Chapter Four

Findings and Discussions

This chapter presents the finding and discussion of the research about the use of mind mapping in supporting students' writing skills. The findings report about participants' experience in using mind mapping, especially how to make mind mapping and what problems they face in making mind mapping. There are six points related to how to make mind mapping by the students and two points which discuss about the student's problems in making mind mapping. To maintain the participants’ identity, pseudonyms such as Emma, Ammi, Arra, and Rara are used instead of using their real names.

Findings and Discussions

This part discusses two main topics of this research. The first one is how the students make mind mapping and the second one is the student’s problems in using mind mapping. Based on the findings, all participants, Emma, Ammi, Arra, and Rara mentioned that there were six steps in making mind mapping, including choosing and writing the title of mind mapping, putting main ideas on top of mind mapping chart, making arrows/lines in the vertical way, writing main points of mind mapping, giving a number/note/color on each point of mind mapping as label to guide in mind mapping, and developing results of mind mapping in the description format.
In relation to problems faced during mind mapping, the three participants stated that they had difficulties in looking for appropriate main points and making connections between the main points.

**How the Students Made Mind Mapping in Their Writing Skills**

There are usually some ways to make mind mapping such as explained by experts in the previous chapter. Those steps were choosing and writing the title of mind mapping, putting main ideas on top of mind mapping chart, making arrows/lines in the vertical way, writing main points of mind mapping, giving a number/note/colors on each point of mind mapping as label to guide in mind mapping, and developing results of mind mapping in the description format. Detail explanation about these steps is explained below.

**Choosing and Writing the Title of Mind Mapping.** There are three participants mentioning about these step. Ammi, Arra, and Rara said that choosing and writing the title of mind mapping became the first step in making mind mapping. Ammi said, "Usually I will write the title first." (B.2.1). Arra also mentioned, "Make a tittle/main idea in the center." (C.2.1). Besides two participants, Rara also argued if she choose and writing the title of mind mapping as the first steps when she writes mind mapping, "I choose the ideas that I have and then I write the title in mind mapping." (D.2.2). The step in which the participants chose and wrote the title of the mind mapping is actually in line with Mento, Martinelii, and Jones (1999) who said that students normally chose words to focus on a particular aspect of writing.
Putting main ideas on top of mind mapping chart. This is the second step conducted by the participants. Mind mapping has some models such as having titles in the center, below, or above of the mind mapping chart. One of the participants, Emma, mentioned that she usually wrote the title of mind mapping on the top chart. She said, "I wrote the main idea on top of mind mapping and the points are under the main idea." (A.2.2). This model of writing mind mapping was stated by Buzan (as cited in Kurniawati, 2010) who mentioned that the main idea or topic can be started from the top of the mind mapping chart. The following figure illustrates the sample of mind mapping topic/main idea.

![Mind Mapping Sample](image)

Figure 1: This figure is about putting main ideas on top of mind mapping chart.

Making an Arrow/Lines in the Vertical Ways. Mind mapping has various interconnected lines. Three of four participants named Emma, Ammi, and Arra mentioned that they made mind mapping’s branches like arrows or lines that curve vertically. Emma mentioned that her mind mapping "Pointing down like a
root of a tree." (A.2.1). Emma statement was added by Ammi who said “Make a
donw arrow.” (B.2.2). In addition, Ammi also mentioned that she “Make arrows
in the other ways.” (B.2.3). In her mind mapping, Ammi also made the branches,
and she said "Make branches of the main point." (B.2.4). The participants’
statements were similar to Buzan (2009) who explained that people can make
curved lines as the connection, and then connect the main branches to the center
image of mind mapping. Below is one of the examples of participants’ illustration
about making an arrow/lines in the vertical ways.

Figure 2. Example of making an arrow/lines in the vertical ways.

**Making Main Points of Mind Mapping.** Two of four participants, Arra
and Rara, claimed that they wrote main points in their mind mapping. These
participants explained that each points will explain some information or explain
about the ideas. Arra mentioned “I made the points on mapping to explain some
ideas that I have.”, while Arra’s said, "Make points on each vertical line." (C.2.3).
Rara also mentioned she created some points on her mapping. "After I found the
title/ideas I will write then I make some points." (D.2.3). This step is in accordance with Anton (2008) as cited in Azizah (2013) who stated that when making mind mapping, it can be from the main idea to develop the related ideas. This is the figure that explains the participants’ mind mapping when they made main mapping points.

![Figure 3. Example of making main points of mind mapping.](image)

**Giving Number/Note/Colors on Each point of Mind Mapping as Label to Guide in Mapping.** The step in which the participants’ giving number/note/colors on each point of mind mapping as a label to guide in mapping was usually conducted by the participants. Three participants, Ammi, Arra, and Rara, claimed that they gave a label to guide in mapping as a way to make them easier to learn mind mapping and to remember the mind mapping plots which they made previously. Ammi said that she was using the colors in mind mapping because she loved it. "I usually use some colors in mind mapping because I love it, the colors also facilitate me as the label to make me easier to remember the mapping plots. Each color has a meaning." (B.2.6).
Arra also mentioned that she used small notes to guide her in her mind mapping, “Before describing the mind mapping, I always make a small note below of the main points as the plots labels.” (C.2.5). Rara also stated similar statements with Ammi and Arra’s that she used the numbers/note/colors to guide mind mapping to remember the plots she made. Rara said, "Make numbers in the mind mapping points." (D.2.4). Such way of making mind mapping was in line with Kurniawati (2010) who explained that a variation with capitalization, colors, underline, or symbol which describes the main points or ideas are commonly used in mind mapping. This is the one illustrated by participants when they giving numbers/note/colors on each point of mind mapping as a label to guide in mind mapping.

Making the Results of Mind Mapping in the Description Format. The data revealed that this was the last step in making mind mapping by participants. Four participants said that they described the mind mapping points in the last step. Emma mentioned that she made the result of mind mapping in the description format, and she said “[I] explain the mind mapping points.” (A.2.4.). Ammi also had a similar experience with Emma. She said, “[I] describe mind mapping.”
(B.2.5). Not only two participants, Ara also made the result of mind mapping in the description format. She said, "[I make a description.” (C.2.4). Finally, Rara said, "[I describe mind mapping.” (D.2.5). The way the participants described mind mapping points after they finished making mind mapping is in line with Mento, Martinelii, and Jones (1999) who mentioned that the students usually presented the mind mapping they have made in the essay form.

The Students’ Problems in Using Mind Mapping

There were three problems in using mind mapping experienced by all participants. Three participants had similar experience in making mind mapping in which they mentioned that when they made mind mapping they had difficulty in looking for appropriate main points and they had difficulty in making connections between main points. The detailed information from the problems in using mind mapping to support student’s writing skill is explained in the following paragraphs.

Looking for appropriate main points. The first problem in using mind mapping to support student’s writing skill was mentioned by two participants, Emma and Rara. Emma mentioned that one of the problems in using mind mapping was looking for appropriate main points. She said, “[It] was difficult to find the right words.” (A.1.1). She also said, "To make mind mapping points, [I] should use simple and clear words, but sometimes I even make a sentence for points, so my mind mapping is not like mapping, it’s bad”.

Similar to Emma, Rara mentioned that she also had the same difficulty in making mind mapping, namely looking for appropriate main points. As she said
“[It] was difficult to pour the ideas into main mapping’s words.” (D.1.1). The participants’ experience is in line with Dewi (2010) who said that most of the students were not able yet in choosing a word, using spelling, and punctuation appropriately. These empirical facts can be seen from the result of students’ work in which most of the students do not use variation words yet.

**Difficulty in Making Connections between Main Points.** Two participants mentioned that they found it difficult in making connections between main points. Emma had experience when she made mind mapping. She said that she felt confused to make connections in mind mapping. This is what she said, “[I] feel confused when making connections between point one and another point” (A.1.3). Likewise, Arra mentioned that she had the problem when she made a connection in mind mapping, and she said “[I] feel difficult in making connections between main points.” (C.1.3). In this case, the main points that the participants made were mostly in the form of abstract words or words with abstract ideas. This situation led these participants to think abstractly. The statement mentioning that they had difficulty in making connections between main points was in line with Adodo (2013), each points has a connector line that connects with the other points.