

**CRITICAL THINKING AND COLLABORATIVE LEARNING: STUDENTS' PERCEPTIONS**

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*This study aims to outline students' perceptions about the use of collaborative learning to foster critical thinking skills; and how the use of collaborative learning helps improve students' critical thinking. This study uses a qualitative case study involving 23 third semester students in the English Language Education Program of the Faculty of Teacher Training and Education Science forming into six groups consisting of 3-4 students. Primary data is the result of group interviews, which are analyzed through several steps such as transcription, coding, categorization, condensation, and interpretation. The results of this study provide evidence for the description of students' high perceptions of the use of collaborative learning to foster critical thinking skills. In addition, students have a great awareness of collaborative learning that influences critical thinking skills. In addition, they also believe that critical thinking offers many benefits, including: 1) building teamwork, 2) implementing discussion, 3) respecting each other, 4) saving time, 5) self-reflection, 6) reducing the workload, and 6) sharing knowledge. Apart from inadequate knowledge about critical thinking knowledge, students succeed in showing elements of their critical thinking by expressing opinions, making comments, drawing conclusions, solving problems, and producing effective arguments during the discussion process.*

**Keywords:** Critical Thinking; Collaborative Learning; Student Perception.

**Abstrak**

Penelitian ini bertujuan untuk menguraikan persepsi siswa tentang penggunaan pembelajaran kolaboratif untuk menumbuhkan keterampilan berpikir kritis; dan bagaimana penggunaan pembelajaran kolaboratif membantu meningkatkan pemikiran kritis siswa. Penelitian ini menggunakan studi kasus kualitatif yang melibatkan 23 siswa semester ketiga di Program Pendidikan Bahasa Inggris Fakultas Pelatihan Guru dan Ilmu Pendidikan membentuk menjadi enam kelompok yang terdiri dari 3-4 siswa. Data primer adalah hasil wawancara kelompok, yang dianalisis melalui beberapa langkah seperti transkripsi, pengkodean, kategorisasi, kondensasi, dan interpretasi. Hasil penelitian ini memberikan bukti untuk deskripsi persepsi tinggi siswa terhadap penggunaan pembelajaran kolaboratif untuk menumbuhkan keterampilan berpikir kritis. Selain itu, para siswa memiliki kesadaran yang besar tentang pembelajaran kolaboratif yang memengaruhi kemampuan berpikir kritis. Selain itu, mereka juga percaya bahwa pemikiran kritis menawarkan banyak manfaat, antara lain: 1) membangun kerja tim, 2) menerapkan diskusi, 3) saling menghormati, 4) hemat waktu, 5) refleksi diri, 6) mengurangi beban tugas, dan 6) berbagi

pengetahuan. Terlepas dari pengetahuan yang kurang memadai tentang pengetahuan berpikir kritis, para siswa berhasil menunjukkan elemen pemikiran kritis mereka dengan menyampaikan pendapat, memberikan komentar, menarik kesimpulan, memecahkan masalah, dan menghasilkan argumen yang efektif selama proses diskusi.

**Katakunci:** Berpikir Kritis; Pembelajaran Kolaboratif; Persepsi Siswa.

## I. INTRODUCTION

Students' success in the world which keeps changing. The need of critical thinking has been suggested by many experts such as Paul & Elder (2007), Alwasilah (2004), and Emilia (2005). Paul claims that critical thinking results in a reasonable person (Paul and Elder, 2007). Meanwhile Emilia (2005) propose that critical thinking should be taught in the classroom since it is aimed to create a highly competitive society in the modern and global world. Due to its urgency, Indonesian government has been trying to achieve the propaganda of critical thinking issue by stipulating it in the 2013 English Indonesia curriculum (*Kurtilas*). Thus, the English teaching and learning process should be designed by critical thinking aspect (Alwasilah, 2004).

The continuous effort of enhancing and fostering critical thinking had been conducting by many researchers; and some of them believe that critical thinking skill can be improved with the use of Socratic Questioning

Technique in speaking (Saleky, 2018), collaborative learning (Sedhu, et al, 2015; Saiz, et al., 2015), writing an argumentative essay (Vyncke, 2012; Rohayati 2017, and Sahoo & Mohammed, 2018), and the involvement of Project-based learning employing internet environment (Mohd.-Ali et al., 2018). However, research on students' perceptions on the use of collaborative learning in fostering critical thinking and exploring students' understanding towards these issues is still sparse. In addition, one important question remains unanswered regarding the context of research. Thus, this study attempts to: 1) elaborating students' perceptions on the use of collaborative learning to foster critical thinking skill; and 2) how the use of collaborative learning helped enhance students' critical thinking. The present study was conducted in a private university in West Java.

## II. LITERATURE REVIEW

The nature of critical thinking has been viewed by many experts of critical movement such as Chaffee (2014), Ennis (1996), Kurfiss

in Inch et al (2006), Paul & Elder (2007), Reichenbach (2001), Siegel (1988), and McPeck (1981), representing two different concepts: general and subject-specific conceptions. From the view of general conception, critical thinking with its nature as a set of abilities and dispositions can be utilized across domain or various situation and circumstances (Ennis, 1996; Paul & Elder, 2007; Reichenbach, 2001, p. 19; Siegel, 1988). In contrary, McPeck (1981) argued provocatively that critical thinking cannot be considered as a generalized skill since there is not any single critical thinking skill that can be employed generally across subject areas. Accordingly, thinking is always thinking about something. To think about nothing is a conceptual impossibility” McPeck (1981, p. 3). However, these two conceptions are complementary (Siegel, 1988).

Figuring out the general conception of critical thinking, it is argued that, in every discipline, someone must be able to recognize argument, facts or evidence, and opinion (Browne & Keeley, 2007, p. 15; Chaffee et al, 2015; Ennis, 1996, p. 4; Inch et al, 2007, p. 9; Paul & Elder, 2007, p. 21; Reichenbach, 2001; Toulmin, 2003, p. 11; Crusius & Channel, 2006, p. 48). These critical thinking skills are

valuable to assess the knowledge someone obtained; and therefore “knowledge underlies all critical thinking” (Reichenbach, 2001, p. 31). This also follows that critical thinking is connected to the manner of teaching or critical manner which refers to “manner of teaching that models and reinforces the critical spirit” (Siegel, 1988, p. 45). Thus, the definition of critical thinking use in this study will be drawn from the work of general, in particular, Chaffee et al (2015), Ennis (1996), Paul & Elder (2007), Reichenbach (2001), and subject-specific conceptions, especially McPeck (1981).

First, critical thinking is considered as a process to achieve the aim of producing a reasonable decision about what is to believe and what is to do (Ennis, 1996, p. xvii). Second, critical thinking pertains to a well-organized commitment to evaluate critically and to determine whether judgment about the truth of claim or recommendation to act in certain way should be accepted, rejected, or suspended (Chaffee et al, 2015; Reichenbach, 2001, p. 19). Third, applied to thinking, critical thinking is defined as thinking that explicitly aims at well-founded judgment and hence utilizes appropriate evaluative standards in the attempt to determine the true worth,

merit, or value of something (Paul & Elder, 2007). Unlike the previous definition, McPeck (1981) argues that critical thinking does not refer to any particular skill; “critical thinking is always thinking about something”.

Critical thinking is supported by the elements of critical thinking that have been discussed by several experts. These include Browne & Keeley (2007, p. 15), Chaffee et al (2015), Ennis (1996, p. 4), Inch et al (2007, p. 9), Paul & Elder (2007, p. 21), Reichenbach (2001), Toulmin (2003, p. 11), and Crusius & Channel (2006, p. 48) Of all elements, a number of critical thinking elements that include issue, claims (thesis), argument, reasons, data (evidence), and opinion are the main facets of critical thinking which shape the present study (Reichenbach, 2001).

Regarding critical thinking standards, it consist of (1) *clarity* in arguments, (2) *logical* and *relevance* of data and evidence used to the main point, (3) *accuracy* of the quality of the arguments, (4) *precision* in the sense of being specific about detail (Chaffee et al, 2015; Emilia, 2005, p. 25; Paul & Elder, 2007, p. 21). By referring to Chaffee et al (20015) and Ennis (1996, p. 7), clarity means a conceptualization of what you want to say by utilizing the best or proper use of language.

The next core of clarity is logical and relevance in presenting the reasoning that contains evidence. This means that the use of well-explained information is beneficial in discussion.

Another element of intellectual standard is accuracy. The accuracy of argument can be shown by using the available evidence which indicates that belief is true (Chaffee et al, 2015, and Paul & Elder, 2007, p. 10). Meanwhile, a precise thinking (precision) and clarity can avoid the vague and the use of general words (Browne & Keeley; 2007; Chaffee et al, 2015; and Ennis, 1996, p. 7).

Critical thinking disposition is a combination of attitudes and tendency to act or think in a certain way at the right time with the right commitments as claimed by Alwasilah (2004, p. 165), Ennis (1996, p. 9), Reichenbach (2001, p. 14), and Ritchart & Perkins (2005, p. 785).

Thus proficient critical thinkers are disposed to: (1) try to be well-informed and clear about the intended meaning of what is written, seek reasons to represent and defend a position, and mention or refer to them, take into account the total situation or context when they interpret something and keep their thinking relevant and focus on the main point

and avoid going off on tangents (Ennis, 1996, p. 9; Reichenbach, 2001, p. 14); (2) have a sound decision, a rational control of beliefs, inferences which entail a commitment to analyze and evaluate beliefs based on reason and evidence, and to believe and conform rationally (Paul & Elder, 2007, p. 17); and (3) think well when they think and also think at the right times with the right commitments-the truth and evidence, creativity and perspective taking, sound decisions, and apt solutions (Ritchart & Perkins, 2005, p. 785).

Collaborative learning which refers to” students working together in an attempt to create knowledge and achieve shared learning goals (Barkley et al, 2014), has its “focus of a considerable amount of empirical inquiry” (Loes & Pascarella, 2017). Collaborative learning provides students the opportunity to interact to each other while working in pair or group. Further, Barkley et al (2005) argue that collaborative learning is beneficial because it trains student to have a discussion, provides reciprocal teaching and problem solving. This kind of technique is underpinned by the theory of social constructivism and has become a primary view of collaborative learning. As stated by Aminloo (2013) and Lin & Maarof (2013) in their research report, social

constructivism is the root of collaborative learning which is based on the work of Vygotsky 1978.

In carrying out the collaborative learning, in particular in writing process, Mulligan & Garofalo (2011, p.6) proposes several steps: forming a group, reading assignment, gathering or organizing to support their assignment, dividing assignment for each student in term of parts of certain types of writing, reading, discussing, and resolving first draft, combining individual assignment into a single document, final revising and editing in term of structure, etc., and proofreading before submitting.

Collaborative learning provides students many advantages (Lowry et. al., 2004; Elola & Oskoz, 2010; Mulligan & Garofalo, 2011; Ghufroon & Hawa, 2015; Aminloo; 2013; Fong, 2012). Lowry et. al., (2004) believes that it can improve socialization or social skill development, get new ideas, share the idea, and enhance interpersonal relationship. While, Elola & Oskoz (2010) claim that it can facilitate reflective thinking, and encourage pooling of knowledge about language. Furthermore, Fong (2012) reports that it can reduce anxiety, promote critical thinking, fostering excellence and motivation.

According to Mulligan & Garofalo (2011), it is a social skill development, time-saving, and improves the content of knowledge. Similarly, Gufron & Hawa (2015) states that collaborative learning can promote an effective learning; combine both motivational and cognitive approaches to collaboration, promote cognitive process, promote students' achievement and self confidence.

Relating to critical thinking skill, Loes & Pascarella (2017) suggests that a continuous exposure to collaborative learning is associated with renders in critical thinking skill. Apart from that, to develop the proper attitude, it can be initialized by embodying the characteristics such as free thinking and high motivation(<http://skepdic.com/essays/Haskins.html>). It is supported by Ennis (1996, p. 9) and Paul & Elder (2007, see also Ritchart & Perkins, 2005, p. 780) who claim that critical thinking abilities and dispositions are considered as a representation of intellectual traits. As it is understood, students' dispositions can be identified in the process of learning collaboratively. The dispositions should be taken as consideration to become an effective critical thinker. All these critical thinking dispositions are exemplified by students when they conduct a team work.

Thus, it is fair to say that collaborative learning become a suitable context to identify students' dispositions.

With regards to students' perceptions, Sedhu (2015) claims that it is an individual's strong believe towards the existence of factors; in this case, critical thinking and collaborative learning. Accordingly, the individual' perception can be influenced by past experience, anticipation of an upcoming event or situation, and attitude. Furthermore, Behm (2011) states that perceptions play on the defining and understanding similar concept.

### **III. RESEARCH METHODS**

In order to develop insight of 1) elaborating students' perceptions on the use of collaborative learning to foster critical thinking skill; and 2) how the use of collaborative learning helped fostering students' critical thinking, this study employed a qualitative design (Holliday, 2005, p. 5; Cohen et al, 2007, p. 461; and Silverman, 2005, p. 10). The research was carried out at the English Department of a Private University in West Java, Indonesia; and 23 students forming six groups consisting of 3-4 students who were enrolling a Business Writing class were recruited. They were given

a freedom to group themselves based on their own preference in order to make them comfortable. Thus, the grouping was not based on achievement or chosen randomly.

The primary data were obtained after the six meeting of teaching writing by using collaborative learning. Each meeting lasted for about 100 minutes in a week; and during that time, the students were taught to write application letter, a memo, and an inquiry letter. Collaboratively, they doing the writing process as what has proposed by Mulligan & Garofalo, (2011, p.6), as previously mentioned.

After each group wrote the inquiry letter at the sixth meeting, group interviewing was administered as suggested by Cohen et al (2007, p. 373). They were required to answer the 6 open ended questions and each member of group was given opportunity to deliver point of view. It was very unfortunate that the leader of group who participated mostly in answering the interview questions.

Subsequently, the interview session was recorded and analyzed in several steps: transcribing, categorizing, and coding. The next step is condensing by following Cohen et al, (2007), if the results of interview are similar; they are grouped into a single

response by row. In contrary, if responses are not similar, they are put in separately; and only responses of groups were displayed into table in this research report. Finally, all the interview result was interpreted by reading it number of times, linked to the underpinning theories, and comparing it to the previous study.

#### **IV. FINDING AND DISCUSSION**

As previously mentioned, the present study was intended to: 1) elaborate students' perceptions on the use of collaborative learning to foster critical thinking skill; and 2) identify how the use of collaborative learning helped in enhancing students' critical thinking. After collecting the data through group interviewing and analyzing it, the thorough information was obtained to be discussed.

Regarding the first research question, the result of group interviewing has been formulated into two central themes: 1) students' understanding towards the importance of building critical spirit in tertiary level; and 2) students understanding about collaborative learning as an effort to foster critical thinking skill. Meanwhile, another central theme depicting the second research question is that collaborative learning helped fostering

students' critical thinking. The account of the result will be elaborated below:

### **Students' Understanding towards the Importance of Building Critical Spirit in Tertiary Level**

Based on the result of interview, all groups has been successful in conveying their perception about the term of critical thinking. The response of Group 1 and Group 2 is that *Critical thinking is the ability to convey the point of view (opinion), deliver questions without reluctance, and know what to do.* It is shown that they were aware of the importance of questioning (Browne & Keeley, 2007); but in reality students still feel reluctant to ask question as stated by Reichenbach (2001). As far as it concerned, students' reluctance is the main factor hampering the critical thinking skill. The group responses implied that the students conduct might be gradually changed from the reluctant attitude to delivering questions for a dare; it might become "a breath of air" for the lecture. This also follows what is said by Siegel (1988) in term of manner of teaching. The reason was that the students' eagerness to deliver question might emerged from the teacher who always model and reinforce critical spirit; and consequently, there would be "an equal position" in the

classroom, i.e., both teacher and students have a similar opportunity to deliver opinion through questioning.

Meanwhile, Group 3 and Group 4 were unanimous in their comments; they said that *Critical thinking is the ability to convey a spontaneous and logical thinking so that the opinion or the response makes sense and logic.* It implied that critical thinker was characterized by logical thinking to ensure the audience or addressee, and to achieve the aim. The response links to what is stated by Ennis (1996). Thus, this is considered as the result of thinking process as what is claimed by McPeck (1981).

The response of Group 6 claimed that *Critical thinking is the ability to think deeply, and evaluate something in order to render a solution.* Group 5 said further that *Critical thinking is the ability to deliver arguments continuously.* It can be drawn that thinking process resulted in offering argument, a judgment and evaluation are beneficial to obtain a merit and a value of something, as suggested by Paul & Elder (2007).

Moving on the element of critical thinking, all groups, in this case, Group 1, Group 2, Group 4, and Group 5, performed their weaknesses in understanding elements of



critical thinking knowledge and did not provide a contented response. After being condensed, it revealed that of all elements of critical thinking, “opinion” is the only one they mentioned. The most unfortunate response is that Group 3 and Group 6 were not able to respond at all. It implied that they were not familiar with the other elements of critical thinking completely, which is consisted of issue, claims (thesis), argument, reasons, data (evidence), and opinion, as claimed unanimously by Browne & Keeley (2007, p. 15), Chaffee et al (2015), Ennis (1996, p. 4), Inch et al (2007, p. 9), Paul & Elder (2007, p. 21), Reichenbach (2001), Toulmin (2003, p. 11), and Crusius & Channel (2006, p. 48). The response delivered by Group 1, 2, 4, 5 towards the elements of critical thinking is that *Offering opinion confidently, chronologically, carefully, and without reluctance, and improve self-control as well.*

In term of critical thinking standards, of all the groups, only Group 3 mentioned the proper response, “logical”. But, again, it did not show the contented response because there are several critical thinking standards to be embedded in critical thinking skill, among other things, *clarity, logical, relevance, accuracy, and precision* in (Chaffee et al,

2015; Emilia, 2005, p. 25; Paul & Elder, 2007, p. 21). Meanwhile, Group 1, Group 2, and Group 4 provided response but it did not meet the intended response. Poorly, Group 5 and Group 6 did not utter any response at all.

Based on the information aforementioned, the students find critical thinking difficult to be elaborated, in particular, the term of elements and standards of critical thinking. Of all the notions mentioned previously, disposition was the most unfamiliar because no group answered this type of questions. This indicated that students had a very low perception toward critical thinking area. The low perception on critical thinking resulted in the poor ability in critical thinking skill. However, comparing to the previous research (Rohayati, 2017), the respondents in the present study did not show a significant different in understanding of critical thinking. Thus, they still need improvement and must get involved with the study of critical thinking.

An account of students understanding toward critical thinking has already explained in detail. It might become evidence that students have not had a serious exposure yet to the area of critical thinking. In order to produce critical thinkers, the students in

tertiary level should be equipped by a comprehensive knowledge of critical thinker. This implied that an explicit teaching of critical thinking should be taught and getting to be accustomed to the critical spirit is a must.

### **Students' Understanding about Collaborative Learning as an Effort to Foster Critical Thinking Skill**

Students' understanding about collaborative learning in the present research might become satisfying result. All of groups have successfully answered the interview question without hesitation and their points of view were in line with what has been said by Barkley et al. (2005). Group 1 and Group 2 have the similar definition about collaborative learning: *It is a mutual teamwork between the more knowledgeable and the less knowledgeable students consisting 2 or more and having a discussion about the lecture then it is worked together to solve the problem and sharing knowledge as well.*

They had a strong believe that collaborative learning which provided social interaction helped the less knowledgeable students to get knowledge from the more knowledgeable students during discussion. But, it must be kept in mind that, this

condition might be occurred clearly in heterogeneous group. In contrary, in homogenous group, students might arrive at a bad condition. To avoid this, it is a teacher privilege to determine a grouping criterion. Coincidentally, the grouping criterion for the present study were based on students' preference, rather than achievement or attendance list.

Group 3 and Group 6 conveyed the other responses: *It is a mutual relationship between lectures and students.* It is in line with Barkey et.al. (2005) was that they had a reciprocal teaching in collaborative learning; between teacher and students and among students as well. This also linked to what has been reported by Sedhu et. al. (2015) in term of effective and efficient teaching learning process, which resulted in increasing several points: teacher' capacity as well as productivity, students' efficacy and students' self regulated. Meanwhile, the response from Group 4 (*It is unifying the various opinions to obtain a good definition and solution*), and Group 5 (*It is a form of teamwork to merge the difference opinions or method, as well as solving problem to obtain the best solution as has been done in the process of writing an inquiry letter*), reflected the primary view of

social constructivism, i.e. interaction among member of group, because the discussion occurred in order to unify variety of thoughts. Also, the activity committed Vygotsky's sociocultural theory, namely, Zone Proximal Development (ZPD). Thus, the finding of the present study had a similar view with Aminloo (2013) and Lin & Maarof (2013), and Elola & Oskoz (2010).

All of the answer of interview indicated that the students were able to demonstrate their comprehensive knowledge about the benefits of collaborative learning. These benefits were not different with the findings reported by the previous researcher on the related topic (Lowry et. al., 2004; Elola & Oskoz, 2010; Mulligan & Garofalo, 2011; Ghufroon & Hawa, 2015; Aminloo; 2013; Fong, 2012). All groups have successfully offered a very contented response about the benefits of collaborative learning. Yet, it was very unfortunate that the students' were not aware of the role of collaborative learning in influencing critical thinking skill. The detail responses are as follow:

*Group 1: It results in understanding and accepting other's opinions better; It provides a lesson for self-control, in particular for those who are very selfish;*

*Group 2: It makes a task faster to be done, and provides the innovation because there will be much more input from all the members;*

*Group 3: It can enhance knowledge, become a means to reflect ourselves in term of knowledge including strength and weaknesses, so that it provides a good effect for oneself and others;*

*Group 4: It can understand and help each other; Group 5: It can help to each other in particular for those who are very low in learning process;*

*Group 6: It can share the knowledge; it provide the students something fruitful.*

It has been elaborated the students' point of view about definition of collaborative learning. Those account of information implied that the students had a high perception about collaborative learning. It was due to their frequent involvement in sustainable collaborative learning activities in great number of times. Apart from a dynamic participation and communication in the classroom, it is no doubt that collaborative learning might become a continuous effort in fostering critical thinking skill.

### **Students' Awareness of Collaborative Learning in Fostering Enhancing Students' Critical Thinking**

Many experts strongly believed that collaborative learning helped fostering critical thinking skill; and even having a sustainable effort of how to maintain collaborative learning and critical thinking concurrently by using variety of method. Like Vyncke (2012), Rohayati (2017), and Sahoo & Mohammed (2018), they found that students' skill of critical thinking and collaborative learning due to writing an argumentative writing and research protocol writing project in academic writing.

Meanwhile, other previous researchers were only intrigued by the use of collaborative without exploring the critical thinking skill, (Loes & Pascarella, 2017; Lowry et. al., 2004; Elola & Oskoz, 2010; Mulligan & Garofalo, 2011; Ghufon & Hawa, 2015; Aminloo, 2013). Yet, Fong (2012) found that collaborative learning helped fostering critical thinking skill. Similarly, the present study has successfully conducted the related research through single data, grouping interview. The obtained data regarding the use of collaborative learning in fostering critical thinking has been analyzed and formulated

into central theme of "Students' Awareness of Collaborative Learning in Enhancing Students' Critical Thinking".

The group responses indicated that they had demonstrated their critical thinking skill at the time of collaborative learning occurred although they could not elaborated the complete terms of critical thinking, especially the term of element, standard, and disposition. In short, the group responses have shown their awareness of collaborative learning in fostering critical thinking. The interpretation of condensed meaning of their interview is in the following excerpt:

"The use of collaborative learning could be used as a tool for demonstrating and fostering critical thinking skill because it provided students an opportunity to produce effective arguments logically, to convey opinion, and to draw conclusion at which they are included into element of critical thinking." (Interview transcription, November 19<sup>th</sup> 2018)

The group responses above made sense since along the activity of collaborative learning, they had a planned discussion leading to an informal debate in order to reach consensus. Neither planned and unplanned discussion support creativity and critical thinking (Sedhu, et.al., 2015). This, concur-

rently, motivated students to equip themselves with an assorted knowledge which can be obtained from mostly reading, or listen to other people. While, it has been confirmed in general consensus of critical thinking that sufficient knowledge is the weapon to demonstrate critical thinking ability. The last group answer dealt with how the use of collaborative learning helped fostering critical thinking skill. The result of responses are as follow:

*Group 1: We agree that collaborative writing can foster critical thinking skill by providing the opportunity for the students to convey their opinions in group.*

*Group 2: We totally agree that collaborative writing can foster critical thinking skill by enabling the students to deliver points of view, criticize in a good manner without irritating other people.*

*Group 3: We agree that collaborative writing can foster critical thinking skill by providing the students to think creatively, emerging the variety of idea leading to a conclusion. This activity also helped students finding out the new thoughts coming from the members of group to draw a conclusion of the problem (problem solving).*

*Group 4: We agree that collaborative writing can foster critical thinking skill by providing each student to offer opinion and produce argument that is to be evaluated in term of its logic. As far as it concerned, the leader of the group had to be someone having a better critical thinking skill; so it was hoped that it could be transmitted to members of the group.*

*Group 5: We agree that collaborative writing can foster critical thinking skill by providing each individual 1) to predict and combine her/ his fellow's answer; 2) to train the members of group to understand the problem more deeply; 3) to discuss and to learn how to respect every single opinion. The activity might result in producing the right and good solution.*

*Group 6: We agree that collaborative writing could foster critical thinking skill by giving the opportunity for each student 1) to think hard and deeply; and 2) to deliver and share opinion; in order to obtain a broad knowledge and the better solution. Thus, this led to produce a logical argument.*

Based on the group responses in the excerpt above, it is no doubt that the implementation of sustainable collaborative learning helped fostering students' critical

thinking skill for many reasons. They are among others: 1) students were accustomed to have a discussion; 2) students were trained to offer opinion based on the evidence and fact; 3) students gained a new knowledge after drawing a conclusion; 4) it provided students an opportunity to have a self and peer evaluation; 4) students were being open-minded; and 5) students became more aware of being focus on the main point. Consequently, the present research emerged that collaborative learning and critical thinking should be fostered sustainably because both of them support to each other.

## **V. KESIMPULAN**

Some conclusions are highlighted based on the finding of this study which obtained from the group interviewing data. The present study shows the students' high perceptions towards the use of collaborative learning that can foster critical thinking skill. It is indeed that the collaborative learning influences the ability to think critically. The inability of students' understanding about critical thinking has become a great concern which resulting in a continuous effort for all practitioners to improve critical thinking knowledge. It proved that the students did not have a comprehensive knowledge about the term of critical thinking.

However, the students ensure that collaborative learning offered many benefits, among other things: building teamwork, applying a discussion, respecting to each other, time-saving, self reflection, reducing the burden of the task, and sharing the knowledge. Also, the collaborative learning enabled students to deliver opinion, give comments, draw conclusion, solve the problem, and produce an effective argument during the process of discussion. The finding of the study resulted in necessity of an explicit teaching of critical thinking and the implementation of sustainable collaborative learning.

With regards to limitation, this study does not have a variety of data collection. Thus, further research is recommended to broadly investigate the related topic to obtain the more rationale research result by using various methodologies.

## **DAFTAR PUSTAKA**

- Alwasilah, C. 2004. *Perspektif Pendidikan Bahasa Inggris di Indonesia dalam Konteks Persaingan Global*. Bandung: CV ANDIRA.
- Aminloo, M.S. 2013. The effect of collaborative writing on EFL learners writing ability at elementary level.

- Journal of Language Teaching and Research*, vol. 4, No. 4 pp. 801-806. Finland: Academi Publisher.
- Barkley, E.F., Cross, K.P. & Major, C.H. 2005. *Collaborative Learning Techniques: A Handbook for College Faculty*. San Fransisco: Joseey Bass.
- Behm, C.L. 2011. *Student perceptions and definitions of sustainability*. University of Illinois: Unpublished Thesis. Retrieved: November 24, 2018 from [https://www.ideals.illinois.edu/bitstream/handle/2142/26309/Behm Corrin.pdf](https://www.ideals.illinois.edu/bitstream/handle/2142/26309/Behm_Corrin.pdf)
- Browne, N. M. & Keeley, S. M. 2007. *Asking the Right Questions- A Guide To Critical Thinking. Eight Edition*. New Jersey: Pearson Prentice Hall.
- Chaffee, J. 2014. *Thinking critically. 11<sup>th</sup> edition*. Stanford: Cengage Learning Retrieved: Agustus 20, 2018 from [https://www.amazon.com/Thinking-Critically-John-Chaffee-ebook/dp/B00H7HT78A#reader\\_1285430115](https://www.amazon.com/Thinking-Critically-John-Chaffee-ebook/dp/B00H7HT78A#reader_1285430115)
- Chafee, J., McMahon, C. & Stout B. 2015. *Critical thinking thoughtfull writing- A rhetoric with reading. Sixt edition*. Stanford: Cengage Learning Retrieved: Agustus 26, 2018 from [https://www.amazon.com/Critical-Thinking-Thoughtful-Writing-Chaffee-ebook/dp/B00H7HVFJE#reader\\_1285443039](https://www.amazon.com/Critical-Thinking-Thoughtful-Writing-Chaffee-ebook/dp/B00H7HVFJE#reader_1285443039)
- Cohen, L., Manion L. & Morrison K. 2007. *Research Method in Education*. Sixth Edition. New York: Routledge.
- Crusius, T. W. & Channel, C. E. 2003. *The Aims of Argument- A Brief Guide. Fifth Edition*. New York: McGraw Hill.
- Elola, I. & Oskoz, A. 2010. Collaborative writing: fostering foreign language and writing conventions developments. *Language Learning and Technology*, Vo. 14, No. pp. 51-71. Boston: Cengage Heinle.
- Emilia, E. 2005. *A Critical Genre-Based Approach to Teaching Academic Writing in a Tertiary Efl Context in Indonesia*. Deakin University: Unpublished Thesis.
- Ennis, R. H. 1996. *Critical Thinking*. New Jersey: Prentice Hall.
- Fong, L.S. 2012. Benefits of collaborative writing for ESL advance and diploma students in the production of report. *US-China Education Review*, Vol. 4, pp. 396-407. Kulalumpur: David Publishing.
- Ghufron, M. A. & Hawa, M. 2015. The effect of collaborative writing technique in teaching argumentative essay viewed from the students' creativity. *Journal of Language and Literature*, vol. 10, No. 1, pp. 49-60. Bojonegoro: Faculty of Language and Art Education.

- Inch, E. S., Warnick, B. & Endres, D. 2006. *Critical Thinking and Communication-The Use of Reason in Argument. Fifth Edition*. Boston: Pearson Education Inc.
- Lin, O.P. & Maarof, N. 2013. Collaborative writing in summary writing: students' perceptions and problems. *Procedia-Social and behavioral Sciences*, Vol. 90, pp. 599-606. Malaysia: Elsevier Ltd.
- Loes,, C.N., & Pascarella, E. 2017. Collaborative learning and critical thinking: testing the link. *The Journal of Higher Education*, 88(5), pp.1-28. Ohio: Routledge Francis & Taylor Group.
- Lowry, P.B., Curtis, A. & Lowry, M.R. 2004. Building a taxonomy and nomenclature of collaborative writing to improve interdisciplinary research and practice. *Journal of Business Communication*, Vo. 41. No. 1, pp. 66-69. Loria: Business Communication.
- McPeck, J.E. 1981. *Critical Thinking and Education*. New York: San Martin's Press.
- Mulligan, P. & Garofalo, R. 2012. A collaborative writing approach: methodology and student assessment. *JALT Teaching-Learning-Growing*, 18-21, pp. 5-10. Tokyo: National Olympics Memorial.
- Mohd-Ali S., Harun, H., Mahir, N.A., Mas-sari, N., Mat Saad, N.S., & Simin, K. 2018. Meeting the demands of the 21st century english language learning through pbl-lccraft. GEMA Online® Journal of Language Studies Volume 18(2), May 2018.
- <http://doi.org/10.17576/gema-2018-1802-17>, pp. 255-266.
- Paul, R. & Elder, L. 2007. *The Miniature Guide to Critical Thinking: Concepts and Tools*. Retrieved November 5, 2013 from <http://www.d.umn.edu/~jetterso/documents/CriticalThinking.pdf>
- Reichenbach, B. 2001. *Introduction to Critical Thinking*. New York McGraw-Hill.
- Ritchart, R. & Perkins, D. 2005. Learning to Think: The Challenges of Teaching Thinking. In K. J. Holyoak & R. G. Morrison, *The Cambridge Handbook of Thinking and Reasoning*, (p. 775-802). Cambridge: Cambridge University Press.inking, and Education.
- Rohayati, D. 2017. Students' critical thinking in writing an english exposition text. *Advance in Social Sciences and Humanities Research (ASSEHR)*, volume 82, hal. 228-232. Ninth International Conference on Applied Linguistics (Conaplin).
- Sahoo, S. & Mohammed, C.A.2018. Fostering critical thinking and collaborative learning skills among medical students through a research protocol writing activity in the curriculum. *Korean Journal Medical Education*. 2018; 30(2): 109–118.
- Saiz, C., Rivas, S.F. & Olivares, S. 2015. Collaborative learning supported by rubrics improves critical thinking. *Journal of the Scholarship of Teaching and Learning*, 2015, Vol. 15, No. 1, pp. 10-19.