MIND MAPPING IN ONLINE LEARNING AT 10th GRADE
OF SMKN NGRAHO BOJONEGORO
IN ACADEMIC YEAR 2022

THESIS

By :

ALVI NAIMATUZ ZULFA
NIM. 210917031

ENGLISH EDUCATION DEPARTMENT

FACULTY OF TARBIYAH AND TEACHER TRAINING

STATE INSTITUTE OF ISLAMIC STUDIES PONOROGO

2022

ABSTRACT

ZULFA, ALVI NAIMATUZ. 2021. Mind Mapping Method Based Online Learning at 10th Grade SMKN Ngraho.Thesis, English Education Department, Tarbiyah and Teachers Training Faculty, State Institute of Islamic Studies Ponorogo. Advisor Dr. Ahmadi, M.Ag.

Keywords: *Mind Mapping, English Learning, Online Learning*

Mind mapping is a visual technique for structuring and organising thoughts and ideas. If this sound all rather general and wide-ranging, they you can also use of mind mapping in a general and wide-ranging fashion. But also mind map is a graphic tool used to collect, create, manage and exchange information. It represents information via the spatial organization of concepts/topic, ideas, words, or other items.

There are lots of different methods as interesting learning materials to be conveyed by educators or students, these methods are developed and also applied by educators, one of which is mind mapping or concept mapping, in an increasingly advanced digital era, this method is suitable and it is effectively used as an online learning medium which is nothing but the application of mind mapping which is able to make students understand in detail, so the researcher chooses a mind mapping based on online learning to be researched.

In addition, the researcher aims to see the response to the online-based mind mapping method, also to see how well students understand or know about mind mapping. In addition, the research students involve an English teacher to find out the mind mapping method taught by grade 10 students, as well as find out how well they understand if the teacher using the mind mapping method in online classes.

The researcher used qualitative methods and case studies, this was involved by class 10 SMKN Ngraho, and the data processing was taken from interviews and documentation. Interviews are used to find out some problems in learning as well as details about understanding mind mapping, while documentation is used as a review of the results of the interviews. The data analysis technique uses display data, data reduction, conclusion drawing and verification.

The researcher shows that from the research results the use of the mind mapping method in online learning can be used and implemented easily by teachers, especially in learning English, where the teacher explains how to use the method clearly so that students understand, apart from being used in online learning the mind mapping method also used in offline learning, especially in grade 10. In this matter, it can be seen that some students' responses to the mind mapping method stated that some students found it difficult and difficult to understand with this method, but there were some students who stated that the method was easy to understand and the method is effective when used in online learning. Knowing this, it can be concluded that the mind mapping method can be used easily and is also easy to understand, it's just that the teacher and students need a review of the material and understanding of the material if using the mind mapping method.

APPROVAL SHEET

This is to certify that *Sarjana's* thesis of :

Name : Alvi Naimatuz Zulfa

Student Number : 210917031

Faculty : Tarbiyah and Teacher Training

Department : English Education

Title : Mind Mapping Method Online Learning at 10th grade of SMKN

Ngraho Bojonegoro in Academic Year 2022

has been approved by the advisor and recomended for approval and acceptance :
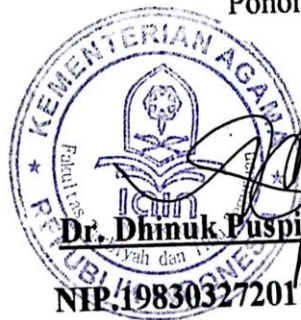
Advisor

Dr. Ahmadi, M.Ag.

NIP. 196512171997031003

Ponorogo, 04 November 2022

Acknowledged by
Head of English Department of
Tarbiyah and Teacher Training Faculty
State Institute of Islamic Studies
Ponorogo

Dr. Dhinuk Puspita Kirana, M.Pd.

NIP. 198303272011012007

RATIFICATION

This is to certify that *Sarjana's* thesis of :

Name	: Alvi Naimatuz Zulfa
Student Number	: 210917031
Faculty	: Tarbiyah and Teacher Training
Department	: English Education
Title	: Mind Mapping Method Based Online Learning at 10th Grade of SMKN Ngraho Bojonegoro in Academic Year 2022

has been approved by the board of examiners on :

Day	: Tuesday
Date	: 15 November 2022

and has been accepted as the requirement for the degree the *sarjana* in english Education on

Day	: Thursday
Date	: 24 November 2022

Ponorogo, 24 November 2022

Certified by

The Dean of Tarbiyah and Teacher Training
State Institute of Islamic Studies Ponorogo

Dr. H. Moh. Munir, Lc., M.Ag.
NIP. 196807051999031001

Board of Examiners

Chairman	: Dr. Tintin Susilowati, M.Pd	( )
Examiner I	: Winantu K.S.A., M.Hum	( )
Examiner II	: Dr. Ahmadi, M.Ag	( )

SURAT PERSETUJUAN PUBLIKASI

PUBLICATION SHEET

Yang bertandatangan di bawah ini :
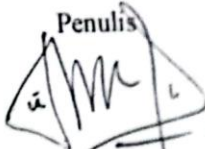
Nama : ALVI NAIMATUZ ZULFA

NIM : 210917031

Fakultas : Tarbiyah and Teacher Training

Program Studi : English Education

Judul Skripsi/ Thesis : Mind Mapping Method Based Online Learning at 10th Grade of SMKN Ngraho Bojonegoro in Academic Year 2022

Menyatakan bahwa naskah skripsi/ thesis telah diperiksa dan disahkan oleh dosen pembimbing. Selanjutnya saya bersedia naskah tersebut dipublikasikan oleh perpustakaan IAIN Ponorogo yang dapat diakses melalui etheses.iainponorogo.ac.id. Adapun isi dari keseluruhan tulisan tersebut sepenuhnya menjadi tanggungjawab dari penulis.

Demikian pernyataan saya untuk dipergunakan semestinya.

Ponorogo, 22 November 2022

Penulis

ALVI NAIMATUZ ZULFA

NIM : 210917031

STATEMENT OF AUTHENTICITY

Saya yang bertanda tangan di bawah ini :

Nama   : Alvi Naimatuz Zulfa

NIM   : 210917031

Jurusan   : Tadris Bahasa Inggris

Fakultas   : Tarbiyah dan Ilmu Keguruan

Judul Skripsi   : Mind Mapping Method Based Online Learning at 10th Grade of SMKN Ngraho Bojonegoro in Academic Year 2022

Dengan ini, menyatakan dengan sebenarnya bahwa skripsi yang saya tulisa ini adalah benar-benar merupakan hasil karya saya sendiri, bukan merupakan pengambil alihan tulisan atau pikiran orang lain yang saya akui sebagai hasil tulisan atau pikiran saya sendiri.

Apabila dikemudian hari terbukti atau dapat dibuktikan skripsi ini hasil jiplakan, maka saya bersedia menerima sanksi atas perbuatan tersebut.

Ponorogo, 04 November 2022

Yang membuat pernyataan

ALVI NAIMATUZ ZULFA

NIM. 210917031

CHAPTER I

INTRODUCTION

A. Background of the study

As a means of education, lessons are important for teachers and students, besides that lessons need a method as an effort in developement and creativity, the number of methods used in learning is very important, but the teacher must be able to choose a method that is in accordance with the discussion or material to be conveyed so that student have a high interest in learning about the lesson. In addition to learning interests are increasingly diverse and varied with the exsistence of methods such as the Cornell Method, Sudyblr, Flash Card, Pomodoro Technique, and others.

Besides the lack of variety methods can also reduce students' creativity and level of mindset, given the importance of creativity for a students, it is important for teacher to always provide stimulation to student in exploring knowledge to improve their thinking power, with the existance of an effective method and of course it can help student and teachers from several methods that have beens.mentioned one of the method that will be used in this discussion is the mind mapping method. In this context, to overcome learning difficulties, students do not to focus on taking notes or writting as a whole on the blackboard, but students can obeserve the problem so that they can make a mapping concept or concept map as a summary of the material, as for maters related to the applicationof online-based mind mapping such as edmodo, google classroom, e-learning and other application.

Accordng to an expert, Mind mapping is a visual technique for structuring and organising thoughts and ideas. If this sound all rather general and wide-ranging, they you can also use of mind mapping in a general and wide-ranging fashion. But also mind map is a graphic tool used to collect, create, manage and exchange information. It represents information via the spatial organization of concepts/topic, ideas, words, or

other items.[1]

Mind mapping (or ―idea‖ mapping) has been defined as ‗visual, non- linear representations of ideas and their relationships. Mind mapping comprise a network of connected and related concepts. In mind mapping, any idea can be connected to any other. Free-form, spontaneous thinking is required when creating a mind map, and the aim of mind mapping is to find creative associations between ideas. Thus, mind maps are pricipally association maps.[2]

Considering that facts, the researcher suggests mind mapping as the technique for teaching descriptive text. Drawing mind mapping is an activity which makes the brain casier to accept and remember visually stimulating, multi-coulored mind maps, rather than monotonous, boring linear notes.[3]

In addition to the notion of mind mapping and some theories about mind mapping, mind mapping also has several concepts, as for the 2 concepts contained in mind mapping, namely brainstorming step and linking step.

One of the advantages of mind mapping, it can be used in the english learning based online and offline learning process. The learning process in shcools is the best public policy tool as an effort to inscrease knowledge and abilities. In addition, many students think that school is a very fun activity, they can interact with each others. Shcools can increase social skills and social class awareness of students. Overall, the school is a medium of interaction between student and teacher to improve intelligence skills and a sense of affection between them, now the activity called school stopped because pandemic era. So, learning at that time was done from home or commonly called online learning. Online learning is still conidered as a breakthrough or a new paragdim in teaching and learning activities where in the process of teaching activities

---

[1] Florian Rustler, *Mind Mapping for Dummies,* (England: John Wiley and Sons, Ltd, 2012)

[2] Davies Martin, *Concept Mapping, Mind Mapping and Argument Mapping : What are The Diffirences and Do They Matter?* (Melbourne, Australia, Science+Bussiness Media B.V. 2010)

[3] Tony Buzan and Barry Buzan, *The Mind Map Book* (London : Journal of Economic Education), 2004

beacuse techers and students do not need to attend classrooms.

Online learning is widely applied in this year's era or during this pandemic, online learning is system learning via internet media or applications. Online learning is also said to be part of the modern transforming factors of higher education in many countries. Several suggestions were made about the possible evolution of these combined changes in the future and possible problems for those working in higher education. in the era of many apply.[4]

From the discussion about online learning, online learning itself is a learning taht uses media on the internet, in addition to the discussion online learning has 3 concepts including transactional distance, presence, and independent learners. Presence itself here there are 2 divisions, namzely cognitive presence and social presence.

From several explanations about online-based mind mapping the researcher chose this as research. In addition to being suitable and effective, this online-based mind mapping also makes it easier for students to find out the coverage of the material presented in outline. The researcher takes the informan from several classes to be researched, here the researchers took informan at the SMK level precisely in class X at the SMK level at SMKN Ngraho. The researchers thought that the school studied was quite interesting besides that there were no previous researchers who had researched online-based mind mapping at the school in the SMK level, researchers also took samples through interviews in class X and some of the teaching staff who would be involved in this research.[5]

In addition, in the location to be studied, the researcher will adapt to the environment in the school, another thing that will be seen is how the teacher delivers the material in an interesting way, so that the researcher can find out the learning process either directly or indirectly, it can be concluded that the researcher aims to

---

[4] Shirley Bach dkk, *Online Learning and Teaching in Higher Education*, (England: Open University Press, 2007)

[5] interview

knowing how enthusiastic they are in responding to online-based mind mapping, knowing how the teacher implements and responding to students' mind mapping in online learning in class X SMKN Ngraho Bojonegoro.

B. Research Focus

Researchers focus on conducting research on mind mapping methods based on online learning, observing objects to be studied, conducting interviews with informants, conducting a tranualation approach so that from several observations can be collected and processed into data, researchers based on topics to be discussed, researchers make observations about methods mind mapping based on online learning in the SMK environment to be more precise. at SMKN Ngraho Bojonegoro and the main target is grade 10.

C. Research Question

1. How does teacher implementation in mind mapping method in online learning at 10th grade SMKN Ngraho Bojonegoro?

3. What are students' responses on the implement of mind mapping method in online learning at 10th grade SMKN Ngraho Bojonegoro?

D. Research Objective

1. To know the teacher implement mind mapping method in online learning at SMKN Ngraho Bojonegoro.

2. To find out students' responses of mind mapping method in online learning at 10th grade SMKN Ngraho Bojonegoro.

E. Significances of The Study

The finding of this research is an expected contribution given both theoretical and practically, those are

1. Theoretical Significance

The result of this study are expected to contribute to the contributions given by

researchers on how to apply the mind mapping method in online learning and how students respond to the mind mapping method in online learning. And readers so that readers and others can apply this method in online and offline learning.

2. Practical Significance.

a. For the teacher

The teacher will know students' response whether it needs long time or short time on getting better result of being given both implementation mind mapping.

b. For the student

The student will know and more understanding the way how get a better result on next learning. Getting understanding conclusion in online learning through mind mapping.

c. For the institution

The institution can get a better models of online learning that applied in every classes in online learning or face to face, and the students' can get more better conclusion in learning, and easy to make practice.

d. For the reader

The researcher hope to give a contribution to readers, particularly students and teacher of SMKN Ngraho Bojonegoro itself to enchance this model in online learning or offline learning.

e. For the researcher

Hopefully the researcher will understand the implement mind mapping based in online learning. And can get applied in learning process.

F. Organization of Thesis

CHAPTER 1 :

Is introduction that consist of : background of the study, research focus, statement of the problem, objective of the study, significance of the study, research methodology,

organization of the thesis.

CHAPTER 2 :

In this chapter the researcher to tell abaout review of related literature, is review of related literature that consist of: the definition of mind mapping, concept mind mapping, definition of online learning, concept of online learning.

CHAPTER 3 :

Is research method, that chapter consist of: research approach and research design, reseach role, research setting, data source, data collection technique, data analysis technique checking validity of findings, research procedure.

CHAPTER 4 :

Is research findings that chapter discussion or contain descriptions of general data and special data. The general data itself contains the profile of the research location while the special data itself contains the findings obtained from obsevations or interviews and other documentation related to the formulation of the problem. In this description, there are several data presented in the form of questions according to the topics discussed.

CHAPTER 5 :

In this section contains the idea of researcher related to patterns, categories, positions of previous findings, interpretations, as well as some explanations of the findings revealed from the field, in this section some of the tehoritical studies written in chapter II are used as a knife for analyzing the data collected obtained from chapter IV.

CHAPTER 6 :

This section is closed, that chapter consist of conclusions and suggestion, the conclusions themselves contain answers to the formulations of the problems raised, or the achievement of research objectives. Therefore, the number of conclusions is in accordance with the number of items in the formulation of the problem and research objectives. While the suggestions section itself is in the form of sugestions

submitted that sourced from research findings, discussions and conclusions of research result.

CHAPTER II

PREVIOUS RESEARCH FINDINGS AND THEORETICAL FRAMEWORK

A. Previous Related Study

1. Previous Research

In this sub-chapter, the discusses some of the objectives, methods, findings, as well as the similarities and differences of the previous researcher. The researcher conducted research on the online-based mind mapping method with the target of class 10 at SMK Ngraho Bojonegoro, with this research, not far from the purpose of the researcher to conduct this research to find out the implementation of mind mapping that is used by teachers in online-based English learning, besides that the researcher will observe some student responses related to this. In this study, researchers used qualitative methods as a reference research, in that the method consisted of several stages, namely observation, interviews, and documentation. the researcher obtained data from several informants, one of which was the teacher, apart from the teacher the also conducted interviews with several students as a source of data that would be processed to obtain the results of the researcher from the data.

From the results of this study, the data obtained from observations, interviews and documentation were collected beforehand until the data was analyzed and data became valid from sources. besides that this research also has some similarities and differences from previous research, as for research from other researchers where the research discusses the implementation of the mind mapping technique enhanced students' writing skills, where the researcher is almost similar to the research carried out when This is in

the problem formulation of researchers who are currently discussing the implementation of mind mapping, but the methods used in these two studies are different. mapping but the difference from several previous studies lies in the issues to be raised and the methods used. On this previous study, the researcher will confirm previous research which ever conducted by other researchers before:

First, the previous research finding that can be consideration theory it taken journal international medical research impact of mind mapping on the critical thinking ability of clinical nursing students and teaching application by Han-Zhou Wu and Qiu-Ting Wu this researcher selected 64 nursing students using convenience sampling. Participants received basic knowledge training of mind mapping in three sessions during the intervention. Questionnaires on critical thinking ability were designed by the researchers, adopting the Chinese version of the Critical Thinking Disposition Inventory. Data collected using questionnaires included learning strategy function and clinical skill improvement with mind mapping, as well as students' degree of adaptability to mind mapping. Participants' critical thinking ability before and after the intervention was analysed using a paired t-test. The critical thinking inclination of nursing students was significantly improved after intervention compared with that before the intervention.[6]

Second, the second previous research finding that can be consideration theory it taken thesis state institute of Islamic studies of Ponorogo mind mapping as technique to enhance students' writing ability in recount text by Happy Fitriasari, this researcher the study was action research, in conducting the study, the researcher involved the English teacher and the students of grade VIII A. The subjects of the study were 14 students of

[6] Zhou-Hang and Ting Wu-Qiu, "*Impact of Mind Mapping on the Critical Thinking Ability of Clinical Nursing Students and Teaching Application*", Journal of International Medical Research, (2020)

VIII A class of MTs Muhammadiyah 1 Ponorogo in academic year 2017/2018. The proscedure of data collection were test and documentation. The use measure students' knowledge in writing skill. Researcher was also observing the teaching-learning process during the implementation of action.

Based on the result of this research, the implementation of mind mapping technique enhanced students' writing skill at the eighth grade of MTs Muhammadiyah 1 Ponorogo. It could be seen from the result of observation checklist. The observation checklist divided into three criteria. They were poor: 35,714%, fair: 57,142%, and good: 7,142%. Then in the second cycle, they were poor: 14,285%, fair: 28,571%, and good: 57,142%. It showed that the students' were more active and enthusiast in teaching and learning writing because the poor criteria decreased and the good criteria had improved. Some students' in cycle 1 were not reach the minimum score 70, the percentage of cycle 1 result is 42,857% then it was improve in cycle 2 all of students were passed the criteria of minimum score and the percentage of cycle 2 is 92,857%.[7]

Third, the third previous research finding that can be consideration theory it taken theses university of Islamic studies Surabaya the researcher use quasi experimental design which analyse about the effectiveness of mind mapping in student' ability to identify supporting details in narrative text. Researcher two classes to do in this research, the classes are 9A as an experiment group and 9B as a control group, each classes got pre-test, treatment and post-test. Experimental group was given mind mapping technique as the treatment, while control group was given another technique which have similarity to mind mapping. Researcher use SPSS to calculate the data and the result showed that

---

[7] Fitriasari Happy, *Mind Mapping as a Technique to Enhance Students' Writing Ability in Recount Text,* (Ponorogo: IAIN, 2018)

the significant score between pre-test and post-test of experimental group is 0,002 <
0,005 which mean there is a difference score result between the test where there are
sixteen students whom the score increase. In post-test result based on Mann Whitney U
test, the significant is 0,000 < 0,005 which means there were difference average of post-
test and pre-test score.[8]

The research examines teachers understanding and perception about mind
mapping by using descriptive qualitative analysis. Two teachers were observed and
interviewed. The analysis based on Buzan framework of mind mapping. Firstly, the
analysis concern on teachers' understanding about the concept of mind mapping.
Secondly, the researcher analyzed teachers' perception about the use of mind mapping in
teaching and learning process. The result of the study showed that the teacher A and
teacher B have different understanding about the concept of mind mapping, teacher A has
good understanding because she could apply almost all principle and procedure when
teaching using mind mapping, meanwhile teachers' B understanding about the concept of
mind mapping is not very good, because she missed some principle and procedure when
using mind mapping in teaching learning activity and for teachers' perception, teacher A
and teacher B perceive mind mapping as useful strategy for teaching English mainly in
writing, because mind mapping has some beneficial factors for students' creativity.[9]

Fourth, the fourth previous research finding that can be consideration theory it
taken theses university Muhammadiyah of Makassar The researcher chooses Descriptive
Qualitative as a design of this research. The subject of the research T is the first grade

---

[8] Dewi, Aulia Sintya, *The effectiveness of Mind Mapping to improve Student' Ability in identifying Supporting Details of Narrative Text at MTs YPM 1 Wonoayu*, (Surabaya: UIN SunanAmpel, 2019)

[9] Ergitasari, Fouria, *"English Teacher' Understanding and Perception The Use of Mind Mapping Technique at SMA Islam Sidoarjo"*, (Surabaya: UIN Sunan Ampel, 2020)

students of RSBI class, X-1 in academic year 2008/2009 with number of students, 28 students and also the English teacher, who handles this class. The reasons why the researcher conducted this research here are: because the RSBI class has sufficient proficiency to conduct successful teaching speaking. There are four instruments to collect the data. First is documentation related to lesson plan and syllabus, second is non-participant observation, third is interview to the teacher, and fourth is questionnaire to the students. Using mind mapping in teaching speaking was so helpful to regulate students' ideas and stimulates the group presenter to extend the statement using their own words. It was interesting for them, because of its simple form and relatively easy to be understood. This study aims to describe the effectiveness of the model. Mind Mapping learning on the results of listening to short stories in class XI IPS Aisyiyah Sungguminasa High School. This research is descriptive quantitative.The research design used in this study was a pre-experimental design.

Achievement of learning outcomes listening to short stories for class XI IPS SMA students Aisyiyah Sungguminasa after taking part in learning with a learning model Mind Mapping has an average score (86.02) of 36 students who are the object all research is completed by meeting the Minimum Completeness Criteria (KKM) with the highest score of 96 and the lowest score of 75. From this achievement. From achievement In this case, (100%) students reached the Minimum Completeness Criteria (KKM). Withusing the Kolmogorov-Smirnov test, the results of the analysis of the average score for the pretest shows the value of a, namely p-value (2.32)> 0.05 and the average score for the posttest shows the value of a, namely p-value (0.22) > 0.05. This shows that the score pretest and posttest included in the normal category. Based on the results of SPSS

analysis, it appears that the value of p (sig.(2-tailed)) is 0.000 < 0.05 indicating that the average student learning outcomes after being taught using Mind learning media is more than 74.9 This means that H0 is rejected and H1 is accepted which is the average learning outcomes (posttest) of class XI IPS students of SMA Aisyiyah Sungguminasa.Based on the results of the research above, it can be concluded that the model Mind Mapping learning is more effective than conventional learning[10]

Fifth, the fifth previous research finding that can be consideration theory it taken theses university of Yogyakarta this research aimed to improve Accounting Learning Activities through the Implementation of Cooperative Learning Model Type STAD With Mind Map inthe class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017. This research was a Class Action Research that implemented the past two cycles with the subject class XI AK 4 Students of SMKN 2 Purworejo academic year 2016/2017 that amounted to 32 students. Data collection techniques were the observation, field note, and documentation. Data analysis technique was quantitative data analysis with a percentage. This analysis was done by processing the score accounting learning activities, calculate the percentage of each indicator and average overall indicators, presents the data, and draw conclusions. The results showed that the implementation of Cooperative Learning Model Type STAD With Mind Map can improve Accounting Learning Activities of Class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017 as evidenced by an increase in scores on each of the indicators of Accounting Learning Activities from cycle I to cycle II, as well as an increase in average score Accounting Learning Activities from the cycle I of 72.44% to 90.63% in cycle II,or

---

[10] Sri Reski Amaliah, *Keefektifan Penggunaan Mind Mapping Dalam Kemampuan Menyimak Cerpn Siswa Kelas SMA Aisyiyah Sungguminasa,* Universitas Muhammadiyah Makassar.(2018)

increased by 18.19%.[11]

2. Theoretical Framework

A. Definition of Mind Mapping

Mind mapping (or "idea" mapping) has been defined as 'visual, non-linear representations of ideas and their relationships. Mind mapping comprise a network of connected and related concepts. In mind mapping, any idea can be connected to any other. Free-form, spontaneous thinking is required when creating a mind map, and the aim of mind mapping is to find creative associations between ideas. Thus, mind maps are pricipally association maps. Formal mind mapping techniques argubly began with Buzan. These techniques involved using line thicknesses, colours, pictures and diagrams to aid knowledge recollection.

The main use of mind mapping is to create an association of ideas. another use is for memory retention-even if the advantages in the case of mind mapping might be marginal. An example of a mind map on the topic on things consider for a presentation is given in Fig. 1.[12]

---

[11] Novia Lestari, *Implementation of Coorperative Learning Model Type Stad With Mind Map To Improve Accounting Learning Activities of Class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017*, University of Yogyakarta (2017)

[12] Davies Martin, *Concept Mapping, Mind Mapping and Argument Mapping : What are The Diffirences and Do They Matter?* (Melbourne, Australia, Science+Bussiness Media B.V. 2010)
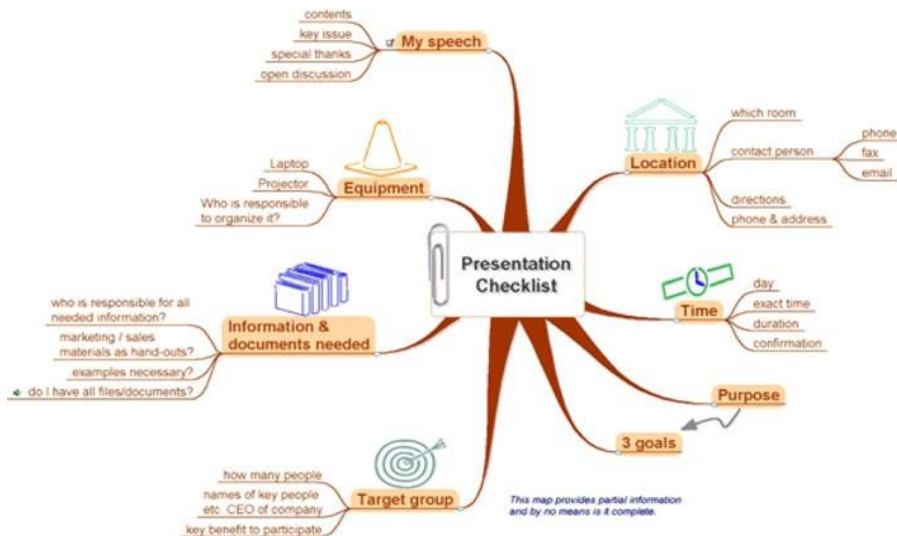
Fig. 1 A Mind Map ("Mind Maps Made With Mind Mapping Tool")

The advantages of mind mapping include its "free-form" and unconstrained structure. There are no limits on the ideas and links that can be made, and there is no necessity to retain an ideal structure or format. Mind mapping thus promotes creative thinking, and encourages "brainstorming". A disadvantage of mind mapping is that the types of links being made are limited to simple associations. Absence of clear links between ideas is a constraint. Mind maps have been said to be idiosyncratic in terms of their design, often hard for others to read; representing only hierarchical relationships (in radial form); inconsistent in terms of level of detail; and often too complex and missing the "big picture". Mind mapping is also limited in dealing with more complex relationships.[13]

B. Five Steps in Mind Mapping

---

[13] *ibid*

1. Create a central idea

The central idea is the starting point of mind map and represent the topic one is going to explore. It usually includes an image that represents the mind map's topic.

2. Add branches

The next step is to add branches. The main branches which flow from the central image are the key themes. One can explore each key theme in greater depth by adding secondary branches, and so on.

3. Add keywords

Each new branch of the mind map must be correspond to and idea or concept. An important principle of mind mapping is using one word per branch.

4. Color code the branches

Color coding links the visual with the logical and helps the brain to create mental shortcuts. The color code allows categorizing, highlighting, and analysing information.

5. Include images

Images have the power to convey much more information than a word of sentence. They are processed instantly by the brain and are a universal language which can overcome any language barrier.[14]

C. Concept of mind mapping

Concept maps are graphical tool for organizing and representing knowledge. They

---

[14] Aquarinza, Novi Rahmania, *"Using Mind Mapping In Teaching Speaking Skills at RSBI Class SMA Negeri 1 Sidoarjo",* (Surabaya: 2009)

include unique concepts, usually enclosed in circles or boxes. Line and linking words between concepts suggest hierarchical relationships. They were originally designed to assist people in visualing the way organized and structured their thoughts. The allow one to from meaningful proposition about the map's theme and very much used in qualitative social research.[15]

Concept mapping as is traditionally understood today was first referred and subsequently The latter researchers remain involved in the discussion and dissemination of the value and utility of maps, mapping techniques, and analysis. In general terms, concept mapping is a technique that can demonstrate how people visualize relationships between various concepts. Related to cognitive maps in psychology concept maps provide a visual representation of dynamic schemes of understanding within the human mind[16]

Concept Mapping is a concepts that is presented meaningful relationships between concepts in the from of porposition. The concepts are associated with certain words.[17] From the several above, mind map have 2 steps to concept, here are five steps to do so.

1. **The Brainstorming Step**

   Brainstorming is a popular tool in generating many radical, creative ideas. It is particulary useful when one wants to break out of state, established patterns of thinking, so that one can develop new ways of looking at things. It also helps one overcome many of the issues that can make group problem–solving a sterile and

---

[15] Florian Rustler, *Mind Mapping for Dummies,* (England: John Wiley and Sons, Ltd, 2012)

[16] Johannes Wheeldon dkk, *Framing Experience: Concept Maps, Mind Maps, and Data Collection in Qualitative Research,* George Mason University2009)

[17] Muhammad Fahurzohman, *Model-Model Pembelajaran Inovatif,* (Jogjakarta: Ar-Ruzz Media,2015)

unsatisfactory process.

A. Origin of Brainstorming

Orbon's claimed that there are two principe which contribute to "ideative efficacy". Tthey are- I defer judgment reach for quantity.

Following these principle, he established four general rules of brainstorming with intention to reduce social inhibitions among grooup members, stimulate idea generation and increase overall ceativity of the group.

Orbon's four general rules of brainstorming.

focus on quantity, withhold criticism, welcome unusal ideas.combine and improve ideas.

a.   Focus on quantity.

This rule is a means of enchancing divergent production. Aiming to facilitate problem solving through the maxim quantity breeds quality. The assumption is that the greater the number of ideas generated, the greater the chance of producing a radical and effective solution.

b. Withhold critism.

In brainstorming, criticism of ideas generated should be put 'on hold' instead, participants, should focus on extending or adding to ideas, reserving criticism for a later 'critical stage' of th the process. by suppending judgement, partcipants will feel free to generate ununsual ideas.

c.   Welcome ununsual ideas

to get a god and long list of ideas, ununsual ideas are welcomed.

They can be generated by looking from new prespective and suppending assumptions. These new ways of thinking may provide better solutions.

d.   Combine and improve ideas.

Good ideas may be combined to from a single better good idea , as suggested by the slogan. It is believed to simulate the building of ideas by process of association.[18]

B. The Basic Meaning of Team Brainstorming

The team brainstorming involves each participant generating new ideas in front of other people, which is aimed to

promote a new combination of divergent ideas. Priority is given to the quantity and imagination of the vision.Brainstorming a technique to produce visions, is extensively applied in the context of the team. Osborne's main concern is how to improve the team's creativity. Osborne provides a theoretical basis for the results of team brainstorming.

C.Influencing Factors of Team Brainstorming

Osborne and other scholars proposed a number of prerequisites for the successful high-yield of team brainstorming. One particular consideration is that the team composition should have a heterogeneous structure. The different perspectives and different knowledge backgrounds with which team members to look at problems will offer more space and potential for the generation and impact of creative ideas. Thinking combinations of brainstorming compatible with intelligence will produce a very effective thinking resonance. Careful choice of team brainstorming participants

---

[18] Zhenguo Zhao dkk, *The Study on Influencing Factors of Team Brainstorming*, (China, Interactonal Journal of Bussiness and Management,2010)

and attracting thparticipation of members from different backgrounds will maximize cognitive incentives, allowing the team to generate more ideas[19]

2. **The Linking Step**

Linking step or concept linking has also been applied to bio-medical literature and is most smilar to the task of entity linking. Draw lines with arrows between the terms you think are related. Then, wrtie on each line a short sentence describing the relationships between the terms or concepts. Many arrows can originate or terminate on particularly important concepts.

D. **Technique of Mind Mapping**

Mind mapping is a technique of utilizing the whole brain by use visual imagery and other graphic infrastructure to form an impression Mind mapping is a way of taking notes that accommodates how the brain works naturally. Different from conventional notes written in the form of a long list down. Mind mapping will invite the mind to imagine a subject as an interconnected whole. Mind mapping is a high-level note-taking technique that utilizes the whole brain, namely the left brain and right brain. brain hemisphere the left functions to apply logical functions, namely forms of learning that. The steps follow a certain sequence. Therefore, the brain receive information sequentially. While the right brain tends to be more processing information in the form of images, symbols, and colors.Good note-taking techniques should help remember the information obtained, namely the subject matter, improve understanding of the material, help organize material, and provide new insights.

In the Mind Mapping technique there are several teaching techniques, one of which is a technique of utilizing the whole brain by using visual images and images other

---

[19] ibid

graphic infrastructure to form conclusions. Mind map (Mind Mapping) can also be categorized as a creative note-taking technique. Categorized to the imagination of the creator. This method was first introduced by Buzan inearly 1970s.[20]

E. Conventional Note-Taking Method and Mind Maps

The linear note-taking technique utilizes few skills of brain such as word, list, line usage and certain level of analysis capability. threrefore,

Individuals using conventional note-taking techniques look like athletes with one arm and one leg, who could only use half of their skills). Expressions associated with note-creation and note-taking are usually boring, punishment, head-ache, loss of time and failure According to Buzan , disadvantages of the conventional note-taking:

1. It causes waste of time because words which do not require any memorization are recorded.

2. Then, these unnecessary words are read repeatedly and this also causes waste of time.

3. Since they are not put in prominence, significant time is spent to find keywords.

4. Since connections among keywords are hindered by the words insignificant in terms of the essence of the subject, this result in waste of time. Intervened distances weaken connections among melted inside.[21]

F. Definition of Online Learning

Online learning is part of the modern transformations factor of higher education in

---

[20] Sri Reski Amaliah, *Keefektifan Penggunaan Mind Mapping Dalam Kemampuan Menyimak Cerpn Siswa Kelas SMA Aisyiyah Sungguminasa,* Universitas Muhammadiyah Makassar.(2018)

[21] Gayatri Delisa Santi, *The Implentation of Mnd Mapping Learning Method in Increasing Student Creative Thinking Ability on Clean Air for Health Theme at The Fifth Grade of Elementary School of Muhammadiyah 002 Penyasawan,* State Islamic University of Sultan Syarif Kasim Riau; (2020)

many countries. Some suggestions are made about the likely evolution that these combined changes will cause in the future and the likely issues for those working in higher education.[22]

Learning involves acquiring and modifying knowledge, skills, strategies, beliefs, attitudes, and behaviors. People learn cognitive, linguistic, motor, and social skills, and these can take many forms.

Let us examine this definition in depth to identify three criteria for learning.

From a philosophical perspective, learning can be discussed under the heading of epistemology, which refers to the study of the origin, nature, limits, and methods of knowledge. How can we know? How can we learn something new? What is the source of knowledge? The complexity of how humans learn is illustrated in this excerpt from Plato's Meno

I know, Meno, what you mean . . . You argue that a man cannot enquire (sic) either about that which he knows, or about that which he does not know; for if he knows, he has no need to enquire (sic); and if not, he cannot; for he does not know the very subject about which he is to enquire (sic).

Two positions on the origin of knowledge and its relationship to the environment are rationalism and empiricism. These positions are recognizable in current learning theories.[23]

1. Learning involves change—in behavior or in the capacity for behavior. People learn when they become capable of doing something differently. At the same time, we must remember that learning is inferential. We do not observe learning

---

[22] Shirley Bach dkk, *Online Learning and Teaching in Higher Education*, (England: Open University Press, 2007)

[23] Schunk, Dale H, *Learning Theories Educational Prespective,* (Boson: Pearson, 2012) 5

directly but rather its products or outcomes. Learning is assessed based on what people say, write, and do. But we also add that learning involves a changed capacity to behave in a given fashion because it is not uncommon for people to learn skills, knowledge, beliefs, or behaviors without demonstrating them at the time learning occurs.

2. Learning endures over time. This excludes temporary behavioral changes (e.g., slurred speech) brought about by such factors as drugs, alcohol, and fatigue. Such changes are temporary because when the cause is removed, the behavior returns to its original state. But learning may not last forever because forgetting occurs. It is debatable how long changes must last to be classified as learned, but most people agree that changes of brief duration (e.g., a few seconds) do not qualify as learning.

3. Learning occurs through experience (e.g., practice, observation of others). This criterion excludes behavioral changes that are primarily determined by heredity, such as maturational changes in children (e.g., crawling, standing).[24]

F. Concept Online Learning.

1. Transactional distance.

Distance in online learning is not defined by physical distance but transactional distance is a social, physhological, and relational distance between teacher and learners that is fluid and manageable based on a function of dialouge and structure.[25] The transactional distance is concerned with indpendent study and highlights the shared responsibility of the teaching/learning enterprise with the independence of the learner

---

[24] Schunk, Dale H, *Learning Theories Educational Prespective,* (Boson: Pearson, 2012

[25] ibid

seen asthe most important and desired outcome.[26]

Transactional distance can also be used to map the transactions from the behavioural aprroach to learning, especially for the novice learner who probably requires more structure with objectivist instruction at the beggining of an educational program versus the experienced and more mature learner who may require less structure, possibly within more constructivist patterns of teaching/learning. The varying use of structure and dialog can be apllicable to all generations of distance education-generations being especially characterised by the use of particular media ranging from the first print-based correspondence instruction through to the use of radio and television recorded programs: to the use of satellite and telephony, eventually to the World Wide Web for online or email based instruction.[27]

In addition, Keegan sees the inter-subjectivity of teacher and learner in the educational transaction by the way that they share control and responsibility of the two-way communications in distance education. Learning happens through mutual sharing and negotiations of meaning between teacher and learner in such a manner that the locus of control shifts from one to the other constantly through the feedback process, which Saba calls the "feedback loop" In response to Garrison that the creation of a visual model would go a long way towards clarifying the structural relationships among these concepts, the following is a proposed visual representation.[28]

---

[26] Sushita Gokool-Ramdoo, *Beyond the Theoritical Impasse: Extending the Apllication Transactional Distance Theory,* (USA: Athabasca University Press)2008

[27] ibid

[28] Sushita Gokool-Ramdoo, *Beyond the Theoritical Impasse: Extending the Apllication Transactional Distance Theory,* (USA: Athabasca University Press)2008

Figure 1. Distance education activity.

Distance education activity
Diagram 1

TRANSACTIONAL DISTANCE

STUDENT PERSISTENCE
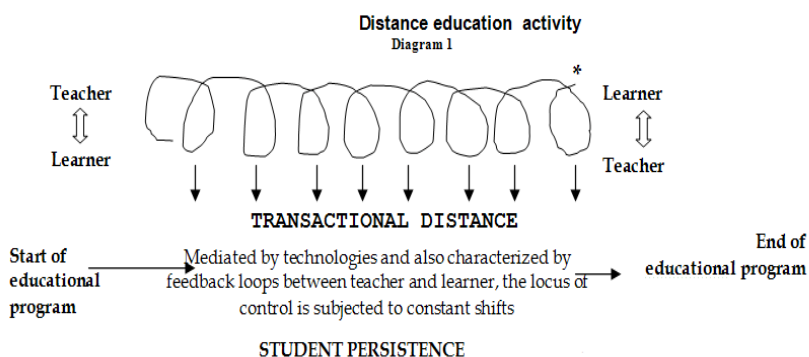
Adapted from Saba (2003; 2007)

Figure 1 demonstrates how part(s) of the theories or perspectives held by the theorists (described in Table 1) can be found within the Transactional Distance Theory, which contains all elements – including educational transaction mediated by technologies between teacher and learner – within a relationship of mutual respected that rests on mutually negotiated balance of control. As the locus of control shifts, and the learner persists along the educational program, the ultimate result is the creation of the persisting autonomous learner.[29]

At the start of the learning enterprise, there is a hypothetical teacher in a mutually responsible sharing relationship with a hypothetical learner. Beween them is transactional distance, which is a space for potential misunderstanding. The teaching0learner transaction happens in an environment that is characterished by a separationmof teachers and learners, and special procedures are required to remove this distance. It is a psychological and communication space that characteristic transactional distance. An inverse relationship between structure and dialog will determine the transactional distance, that is the more autonomous the learners, the

---

[29] Sushita Gokool-Ramdoo, *Beyond the Theoritical Impasse: Extending the Apllication Transactional Distance Theory,* (USA: Athabasca University Press)2008.

less structure is required – this gives rise to more dialog or interaction as meanings are constantly negoitaned in the educational enterprise.[30]

2. Cognitive, social, and teaching presences.

Another concepts of online learning education is presence. Presence has been holistically captured in the community of inquiry model – a model of teahing and learning environments with media enchanged interactions. There are three kinds of presence; cognitive prsence, social presence, and teaching presence. Presence – or having a sense of active participation – in distance education has increased with the expending use of affordances of communications technologies. Virtual worlds have been on the forefront of popular and education technology in the last three years and inovative methods of teaching and learning are emerging in the contexts. [31] Virtual worlds can be defined as digital, immersive environments that have three predominant characteristic they are not a game (in that there is no artificially imosed goal or competitive activities), navigation is by graphic representation, tipically an "avatar" , and the 3D environment is consructed and augmented both by particpants and designers.[32]

a. Cognitive presence

idicates the degree to which the learners can contruct meaning through constant exchange of thought questioning, answering, brainstorming, discussing, and solving a problem. Cognitive presence is defined as "the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical

---

[30] *ibid*

[31]McKerlich Ross, Anderson Tedy, Riss Mariane, Eastman Brad, *Student Perception of Teaching Presence, Social Presence, and Cognitive Preence in a Virtual World*, (Canada: MERLOT Journal of Online Learning and Teaching) 2011

[32] ibid

community of inquiry").[33] Beside that cognitve presence is one of the core components of inquiry. Previous study exploring cognitive presence found that cognitive presence has been associated with perceived and actual learning outcomes.[34] Cognitive presence was rated highly in our survey results – the second highest overall mean. This is promising, because while all the presence is shows that the student is constructing meaning and connecting knowledge. Of particular interest is the category that scored the highest – resolution – has to do with being able to apply the content to real life outside of the classroom. Low scoreson this highest, resolution stage of cognitive presence have been a regular concern of researchers using the COI to study other modes of distance education.[35]

b. Social presence

The degree to which learners can present themselves socially and emotionally in a learning community. Social presence may facilitate cognitive objectives by creating "the conditions for inquiry and quality interaction" in online learning contests. Where learners feel secure to openlycommunicte with each other and develop a sense of communication.[36] Social presence is a complicated social and psychology construct. The development of social presence reseacrh studies is dependent on researchers' theoritical framework of the concept as well as valid and reilable measures of the concept. Can be achieved when learners project their prsonal feelings, emotions,

---

[33] Olesova Larisa, Slavin Margaret, *Explorng the Effect of Scripted Roles on Cognitive Presence in Asynchronous Online Discussion*, (George Mason University) 2016

[34] Jee Jung Min, *Cognitive, Social, and Teaching Presence in a Virtual World and a Text Chat*, (Computers and Education) 2010

[35] Kerlich Mc Ross, Anderson Tedy, Riss Mariane, Eastman Brad, *Student Perception of Teaching Presence, Social Presence, and Cognitive Preence in a Virtual World*, (Canada: MERLOT Journal of Online Learning and Teaching) 2011

[36] Ibid

questions, and charactristics into the community. The study also found strong correlations between students' perceived social presence and perceived learning from individual course activities. Results showed that students' overall perceptions of social presence, students' overral percieved learning and students satisfication with instructor are all highly correlated. Students with high perceptions of social presence have high levels of perceived learning and perceived satisfaction with the instructor. At the same time, a signifcant correlation was also found between gender and overall social presence, with accounting for 5% of the variability in overall social presence. Simillar results were also found by other researcher at the same period such as.[37]

c. Teaching presence

Is the ability to manage and coordinate learning activities and environments.[38] Indicates two general functions, design of the educational and facilitation. The former function may be the primary responsibility of the teacher who select, organizes, present course content, and develops learning activities and assessment, providing clear expectations and basic guidlines on learning activities.[39] Teaching presence brings the social nd cognitive presence together and accounts for learners' needs and capabilities.[40]

---

[37] Cui Guoqiang, Lockee Barbara, Meng Cuiqing, *Building Modern Online Social Presence : A Review of Social Presence Theory and Instructional Design Implications for Future Trends,* (Shandong, China; Springer) 2012

[38] Jee Jung Min, *Cognitive, Social, and Teaching Presence in a Virtual World and a Text Chat*, (Computers and Education) 2010

[39] Chang Rhim, Hye and Heeyoung, Han, *Teaching Online*, (USA: Department of Medical Education) 2020

[40] Moore, R.and Miler , C.N. *(Fostering Presence Online Course: A Systematic Review)* 2008-2020

CHAPTER III

RESEARCH METHOD

A. RESEARCH METHODS

1. Research Approach and Research Design

1. Research Approach

This research applies about a qualitative approach. The kind of approach is case study. The research data is collected naturally by observing a phenomenon while it is happening and by conducting a verbal communication with the respondents. A qualitative approach research also promotes human (research) as the resrach instrument. A qualtative research also takes into account the process rather than the outcomes or the product.

2. Research design

Research design is based on considering these three elements as well as the research problem in this study, the personal experiences of the researcher, and the audiences for whom the research study, from whom the research study will be written.[41]

Conducting this topic, the researcher applies qualitative approach and research design by observing in direct location at school, observing teacher and the students in the teaching learning process, catching information from several interviewers within its real-life context naturally. In this research, the researcher used qualitative, qualitative research is a mean for exploring and understanding the meaning individuals or group ascribe of social or human problem. The process of research, the researcher can get clearly the data and making interpretation of the

---

[41] Creswell John W, *"Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

meaning the data.

3. **Researcher's Role**

Characteristics of qualitative research can not be separated from participant observation. Because the role of the researcher is to determine the overall scenario. Therefore, in this study the researcher is the key instrument, as a full participant and as a data collector, while the other instruments are the supporting instruments.

In this section, the researcher explains that as an instrument, the researcher must be interviewing, observing, and collecting data to get the related data that will later be processed, so that researchers get results according to what will be studied, so here researchers can obtain mind mapping data based on online learning. in the 10th grade of SMKN Ngraho Bojonegoro.

4. **Research Setting**

The reason the researcher chose the place/location to be researched was to find out how to apply mind mapping in online learning, and the responses of students and teachers to the mind mapping method in online learning, besides that the researchers also knew about the state or the learning process at the place Jl. Raya No. 613 Ngraho Bojonegoro or SMKN Ngraho Bojonegoro.

5. **Data Source**

In this study the primary data can get during online learning process at SMKN Ngraho Bojonegoro. Conducting the primary data, the researcher several descriptions on the result of source like, observing, interviews, and documentation. In this data source can be got person, something, place, can

get information for the researcher. On this part, the researcher can gets the data from several sources, such as the teacher, the student, observation, interviews, and documentation.

6. **Data Collection Technique**

The researchers use some technique collecting data. Its aims to get a valid information about teaching learning process in an activities class. These are the instrument use to collect the data:

a. **Observation**

In this study, qualitative observations are those in which the researcher takes field notes on the behaviour and activities of individuals at the research site. The researchers can records, in an activities at the research site. [42]

The researcher observe at the school, and to observe model teacher's especially in online learning class, the researcher write everything happens during in teaching online learning process for beginning the learning until done the learning. During learning process the researcher joined in the class the researcher can get a valid the data.

b. **Interview**

In this next collection data the researcher can get another data with interviews, the researcher conducts face-to-face interviews with participants, interviews participants by telephone, or engages in focus groups interviews. [43]

The researcher prepares the questions and take some interest

---

[42] Creswell John W, *"Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

[43] Creswell John W, *"Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

conversation to get information a valid data. The researcher will interviews the student and the teacher of ten grade at SMKN 2 Ponorogo. How the teacher implement mind mapping during online learning, and how the student enjoyed and can get the responses from the students.

c. **Documentation**

During the process of the research, the researcher collect the data, these may be public documents (minutes of meeting, official reports) or private documents (personal journals, diaries, letters, and e-mails)[44]

In this research, the researcher can get another data from documentation, the researcher prepare such as a photo during activity in learning, observation, and interviews, school document (vision, mission, teacher's schedule, and the school profile). And other documentation the researcher take a video during a process activity in learning, so the documentation can get another information, are going to be helper for the researcher on supporting the approvements which this research.

d. **Triangulation**

According William Wiersma, triangultion is qualitative cross-validation it assesses the sufficiency of the data according to the convergence of multiple data source or multiple dta collection procedures.[45]

This research is using technque by source. It means the researcher using the way: (a) the corporation between result of observation and result of interview, (b) the corporation between public opinion and individual opinion (c) th corporation between the opinion public about reserach

[44] Creswell John W, *"Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

[45] Sugiono, *Memahami Penelitian Kualitatif*, 125

situation and the opinion of a long time, (d) the corporation between result of interview and related of document.

7. Data Analysis Technique

The process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting different analyses, moving deeper into understanding the data and representing the data.[46]

1. Data Reduction

Data reduction is data that is carried out by researchers, as a process of selecting data that aims to focus on things that are considered important or important, classifying or differentiating important data and removing some data that is not important, in such a way that the data can be drawn conclusions easily and produce meaningful information.

2. Data Display

Data display is an organized, composed assembly of information which concluded a conclusion written. This part verified as the analyst proceeds which may be as brief as a fleeting second thought crossing the researcher's analyst during writing, in a short excursion to field notes, or through argumentation to develop the data.

8. Checking and Validity of Findings

When the qualitative research, the researcher can be conclusion the whole data, in order to check and validity the data through checking some components like:

1. The strenuously observation.

---

[46] Creswell John W, *"Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

a). Observing mind mapping based in online learning at ten grade at SMKN Ngraho Bojonegoro.

b). Studying deeply until the researcher finds several valid data consistly.

9. **Research Procedure**

1. Planning

   This procedure of the research, the researcher arranging a plan before a research, choosing institution such as class and the teacher which is applied the model in learning, observation the teacher when learning process, preparing instrument that support researcher's valid the data.

2. The procedure of data analysis

   In another procedure the researcher perfoms data analysis, processing data aznd teachers in the learning process, beside that researcher also make observations through interviews that will be submitted to sources according to the topics to be discussed, here researchers can also describe or taken an outline of the conclusions to be summarized and then processed into a data that will be presented for research.

3. Research report

   The researcher here is last step in the research sequence, here the reseacrher will write the final report after all data has been done on the findings studied, the researcher conducts observations and interviews, then the data is processed so that the research results will be made a final report, here the researcher do observations in accordance with the topics raised, as well conducting reearch with steps in sequence. The topics or objects studied are SMKN Ngraho, with the title Mind Mapping Based On Online Learning. Where researchers make observations when online

activities or learning begin.

CHAPTER IV

RESEARCH FINDINGS

A. General Data

1. History of SMKN Ngraho Bojonegoro

SMKN Ngraho Bojonegoro this school has been established sice 2004 and has graduated several generations to date. SMKN Ngraho itself is located on Jl. Raya Ngraho No.613, over time in 2015 this school began to build a new building which is ussually called campus 2.

In contrast to the campus 1 building, SMKN Ngraho building campus 2 is located between the house of residents whho enter the hilly area, but not far from the highway, the existence of building 2 is because building 1 or campus 1 has several classes that are not enough to accommodate the number of students who have an impact on building new buildings, beside that campus 2 building has a large area compared to campus 1, but some facilities on campus 2 is not adequate due to rehabilitation or development, entering 2020 the facilities at the school are gradually starting to be adequate with wifi, several practicum rooms, computer labs, OTKP workshops, UKS, libraries, mosque, fields, and sports buildings that can be rented out for importan events or other events.

At SMKN Ngaraho there are many skill competencies including:

TKJ is one of the expertise competencies in the Informatics and Communication Engineering (ICT) Expertise study program. TKJ is now visible in the eyes of the public where its direction is approaching practitioner science which can be directly implemented in the world of work. The rapid development of technology will be a challenge in the world so that good skills are needed in

the field of technology, one of which is networking.

TKJ students will be provided with theories from the beginning of computers and networks that apply the practice of assembling computers, repairing laptops. In addition, TKJ students also learn about the development of operating systems and software such as Windows and Linux operating systems and how to install them. The TKJ major, apart from studying this, is also equipped with computer troubleshooting, computer maintenance, and other hardware maintenance.

The TKJ Department produces graduates who have integrated knowledge, skills, values and attitudes and learn in the field of technology, and have Technopreneur insight to face the development of the ASEAN Economic Community (AEC). TKJ is one of the expertise competencies in the Informatics and Communication Engineering (ICT) Expertise study program. TKJ is now starting to be seen in the eyes of the public where this direction is approaching practitioner science which can be directly implemented in the world of work. The rapid development of technology will be a challenge in the world so that good skills are needed in the field of technology, one of which is networking.

TKJ students will be provided with theories from the beginning of computers and networks that apply the practice of assembling computers, repairing laptops. In addition, TKJ students also learn about the development of operating systems and software such as Windows and Linux operating systems and how to install them. The TKJ major, apart from studying this, is also equipped with computer troubleshooting, computer maintenance, and other hardware maintenance.

The TKJ Department produces graduates who have integrated knowledge, skills, values and attitudes and work in the field of technology, and have Technopreneur insight to face the development of the Asean Economic Community (MEA).

Automotive Light Vehicle Engineering

Light Vehicle Engineering is the study of land transportation equipment that uses machines, especially cars, which began to develop as a branch of science along with the creation of car engines. In its development, the car is increasingly becoming a complex means of transportation consisting of thousands of components belonging to dozens of systems and subsystems. Therefore, Light Vehicle Engineering has developed into a broad science and covers all systems and subsystems.

Light Vehicle Engineering, which used to be Automotive Engineering, equips students with light vehicle knowledge to be able to carry out maintenance and repair of car components independently, maintain and repair cars according to standards determined by the factory, maintain and repair cars in workshops or companies where where he works, as well as creating new jobs for himself and others.

The purpose of the Light Vehicle Engineering Skills Competency at SMK Negeri Ngraho is to equip students with the knowledge, attitudes, behaviors and skills to be competent in:

1. The field of Light Vehicle Engineering expertise is given, so that they are able to develop and apply in their work independently and can fill job vacancies in the business world and the industrial world as a reliable middle-level workforce.

2. Havze character, be able to compete and develop a professional attitude in the competence of Light Vehicle Engineering expertise.

3. Creating own Jobs or entrepreneurship in the field of Light Vehicle engineering expertise competence.

4. Continuing to a higher level of education according to the competencies

possessed

Graduates of the light vehicle engineering competency at SMK Negeri Ngraho are equipped with knowledge and skills in automotive motor maintenance and repair, maintenance and repair of automotive power transfer systems, automotive chassis and suspension maintenance and repair, maintenance and repair of automotive electrical systems and equipped with entrepreneurial skills in accordance with with the development needs of society, the industrial world.

Office Automation and Governance is a science that learns about the basic knowledge in the field of data management and management so as to speed up a job and complete tasks efficiently.

Office Automation and Governance

Office Automation and Governance is a science that learns about the basic knowledge in the field of data management and management so as to speed up a job and complete tasks efficiently.

Model design and building information

This skill competency has a basic function, namely creating individuals who are skilled in the field of interior and exterior modeling, not only stopping in the realm of modeling but also being able to analyze and estimate budget plans, and oversee a job so that it can run according to a predetermined plan.

The construction and property business is a competency skill that learns about the basics of building a building.

2. **Vision and Mision of SMKN Ngraho Bojonegoro**

   a. **Vision**

Make school that excel in achievement, produce, graduates who are creative and environmentally friendly.

b. Mision

1. Prepare educational facilities and infrastructure in accordance with technological deveploments.

2. Improve the learning process in accordance with national ucation standarts.

3. Improve the competence of education and education personnel.

4. Develop school culture to empower students to become moral, noble, creative, and competitive human beings

5. Prepare graduates who are skilled, virtuos, entrepreneurial, and able to compete in the global era.

6. To instill dicipline, social sensitivity, the spirit of nationalism and partiotsm to the school community.

3. Profil of SMKN Ngraho Bojonegoro

a. School Name   : SMKN Ngraho

b. NPSN   : 20541263

c. Date of Built   : 17/12/2003

d. Level   : Senior High School

e. Status   : Negeri

f. Accredetation   : B

g. Headmaster   : Ahwan Hadiwiyanto, S.T.

h. Adress of School   : Jl. Raya No. 613 Ngraho

> Village   : Tanggungan

> Sub Distric   : Ngraho

> District   : Bojonegoro

i. Map Position   : -7.267711, 111.523654

j. Website   : http://smknngraho-bjn.sch.id/

k. Email   : smkngraho@gmail.com

4. **Teachers, Staff, and Students of SMKN Ngraho Bojonegoro**

School community is the most important thing and affects learning and he school environment, without the rsidents in the school education will not run well, some there are teachers consisting of 33 staff consisting of 12 and also a number of 450 students at SMKN Ngraho.

5. **Infrastructures of SMKN Ngraho Bojonegoro**

Infrastructure is the most important part in the school, the infrastructure itself also affects the school environment where the infrastructure is used as a facility in the learning process at school, the facilities or infrastructure at SMKN Ngraho are adequate to use, some other faclities are also fairly good, as for some facilities that need to be repaired, and there are also some buildings under renovation.

B. **Specific Data**

The data resulting from the description were collected from observations and interviews. Observations were made in two stages. The first stage was carried out before the submission of the thesis title on July 19, 2021. The second stage was carried out after the submission of the title on September 30, 2021. This observation was carried out to provide further information related to school culture and others at SMKN Ngraho. after that the researcher conducted interviews with the English teacher of SMKN Ngraho and several students of SMKN Ngraho, tenth grade. This is done to provide information about teaching and learning through the mind mapping method in online learning. After conducting observations and interviews, the data obtained are as follows:

1. **Teacher Implementation Mind Mapping Method in Online Learning at 10th Grade SMKN Ngraho Bojonegoro**

The application of the learning method is very important to use in learning, some learning needs to have a method that is applied, from this application the teaching staff will know how well students understand the ability of students in learning in the applied method, one of which is the mind mapping method where this mind mapping method is often used. used in online learning by Mrs. Ratna Widyawati S. Pd, as an English teacher at SMKN Ngraho.

Mrs. Ratna Widyawati S. Pd said:

Actually from the question asked by you, English is indeed a difficult subject for ordinary people, on the other hand English is a foreign language that not everyone can, and I also feel from all general subjects 70% of students have difficulty in language subject English, especially if the material I teach is related to tenses, some children do experience that difficuly.

In terms of the methods I use almost all of them, and there I also start to think about what is suitable for the method that will be taught in class later, now one of the methods that you talked about mind mapping method.

Mrs. Ratna Widyawati added :

I think the mind mapping method is easy to apply and also makes it easy for students, but some special classes in the tenth grade have difficulty understanding the method, not only mind mapping that I apply in class I also apply some methods, but the students also still the same, in my opinion English is a difficult subject to be directly understood by them[47].

From the statement of Mrs. Ratna Widyawati, who explained that it was necessary to have difficulties in understanding English. Regarding the mind mapping lesson itself, students also find it difficult to understand, but regarding the mind mapping method there

---
[47] Interview 09/08/2021

are several different responses or opinions from some students.

As for the students themselves about this method, one of them is Tino Irawan, a tenth grader, he said:

In my opinion, the mind mapping or method used by Mrs. Ratna herself is a bit easy to understand, apart from the application of the method itself, I also like the way she teaches, maybe some of them do not understand the way she conveys it because the language used is English and also these subjects not many people like.[48]

Verzina Heksa Julihenza said:

In my own opinion the mind mapping method is easy to understand, moreover this method is suitable for use in offline and online learning, because what I know is that mind mapping only takes the essence of the reading, it can be said that it is like a small summary maps.[49]

From the above opinion, both of them have the same opinion about the application of the mind mapping method, it can be said that the theory that follows orbon in brainstorming is one of them with hold criticism where students develop ideas, which focus on criticism so that students can also create ideas. new and developed. as for the opinion of other students regarding the response, namely Hendriyanto Rafi Ramdhan said :

I don't know about this method, I also don't know what mind mapping is but I think this method seems easy to understand and digest by students and Mrs. Ratna Widyawati as an English teacher can develop this method even more so that it is easier to learn.[50]

Siti Nur Inayah also added :

I agree Rafi's opinion, the method make a easy to understanding in online learning or offline but, some students do not understand, I myself sometimes do not understand but I think this method is easy it's just that I don't understand the translation.[51]

From another opinion about the mind mapping method, the researcher also

---

[48] Inerview 09/08/2021

[49] Interview 09/08/2021

[50] Interview 09/08/2021

[51] Interview 09/08/2021

made observations about this, in addition to the students being interviewed, some also added such as one of the students.

Hedriyanto Raffi Ramdhan added :

I just want to add that not all of the mind mapping methods can be understood well, like the opinions of other friends, I honestly don't really understand the teacher or others when teaching in class, I only use any method, just some methods if I understand me will follow the lesson well.[52]

From some of the opinions above, the method applied by the English teacher partially understands the application or implementation. the application of the mind mapping method itself in this school is enough to make some of the children here understand this method, besides that this method can also be developed again in online learning, given that it is that online learning continues, this can be seen from the current state of affairs. requires activities or activities to be carried out at home or can be called work from home (WFH).

Knowing some of the opinions earlier online learning can be done using the min mapping method, starting from the opinions earlier that the implementation of mind mapping can't all be understood, but some do understand, plus if the student doesn't like English some questions submitted by researchers regarding their English subjects only slightly liked English.

From here we can outline the implementation of the mind mapping method, not all of them can understand, only some understand, but the mind mapping method is quite effective if used in online learning that is applied at this time. Besides that, the students' abilities cannot be equalized, because most of the students in this school don't like English.

---

[52] Interview 09/08/2021

2. **The Responses Students' About Implementation Mind Mpping Method in Online Learning at 10th Grade SMKN Ngraho Bojonegoro**

The application of methods in learning is very important in learning this also involves the teacher in pursuing his students so that these students can understand the material given, this also affects the teacher to find out feedback or student responses to the method applied, one of which is Mrs. Ratna Widyawati who applying the mind mapping method in online learning

she said:

This method is actually easy for me, but some students also find it difficult with this method, especially if it is applied in online learning, some of the classes that I hold almost all of them do not understand, even in each of my lessons explain the material just by taking the outline, because the basic tenth graders are not fully able to master English lessons, you could say for the tenth graders who are low in English lessons, but different from the TKJ majors they can still understand a little bit of language lessons English, even the mind mapping method is also easy to apply in the class.[53]

From Mrs. Ratna Widyawati regarding the response to the step mind mapping, she explained that

She thought it was easy but if it was applied it was enough to make children feel difficult, especially children who don't like English subjects[54]. From here we can conclude that as in Orbon's theory in the brainstorming step, namely withhold criticism theory, we can also see how students respond to the mind mapping method.

Siti Nur Inayah said :

---

[53] Interview 0908/2021
[54] Interview 0908/2021

I myself don't know what mind mapping is, but after explaining it to you, I understand, I think this method is easy to understand, especially if it is applied in online classes, it can make it easier for real students in any material[55].

Toni Irawan said:

I agree with what he said, especially considering the current conditions, online learning has been implemented since the corona and pandemic, so mind mapping is also good if applied in online learning.[56]

From another opinion about the mind mapping method, the researcher also made observations about this, in addition to the students being interviewed, some also added such as one of the students.

Verzina Heksa Julihenza added:

I think it can make it easier for students, but indeed most students don't understand what mind mapping is, from my own experience I really like English lessons, but I need to understand more in translation or vocabulary in English. [57]

Hendriyanto Rafi Ramadahan also added:

Most of the students here don't like English lessons, but I think the mind mapping method is easy to understand in every lesson, especially English.[58]

Verzina Heksa Julihenza said:

In my own opinion the mind mapping method is easy to understand, moreover this method is suitable for use in offline and online learning, because what I know is that mind mapping only takes the essence of the reading, it can be said that it is like a small summary maps.[59]

Toni Irawan added:

---

[55] Interview 09/08/2021

[56] Interview 09/08/2021

[57] Interview 09/08/2021

[58] Interview 09/08/2021

[59] Interview 09/08/2021

I also agree/and agree with Verzina, I don't think it's mind mapping, but after explaining what mind mapping is, I understand and know how much, again like at the beginning I also said that the mind mapping method is also easy to understand, moreover this method also seems often used by teachers not only in English lessons but in all subjects.[60]

From some of these understandings and explanations, some students understand that it is a method after it has been explained previously, some students also understand, it's just that before being explained they understand that it is a small summary that is mapped out and only a few points are taken.

From some of the opinions above, related to the discussion of mind mapping applied by English teachers, some understand about mind mapping or mind mapping images. so that the application of the mind mapping method itself in this school is enough to make some of the children here understand what mind mapping is or the notion of mind mapping. Besides that, mind mapping can also be developed again in online learning, considering that online learning continues, this can be seen from the current situation. requires activities or activities that must be done at home or can be called work from home (WFH).

From here we can outline the of the mind mapping method, not all of them can understand, only some understand, but the mind mapping method is quite effective if used in online learning that is applied at this time. Besides that, the students' abilities cannot be equalized, because most of the students in this school don't like English.

From several opinions or student responses to this method, it can be concluded that this method is well received, or easy to understand, but most students also

---

[60] Interview 09/08/2021

refuse or do not understand the mind mapping method because some of these students do not like English lessons.

CHAPTER V

DISCUSSIONS

A. **The Analysis of Implementation Mind Mapping Method in Online Learning at 10th Grade SMKN Ngraho Bojonegoro**

According to Florian Rutsler, Mind mapping is a visual technique for structuring and organising thoughts and ideas. If this sound all rather general and wide-ranging, they you can also use of mind mapping in a general and wide-ranging fashion. But also mind map is a graphic tool used to collect, create, manage and exchange information. It represents information via the spatial organization of concepts/topic, ideas, words, or other items.[61]

Mind mapping is a method of learning, either directly or indirectly, while mind mapping can be used in online learning according to David Watson, online learning is part of the modern transformations factor of higher education in many countries. Some suggestions are made about the likely evolution that these combined changes will cause in the future and the likely issues for those working in higher education.[62]

In online learning this method is also applied to English subjects, as before the researchers conducted interviews with informants to provide some information regarding the application of the mind mapping method in online learning in the tenth grade. the data is collected into one, it is concluded to find out the results of observations, there are several opinions from informants or sources related to this

---

[61] Florian Rustler, *Mind Mapping for Dummies,* (England: John Wiley and Sons, Ltd, 2012)

[62] Shirley Bach dkk, *Online Learning and Teaching in Higher Education*, (England: Open University Press, 2007)

according to

Mrs Ratna Widyawati,

In English subjects some children it is easy to understand but most of it is difficult to understand English lessons, even any method I have applied, including mind mapping, but if the student does not like English subjects, students will also have difficulty understanding it.[63]

B. The Analysis of Responses Students' About Implementation Mind Mapping Method in Online Learning at 10th Grade SMKN Ngraho Bojonegoro.

After the researchers conducted interviews with teachers and several tenth grade students at SMKN Ngraho the researchers concluded several responses from them, especially according to Mrs. Ratna Widyawati as an English teacher, it can be seen from some students who can understand after I teach, I think the feedback from them is quite good, but there needs to be an understanding of some vocabulary that must really be learned, I myself when teaching use this method as well need to translate a lot, especially when in online learning sometimes students don't know if some vocabulary is not translated into Indonesian.

Verzina Heksa Julihenza said:

I think it's easy, but I personally need to learn a lot more vocabulary, mind mapping itself is also suitable for use when learning online, especially during a pandemic like this, for me mind mapping is also not so difficult for me, it's just that we need to learn a lot of translation, or vocabulary.

Tony Irawan added:

I totally agree with Heksa's opinion, because it also makes it easier for me, in

---

online learning like today, personally I think most students don't need complicated methods, such as several methods, including mind mapping, I also I like it if every teacher uses a method like this, especially English subjects, besides that there is also a need for vocabulary that must be studied further.

Siti Nur Inayah also added:

I also agree that mind mapping is indeed easy, but for some students it may be difficult, especially for students who don't like English lessons, I think this method is also suitable for use in online and offline learning.[64]

Hendriyanto Rafi Ramadahan also added:

Most of the students here don't like English lessons, but I think the mind mapping method is easy to understand in every lesson, especially English.[65]

From some of the opinions above, related to the discussion of mind mapping applied by English teachers, some understand about mind mapping or mind mapping images. so that the application of the mind mapping method itself in this school is enough to make some of the children here understand what mind mapping is or the notion of mind mapping. Besides that, mind mapping can also be developed again in online learning, considering that online learning continues, this can be seen from the current situation. requires activities or activities that must be done at home or can be called work from home (WFH).

From here we can outline the of the mind mapping method, not all of them can understand, only some understand, but the mind mapping method is quite effective if used in online learning that is applied at this time. Besides that, the students' abilities cannot be equalized, because most of the students in this school don't like English

---

[64] Interview 09/08/2021

[65] Interview 09/08/2021

CHAPTER VI

CLOSING

A. CONCLUSSION

This chapter is a summary of the results of the study, researchers have concluded several conclusions including:

1. The teacher here uses the mind mapping method in online learning, especially in English subject well.

2. The teacher applies the mind mapping method in all classes, especially in class 10th grade.

3. In the mind mapping method not all students here can understand the method applied.

4. Student need more detailed understanding of the mind mapping method especially for English lesson.

5. On the other hand, some students find the mind mapping method helpful and they think this method is suitable if applied in online learning, because the method makes it easier for them.

B. SUGGESTIONS

a. For the English teacher

Any method used in the learning process is good, including mind mapping itself, but there needs to be feedback or deepening of the material after the subject ends, besides that the steps or stages in using the mind mapping method are also easy for the students to understand.

b. For the students

students have to read more and manage their time well, even in online classes, they need to spend time studying and it is also necessary to review some material, while evaluation can also be done with teachers who teach or teachers related to the subject. the lesson. The importance of evaluating so that students can better understand the material presented in addition to making students also more active in asking questions in class.

c. For the readers

readers can also apply this method to the learning process either face-to-face or online, this method makes it easy for those who want to understand quickly, in addition to those who have difficulty in each material, this method can also be used simply, they can take an outline and can develop well.

d. For the researcher

For the researcher themselves , in the future this research can be useful for other people and researchers, researchers can also apply the mind mapping method in a study, which later can be used properly and easy to understand for others.

REFERENCES

Florian Rustler, *Mind Mapping for Dummies,* (England: John Wiley and Sons, Ltd, 2012)

Tony Buzan and Barry Buzan, *The Mind Map Book* (London : Journal of Economic Education), 2004, p.4

Zhou-Hang and Ting Wu-Qiu, "*Impact of Mind Mapping on the Critical Thinking Ability of Clinical Nursing Students and Teaching Application",* Journal of International Medical Research, (2020)

Shirley Bach dkk, *Online Learning and Teaching in Higher Education*, (England: Open University Press, 2007)

Fitriasari Happy, *Mind Mapping as a Technique to Enhance Students' Writing Ability in Recount Text,* (Ponorogo: IAIN, 2018)

Dewi, Aulia Sintya, *The effectiveness of Mind Mapping to improve Student' Ability in identifying Supporting Details of Narrative Text at MTs YPM 1 Wonoayu*, (Surabaya: UIN SunanAmpel, 2019)

Ergitasari, Fouria, *"English Teacher' Understanding and Perception The Use of Mind Mapping Technique at SMA Islam Sidoarjo",* (Surabaya: UIN Sunan Ampel, 2020)

Aquarinza, Novi Rahmania, *"Using Mind Mapping In Teaching Speaking Skills at RSBI Class SMA Negeri 1 Sidoarjo",* (Surabaya: 2009)

Davies Martin, *Concept Mapping, Mind Mapping and Argument Mapping : What are The Diffrences and Do They Matter?* (Melbourne, Australia, Science+Bussiness Media B.V. 2010)

Muhammad Fahurzohman, *Model-Model Pembelajaran Inovatif,* (Jogjakarta: Ar-Ruzz Media,2015

Zhenguo Zhao, *The Study on Influencing Factors of Team Brainstorming*, (China, Interactonal Journal of Bussiness and Management,2010)

Schunk, Dale H, *Learning Theories Educational Prespective,* (Boson: Pearson, 2012)

Sushita Gokool-Ramdoo, *Beyond the Theoritical Impasse: Extending the Apllication Transactional Distance Theory,* (USA: Athabasca University Press)2008

McKerlich Ross, Anderson Tedy, Riss Mariane, Eastman Brad, *Student Perception of Teaching Presence, Social Presence, and Cognitive Preence in a Virtual World*, (Canada: MERLOT Journal of Online Learning and Teaching) 2011

Olesova Larisa, Slavin Margaret, *Explorng the Effect of Scripted Roles on Cognitive Presence in Asynchronous Online Discussion*, (George Mason University) 2016

Jee Jung Min, *Cognitive, Social, and Teaching Presence in a Virtual World and a Text Chat*, (Computers and Education) 2010

Kerlich Mc Ross, Anderson Tedy, Riss Mariane, Eastman Brad, *Student Perception of Teaching Presence, Social Presence, and Cognitive Preence in a Virtual World*, (Canada: MERLOT Journal of Online Learning and Teaching) 2011

Cui Guoqiang, Lockee Barbara, Meng Cuiqing, *Building Modern Online Social Presence : A Review of Social Presence Theory and Instructional Design Implications for Future Trends,* (Shandong, China; Springer) 2012

Chang Rhim, Hye and Heeyoung, Han, *Teaching Online*, (USA: Department of Medical Education) 2020

Moore, R.and Miler , C.N. *(Fostering Presence Online Course: A Systematic Review)* 2008-2020

Creswell John W*, "Research Design Quallitative, Quantitative, and Mixed Mhetod Approaches",* (Sage Publications, 2009)

Novia Lestari, *Implementation of Coorperative Learning Model Type Stad With Mind Map To Improve Accounting Learning Activities of Class XI AK 4 Students of SMKN 2 Purworejo Academic Year 2016/2017*, University of Yogyakarta (2017)

Sri Reski Amaliah, *Keefektifan Penggunaan Mind Mapping Dalam Kemampuan Menyimak Cerpn Siswa Kelas SMA Aisyiyah Sungguminasa,* Universitas Muhammadiyah Makassar.(2018)

Gayatri Delisa Santi, *The Implentation of Mnd Mapping Learning Method in Increasing Student Creative Thinking Ability on Clean Air for Health Theme at The Fifth Grade of Elementary School of Muhammadiyah 002 Penyasawan,* State Islamic University of Sultan Syarif Kasim Riau; (2020)