

English Language Education Department Students' Voices Of Using Mind Mapping Techniques_For Veles Journal

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English Language Education Department Students' Voices Of Using Mind Mapping Techniques

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Abstract

17 Teachers and students have widely used mind mapping techniques to enhance teaching and learning experiences in education. This study intended to explore the benefits and challenges of applying mind mapping techniques based on students' perceptions. The current study used a qualitative approach. In depth interviews were employed to collect the data. The study involved four students in their junior year of an English Language Education Department of a private university who had frequently used mind mapping. All participants in the study viewed that using mind mapping contributed positively to their English learning. The contributions included saving time in learning, assisting them in learning and understanding materials, and recalling materials more easily. In addition, the participants also claimed that mind mapping enhanced their creativity in learning, helped them brainstorm ideas, improved language skills, increased their interests, and motivated the students in learning. Apart from the benefits, all participants considered mind mapping techniques challenging due to their complexity, especially when they were new to mind mapping. In addition, they also believed that applying mind mapping techniques consumed much time. The study concluded that mind mapping positively contributed to students' learning experiences, especially in organizing the information they gained when learning.

Keywords: mind mapping techniques, mind maps, learning experiences

INTRODUCTION

The educational process requires changes because there are still many problems faced by teachers and students in language learning in classrooms. For instance, Coskun and Marlowe (2015) stated that the need for technology in ELT is inevitable as the demand for an effective teaching process. Thus, many efforts have been made to implement different techniques in teaching and learning English successfully. Employing mind mapping techniques can be one of the strategies to solve the problems in language learning. According to Buran and Filyukov (2015), mind mapping is an effective, creative, and adaptable technique in teaching and learning languages. Besides, mind mapping is essential and valuable for students' complete understanding (Buran & Filyukov, 2015).

Additionally, employing mind mapping techniques has been indicated to increase English skills. For example, Bukhari (2016) stated that students positively improve their writing abilities through applying mind mapping techniques. The opinion is in line with Male and Tias (2016), who asserted that mind mapping techniques offer a promising improvement in reading comprehension skills. Although the scholars have indicated the benefits of the mind mapping technique, Christiani and Latief (2018) noticed that many students find it challenging to apply this particular technique since they must deal with a lack of vocabulary and some other technical issues.

The objectives of the study are twofold. The first aim is to discover the benefits of using mind mapping techniques based on students' perceptions. The paper also focuses on finding out the challenges when employing this strategy. The study focused on English Language Education Department (ELED) students at a private university in Yogyakarta when they were in their junior year.

The paper's findings are expected to benefit the lecturers. They can consider introducing mind mapping techniques to their students to get the advantages of the activity. This research can provide information on mind mapping techniques for students, encouraging them to know more about them and use them in their learning. As for students, this study can encourage them to use mind mapping to organize their thinking. As for other researchers, the findings of this research can be used as a reference for similar topics.

Mind mapping techniques are an activity that anybody can perform. According to Buzan (2010), mind mapping techniques are note-taking techniques designed to meet the needs of the whole brain. It includes not only words, numbers, sequences, and lines but also colours, images, dimensions, symbols, rhythm, and maybe other visuals. Additionally,

Ayudyah and Sumarsono (2014) asserted that mind mapping is a technique to categorize ideas based on individuals' thinking. The technique is commonly used to take notes efficiently, interestingly, creatively, and effectively. The results of mind mapping techniques are mind maps.

On the other hand, some minor points are also found in this area. For instance, Fu et al. (2019) tried to design an English writing class by including role-playing game activities with a mind mapping technique to enhance students' writing ability. It was found that mind mapping looks to be a challenging learning technique for some students to increase their writing skills and their technological acceptability for study. Above all, mind mapping techniques encourage students to make visualizations by using keywords, images, symbols, and colours. Through these visualizations, students can store the information they learned longer.

Mind mapping techniques have been used in students' different subjects and grade levels. It indicates that mind mapping may have given many benefits to the teaching and learning process. For example, mind mapping techniques have improved students' long-term memory (Fatmawati, 2016). It might be because the technique assimilates new information with the existing one and builds the schema (Keleş, 2012). In the end, the way that mind mapping techniques work can stimulate innovation and facilitates learning.

Another benefit obtained from mind mapping techniques is that they save time in the learning process (McMurray, 2018). In addition, applying mind mapping techniques in learning will be more fun (Bevan, 2018) because it can boost the students' motivation. It can also encourage students' participation by creating colorful and meaningful images, leading to more effective learning (Wilson et al., 2016). Mind mapping techniques may also enable students to practice brainstorming in the learning process (Rizqiya, 2013). Students are encouraged to connect one idea with other ideas; thus, more ideas are explored.

Furthermore, mind mapping techniques can successfully enhance students' comprehension skills (Male & Tias, 2015). Mind mapping techniques also encourage students to understand different pieces of information before synthesizing and putting them in visuals. Using mind mapping techniques, students can also improve their speaking performance (Tuan & Mai, 2015). It may happen because students may need to interact with other students to confirm their understanding of the information that they are reading.

Aside from giving students many benefits, mind mapping techniques also present some challenges which students in the learning process cannot avoid. According to Muhib, Anggani, and Hartono (2014), students face challenges when creating a comprehensive mind

map. Creating mind maps needs much time to organize and find out essential keywords of the materials. Moreover, mind maps are created in free form in which only the creator understands his or her mind maps. Also, it may be challenging for many students because no templates of mind maps are provided.

According to Adodo (2013), one of the challenges of mind mapping techniques is that it is too difficult to interpret the complicatedness of a mind map if the students are unfamiliar with the concept of mind mapping. It means that mind mapping has relatively little explanation for a complex topic. Accordingly, mind mapping techniques are more suitable for explaining simple materials or issues. Last but not least, mind mapping techniques also take time because the students have to find out the keywords, and they are sometimes confused about putting the keywords in every branch (Nurlaila, 2013).

In following the rapid changes and development, teaching, to some extent, should be varied and/or modified in some parts. Some scholars and teachers have tried to find an interactive teaching method to increase and create good learning outcomes. In addition, in learning activities mentioned in constructivism theory, individual learners have a unique learning method. Therefore, this prior knowledge proves that the research about the development of teaching and learning is still going on. One teaching method that teachers and scholars have introduced is the mind mapping technique. As discussed previously, this method brings a fresh and interactive teaching method for both teacher and student. Boley (2008), who conducted a study about mind-mapping techniques, found that the technique increases students' learning to derive material more effectively by 65%.

Furthermore, some scholars try to combine which teaching activities fit with mind mapping activities, especially in language subjects. Ayudyah and Sumarsono (2014) once attempted to match reading activities with mind mapping techniques. Using a quasi-experimental design, they aimed to engage students with reading comprehension activities and mind mapping techniques. The findings revealed that the use of mind mapping strategies could increase the students' engagement and comprehension, particularly reading among the students.

Other scholars, Buran and Filyukov (2015) conducted research in which they focused on the use of mind mapping techniques in language learning. Their study found that mind mapping helped to solve problems, brainstorm before tasks, and learn vocabulary for students. Last but not least, they emphasized that mind mapping techniques can be applied as one way to provide a creative learning process for students by placing teachers as the facilitators and coordinators to assist students. In addition, Bukhari (2016) conducted the

¹² effect of mind mapping techniques in enhancing writing skills. He mentioned that mind mapping techniques also work perfectly well to improve students' writing skills. The techniques can be an alternative to replace the traditional way in language teaching-learning. In conclusion, it is safe to say that mind mapping techniques, particularly in language teaching and learning, have a positive impact. It is eligible to be used to improve language skills.

In general, many scholars have conducted ample research, particularly about using mind mapping techniques in the classroom and their impacts on students' achievement. The ¹⁸ use of mind mapping techniques as an effective tool in National Research Tomsk Polytechnic University has been observed (Buran & Filyukov, 2015). The research showed ¹⁵ a significant aspect in providing different opportunities for students to learn when using mind mapping techniques in the language classroom.

The comparison learning techniques between mind mapping and semantic mapping techniques were also explained by Khatimah and Rachma (2018). Their research aimed to determine which one is the best technique that gives more benefits to reading comprehension. An experimental study was used in their research by having two sample classes. The results found that students' scores increased after using the mind mapping techniques. The second findings of the research revealed that students' interests in reading also increased, particularly in narrative texts, after using mind mapping techniques.

Another previous research about mind mapping was conducted by Sulastri (2020), which focused on ²¹ using mind mapping to improve students' speaking skills. By utilizing classroom action research, Sulastri's (2020) ²⁴ study revealed that students' speaking skills improved after being taught using mind mapping techniques. The classroom observations showed that students also appeared more relaxed and comfortable when explaining the material in front of the classroom. At the end of the discussion, she mentioned that about 80% of students passed the minimum score, and the rest had outstanding scores.

Even though mind mapping can benefit teaching and learning in classroom activities, only some students feel satisfied when using mind mapping techniques. Muhib et al. (2014) asserted that students sometimes ³ find it challenging to create a comprehensive mind map. For this reason, creating a mind map may need a great deal of time when it comes to organizing and finding significant keywords. In addition, in her thesis, Wandut (2018) asserted that mind mapping techniques, in some cases, confused students because the results of mind mapping techniques of each student were different. Students often tried to determine the best way to reiterate the material into a mind map. Researchers argue that

doing mind mapping will likely make students need assistance from their teachers because, as Davies (2010) argued, mind mapping techniques may result in students' own understanding of the topic with little or no explanation from the teachers. Teachers' assistance is needed to ensure students create a correct mind map. Teachers' assistance is also used to ensure that students truly understand doing mind mapping techniques properly even though they have their way or style to express their understanding of the topic being learned.

After reviewing the existing studies, the researchers noticed the empirical gap in which the prior research positioned and showed the positive side of mind mapping. In other words, teaching students the mind mapping techniques may lead to an effective teaching and learning process. Unfortunately, existing studies in the area have mainly focused on using mind mapping techniques based on teachers' perspectives. Students' perspectives on using the particular techniques have received little to no attention. In this current research, we seek to extend the discussion of the use of mind mapping techniques in ELT practices based on students' experiences. By voicing their experience, this research is expected to reveal and enrich the discussion under the mind mapping techniques, both the positive and negative sides.

METHOD

The current research employed a qualitative approach. According to Pathak et al. (2013), the qualitative method is used to understand people's beliefs, experiences, attitudes, behavior, and interaction. They also added that qualitative research allows participants to share their experiences and interests. The research was conducted at an English Language Education Department (ELED) of a private university in a college town in Indonesia. Four ELED students in their junior year agreed to participate in this research. They were selected because these students were deemed to have an extensive learning experience in creating mind maps from their teacher(s) and used the mind mapping techniques independently in their study. The other similar characteristic of the participants was that they were enrolled in Teaching English as a Foreign Language (TEFL) course. Students learned the mind mapping techniques in this class as one of the class activities. For example, they used mind mapping to find out the information on the articles or books they had read. After creating a mind map of their reading, they shared their information with the class. All the participants were in-depth interviewed using the same questions. For example, they were asked how

often they used the mind mapping techniques and when they employed them. They were also asked about their perceived advantages and barriers when using mind mapping techniques. Follow-up questions were given depending on the participants' answers to obtain rich data.

After collecting the data through interviews, the researchers analyzed them by transcribing and coding them. The interviews were audio-recorded. Since the interviewer and interviewees were all multilingual, the discussions used the combinations of the languages they spoke (i.e., Bahasa Indonesia and English). It aimed to make the participants feel comfortable when answering the questions and avoid misunderstanding. However, the Indonesian language was mainly used throughout the interviews.

The first data analysis step was to write verbatim transcriptions of the interviews from each participant. To get the best results, the researchers listened carefully to the audio and took notes on the contents resulting from the recording. The names of participants used in the current study are pseudonyms to keep their privacy. After transcribing the data, the researchers conducted member checking to examine the trustworthiness of the data from the interview (Creswell, 2018). The transcriptions were returned to the participants to see if they would like to change the information given during the interviews. All participants stated that no data alteration was necessary. The last step was data analysis, which was conducted by finding the similarity of the codes from each transcription. The researchers then put these codes into themes that "can represent the codes" (Creswell, 2018, p. 197). The interview excerpts in the next section have been translated into standard English.

FINDING AND DISCUSSION

Students' Perceptions of the Benefits of Using Mind Mapping Techniques

Prolonged recollection

The data revealed that using mind mapping techniques positively impacts students' learning to remember the materials for a more extended time in the memory. The participants shared that the learning process in the department requires students to read all materials before coming to the class. Mind mapping helped them make a road map of the materials they had read. Ayu, the first participant, stated that mind mapping helped her understand the plot of the materials.

"I can draw a line between one theory and the other, and I realize that it helps me understand the bigger picture of the topic" (interview excerpt 1.4).

Other participants, Bella and Tiara, asserted that they used mind mapping techniques as a strategy to memorize a theory or description from a material. As said by Bella,

"I personally prefer to learn my class materials using mind mapping strategy because this technique is all about the main points of the materials, which enables me to memorize the readings more easily" (interview excerpt 2.5).

Similarly, Ayu also stated that ³ mind mapping is a powerful technique to describe complex materials by breaking down and nailing keywords related to the reading materials. She remarked,

"Finding the keywords of long materials through mind mapping techniques helped me better understand the complex reading materials. The keywords worked as hints for me" (interview excerpt 1.6).

In addition, Tiara also argued that ⁴ mind mapping is a powerful way to take notes because it provides a general picture for a learner to know complicated explanations through lines and keywords.

Saving time

The second finding from the obtained data showed that mind mapping helped students manage their study time. It means that students saved more time when they employed mind mapping techniques when reading a text. Santi stated that instead of re-reading the class materials multiple times, she preferred looking at the mind map that she had created when reading the class material for the first time. She remarked,

"Reading a class material sometimes takes too much time because I have to re-read it. Once you know how to use this particular technique, it will be much easier for you. You just need to read the mind map that you have created. It saves so much time" (interview excerpt 4.5).

This finding underpins the fact that learning time, particularly in reading and understanding a class material, can be saved to do other learning activities. It is simply because mind mapping provides keywords to lead to the main class materials.

Increasing students' learning engagement

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In brief, learning engagement here refers to students' participation in the teaching-learning process. The data also revealed that mind mapping techniques increased students' participation in teaching and learning activities. As mentioned in the previous section, mind mapping involves students' creativity to create an engaging mind map based on their understanding. For instance, mind maps consisting of various shapes, lines, and colors made them more eye-catching and appealing. Bella and Santi support this particular finding. They stated that the mind mapping technique was not monotonous because it was more than re-writing things that they had read. It was also about re-designing a complex theory to become engaging materials. Tiara asserted,

"Mind mapping is more interesting than just reading. I mean students can show their creativity freely and make mind maps that are easy on the eye and good to read. (Interview excerpt 3.5)

The researchers conclude that the creative process when using mind mapping techniques and the created mind maps can increase students' learning engagement. As a result, it will influence their motivation to learn. In some learning theories, motivation plays a significant role in learning. Thus, mind mapping techniques can be considered an effort to increase students' motivation to learn.

Supporting speaking skills

The last finding confirmed that mind mapping techniques also positively contributed to students' speaking skills. Tiara maintained that employing the mind mapping technique helped her prepare her presentation. She added that mind maps helped her manage what she had to say, such as explaining a theory and describing the reading materials to her peers. Tiara stated,

"[Because of mind mapping techniques] I know the things that I have to say. I have the order [of what to say], and it helps me a lot so that I will not say something out of topic" (interview excerpt 3.6).

Apparently, the lines connecting the bubbles in the mind maps work like road maps for the participants. They considered it helpful to have it in hand when explaining a theory or material. Mind mapping techniques require students to read and understand the material before creating the mind map. So, they had background knowledge of what they had to say. Thus, they would deliver their ideas in the mind maps first before explaining them in front of the class.

Students' Perception of the Challenges of Using Mind Mapping Techniques

Mind Mapping techniques are complex

Reading and understanding class materials beforehand are needed in making a mind map. Students need to understand the context of the materials from which a mind map will be created. This process requires students to synthesize the reading by connecting each part of the materials.

The data obtained were also consistent with the argument. Bella mentioned,

"Applying mind mapping techniques is actually a bit complex. But the complexity happens only at the beginning of the process. Basically, we should be detailed when creating the mind map [so we can understand it later]" (interview excerpt 2.7).

The key process of mind mapping techniques is a good grasp of the materials. Students must ensure that the lines go with the correct bubbles and that mind maps have to replace the intended materials. Thus, when students do not have the reading in hand, they still use the mind map to contribute to the class discussions.

Mind mapping techniques are highly personalized.

Mind maps are too personalized means that each student will have a unique way of transferring the materials into a mind map based on the level of their understanding of the materials. For instance, one student will draw a simple mind map, which only he understands. On the other hand, another student may have a more complex mind map, and

only he can tell 'a story' behind the mind map. Therefore, the first student's mind map may not be understandable to the other students. Tiara remarked,

"Yes, mind maps are quite difficult to understand if we are not clear to make it. There are some points in which we understand a mind map, but others do not. I think it is because our interpretation of what we read is different from one another. So, everybody has different perspectives even the reading is the same" (interview excerpts 3.8).

¹⁹ This finding is also in line with the previous discussion that every learner has a unique way of learning. In short, learners may have their own way of creating a mind map, which sometimes makes some students confused about the 'correct' form of a mind map or the correct way to perform the technique. They will have their opinion and arguments to defend their mind mapping as the right one.

DISCUSSION

Mind mapping techniques can be a powerful tool for students. Although mind mapping techniques may be complicated, they can assist students in getting more meaningful learning. The techniques can also be helpful to students to do brainstorming as well as exercise their creativity. The current study's findings align with Rizkiya's (2013) and Filyukov's (2015).

In addition, mind mapping techniques can improve student engagement, which in the end, can improve students' achievements. Wilson et al. (2016) asserted that mind mapping techniques encourage students to actively participate in the learning process when creating their mind maps and explaining the products to others.

Although students may sound quiet and less active verbally when creating mind maps, they work pretty hard cognitively to synthesize the materials. They also have to make sure that they understand the mind maps they have created. In addition, they will have to explain them to their friends and teachers. Thus, mind mapping techniques engage students cognitively and verbally, which according to Bevan (2018), can be a fun agenda to have in the learning process.

When related to language skills, mind mapping techniques can improve students' speaking skills because interactions ²⁰ between students and teachers or among students will likely occur. If the teacher applies mind mapping techniques for the first time, students will likely be required to explain the map they create to their friends in front of the class. It is also

in line with Tuan and Mai (2015), who mentioned that the mind mapping techniques can increase learners' speaking performance.

In addition, Muhib et al. (2014), who conducted their research in an Indonesian context, stated that students need to be able to find the keywords that are meaningful for them to understand the whole materials. One keyword may be meaningful to one student but not as meaningful to other students. With these keywords, students will create mind maps based on their understanding of the materials. Thus, each student may produce mind maps that look different from each other. The different mind maps can present challenges because they can confuse students, especially Indonesian students. Indonesian students are culturally accustomed to right/wrong answers or uniformed answers. These differences in the products of the techniques can cause dissatisfaction among students because they do not know if their mind maps are correct. In short, teachers must give students the understanding that each student has their own understanding of material, and they have their unique way to draw into a mind map.

CONCLUSION

In conclusion, mind mapping techniques can be a powerful technique to help students understand the class reading materials or complicated theory. While the techniques may provide some promising benefits for students, teachers have to be aware of the challenges presented by the techniques. The benefits, however, outweigh the challenges. The benefits which include improving students' engagement towards the learning process, seem to suggest that this particular technique is worth applying in the class.

It is understandable that students may feel that mind mapping techniques do not make their tasks easier. For instance, they still have to read the materials before creating the mind maps. Students may think that the mind mapping technique gives them more work. Rather than simply write down the summary of the materials, they have to do extra work, such as synthesizing, drawing, and sharing it with their friends.

When teaching the mind mapping techniques in the Indonesian contexts, in particular EFL classes, teachers should be ready to inform the students that there are no good or bad mind maps nor correct or incorrect ones. As the finding revealed, making mind mapping will invite students' subjectivity to deal with the high in-person perspective. On a side note, if the teacher wishes to grade students' mind maps, an assessment rubric should be available (see Swestyani et al., 2018).

The limitation of this research is that the data were obtained merely from students. Obviously, the opinions of teachers teaching mind mapping techniques are essential to investigate to give a balance opinion about the technique. At the same time, teachers' voices need to be heard, as much as we hear students' voices.

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