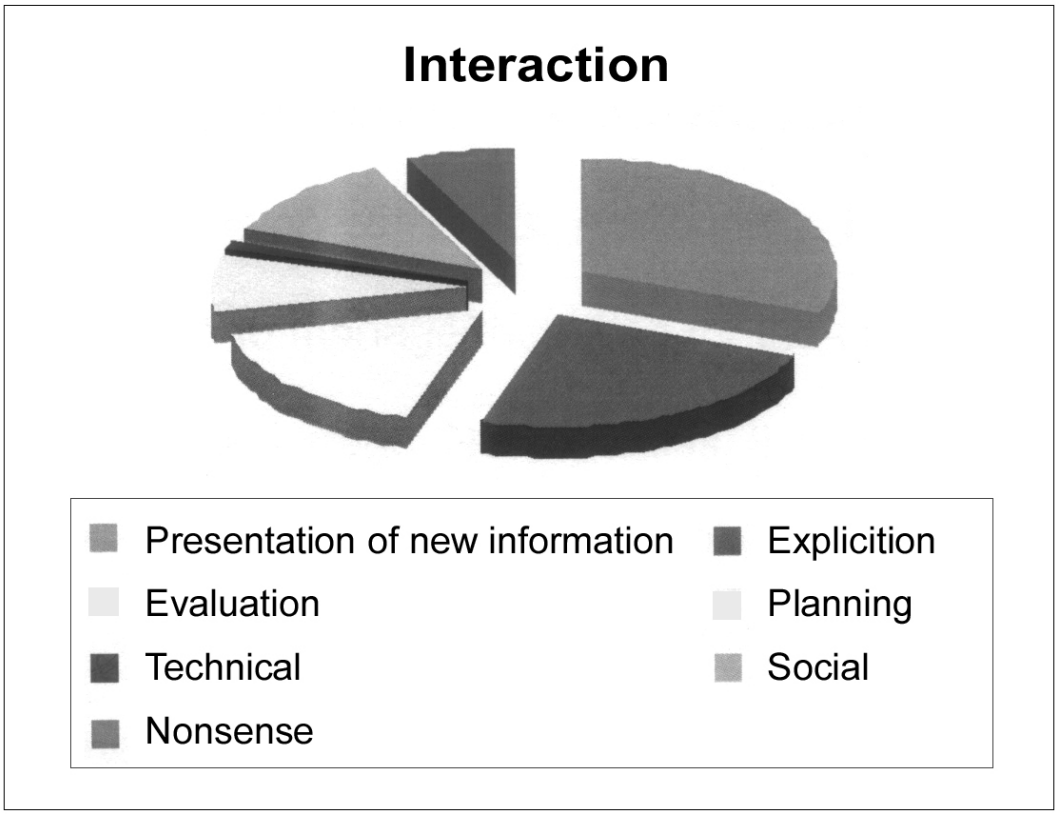


Figure 8 summarizes the process of students' interactions for all the categories derived from the task-related and not-task-related categories. Overall, presentation of new ideas and elaborating ideas for clarification dominated the email discussion (55%), followed by 17% of evaluation indicating that asking for and giving feedback, making judgements and giving suggestions involved in the writing activity was important to the respondents.

In conclusion, students' interaction is focused primarily on task-related activity. Active correspondences occurred at the early stages of the writing process, these being the crucial stages in generating new ideas. They argued about contrasting ideas, and finally discussed ideas or views for clarification, before they proceeded with further discussion for the writing task. There are reasons which contributed to the positive ambience of focusing on the task-related activity. Firstly, this can be related to the design of the task environment which incorporates stages of activities in the writing process approach. At each stage of the activity, the respondent received operational guidelines and prompts to direct their discussion behaviour. Additionally, the duration for each stage was given to allow them to manage their time for the discussion and also to complete the given task at each stage. Nevertheless, the time was quite limited; therefore the students focused directly on their task to ensure that they were able to complete within the assigned duration. This shows that students value the time allocated, thus, time allocation is effective to be included in the framework of the activity. Additionally, different stages need different duration of time allocation, thus, giving ideas for teachers to allocate shorter or longer time for certain stages.

Secondly, the results can be related to the fact that participants' writing performance would be evaluated. Thus, students were obliged to participate seriously knowing that this was part of their evaluation. McCreary and Van Duren (1987) found that assigning a percentage of final grades to the content of electronic messages influenced students' participation.

Thirdly, as this activity is a student-centred approach, the students took the responsibility to administer their activity focusing on the completion of the task. Finally, as only pair work activity is involved, their discussions were not diverted to many issues or messages that were not related to the task (not-task-related), which may be the case with group discussion. This is proven by the small percentage (7%) of not-task-related messages.

Conclusion

The findings from this study are based on the limited data size, comprising email messages and writing transcripts from twelve participants involved in collaborative learning via email discussion. Thus, this study may be limited as it may not necessarily be representative of all existing email discussion. There is no claim to be made for the generalisation of findings from this study. However, the data from this study has its own interest and which could supplement existing knowledge, as the main findings have not been previously reported, particularly in the research context of Malaysian ESL classrooms. Although the findings for this study cannot be over-generalised as it has been conducted with only twelve respondents in one particular context, they do, however, provide a basis for further research and directions for a larger study. In short, asynchronous computer-mediated communication, such as email, offers a host of possibilities for further study in order to enhance students' learning, increase students' language proficiency, promote students' positive attitude and interest, and improve students' performance particularly in writing classes and specifically in ESL writing classrooms.

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