THE USE OF MIND MAPPING BOARD (MMB) TO IMPROVE SPEAKING ABILITY IN FACING INDUSTRIAL REVOLUTION 4.0

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ABSTRACT

This study aims at seeing the effect of students' ability in speaking using Mind Mapping Board (MMB). There are 30 students who consist of 14 female and 16 male students at the seventh grade of one of Junior High School Kudus. The data collection is collected by interview, observation, questionnaire, and test. The research design used was quasi expreriment. It is used to know the effectiveness of MMB as the treatment. By mind mapping, the ideas will be elaborated well and organized into framework of mapping. MMB is a media used to help students to extend their creative ideas and help them to be able to communicate. Communication skill plays an important role in supporting the 4.0 industrial revolution. Finally, MMB media is an effective way for students to organize concepts and ideas to support their speaking skills and prepare communication skills in the era of industrial revolution 4.0.

Keywords: Mind Mapping Board (MMB), Speaking Ability, Industrial Revolution 4.0

Enhancing idea is the important process in speaking skill. In addition, communication is the two-way process in which participants are reaching mutual understanding, not only encoding and decoding information or feelings, but also creating and sharing meaning. Communication becomes one important aspect which needs speaking skill to face industrial revolution 4.0. It is called literacy (Mubarak, 2018). Elaboration of ideas helps the speaker to convey information in detail and systematically so that the message can be conveyed to the listener. This is very important in communication. In

addition, communication is also an important aspect in the industrial revolution 4.0 to foster a collaborative attitude which must be introduced from the ground level (Hecklau, 2016).

In speaking skill, one difficult aspect is interaction process, not intonation, vocabularies, nor grammar (Murcia, 2003). Eventhough students have sufficient knowledge of vocabularies and grammar, but they still felt difficult to elaborate ideas in speaking. Elaborating ideas is one problem factor for students to convey and to share information in a text (Putra, 2012). In

interaction, though, humans need to elaborate ideas of a topic talking about.

Many solutions are solved by teachers to encourage students to speak in a classroom. Thus, one teaching aid used as a solution to enhance students'speaking ability and to elaborate ideas is *Mind Mapping Board*.

Every concepts, ideas, as well as text organized through mapping is called mind mapping. Mind mapping technique considered as the right aid to facilitate students elaborating mind ideas in a learning process only by listing keywords in column provided. The strategy of teaching using colored media either picture, letter, symbol, are definitely very popular with students in order to motivate them saving information in boxes of nerve cells branch off like tree branches which are all centered on one main word as the main idea (Buzan. 2007). Besides, mind mapping facilitate students elaborating ideas which starts from main idea, and then it breaks down into supporting ideas to specify it more detail.

In addition, mind mapping is as the strategy of teaching facilitate students to describe and to convey ideas in speaking communication (Blessing and Olufunke, 2015). There are some steps to convey ideas. The first is conveying main idea as a central which are then developed into derivative themes with branches as a link between the main themes with the derivative themes. The second step is framing mind ideas into boxes of mindmapping visually in order to memorize and to stimulate. This activities are more efficient than traditional recording which tends to be teaching media and the method is less creative.

Learning media is one of the important aspects in classroom learning. In the teaching and learning process, instructional media stimulates students' attention, thoughts,

feeling, and skills in carrying out the learning process. Some types of learning media include visual media (graphics, diagrams, charts, comics, posters), audial media (radio, tape recorder, language laboratories, and the like), projected still media (slide, OHP), and projected motion media (film, television, video, computer). The use of audio media visual application in speaking well in education world contributes (Wahyuningsihet nowadays. 2014; Muhson, 2010).

The learning application using audio visual for high school students helped them to speak correctly and accurately emphasized on the message (Untung, 2011). English Game, for instance, facilitate students to improve their speaking skills to overcome students' weak learning motivation and develop methods to overcome the problem of learning English (Nurbadri, 2017; Hakim et al., 2017). The use of audio visual application media in speaking learning contributes well in the world of education. The results of the study show that this application helps students speak correctly and accurately based on message conveyed. Likewise in a Song Base Learning for students of Junior High School at SMP Negeri 1 SinjaiBorongcould develop students' ability in listening and speaking using Classroom Action Research (Muhsin, 2012).

In addition, implementing mind mapping approach also could enhance speaking activities in a classroom that it is very recommended for teachers in order to be creative, innovative, and interesting (Zipp, 2013; Mustajib 2017). The result shows the use of mind mapping can influence speaking skill optimally. Implementing mind mapping strategy stimulates students to think critically

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including inductive thinking, analysis, and learning feedback (Hamid, 2017).

The use of board helps students to explore their ideas so that students have their critical thinking and care toward their surrounding. Both mind mapping learning strategy are applied by teacher in classroom. In a previous study, group guidance strategy was used and the solution as an outcome was mind mapping and selfreward effectively could motivate students al..2017). (Samsenoet Mind mapping illustrate visually in the board media. It is often visualized and encourage students to elaborate their ideas through mind mapping. Mind mapping facilitate them exploring ideas and their English learning (Wang and Chu, 2010).

METHOD

This study used quasi experimental design. The population of this research was seventh grade students of Junior School Kudus in the academic year of 2019/2020. The class of VII C that consist of 30 students were the subject of this study. Before treatment, pretest was given once to know the stability and clarity the condition of group before and after being treated. (Sugiyono, 2012: 114).

Quasi-Experimental Design

Class	Pre test	Variable	Post Test
	O_1	X	O_2

Where:

7C: The experiment group

O1 : The pretest administered before the treatment

X : The independent variable or the treatment / using MMB

O2 : The post test administered after the treatment

In this research, the students were taught by using MMB as media. The research was done in five meetings including giving pretest, treatment, and posttest. Data collection was taken by conducting pretest to measure students' performance before received a treatment. Meanwhile, posttest was conducted to measure students' performance after received a treatment.

The instrument of the research was spoken test. The tests consist of pretest and posttest. It was used to get information about students' speaking improvement. Pre-test and post-test were conducted to measure the improvement on the students speaking skill indescribing person by using MMB. The pretest and posttest were given different topics. The topics of pretest were about "Physical appearance" and the topics of posttest were about "Person's Activity"

The data gained quantitatively through the process of arranging data sequence, organize into a system, category and set of the breakdown of base. In analyzing the data, ttest was used to find out the effectiveness of MMB in improving students' skill of speaking.

FINDINGS

After measuring students' performance in speaking before receiving a treatment by giving pre-test, giving treatment and measuring the students' progressive in speaking afterreceiving a treatment, the researcher got the data score. Before calculating by using t-test, the data of

students' scores of experimental and control class had been described as follows:

The score of pre-test and post-test was gained after the treatment of MMB. The mean of students' score in the pre-test was 65 with << 168 lowest score 50, and the higher score 80. Meanwhile the mean score of post-test was 77 with the lowest score 65, and the higher score 90.

Based on the data above, it showed that the student's gained score in speaking about describing people by using MMB was higher than the students bedore getting treatment The null hypothesis is there is no significant effectiveness of using mind mapping board in speaking at the seventh grade students. The paired sample test as shown as table above indicates that that t-value is 0.000006020 < t-table 2.02. The pretest and posttest score are significantly different. It can be concluded that using mind mapping board to teach speaking is effective. It means the null hypothesis is rejected.

CONCLUSION

The effectiveness of using MMB was shown from pre-treatment and post-treatment. By MMB, the score showed improvement from students' ability. It also helped students to organize and elaborate ideas easier so that help students to speak. It can also become media for teacher to encourage students to speak in speaking class. The finding of this study may give benefit to other researchers and teachers to develop other teaching aid as learning media related to pedagogical terms.

Acknowledgments

We would like to thank to LPPM and RISTEKDIKTI for giving the researchers an opportunity to make research. I would also like to thank to friends for always supporting the researchers and giving much improvement of this paper.

REFERENCES

Blessing, Oluwatosin Omolaradan Bello Theodora Olufunke.(2015). Comparative Effect of Mastery Learning and Mind Mapping Approaches in Improving Secondary School Students' Learning Outcomes in Physics. 2015; 3(4): 78-84 Published online July 30, 2015 (http://www.sciencepublishinggroup.com/j/sjedu)

Buzan, T. (2007). Bukupintar mind map untukanak: agar anakjadipintar di sekolah. Gramedia Pustaka Utama.

Hakim, Muhammad Luqman, AkhyardanAsrowi.(2017). *Pemanfaatan Media Pembelajaran Game Interaktif Dalam Pembelajaran Kosakata Bahasa Arab*.Vol.2 No. 2 | 157-162http://journal.imla.or.id/index.php/arabi.

Hamid, Gadha A Abdel. (2017). *Mind Maps as a New Teaching Strategy for Medical Students*. Volume 3 Issue 3 – 2017. MOJ Anat&Physiol 3(3): 00090. Diakses di https://www.researchgate.net/publication/315054916. King Abdul Aziz University: Saudi.

Hecklau, F., Galeitzke, M., Flachs, S., & Kohl, H. (2016). Holistic approach for human resource management in Industry 4.0. *Procedia CIRP*, 54, 1-6. Available online at https://ac.els-cdn.com/S2212827116308629/1-s2.0-S2212827116308629-main.pdf?_tid=7811f3a1-b332-430c-be33-

- 4d6a8d2d5218&acdnat=1535046789_575b38d981c3717f3d43baab73cffdb9Accessed on 8th August 2018.
- Moleong, L.J. (2006). Metodologi penelitian kualitatif. Bandung: RemajaRosdakarya.
- Muhsin, MuhArief. (2012). Pembelajaran Media Songs Base Learning SiswaKelas VII SMPNegeri 1 Sinjai Borong kabupaten Sinjai. Jurnal Media Volume 1 No. 2. Edisi Juni 2012.
- Mubarak, H. (2018). Kontribusi Usai d Prioritas dalam Menumbuhkembangkan Budaya Literasi di Sekolah Sd/Mi di Kabupaten Langkat. *Journal Analyticalslamica*, 7(1), 47-59.
- Muhson, Ali. (2010). *Pengembangan Media PembelajaranBerbasisTeknologiInformasi*.JurnalPendidikanAkuntansi Indonesia, Vol. VIII. No. 2 Tahun 2010, Hlm. 1 10.
- Murcia, C. (2003). *Teaching English as a Second or Foreign Language*. 3rd ed. Boston: Heinle & Heinle.
- Mustajib, Agus. (2017). Improving The Students' Speaking Ability By UsingMind Mapping And Guided Questions At Fourth Semester OfEnglish Education Study ProgramAt Islamic University Of Indragiri Tembilahan. English Journal of Indragiri (EJI) 2017, Vol. 1, No. 1.
- Nurbadri.(2017). English Games Untuk Meningkatkan Speaking Skill Dan Motivasi Siswa Kelas X SMK. Jurnal EDUCATIO (J.Edu). Volume 3 Nomor 2, 2017, Hlm 68-73.
- Putra, P. P. (2012). The use of mind mapping strategy in the teaching of writing at SMAN 3 Bengkulu, Indonesia. *International Journal of Humanities and Social Sciences*, 2(21), 60-68. Available online at www.ijhssnet.com/journals/Vol_2_No_21_November_2012/8.pdf. Accessed on 24thApril 2018.
- Samseno, Akhtiar Sigit, Edy Purwanto, dan Sutarno. (2017). *Bimbingan Kelompok dengan Peta Pikiran dan Self-Reward Untuk Mengembangkan Keterampilan Belajar Siswa*. Jurnal Psikoedukasi dan Konseling. Vol 1, No. 1, Juni 2017. http://jurnal.uns.ac.id/jpk
- Sugiyono. (2012). Metode Penelitian Kuantitatif kualitatif dan R&D. Bandung: Alfabet.
- Untung, Slamet. (2011). Aplikasi Media Audio-Visual DalamPembelajaran Speaking Skill denganPendekatanAudiolingual: StudiKasus di MAN Batang. JurnalPenelitian Vol.8, No.1., Mei 2011, hlm. 91-110.
- Wang, Wen-Cheng, Lee, & Chu.(2010). A Brief Review on Developing Creative Thinking in Young Children by Mind Mapping. International Business Research Vol. 3, No. 3; July 2010. Canadian Center of Science and Education: Canada. www.ccsenet.org/ibr
- Wiyanto, Sopyan, A., Nugroho., & Wibowo, S.W.A.. (2006). Potret Pembelajaran Sains Di SMP dan SMA. Unnes Physics Education Jurnal, 4 (2)(2006): 63-66. Retrieved from http://journal.unnes.ac.id/
- Wahyuningsih, Maria Goretti Sri, danHarisMudjiman. (2014). *Penerapan Audio Visual DalamPembelajaranBahasaInggris* (StudiKasus di SMP N 3 Bawen).JurnalTeknologiPendidikan Dan Pembelajaran. Vol.2, No.1, hal 79 92, EdisiMaret 2014.http://jurnal.fkip.uns.ac.id
- Zipp, Genevieve and Catherine.(2013). Prevalence of mind mapping as a teaching and

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learning strategy in physical therapy curricula. Journal of the Scholarship of Teaching and Learning, Vol. 13, No. 5, December 2013, pp. 21-32.

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