

# The Effectiveness of Collaborative Mind Mapping to Develop Writing Skills at MTsN 4 Mojokerto

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**Abstract**—Mind map is a powerful graphic strategy that can facilitate the students to develop ideas and concepts, it could help the students to write more organized important points, and grow critical thinking. However, writing ability requires a good level of English competencies in which most students in Indonesia still struggled to achieve. This experimental research examines and compares the impact of collaborative mind mapping to develop students' writing skills for those students who are using it with those who aren't. The aim of the study is to improve the student's ability in writing Descriptive text through collaborative mind mapping. 20 students of English Conversation Class of MTsN 4 Mojokerto were featured as the participants. They were divided into two groups who are in control group and experimental group, both had the same teacher. The control group received instruction as required in the students' workbook only, meanwhile the experimental group will be required to do a collaborative mind mapping before producing a writing product. All participants are required to do a Pre and Post test first to track their writing competence. The instruments employed in this study were writing and observation checklist. Finally, it is found that the implementation of collaborative mind mapping does improve the student's competence in writing with the help of giving excessive vocabulary from reading a passage, and feedbacks from the researcher.

**Keywords:** *collaborative, mind map, writing skill*

## I. INTRODUCTION

Writing activity is the way of someone articulate their ideas, thoughts or opinion besides speaking. Reimes also argue that writing is a skill of someone expressing their ideas, feelings and thought which organize using some words, sentences and also paragraph. This is a skill that should be exercised regularly because this is one of difficult skill that can

be mastered. As Richards and Renandya (2002: 303) said that writing is the hardest skill to learn for L2 learners.

Writing is a very essential skill for students, because students will deal with some writing task in the process of learning English. A good writing product should deliver the text clearly, coherence, and easy to understand by the readers. A common problem of writing, especially in EFL context, are formulating the topic and organizing the sentence. In the process of writing students often find difficulties to start writing, even though sometimes they also have a lot of ideas in their minds but they are difficult to express in written form, the bad thing is because they do not immediately write down every idea that appears in written form then the idea becomes lost.

The difficulties that occur in writing activity makes student become less enthusiasm in learning writing. So, this is become the responsibility of the teacher to perform a strategy or technique in the teaching writing in order to help their students become the better writers. There are various technique that teacher can use in teaching writing. Collaborative writing is one of the techniques can be use when teachers may have a tendency to working together. M. Ali Ghufon and Masnuatul Hawa (2016) found that collaborative writing technique is more effective than the other method, like direct method. Students also have better achievement. The previous research mention that collaborative writing is effective to improve students argumentative essay writing.

Mind map is also interesting when it is implemented in learning process. By using mind map students can easily organize their idea and after that they can make it become a good writing. Collaborative writing and mind map can be implemented together in writing activity. If the students work

collaboratively using mind map before they make writing product they will produce a better writing result.

The ability in writing is the indicator of successful learning process for students in their education and future (Sulisworo, Rahayu, & Akhsan, 2016). This present study examined the students' English writing skill using collaborative mind mapping technique at MTs Negeri 4 Mojokerto.

## II. LITERATURE REVIEW

### A. Writing Skill

Writing skill is a complex activity where the writer must have the ability to build and integrate information, so the readers would be understand the language that being used in written communication. According to Raimes (1987:76) writing is a skill in which we express ideas, feelings, and thought that are arranged in words, sentences and paragraph

by using eyes, brain and hand. This also means, by using writing the students can share their ideas, feelings and thing that exist in their mind.

As one of the language skill, writing is very essential for the students, because they will face some writing task in learning English. However, it is not an easy work because composing idea in written form should concern some writing aspects such as grammar, vocabulary, mechanics, fluency and organization. Bram (1995:25) states that for beginning writers, expressing what they intend is usually difficult. Sometimes the grammar is correct, but the vocabulary used is not appropriate. Furthermore, Wyrick (2003) states that for many writers, getting started is the hardest part. As a result, the writers have to find the way to help the writers in gathering ideas and organizing them into a good arrangement. Then, the advantages of mastering writing are coming directly with the writers' development of writing.

Hence, teaching writing is expected to make students improve and master writing skill through those writing process in the classroom. Thus, to develop writing skills the students must practice and the teacher must give many opportunities for them by providing some various types of writing such as Narrative, Recount, Report, Procedure and Descriptive text.

### B. Descriptive Text

Descriptive text is one of the texts that must be able to achieve by the students besides Narrative, Explanation, Discussion, Commentary and Review. In other words, a paragraph that describes about the features and characteristics of particular person, place and thing is Descriptive text (Doddy, 2008). In this case, the students were often confusing express their ideas in writing Descriptive text, thus the researcher uses Descriptive text in order to make students interested in writing class.

According to the expectation, in the beginning, the students have to compose ideas to write as easy as possible with their creativity in order to produce a whole coherent paragraph. However, in fact when the students were asked to

write, they often got difficulties to begin their writing, they were confused what should they write. Then, they took a long time before they started to write. Another problem was their motivation. Therefore, the students need an appropriate technique to help them to make it easy to write a text for their excellent score.

The technique that will be used is collaborative mind mapping. This technique is needed to improve their writing skill in order to make students easy in expressing their ideas and arranging the words to be a good sentence.

### C. Mind Mapping

Mind mapping strategy is one of the researchers' strategies in teaching. Not only mind maps show facts, but also how the overall structure of a subject and the relative importance of individual parts of it. It helps students to associate ideas, think creatively, and make connections that might not otherwise make (Buzan, 2010). Additionally, the implementation of this technique could help the students to think how to write the important points, compose ideas, organize ideas, and arrange sentence to be a good paragraph. Hence, mind map is one of the appropriate technique to facilitate the students to develop ideas and concepts, especially in writing Descriptive text.

The similar researcher of mind mapping was conducted by Milan (2016). Her study discussed about the use of mind map in teaching writing report text at 8<sup>th</sup> grade of Junior High School. Her study revealed that the students made a considerable improvement in writing Report text. From the previous study, the researcher found some problems. The students complained that they confused to expressed their ideas and also less of motivation. The result of this study showed that there was a significant increase of students' achievement after they are taught by using mind mapping technique.

Then, another study was conducted by Asrifal (2016). His research was aimed to investigate the use of mind mapping strategy to improve students' speaking ability at 7<sup>th</sup> grade of Junior High school. The result showed that using mind mapping strategy is very appropriate to improved students' speaking ability. Students easier to organize their ideas, they would get new vocabulary and perceived that they speak more fluent. Besides, they thought that mind mapping strategy assisted them to develop their speaking ability also.

In addition, writing can be implemented together with collaborative mind map. If the students work collaboratively using mind map before they make writing product, they will produce a better writing result. It can be assumed that collaborative mind map is the activities that carried by more than one person to sharing and communicate their ideas in order to producing a good paragraph. This activity can stimulate their critical thinking and enhance creativity in structuring students' knowledge. Thus, by collaborating with each other in creating and communicating meaning, learners are able to involve in the composition process with more clarity and understanding.

All previous study had been conducted. Therefore, this research interest to develop student's writing skill in descriptive through collaborative mind map techniques at second grade of MTsN 4 Mojokerto.

### III. RESEARCH METHOD

This research was conducted at MTsN 4 Mojokerto from August to September 2019 in the first semester of 2019/2020 academic year.

#### A. Participants

The Participants in the study are 20 Students of MTsN 4 Mojokerto who enrolled in English Conversation Club (ECC). There are two classes for English Conversation Club (ECC), excellent class taught by Mrs. Yuni contained of 20 students, and cool class taught by Mrs. Iuvi contained of 20 students. In this study, the researchers take the samples from excellent class. The reason why we take excellent class is because the students are from 9th grade and 7th grade, and they are learning about descriptive text. Students in 7th grade are still new to it, so if we apply the collaborative mind mapping, the result can be easily seen. Hence, we choose excellent class's students as the population.

#### B. Instruments

The data used in this research was qualitative data and qualitative data. Where the qualitative data were collected from classroom observation and interview, which transformed into interview transcript. The classroom observation was done in the first time of teaching descriptive text, the researchers observe the teaching- learning program, and also doing interview to the teacher.

Meanwhile the quantitative data were collected from pre-test and post-tests of the students' ability in writing descriptive text when they writing it before implementing collaborative mind-mapping and after implementing it, after that the data transformed into writing score using scoring rubric from Harmer (2004: 244-245). The instruments used in this research are observation checklist, interview questions, pre- test and post-test questions.

#### C. Data Analysis

The analysis of qualitative data was used to define the use of collaborative mind mapping in improving students' writing skill in the teaching and learning activity. Also to observe whether it is successful or not. Researcher also investigate the problem that occur during the process.

In this research, the quantitative data were collected from pre-test and post-tests were analyzed by using scoring rubric form Harmer (2004: 244-245). After that the mean score of students in each test were measured by using Microsoft Excel program.

The researcher divide the research into two cycles, before each cycle are started, the researcher held a pre-test first to know their level of competencies, the students are asked to make a descriptive text with the help of a descriptive text example and some adjectives, then, there will be held a post-test when each cycle is finished, this activity is done to let the researcher know whether the students' competencies are improving or not after getting a treatment.

The observation are done when the teacher doing the teaching-learning process, the researchers observe the students' behavior during the delivery of the material by the teacher, whether they experience any difficulties or not, in this first cycle, the role of the researcher is merely as an observer, and not taking part in teaching, while in the second cycle, the researchers replace the teacher to deliver the material meanwhile the teacher helps the researchers to connect with the students.

From the observation, it is known that the application of collaborative mind-mapping in the classroom can trigger the students' participation and interest, their enthusiastic participation in mentioning anything they know related to the topic of that day even if they have to switch languages every time they speak due to the lack of English vocabulary input is the proof that collaborative mind-mapping does increase the student's level of participation, but in general, they all feel excited and glad to experience learning with new method. And also, the implementation of collaborative mind-mapping helps students to be more independent in doing discussion with their respective groups, they also become less anxious when expressing their ideas.

The result of the analysis of observation showed that the percentage of students who participated actively during the teaching-learning process is around 75% or about 15 students, among those students there are 10 pupils that successfully answered the teacher's question, while the other 10 are still not confident enough to mention their answers, the students participated by answering teachers' questions, making mind-map, developing the mind-map into descriptive paragraph, revising and rewriting their draft to make the final draft.

In generating mind-map, there are 10 students who were having trouble in generating their ideas into mind-map, while the rest have successfully generated the mind-map collaboratively, the students are required to produce a descriptive text from the mind-map that they have made as good as possible, but in this phase, there are 5 students (1 group) who were doing it slower than the rest of the class, they find a problem in generating their points into paragraph so they only write the topic and categories but have not finished yet when the time is already up. When the student's writing product have been acquired, the researcher together with the teacher analyze the writing product and score it using Harmer's writing scoring rubric (2004: 244-245).

The way the researcher applied collaborative mind-mapping in the class when doing teaching (replacing the teacher's role) are: applying collaborative mind-mapping method, giving the students more example of the mind-map, inviting students to brainstorm more ideas, rewarding the

students, and give the students feedback of their writing product.

Applying collaborative mind-mapping in the class has improved student's competence and build their interest in writing better, by creating a mind map students can produce and expand their ability to generate their ideas and points, it helps the students generate their writing easier compared to when they did not make any. But the students still have another factor nonetheless, which is the limitedness of ideas to generate a writing product.

By doing collaborative mind-mapping, the students' interest have risen due to the series of color in the mind-map they have made, it increased their curiosity to explore more. But regardless of the fact that implementing collaborative mind-mapping is fun, the level of difficulties implementing it in 7<sup>th</sup> grade students is quite a challenge, because the students should develop ideas related to the topic, and not much of them have good English proficiencies. When first implementing the method, they stayed quiet and do nothing because they do not know what they need to write in the paper given by the researcher, however when the researcher explain one more time about the task, they start working and focused in generating their mind-maps collaboratively with their respective groups, still they can only make a mind map with less ideas since they lacked of vocabularies related to the topic given, it resulting them to produce more drawings than write ideas.

Thus, by providing a passage of descriptive text and mind-map before generating a writing product the students becomes more attracted, and it helps them expands their word-banks, it is because the researcher make sure to include more vocabulary in the passage given to the students. But the students still make some errors in their writing draft, therefore, researchers initiated to give a reward to trigger the student's interest in learning.

And in order to improve the student's awareness and confidence, the researchers provide feedback to the students' writing, this was meant to make them know what errors they made and which part should be corrected, they are also told how to improve their writing by using mind- map collaboratively. From this the students can learn what they need to improve. And in the second cycle, some changes were made to make sure that the method can surely improve the students' competence because the students' progress are still under the desired level, there are also some problem in the previous teaching-learning process.

In the second Cycle, a longer paragraph was provided and added with more vocabularies either verb, adjectives, noun and conjunction. After doing this action, it have successfully improved the students' vocabulary mastery, it added to their previous knowledge about the vocabularies used for writing a descriptive text.

Oral and written feedbacks are also provided by the researcher for the students. Oral feedbacks are delivered during the discussion and Q&A session to make if more efficient, and some in students' writing product to enable the students to repair or beautify their writing. In the second

cycle, the students' score has increasingly improving due to the modification of some activities. Below is the presentation of the score that the students' have obtained.

Table 1. The Student's Score

Score	Pre-test	Post-test 1	Post-test 2
Mean	45.3	65.3	72.4

## V. DISCUSSION

It can be seen from the description above, that by applying collaborative mind mapping techniques for writing skills. Making mind-map does motivate students to be actively involved in the teaching of writing subjects. They can contribute information, knowledge, and experience they already have to produce and develop ideas and concepts related to or related to the topic.

This is in line with the opinion (Buzan 2000) in Al-Jarf (2008) that mind-map is a kind of method used to generate a main idea into several different sequences that leads to a more detailed definitions or parts by drawing a center point and make some branch that connected to the center part, this method can help us to generate ideas and concept, also for organizing thoughts. In addition, by using mind mapping during the pre-writing stage, students can generate and develop ideas and information into maps that show meaningful relationships. After words and ideas are generated it was grouped and divided into sections. Therefore, we can generate more ideas and thoroughly. From this, students can generate a new writing with the concept that they have gotten and applied it into writing a descriptive text.

As a pre-writing technique, mind mapping can be used for general vocabulary development. This can help students build background knowledge and exchange ideas to produce words and ideas related to the topic. Teachers can give reading passage with excessive new vocabularies that are related to the topic that they are studying at that time to the students to add and enrich the students vocabulary mastery, this way was proved to be effective, and less boring than to ask them to read the whole chapter of a story or a book without relevant topic with their learning Based on the previously presented findings, it was clear that implementing collaborative mind mapping techniques can improve student writing competence and achievement.

Therefore, the results of this class action research that is divided into two cycles prove that the implementation of collaborative mind-mapping techniques can improve the writing skills of 20 students from the English Conversation Club (ECC) at MTsN 4 Mojokerto.

## VI. CONCLUSION

From the data that has been presented before, there are found some differences, from the researchers' observation, it

is found that students become more motivated during the implementation of the method, it is proved by their activeness while doing the teaching – learning process, the students can generate more sentences. And the result of the pre-test in the first time and two post-test in the end of each cycles, the students showed a noticeable progress in their writing. In the first time, the pre-test, the mean score is 45,3, and after the implementation of collaborative mind-mapping and doing the first post-test, the mean score increased into 65,8, and after some modification in cycle 2 and doing the second post-test, the score reached 72.4. from this we can conclude that the implementation of collaborative mind-mapping has successfully increased the student's competence in writing. The data of the result of the first and second post-test has proved that 20 students of English Conversation Club (ECC) writing skills have been improved by the implementation of Collaborative mind-mapping techniques.

Those English language teachers who also teach other classes which get the topic of writing are advised to apply collaborative mind-mapping techniques as an alternative in teaching writing. Teacher must provide many activities to avoid boredom that students eager to share their knowledge. Besides, offering several kinds of exercises can also make the learning more comfortable as students can practice more. As a result, the students are becoming more enthusiastic in improving their writing skill and to not becoming the students with the lowest score.

Shortly, teacher can also help students generate a 'connected' writing that is cohesive and well-structured, it is also advised that teacher consider the teaching-learning environment, students' condition, and the learning equipment. Attractive topics and interactive media can surely help to attract the less active students to participate more and focused to the teaching learning process.

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