

## STUDENTS' PERCEPTIONS TOWARD THE EFFECTIVENESS OF COLLABORATIVE BRAINSTORMING IN ACADEMIC WRITING CLASSES

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### Abstract

The 21st century skills include collaboration and teamwork, creativity and imagination, critical thinking, and problem solving. In writing classes collaborative brainstorming is one of many activities that can be conducted by teachers to help students develop their 21st century skills. It is because collaborative brainstorming makes students think critically and creatively, work better in groups, and solve problems collaboratively. This study investigated students' perceptions on the use of collaborative brainstorming in an academic writing class and its effectiveness in the students' eyes in writing. The participants of this study were thirty-three English Language Education Program (ELEP) students who were taking Academic Writing class. The data were analyzed qualitatively, supported by open ended questionnaires and semi-structured interviews. The results of the data analysis exposed to prove that collaborative brainstorming helps students in academic writing projects. Finally, this study indicates the importance of classroom interaction during classroom learning activities. This study also suggests a strategy to overcome students' minor participation during group discussions.

**Keywords:** collaborative brainstorming, idea generation, idea stimulation, initiator

### INTRODUCTION

Brainstorming is a creative thinking activity as an attempt to get ideas before creating something as the product (Ning-Fang, 2013). This creative activity uses many methods in terms of getting ideas such as mind-mapping, noting, outlining and many others. However, finding ideas for a paper is not always easy as ever imagined. Some students need baits in order to pick an idea in their work. Therefore, I believe sources that have rich information such as journals, books, and experiences are likely to help them to get inspiration in writing an essay. Group

discussions also tend to be helpful for some students because their peers' comments may lead them to an idea to develop the paper.

In Monguea's and Morr's (1999) study, Osborn stated about rivalry in the group discussion that may stimulate the creative thinking activity. He added that the friendly rivalry is important to increase the motivation in creating ideas. It is called rivalry because the activity involves critiques and comments in order to make the productivity of the discussion work better. Although it involves rivalry among the students, the activity should be conducive in order to avoid anxiety and increase the relaxed circumstances instead. The other thing that should be considered in the activity is that group brainstorming contains free-wheeling ideas. It means that everyone can bring anything related to the main topic to the group discussion. There will be plenty of ideas in the discussion because the ideas come from more than one student. The advantages are, for the group, they can sort the ideas and pick the best topic, and for each member, the comments during brainstorming sessions can stimulate them to think broader to get more ideas for their projects.

Despite plenty of statements that support the idea of collaborative brainstorming, the activity, I believe, is not always supportive for some types of students. Students are different from one to another, so teachers cannot generalize that all students can get the benefits of idea generation through collaborative brainstorming. This research was an attempt to get students' opinion about the benefit of collaborative brainstorming in an Academic Writing class.

The objective of the research was to investigate the effectiveness of conducting collaborative brainstorming in an Academic Writing class. This study was aimed to give an insight to the teachers about students' perception toward teachers' certain approaches in the class, which is building students essay's brainstorm in a group discussion. The result of the effectiveness of collaborative brainstorming will likely to change the way teachers provide a platform for students to get ideas, especially in their Academic Writing classes. Therefore, this study addressed these questions 1) what are the students' perceptions toward the effectiveness of collaborative brainstorming in their Academic Writing class, and 2) what are the negative sides of collaborative brainstorming in Academic Writing class.

### **Brainstorming**

According to Jossey-Bass and Pfeiffer (1998), Osborn firstly invented brainstorming activity in 1938 and applied it in the company that he headed. He called it "organized ideation" and the participants referred to their attempts to using brain in order to storm the problem. That is why the "organized ideation" is called brainstorm. Brainstorming is a creative technique of a group of people or individual person to generate ideas to find the solution of problems. Therefore, brainstorming in academic matters is a creative activity as an attempt to find ideas that students do to produce essays, crafts and many others for their projects.

### **Collaborative brainstorming**

A recent talk in the faculty conference of a private university in Central Java, Newton (2018) discussed the 21st century teaching style. Most of the time, he talked about interactive learning environments that should be built by the teacher in the classroom. Collaborative brainstorming can be one of the activities that support the idea of 21st century skills. A study from Jossey-Bass and Pfeiffer (1998) mentioned Addams' four requirements in idea generation in collaborative brainstorming. According to him, there are four essential criteria to brainstorming sessions. Firstly, there is no criticism, evaluation, judgment, or defense of ideas. Critiques that are deliv-

ered in a negative way may lead to uncomfortable situations in the brainstorming session, and it may cause members to be reluctant to be active in the group brainstorming activity. The second is free-wheeling and free association is encouraged. The wilder the idea is, the better solution it will be. Brainstorming essentially looks for a solution, and wild ideas may lead to creative inputs. The third criterion is quantity is more desired than quality. The amount of ideas takes an important part in collaborative brainstorming. It is because every member can give inputs toward the group discussion, and the plenty of ideas provide choices for the group to choose the best idea to pick for the group's project. The last one is building on ideas is encouraged. Critiques and negative comments are not allowed in the discussion, but positive comments and advice toward the member's idea are helpful and it is a part of the creative process in order to find the best idea.

Collaborative brainstorming helps students who are lower achievers to understand the material. I believe it is because students with high grade point average (GPA) tend to be quick in understanding the materials. They can be the ones in the group who initiate the discussion and come up with insights and ideas. Nevertheless, the students who are lower achievers can also be the ones with ideas although they might need a bait. The way of the brainstorming towards a topic stimulates students of lower achievers to have a part in the discussion. Collaborative writing is not always stimulating for every student to be enthusiastic in the group work (Paulus, 2002). However, students are different from one to another, so teachers cannot generalize that all students can get benefit in the group discussion. In this study, the students who worked better individually were likely the initiators of the group discussion, which means they helped students who were lower achievers in the group. They gave advice or inputs to the other members of the group.

### **The negative sides of collaborative brainstorming**

Despite all the positive ideas of brainstorming, a study by Goldenberg and Wiley (2010) revealed that there are several factors which made collaborative brainstorming may lead to failures in finding ideas. One of the factors is the fear of negative evaluation. The productivity of the collaborative brainstorming session will likely decrease when members of the group are concerned about the other members' reaction toward their ideas (Schiavo, Mencarini, & Zancanaro 2016). The second barrier in collaborative brainstorming is being interrupted when reporting the ideas. This matter is called production blocking (Schiavo et al., 2016), when members forget about their ideas before they express them or are distracted because they are listening to others. The other obstacle of collaborative brainstorming is cognitive inertia (Reinig & Briggs, 2008). It happens when people get stuck with a limited idea during the ideation or brainstorming. This is likely to block the production of a creative thinking activity, and it may cause the ideation fails.

### **Academic writing**

Academic Writing is a course that plays an essential role in English language education program. The course requires students to think critically in order to find an intriguing issue as the topic of their writing. Academic Writing is a course that is familiar with writing processes. That is why the students should be familiar with the fundamental things in the writing processes such as formality, objectivity, and complexity in order to use the language precisely and accurately (Abdulkareem, 2013). Academic writing is also the development indicator of students' learning during their college life. That is why teachers need to encourage students' positive attitudes towards the basic factors in academic writing.

Academic Writing Classes in a private university in Central Java also require students to be familiar in formality in writing essays. These classes sharpen students' writing skills by helping them in making paragraphs containing academic issues in a formal way.

### **Collaborative brainstorming in academic writing at ELE program in a private university in Central Java**

Usually, Academic Writing projects are individual works, and it ends with an individual final essay. There are only a few projects that need group discussions. However, the collaborative brainstorming session seems to be helpful for students who need baits in order to pick the best ideas that fit into their main topic in Academic Writing projects. As mentioned in the previous paragraphs, collaborative brainstorming helps students to stimulate their creative thinking capacity considering that there will be plenty of ideas that are expressed by each group member. Osborn, in Goldenberg's (2010) research, stated that the group brainstorming session is effective as a supplement of individual works.

## **METHOD**

### **The context of the study**

This research was conducted at the English Language Education Program (ELEP), Faculty of Language and Arts (FLA), of a private university in Central Java, focusing on the English Language Education Program using the qualitative approach. The students who took the Academic Writing classes were expected to be able to answer questions based on their experiences in finding ideas in the classes. This research analyzed cognitive processes during students' brainstorming sessions.

### **Participants**

The participants of this study were from two classes (Class A and B) out of the five Academic Writing classes. The participants were mostly students in the 2016 batch. Before filling the questionnaires, the participants were asked to fill in the consent form to ask for their permission and willingness to be the participants of the study. In class A, 20 responses were derived from the questionnaires that were given to the students. In class B, 13 responses were derived. The total number of responses was 33. Therefore, it was considered as enough for this study.

### **Data collection instruments**

The data were collected using semi-structured interviews and questionnaires, the questions given were the same for each student. The interview allowed flexibility to elicit certain questions that were not relevant for some interviewees. Students were given the questionnaires first in order to check students' opinions in general. There were six questions to ask students' perceptions on collaborative works in Academic Writing Class. Then the worth digging deeper answers were selected.

### **Data analysis procedures**

After the data from questionnaires were collected, the answers were grouped into three based on students' responses which were pros, cons, and abstain. Then students with answers from questionnaires that were worth digging deeper through the interview were selected. There were two students who participated as the interviewees in this study. Their answers in the interview

were coded based on similar categories and then discussed based on the theories that support the findings.

## FINDINGS AND DISCUSSION

In the third semester, Academic Writing's students in a private university in Central Java conducted group projects. It was quite intriguing to see how group work helped students in academic writing. I tried to dig this issue deeper through questionnaires and interviews to students to see their perspectives. The findings include the students' points of view of the use of collaborative brainstorming in order to write an essay in Academic Writing classes during this semester and their strategy dealing with various learning styles as the two main points of this research.

### Students' perceptions toward collaborative learning

It was essential to know whether the students liked to work collaboratively or not before I dug deeper to the other section of the effectiveness of Collaborative Brainstorming. This question was asked to know how effective collaborative brainstorming was for them. The results are various, but most students agreed with collaborative brainstorming when they were working on writing projects, and some of them did not. It is because students have different learning styles, needs and interests in learning English (Yilmaz-Soylu & Akkoyunlu, 2009). As the result of this study, there were three types of students' perceptions towards collaborative brainstorming in Academic Writing classes. The first one is students agreed that Collaborative Brainstorming helped them in their Academic Writing class especially when they were about to do group projects. The second perception is students thought that collaborative brainstorming was not effective to help them in the Academic Writing course. The third is students thought that there were possibilities that Collaborative Brainstorming might be helpful or not. They think that certain conditions might block the idea production during brainstorming sessions. Table 1 shows the percentage of students' perception of Collaborative Brainstorming.

**Table 1. Academic Writing Students' Perceptions toward Collaborative Brainstorming**

Students' perception	Participants	Percentage
#1 Collaborative Brainstorming is really helpful	22	67 %
#2 Collaborative Brainstorming caused confusion and is not effective for Academic Writing tasks	6	18 %
#3 Collaborative is effective in some conditions and can be ineffective too.	5	15 %
<b>Total</b>	<b>33</b>	<b>100</b>

### The positive sides of collaborative brainstorming

As mentioned earlier in this paper, collaborative brainstorming can bring positive impacts as the other members can stimulate students to think broader. A question asking about other members' contribution was asked, specifically about how their comments helped the students to think creatively that made collaborative brainstorming more effective. The result is, from the total of 33 respondents, there were 26 students who agreed with the effectiveness of collaborative brainstorming and four against the idea of the effectiveness of collaborative brainstorming.

It means that 86% of Academic Writing students agreed that collaborative brainstorming was helpful for them.

### ***Better comprehension and skills improvement***

Most of the students believed that working with peers might help them in mastering the materials that made it easier for them to get an idea in idea generation. In the interview session, Student A said that collaborative brainstorming helped her to improve her speaking skill, writing skill and reading skill. The same perspective was expressed by Student K.

Excerpt 1:

“Collaborative works help students to learn better with friends because sometimes friends’ explanations are simpler than teachers’”. (Student K’s Opinion, July 9, 2018)

Student K also said that if there was someone who was clever in the group, it helped a lot since the other students’ comprehension got enhanced. This was supported by Student K’s statement.

Excerpt 2:

“So, in my group, every member is really active to speak up their mind and we often use English during our brainstorming session. For me, this is really helpful to enhance our speaking skill, because some of the members of the group have a good proficiency in speaking in English. Our writing skill also gets improved because when we find difficulties in our homework our friends tend to help us in finding a solution for our individual projects.” (Student K’s Opinion, July 9, 2018)

Student K’s statement shows that collaborative brainstorming sessions were not only beneficial for the group projects, but also for each member individually. It was not only helpful for the idea generation but also helped the improvement of the skills in English such as speaking, writing, reading and listening.

### ***Producing more ideas***

In the questionnaire, the effectiveness of collaborative brainstorming in Academic Writing classes was also questioned. Student A answered, “Collaborative Brainstorming in Academic Writing is effective if the members actively involved into the discussion because it can produce more ideas and makes the work easier.” According to student A’s statement, collaborative brainstorming was an effective way to help students to get more ideas in Academic Writing projects.

### ***Stimulating critical thinking***

Student N also thought that collaborative brainstorming was helpful for his individual projects. In the group discussion, her friends often stimulated her to think broader about the topic, so it helped her to find a better idea for the projects. Hearing others’ ideas should allow group members to explore new categories that otherwise might have not been explored...piggybacking might occur where one builds ideas off another group members’ ideas (Kohn & Smith, 2010). The following is Student N’s statement.

Excerpt 3:

“My friends’ comments are really helpful for me. It is because sometimes their comments help me think broader especially from other perspectives about certain ideas. So that the discussion will be more active than if I do it myself.” (Student N’s Opinion, July 9, 2018)

However, when asked about stimulating students’ critical thinking, Student K said that he was a passive group member that he preferred to be quiet and listened to others while he was preparing his idea that might support the collaborative brainstorming session. Although he said that his ideas were not always picked into the main topic, at least it made the discussion more active than if he kept quiet during the brainstorming session. He pointed out about being an initiator in a group discussion, and his statements clearly said that he was not an initiator of a group work. This answer represents the most answers in the interviews and questionnaires.

### **The negative sides of collaborative brainstorming**

Although the majority of the participants of the study agreed with the effectiveness of Collaborative Brainstorming in Academic Writing class in ELEP, of a private university in Central Java, the fact that collaborative brainstorming has negative sides is still undeniable. For example, student J said that collaborative brainstorming was not easy to do because she thought that to share ideas and build a topic was not applicable. She added that working with peers to combine one’s idea to another was tiring. It is because sometimes each student has different perspectives toward the materials, and it may cause misunderstanding during the group work. She added more about it that sharing ideas once made her group confused on how they developed their ideas into a paragraph. Moreover, if there were group members who were passive in the group discussion, it may lead the discussion to nowhere, which means the group may ‘suffer’ from lacking ideas. The theory of Schiavo et al. (2016) says about the conditions of a group that may lead the group into production blocking or lack of ideas during the brainstorming session. In his research he said that a group of people who do not know well might in fact encounter a number of cooperation barriers (Schiavo et al., 2016). The other factor that is considered as the negative side of Collaborative Brainstorming is that students have different learning styles. There are students who work better individually in their academic project. This might be a problem when the students who work better individually cannot mingle with other students. By means they tend to be strict with their ideas, and it makes them tend to force their idea to be used in the group works. This issue is supported by Student E’s comment.

Excerpt 4:

“My friend is really good in English. He is always giving good ideas during our group work. But he rarely listens to our opinions toward an issue. He always revises the group work into his own version” (Student E’s Opinion on an Interview, July 13, 2018)

### ***Overcoming passive group members***

Paulus (2002) in his research mentioned that although brainstorming methods are effective, the level of enthusiasm of each student cannot be justified. As mentioned before, there are responses of the students who are against the collaborative brainstorming showing that although the numbers of the students who agree with the effectiveness of collaborative brainstorming is

bigger than the students who are against the idea, there is still a problem inside the collaborative brainstorming method.

In the interview, Student J said that the other members who were passive during a brainstorming session might cause a production block, and it made other members that used to be active became reluctant to speak up their mind. That is why a group needs an initiator to help the other members become active during the discussion. In this situation an initiator can be a moderator in a discussion. Initiators serve as discussion leaders who are responsible not only for guiding the participants through the discussion, but also for looking after the group dynamics to ensure all participants join in the discussion (Wong, 2008). It means that an initiator leads the way where the discussion flows, especially when the idea gets too broad. In the course of encouraging someone to voice his opinion, the moderator must do so without making the individual uneasy and having the other participants realize that one of their peers has been singled out and placed in an uncomfortable position (Folch-Lyon; Trost, 2015). An initiator can be the one who opens the discussion, so it means that an initiator comes up to the discussion with an idea. The group leader takes an approach to motivate members through an inspiring vision enhance group creativity and stimulate other members to contribute ideas to the group (De Dreu, Nijstad & van Knippenberg, 2015).

There were several thoughts about the initiator in a group discussion based on the results of the questionnaires and interview. The results were also various since there were different perspectives amongst students. Student Y said that the initiator could be helpful especially if the other members were reluctant to speak up their mind. So, the initiator is the one who opens their mind and starts the discussion with an idea. Student D said that the one who became dominant in a group discussion could lead the group to reach the goal if the other members were cooperative. However, there were plenty of responses against the use of initiators in a group. It is because sometimes the initiator tended to be dominating the group that made other members unwilling to be cooperative during the group discussion. The following is Student K's response.

Excerpt 5:

“There is a student in my group who is really good in English. He is really smart and creative, but it gets a bit disturbing when he dominates the discussion. We actually want to contribute for our group, but when our idea was not fit with his perspective, he will never use it. Once he ever revises our work and makes it to his version, which is better than ours, we admit, but I feel uneasy that he always works “alone.” (Student K's Opinion on an Interview, July 13, 2018)

Folch-Lyon and Trost (2015) in their research discussed a lot of group discussion. They said that a group can find difficulties if there are members that contribute too little or being too dominating during group sessions. They added that the leader of the group should be responsive during the discussion to avoid an uncomfortable situation that might lead to production block. Kohn and Smith (2010) stated that group members who tend to be passive may cause productivity deficit. They said group members who worry that their contributions are evaluated might feel apprehensive about volunteering wild ideas, thus lowering productivity. Responding to passive students' issue, Schiavo et al. (2016) mentioned the use of facilitator (or initiator) during brainstorming session to increase the groups' motivation to ensure that all team members contribute, giving everyone a chance to participate in the discussion. The following is Student S' response.



Excerpt 6:

“Almost every group has members who are passive during the brainstorming sessions, and I think the one who becomes the initiator in a group can be really helpful since they may inspire the passive students to participate more in a discussion.” (Student S’ Opinion, July 9, 2018)

Student M also had the same perspective with Student S about the role of initiator in the Collaborative Brainstorming session, as stated below.

Excerpt 7:

“The one who becomes initiator does help the discussion, he or she takes a big role in a group since they can inspire others when they are lacking of ideas.” (Student S’ Opinion, July 9, 2018)

From these findings, students believed that collaborative brainstorming worked better with an initiator who could lead the discussion and created ideas which might inspire other members to think of other ideas related to the topic. Not only generating ideas, initiators also took a big role in leading the discussion in order to make sure that all members got involved into the discussion because some students who were considered as the passive ones needed to be approached in order to encourage them during the brainstorming sessions.

## **CONCLUSION**

Based on the collected data, it was proven that some students believed that collaborative brainstorming could help them in a better lesson comprehension, producing more ideas, and stimulating critical thinking. This was supported by the students’ comments on the questionnaires based on their experiences in group ideation. As mentioned before, 67% of the students agreed that collaborative brainstorming was effective for them. The second reaction was students’ negative comments about how collaborative brainstorming conducted in their Academic Writing classes. They said students’ different learning styles might cause production block since it might cause misunderstanding among the members of the group.

From the respondents’ comments on the questionnaire and interviews, a way to overcome the negative sides of brainstorming appeared, that was to provide an initiator for each group. Therefore, initiators function as the leaders of the groups to lead the discussions as what a moderator does, but the initiators work more actively because they are involved in the discussions during brainstorming sessions. Initiators also work as the ones who come up with an idea to avoid idea lacking. They provide an issue to discuss or make a statement that may stimulate other members to think broader. Not every student, in this study, could be an initiator that is why the teacher should take an action to involve in the discussions in order to facilitate the students on how they brainstorm a topic. Here, a teacher can be an initiator too. The point is that teachers avoid being the center of learning activity, instead, teachers can make an active interaction in the classroom and make sure that every student participates actively.

Future researches can do similar research on collaborative brainstorming for different writing classes, like Creative Writing, Procedural Writing, or Narrative Writing. More participants should be asked as the respondents of the research, so that better and more general results can be derived from this field.

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