The Implementation of Hybrid Computer Mediated Collaborative Learning (HCMCL) for Promoting Students’ Critical Thinking at IAIN Salatiga, Indonesia

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Abstract
This article stresses on answering the questions on how HCMCL implemented for promoting students’ critical thinking, and how the students’ potentials of critical thinking in the aspects of communication, reasoning, and self-reflection promoted in the class. The ethnographic-case study was undertaken in writing skills. Descriptive-Qualitative is used to analyze the findings. The data gathered from in-depth interview, field notes, questionnaires and students’ documents. The finding reveals that the lecturer considered the four key dimensions of time, fidelity, space, and humanness in its implementation. The data also reveals that HCMCL can promote students potentials of critical thinking in communication, reasoning, and self reflection. However, some points needed to be improved by the learners in the first aspect especially related with linguistics conventions. HCMCL provides the chances for the learners to communicate with their peers and other members of group to complete the tasks. This process demand the students to work in a group which requires another set of complex skills; students needed to manage interdependence with others and to reconcile differences for mutual benefit.

Key words: Hybrid Computer Mediated Collaborative Learning (HCMCL), students’ critical thinking, communication, reasoning and self reflection

Introduction

To begin with, the importance of critical thinking as the literacy skill in the current decade needed to be undermined. Congruent with this, a number of literatures showing that critical thinking skills among third year university English students in Indonesia lag far behind American secondary and university students (Pikkert & Foster, 2014). Mills (1997) found that in particular, South-East Asian students are commonly stereotyped as passive, non-critical rote-learning students who do not engage in deep learning. He also shows evidence that cultural differences in approaches to educational learning do exist. Even so, students from South-East Asia are not a homogenous cultural group and differences between them are quite marked. Some Asian groups reflect only a few, or in some cases, none of the characteristics identified as problematic by academics (Smith, 2001). Furthermore, books like Can Asians Think? by Mahbubani (2002) and Why Asian are Less Creative than Westerners by Kwang (2001) reflect the concern felt in Asian circles. Numerous articles have focused on this issue, particularly those in journals devoted to teaching English as a foreign language. It is a topic of particular concern to English teachers in Indonesia.

The review of previous studies showed that HCMCL is enable to foster learner’s critical thinking (e.g, Areni & Syafri, 2015; Farida & Margawati, 2014; Bharati & Ardianti, 2016; Rofi’i, Rukmini, & Hartono, 2014; Omar & Albakri, 2016). All of the studies are in one similar direction saying that HCMCL is an effective learning strategy because it builds up student-student interactions and boost students’ critical thinking. However, none of the studies are emphasized on certain context of productive language skills of writing which is regarded as the most prominent factor contributing to the critical ability. Thus, this study was conducted to address the questions of how HCMCL implemented for promoting students’ critical thinking, how the students’ potentials of critical thinking in the aspects of communication, reasoning and self-reflection promoted in writing class.

Literature Review

There are many arguments of the definition of critical thinking (Mulnix, 2012 & Seaman, 2003). In this context, I take the notion from Benesch (1993), Fox, (1994) and Ballard (1995), it has the closest elements with writing activities and appropriate with socio cultural dimension of critical thinking. This concept has three identifiable aspects: communication, reasoning, and self-reflection. This concept is not simply about critical thinking; it is a model that is designed to ensure that language learners experience all the elements of critical thinking. In some numerous books and articles, it is reported that collaborative learning can promote critical thinking (Johnson & Johnson, 1994), they concluded that most studies he reviewed point in one direction: collaborative learning is more effective than other modes of instruction for higher-level tasks. The review of previous studies mentioned in the part of introduction also indicated that HCMCL can promote students’ critical thinking. In this context, Graham (2006, p.5) claimed “blended learning systems in collaborative learning combines face to face instruction with computer-mediated instruction”. Thus, in this study, instructional design and implementation of the course, both on a content and delivery level, were performed online.
Methods

In this study, an ethnographic-case study design is used to find out the answer. The research participants were fifteen students of the International class program at one of the Islamic University managed by the supervision under the Department of Religious Affairs, namely *Institut Agama Islam Negeri Salatiga* (IAIN Salatiga) located in Central Java, Indonesia. The key participants in this study were; a lecturer and the students. The methods of collecting the data were in-depth interview, field notes, questionnaires and students’ documents. In order to analyze the data, the researchers used content analysis, proposed by Alter and Evens (1990), it then supported by triangulation techniques to check the validity and reliability.

Results

To explain how the lecturer implemented HCMCL for promoting students’ critical thinking, the researchers conducted interview to the lecturer and the students. In line with this, the researchers developed the guideline of interview based on Grahams’ (2006) idea who has suggested that there are four key dimensions of HCMCL learning; *time, fidelity, space*, and *humanness*. From the results of interview with the lecturer, it can be inferred that the amount of *time* allocated to online and Face to Face (F2F) learning experiences is 50:50 or 60:40 percentage for a face to face and online learning. The class has been set up for regular meeting or face to face interaction every week. Then, the lecturer blended the mode. He did not just explain the material in the classroom but also use online approach. It is why, it was done synchronously. Related with *fidelity*, the lecturer used a high level of instructional experiences design and strategies. It involves the process of engaging, captivating, productive, and directly connected to course learning outcomes. The teaching materials are not only from textbook but also from the websites and blogging. In this case, the lecturer involved and revolved between the materials and the aids or the instruments. So, it has relationship each other. These decisions balanced against the level at which learning experiences contribute to the accomplishment of identified learning outcomes. Meanwhile, the element of *space* is characterized as a continuum that extends from full F2F (i.e., “Live”), a mixed reality of F2F/online, and totally online (i.e., “Totally Virtual). Related with this, the lecturer regarded that the currently available and accessible tools can be accessed on the internet. The lecturer used middle technology to elaborate the blended learning and extra tools to be used. For instance, when the lecturer talked about essay, he tried to provide students the material from the links. Facebook is chosen as the best tool because it gives many benefits such as uploading file, commenting on people’s posting, offering comments and making groups. And it helps a lot for online discussion. In line with *humanness*, the lecturer tried to make jokes and ask questions to all of the students in online and F2F forum. The lecturer also provides the space for sharing stories and appraisal. For example, he gave the acknowledgement and humor, while chatting. When the lecturer gave the example, he often gave some stories that are familiar in academic world and provided appreciation when students can answer the questions. All of these parts were built up through online interaction so that the students would have more freedom to express their opinion. The other strategy done by the lecturer is providing social presence and immediacy not only for face to face interaction but also consider the social presence and the existence while chatting with the students. Social presence can also be represented from their participation.

In addition, the results of interview with the students shows that the lecturer fulfilled the criteria of HCMCL implementation such as he divided the students into some groups and he
randomized the member of the group, stressed on the clarity of the academic work, teaching practice is emphasized on teamwork and peer review, this project was constructed from unknown into known, convention used for this synchronous teaching learning process, provided the time to do reflection and documented all of the evaluation process directly in the application of Facebook and printed to be given to students in the end. To explain the potential of students’ critical thinking promoted, the researchers undermined that there are five potentials of critical thinking in language learning, i.e; linguistic conventions, audience, communication aims, reasoning, and self-reflection. To answer the first question, three essays produced by the students taken from the online presentations were analyzed using the text analyzing software. An analysis of Text 1 shows that the total number of words used was 392, of which up to 178 were unique or unRepeated words. There were 26 sentences, and the average number of words per sentence was 15.08. Type-Token Ratio (TTR) which indicate the greater complexity of a given text was high at 0.61. The level of lexical density was middle, i.e: 45, 41 %. However, the Gunning Fog Index (GFI) which provides an indication of the richness of the vocabulary used was low at 8.99. It can be inferred from the average number of words per sentence (15.08) that the sentence structures were complex, even if the average number of errors per sentence was high. For Text 2, the total word count was 656 and 278 were unique words. The TTR was 0.60. There were 32 sentences, and the average number of words per sentence was very high at 20.50. The lexical density was 48 %. The GFI was also High at 12, 53. As with Text 1, the vocabulary used was rich and the sentence structures were complex. However, once again there were some typographical and grammatical errors. Text 3 consisted of 405 words. The total number of sentences was 25, of which 183 were unRepeated words. The average number of words per sentence was 16.20. The lexical density was 45.19. The GFI was 10.73 and the TTR was 0.52. Compared to Text 1, this text, which was probably edited beforehand, contained relatively few spelling errors. As with Text 2, they used complex sentence structure.

Meanwhile, in the grammatical aspects, the researcher used the software of usingenglish.com. The three essays shows that the first group essay still contain 17 mistakes on grammatical aspects, i.e ; nine determiner, one incorrect phrasing, two faulty subject verb agreement, four wrong prepositions, and one modal verbs. Group two shows more mistakes, it has found that there are 22 mistakes on grammatical aspects, 15 on determiner, two incorrect phrasing, one faulty subject verb agreement and four wrong prepositions. And the last group is the best performer, in which it only has six mistakes on grammar including two wrong prepositions and four determiner use. From the data, it was apparent that considerations relating to lexis were more positive. The TTR was found to be quite high, especially in the final drafts or online presentations. It is evident that, when compared with their impromptu writing, the students’ use of English grammar in their discussions was less accurate. Perhaps, with online presentations, the students had time to pay attention to spelling and grammar. This evidence partially demonstrates that the students in general were aware of both their audience and their communication aims. The notions of aims and audience determined the complexity and accuracy of their writing, which is in tune with the major finding of Li (2000) who conducted a study on the linguistic characteristics of English as a second language writing in task-based email activities. There was a tension between accuracy and complexity. From the case study, it was found that the students improved linguistics conventions, especially on spelling. Most spelling mistakes could have been significantly reduced or avoided when the students proofread their work adequately. To answer the second question, comments from the research participants and an examination of the students’ work, including their
online discussions, were used as data analysis. In communicating with the lecturer, the peers and the researchers, it is apparent that all of the students attempt to respond to the question that was posted by the researcher. The response was given from the member of the groups. In online communication, their language seems to be informal with some grammatical errors but still easy to be understood by other members. It can be proved by the feedback given from the members from other groups and the lecturer. A student [L] posted a very short message in which she explained his argument although it has not supported by supporting arguments. The opinion also lacks elaboration. This may be due to many factors, such as the student’s limited language proficiency and the limited experience with online discussion. However, it was followed by the next argument in different time. Other student (I) also argued and given the solution on how to correct it. Student [H] tried to stimulate discussion with a question whether the thesis made has correlation with the body or not.

Based on the data taken from the students’ work, it shows that the essay they made used the technical knowledge of writing promoted in the communication. It reveals that the students attempted appropriate language for their academic audience. It shows that the students purpose to attract readers’ attention explored through giving thesis statement. It names the specific topic and gives the reader a general idea of the contents of the essay. Meanwhile, the body consists of one or more paragraphs which describes a subdivision of the topic. Lastly, concluding sentence in a paragraph is a summary or review the main points discussed in the body. Despite their imperfect grammar, they managed to get their message across. The online discussion presented above shows that the participants were genuinely engaged in interaction with the audience. However, different from the more formal register of the talks, the students were more concerned with communicating their message than with observing linguistic conventions. To answer the students’ critical thinking promoted in the aspects of reasoning, the students’ works have been analyzed to explain the aspects of organization of information and use of cohesive devices. The students’ work on argumentative writing shows that they organized their information in a logical manner. They started their writing by writing the title, completing the parts of an essay such as; writing introductory paragraph which consist of the elements they are funnel introduction, attention-getting introduction and thesis statement, writing body paragraphs comprising of logical division of ideas, thesis statement for logical division of ideas, thesis statement for pitfalls, and transition signals between paragraphs. Finally, the students also wrote the concluding paragraph. In the process, they also made the outline and the draft of writing before submitting the end product. The data reveals that the students created their project using language that was suitable for the audience, and that they organized their information clearly following the patterns of logical development such as problem-solution and cause-effect. The final product in which the students made are all expressed in a logical order. The use of cohesive devices provides a good indication of the coherence of the texts. This is particularly important because coherence is overt evidence of logical reasoning. The samples of the students’ writing were examined based on five types of cohesive devices: reference, lexical cohesion, conjunction, substitution and ellipsis. It can be described as follows:

a. Reference
In the matter of anaphoric reference, students used pronouns widely to refer back to nouns or other pronouns. Students also used the device widely to link sentences together, as in the following example (taken from students’ work -cause-effect essay of group three)
Have you ever heard about execution place for prisoners? How about Nusakambangan? Nusakambangan is an island close to Central Java province and famous as one of the safest execution places for prisoners in Indonesia. It is the main location for carrying out capital punishment in Javanese territories.

From the above text, the pronoun ‘it’ refers back to Nusakambangan in the preceding sentence, so ‘it’ links the two sentences together.

b. Lexical cohesion
The students were also able to use lexical cohesion to demonstrate the logical flow of ideas. The example below shows how the writer used semantic chaining to link ideas into a coherent text.

To solve the overpopulation problem by to implement one family one child, I think it’s not a good idea. The good way to solve this problem could be to give a good educational for adult who are married that they should plan before having a child. [Text 2]

The above text, an excerpt from Text 2, shows that the student used words repetitively that were semantically related to make the writing coherent.

c. Conjunctions
As far as the use of conjunction is concerned, students used items such as ‘and’, ‘but’ or ‘so’. The following are excerpts from the students’ writing.
Excerpt 1:
The colonial government built a high security prison on the isolated island to exile criminals and political dissidents.

[Text 1 –from the third group of cause-effect essay]

Excerpt 2:
Do you know that the content of our body is dominated by the water? And to fulfill the necessary of water in our body, we must drink. Unfortunately, most of people do not know how to drink well, that is by sitting down. But in fact, drinking while standing is habit of most people.

(Text 2-from the first group of cause-effect essay)

Excerpt 3:
We know that today’s children are crammed with homework, assignments and quizzes. Moreover, in many cities children have to go to school from Monday to Friday while Saturday is used as an extracurricular day.

(Text 1-from the fifth group of cause—effect essay)

The three excerpts above show that the simplest connective markers were frequently used. The first excerpt shows that the students used the connective marker / coordinating conjunction showing the equal relationship. The second shows use of the conjunction ‘but’, unfortunately, and in fact to contrast the two ideas. The third shows the use of ‘moreover’ to give additional
d. Substitution and Ellipsis

The students’ writings also contain examples of substitution and ellipsis which contributed to overall coherence of their texts. For example, in the following excerpt, the students’ use of ‘do’ refer back to the preceding argument provided this is called as verbal substitution.

*Do you have problem with your weight? If you do not, you might have an ideal and healthy body. But if you do, you have to make your body be more ideal and healthier absolutely. Diet is probably the best solution to anticipate this problem because there are many benefits of doing diet.*

(Text 1 –from students’ work on cause effect essay –the 4th group)

The students’ writing also revealed their use of the ellipsis, even with error. For example:

*Music can make the feelings of the children become more sensitive. Because to know the contents of a song, they need to learn and (they need to) try to enter into the thinking of the songwriter.*

(Text 1 – from students’ work on cause effect essay – the 5th -group)

An analysis of cohesive devices in the students’ writing provides evidence that the students ability to develop their argument using reasoning promoted because they are offered the chance to practice critical thinking.

The last question relates with the students’ critical thinking promoted in the aspect of self-reflection. To answer this question, the researchers gained the data from peer collaboration, task and content, and feedback from the lecturer. The researchers used information from the interviews with the students plus some comments and opinions expressed by their lecturer. In addition, the written self-reflections from the student participants were included in the analysis.

The data of peer collaboration gained from students written self-reflections reflected on his learning experience with peers were taken. Here is a sample of extract from one written self-reflections.

*We can get benefits of learning English by using Internet such as joining the group in Facebook and chat with other members through Whatsapp. When I login on Facebook Groups, I always looking for the topics which I’m interested in then join the group and read the messages that other members left. If I agree or disagree with them, or have other new points about that topic, I will send the message to talk about it with them. During this process, I really learn English a lot.*

In addition, based on the data of students survey of writing advancements, twelve students stated that peer editing enable them to help others edit their writing, to communicate ideas to others through their writing, to give honest feedback to other students about their writing, to recognize weak points in an essay, to apply the lecturer’s or other students’ feedback comments toward their writing, to evaluate the writings of others, to help others edit their writing to be grammatically and mechanically correct, and to trust the contribution of classmates when offered suggestions about
writing.

The data of students’ questionnaire also reveals that peer collaboration gave the participants to have self-reflection, especially when it came to the phases of writing. Working in groups was challenging for many students, for example, many students reflected through their writing that they felt discouraged as they encountered difficult language and technical problems. One student confessed, “In fact we had abandoned it. I give up; I have a low connection and cannot submit the task on time”. Meanwhile, the lecturer gave this comment on the demands of the task:

>This online project was quite challenging for my student. It was the first experience for most of them to learn English through computer. They learned how to search, select the information they needed. However, most of them found that it was difficult to understand messages/data which was full of complicated grammatical structures and more advanced vocabulary.

The task and content were mechanisms that encouraged the students to be self-reflective in their learning in the sense that the students were encouraged to develop collaborative skills because the topics were of global interest and significance. In order to work together they needed to negotiate their understanding and resolve the differences that inevitably occur when people work together.

Student (A) experienced a very significant progress in certain condition; it was the first time she had ever done such a project. Her reflection on the task revealed a great deal:

>This task was very useful for me, because I’ve never followed CMCL classroom before. I really interested in this program because it can combine among writing, typing skill and using social media. Using the computer we can improve our skill in writing task while typing in computer. We are not only discussing or sending tasks immediately in the class but we also use social media. When I read web page site, I had to check new vocabulary and new world. After we had presentation, I have more confident than before. Thank you for teaching.

Looking the feedback from the lecturer, students consulted with their lecturer from time to time. Their lecturer gave them feedback on grammatical errors as well as on contents. Lecturer feedback was routinely given on the students’ use of linguistic conventions and information organization. Even though there was not a structured framework to monitor the students’ reaction to the feedback from their teachers, the fact that their final product contained fewer grammatical errors than their drafts shows that they acted on the teachers’ feedback. This feedback, however, was intended to encourage the students to solve their own emerging problems and was never in the form of a gift of ‘the right answer’.

Because of the challenging nature of the task, scaffolding at the task level was a key factor to successful task accomplishment. All student participants had to learn web skills. Also, they had to make decisions about topics, about working in groups and about searching for the information on the Internet. Moreover, they had to meet the challenge of presenting their work on the Internet,
responding the feedback from their lecturer, accepting and correcting their arguments, also expressing and discussing their idea with their peers and other member of the groups. The data of interview with the students also reported that they had learnt a lot from the research project.

**Discussion**

From the data above, it was clear that HCMCL able to promote students critical thinking in the aspects of communication, reasoning, and self reflection although the researcher also found some points in which the learners still have to improve. Related with the aspects of communication on the use of linguistics conventions, the researcher has made the lists on students’ grammatical aspects promoted on the students work starting from the first draft into the final writing, they are lexical choice (including words that should be included in the text or not), articles, major punctuation, linkers, use of capital letters, sentence structures, tenses, singular/Plural concord (including Plurality), use of prepositions and use of modal verbs. This was gained by the students because the lecturer consider the illuminating discovery of composition research ,i.e there is an extent to which students ‘apparent skill level varies according to the cognitive complexity of the writing task. Schwalm (1985, p.141) claimed the relationship between error production and the difficulty level of a communication task between error production and the difficulty level of a communication task in the examinations used by the government language schools to categorize students’ skills levels.

Bean (2011, p.77) also noted that grammatical problems supposedly eliminated in undergraduate work begin cropping again in their first attempts to write legal briefs. The longitudinal studies done by Carrol (2002) also claimed that the first year English going on to produce poorly written papers the next term in philosophy or political science. This research points to a relationship between grammatical competence and writers’ control over the ideas being expressed and the features of new genres. As each new course immerses students in new, unfamiliar ideas, and rhetorical contexts, the quality of students writing predictably degenerates. That is why in this class, the lecturer help counter this phenomenon by building requirements for multiple drafts into their assignments so that students can use early drafts to clarify their thinking. From this process, students write paper as draft rather than a finished product. Instead of working on errors, teacher and students focus on clarifying the ideas in the paper. The writer leaves the forum with a newly formulated thesis and an improved organizational plan. On the next draft, many of the grammatical errors disappear. This phenomenon suggests that the early error laden draft is a necessary step toward the writers’ eventually mastery of the ideas and that once the ideas have become clearer, the sentence structure begins to clear up too. It has the aim to produce correct sentences from writing process not premature editing.

Dealing with communication to the audience, there were three types of audience: fellow students, the lecturer, and the researcher and volunteers. Appropriateness in this study entailed comprehension after the students produced the errors in grammar and wording in the first draft. It also included whether the content and the topic was appropriate or not.

It was found that students’ online texts generally communicated successfully, despite the high number of linguistic errors. Moreover, in all cases, the textual evidence suggested that the students adjusted their style to suit their audiences. This aspect is similar to the main finding
reported by Davis and Thiede (2000, p. 105) who demonstrated that L2 students tend to shift their writing style to match new situations. Such shifting of style may indicate that the students have become aware of a range of discourse conventions in L1 and are beginning to imitate or accommodate to these conventions. Actually, there were more spelling errors on the discussion boards than with the online presentations which may imply that the students, at least to a certain extent, were beginning to become aware of the communication context, that is, with their audiences.

The results showed that the students tended to write with the audience in mind, which is a similar picture to that presented by the discussion in Warschauer (1998, p.68). When the students published their work on the Internet, an act of public display, they were encouraged to make their writing more accurate and formal. From the interviews, the students were confident that their audiences understood their messages, reasoning that they had used simple words and grammatical structures. The online discussions (text-based) seemed to suggest that, despite errors, the intended messages were largely successful. It can also be seen from the way the students choose the topics and organize their writing well in terms of composing thesis statement in introduction, explaining the content of the body and integrating the whole to be summarized in conclusion.

Relating with the communication aims, the short term of goal of doing the task is that all of the students are able to compose the argumentative and cause effect essay; they followed the phases of writing from making the outlining, drafting, and finalizing. To communicate with the audience, in this case was the reader, they have fulfilled the assignments. Their lecturer commented that most students performed much better than was initially expected. In this sense, the students accomplished the short-term goal.

The long-term goal was to improve students’ language proficiency for other purposes especially those students wished to continue their study in overseas higher institution. Even though this study could not demonstrate the extent to which the students actually achieved their long term goals, this class gives them the chances to practice and familiarize themselves with academic discourse.

Based on the data got from students’ documents, it was indicated that students were thinking rhetorically about audience. It means that writers’ decisions are often functions as writers’ rhetorical situations- the writer’s purpose and audience. It will include who are their intended readers, how much do their readers already know and care about the topic and what is their stance toward the topic, what is the purpose of writing, what kind of change do they want to bring about in their readers’ understanding of the topic, when the readers finish the paper and what they want to know-believe-or do. All of those processes happened because the lecturer led their students to think about audience and purpose. The first strategy is by providing the chances for students to think about the writers aims earlier such as to inform, to explain, to analyze, to persuade, and to reflect. The second is by articulating the kinds of change the writer hopes to bring about in the readers’ view of their topic.

Articulating purpose in this way is particularly valuable in settings calling for thesis-governed prose. According to Bean (2011), the types of audiences are as follows: (1) naïve
audiences (needs new information or a clear explanation of something, the students play the role of expert relative to the assigned audience), (2) puzzled audiences with skeptical tendencies (writer and reader of equal status confront a shared questions or problem, the writers’ role is to present, through critical thinking and analysis, the audience will be interested in the writers solution but will raise the skeptical questions and (3) resistant or hostile audiences (students must imagine an audience whose views of the subjects are well formed and opposed to the writer’s view). It was clear that helping students think rhetorically about audience and purpose can lead to substantial improvements in their writing.

The second concern relates with the aspect of reasoning. The assumption of this study is that a critical thinker also reasons appropriately, that is, reasons in a logically and ethically appropriate manner. As discussed in the theory, logical reasoning was in evidence in the way students organized their information and their textual coherence, as well as in their use of cohesive devices. Appropriate reasoning also means that such reasoning is ethical, and in this sense, the content of the students’ work (writing) revealed some objectivity and open-mindedness.

Based on the data, it reveals that the students’ essay from rough draft into the finished products shows the progress on the way they used logical reasoning in their text. Logical reasoning relates with patterns of argument. Some of these patterns connect the ideas expressed in specific statements to ideas expressed in other statements in conventionally accepted ways. According to Kytle (1987), logical reasoning is a process used as an evaluative or interpretive tool that has objectivity as its prerequisite, insight as its goal and analysis as its preferred method. Most texts rely on chains of reasoning that set up several successive arguments in support of final conclusion. Chains of reasoning occur when a conclusion in one argument becomes the premises of a subsequent argument. Meanwhile, Beene and Kopple (1992) stated that induction and deduction are the two basic patterns of logical reasoning that writers used to structure their judgments and to convince others to accept their perspectives. Based on the data taken from students’ documents, it was obvious that students applied inductive and deductive reasoning to a text and it was dependable tools for identifying the text’s oversights. It was in line with Beene and Kopple (1992) who claimed that inductive reasoning deal with empirical matters such as reading, investigation, study and experience. On the other hand, deductive reasoning concerned with a limited set of items and need; it has no relationship with empirical facts. Inductive argues from specific circumstances to generalities and deductive argues from generalities into specific circumstances.

There was an improvement in the way they organized their information in a coherent manner. The texts that were produced showed the use of a variety of cohesive devices / transitional markers. According to Bram (1995), a coherent paragraph consists of interrelated sentences which move in such a way that they smooth the way, one for another. Many students do not use it appropriately in the rough draft. However, in the finished product, they proved that they can use it appropriately. So that the students as the writers will not jump out of the blue or sound too abrupt. Their ideas will flow smoothly one after the other.

From the essay they made, it also showed that the arguments and organization of their work were logical. In terms of objectivity and open-mindedness, the students researched their topics and presented their work in some depth. Heterogeneous grouping and technology helped the students...
open up to new ideas. The features and functions of the online environment widened their perspectives. Also, the online environment exposed them to different perspectives, an important condition to develop critical thinking. Some issues raise different perspectives leading to controversial argument. This can be considered a healthy sign for students. As Johnson and Johnson (1994) noted that academic controversy and properly structured can result in higher quality reasoning, problem solving, and decision making.

This study has shown that there was a progress of students in expressing their arguments using logical reasoning. HCMCL enable the students from different backgrounds to interact constructively with each other. It has the potential to expand students’ learning capacity and promote communication in an open and supportive environment. Since open-mindedness becomes the characteristics of a critical thinker.

The third aspect is self-reflection in language learning. This class encouraged the students to be self-reflective in their language learning. It encouraged the students to be reflective in three major areas: their performance, their learning strategies, and the intervention.

When the lecturer has been asked about the goal of learning, he stated that before designing the productive small group task, he identified both a disciplinary content goal and thinking or arguing goal for each task. The teachers’ content goal is to make the students able to write the argumentative and cause-effect essay, to engage them in independent discussion of the text, and to see the students as commentators. The thinking skills goal is to increase students’ ability to pose self-sponsored questions about a text and to determine how it can be better. This is in line with meta-cognitive reflection strategy, in which according to Bruffee (1993, p.47) it was effective used in small groups to ask the students to consider their own thinking and negotiating processes metacognitively. This strategy is useful to help students to produce solutions. In other words, this has the purpose to tell the groups that their answers are wrong and show them the right answer. Bean (2011) also argued that the effect of this approach is to deepen students understanding of how knowledge is created: instead of accepting (and perhaps just memorizing) the right answer based on the teachers’ authority, the students struggle to understand the principles of inquiry, analysis, and problem solving used by the experts to arrive at their views. In this case, the students learn to consider an answer not only a product but also the result of a process in online discussion forum.

Conclusion

It can be inferred from the study that the key dimensions of HCMC, i.e: time, fidelity, space, and humanness are completely implemented by the lecturer, so that the classroom runs successfully. The students’ use of linguistic conventions was at a reasonably high level of complexity, but the accuracy associated with their use was low. It seems that they also understand their audience. They interacted with their peers both inside and outside the classroom. The short-term goal of communication was concerned; the students achieved it by presenting their essay on the Internet. An increase ability to switch between registers was evident, although they still have a limited vocabulary and grammar. The logic of students’ organization was also found. Their use of certain cohesive devices such as conjunctions, equivalent words, and pronouns was competent but very basic. It demonstrates the students’ ability to promote appropriate reasoning. In this classroom, the students were involved in the completion of sets of complex tasks where peer
The implementation of Hybrid Computer Collaboration was crucial for the success or failure of projects. The output of collaboration was self-reflection, since students were invited to report on their experience of participation in the group. Meanwhile, the content of the task also helped raise students’ awareness of trending issues and served as a stimulus for engaging them in controversial issues that demanded discussion skills. In brief, it was clear that HCMCL promoted students critical thinking.

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