

IDA AYU MADE SRI WIDIASTUTI



TEACHING & LEARNING STRATEGIES

FOR

EFFECTIVE CLASSROOM

TEACHING AND LEARNING STRATEGIES FOR EFFECTIVE CLASSROOM

Ida Ayu Made Sri Widiastuti

Unmas Press

Teaching Learning Strategies for Effective Classroom

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ISBN : 978-602-5872-43-3

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Publisher : UNMAS PRESS

Address : Universitas Mahasaraswati

Jl. Kamboja 11A Denpasar 80233

Tlp/Fax (0361) 227019

Web. www.unmas.ac.id

Printed: March 2020

FOREWORD

The effective learning process is absolutely a dream of every teacher to have for every teaching and learning process. This book is written in an effort to help teachers to gain that dream. The author therefore would like to devote her sincere gratitude to all parties for their contribution in writing this book. Finally, the book entitled "Teaching and Learning Strategies for Effective Classroom" could be completed to add literature about teaching and learning strategies.

This book is written based on the participation of various contributors. The author would like to express her sincere gratitude to her colleagues who have given ideas, thought, and encouragement to write this book. Special thanks are also dedicated to websites and blog writers whose writings were used as sources in writing this book. The author hopes that this book is useful for all readers who wish to enhance their horizons in teaching and learning strategies.

Denpasar 2019

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Daftar Isi

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CHAPTER ONE

ACTIVE DELIGHTFUL LEARNING

Learning activity is a process for the improvement of students' competencies. Every activity should be conducted seriously and well-planned to attain the objectives of learning. Learning should be conducted in a conducive, *Joyful and meaningful* atmosphere. Learning will be meaningful if there are *lesson objectives* that can be *obtained* by students and even teachers at each learning period. Learning objectives could be easily obtained if learning is memorable and enjoyable for the students.

Learning is an individual process, although most classes are arranged classically the teacher's attention must still be individual, because each child has his own peculiarities, and has his own level of development. Each student has a different level of cognitive, therefore, each student needs special attention.

Learning is also a social process, which involves social interactions by learning together to solve various learning problems. Learning

must be carried out in a conducive and pleasant atmosphere so that each student has the readiness to learn. Learning is a continuous process that does not stop at a certain level but is continually conducted until learners are really competent and have a variety of skills.

Learning is a process of building meaning, where every learning process must be meaningful for the growth and development process, both physically and psychologically, in a pleasant atmosphere. There is a paradigm shift in the learning process through various learning activities, media and technologies.

Learners should be engaged in active learning activities. Active learning implies learning that is designed to activate children, develop creativity in doing various things. It is also expected to create a conducive or meaningful learning environment that is able to give students the skills, knowledge and attitudes to life. The characteristics of learning called active learning include using multi-methods and multi media, involving all the senses, practicing and working in teams, utilizing the environment as a source of learning. Learning also needs to involve

multiple aspects, namely logic, kinesthetic, aesthetic and ethical.

In other words, learning needs to activate students and teachers, make learners creative, the results are effective and of course, all takes place with fun. All that needs to be directed at continuing education quality standardization in the face of local, national and global demands. It also needs active support from the community, parents and institutions and other stakeholders.

Active Learning means involving students both physically as well as mentally, morally and even spiritually to do the learning activities. Therefore, in learning, all aspects of humans should be developed properly to create civilized human beings. Through the quality of learning, students may gain various competencies for enhancement of living both for physical and mental development.

Moreover, learning activities should build students' creativity. Creative learning has meaning, not just implementing and applying curriculum references because the curriculum is just documents and plans, it needs to be criticized, it needs to be developed creatively, there are a thousand ways to learn and deepen one particular competency. therefore,

there is creativity in developing basic competencies and there is also creativity in its implementation in the classroom, including the use of the environment as a source, material and means for learning.

The environment can mean the physical and social environment, the physical can be a natural environment and natural phenomena while the social environment is all human behavior and its relationship with other humans, as well as the natural environment. Therefore, learning should include various sources of learning.

Learning is said to be effective if it the students achieved the learning goals. Teachers know whether learning in their class effective or not, at the end of each lesson they need to do an evaluation. The evaluation is not just a test for students, but a kind of contemplation conducted by the teacher and students to record data related to students' progress.

By knowing students' achievement, it allows teachers to see the objectives that they set have been achieved or not. Moreover, to know the degree of the quality of learning and to know what should be modified for improvement. Joyful learning should be interpreted broadly not just as fun, but learning

should also be enjoyed by the learners. Learning can be enjoyed if the learning is fun. Exciting is not just fun but there is an element of perseverance, inner motivation, after knowing something always eager to know more and have the resilience of further learning.

On the other hand, learning needs to provide a challenge to the students to think, to try and learn more, brimming with confidence and independently to develop optimally. Being a human who has the character full of confidence, be himself and have a competitive spirit in the atmosphere of togetherness. Schools, teachers, and the existing media and facilities only support and facilitate. However, even if it only facilitates schools and teachers and other stakeholders, including the government, it must strive so that the existing potential, as well as inner motivation and student independence, can be formed.

Learning also needs to provide challenges to motivate curiosity and learn further, be creative and innovative, be diligent and realize your own potential, which needs to be further developed. Learning must also spur a competitive spirit. Therefore, it is not just Joyful in the sense of having fun and having fun

together. In this way, the instructor needs to pay attention to many aspects, including how students are able to work in teams, able to present their ideas coherently and systematically both verbally and in writing.

Joyful Learning is only a part of active learning and active learning is only part of whole learning that involves many aspects. Clearly, every learning must be based on life. In each learning, there are at least two things that need to be trained and mastered by the students.

Joyful learning is an essential learning activity to be conducted to make the students always feel happy and learning. Students who are happy in learning, may learn faster and have better comprehension. By conducting joyful, creative and active learning make students learn properly to attain the learning objectives. This is because the learning activity is meaningful.

CHAPTER TWO

EXAMPLE NON-EXAMPLE LEARNING MODEL

Learning activities should be conducted to make the students learn comprehensively the learning materials delivered in the classroom by the teachers. One of the learning models which create the learning activities become meaningful is Example Non-Example Learning Model. This Learning Model is also commonly called an example and non-example learning model that uses images as learning media. Example non-Example learning model utilizes images in the delivery of learning material that aims to encourage students to learn critical thinking by solving the problems contained in the examples of images presented. The use of the image is arranged and designed so that students can analyze the picture into a brief description of what is in the picture. The use of the Example Non-Example Learning Model emphasizes more on the context of student analysis. This learning model can be applied in the lower class and also in the higher level, some psychological aspects and the level of development of low-grade students should be considered such as:

- a. written and oral language skills,

- b. analytical skills, and
- c. ability to interact with other students

The Example Non-Example Learning Model uses images through the projector, or the simplest way is a poster. The image that is used must be clear and visible from a long distance so that the students can see clearly.

The Example non-Example method is also a method that teaches students to learn to understand and analyze a concept. Concepts are generally studied in two ways. Most of the concepts we learn outside of school through observation and also are learned through the definition of the concept itself. Example Nonexample are tactics that can be used to teach concept definitions.

The strategy adopted from this method aims to prepare students quickly by using two things consisting of examples and nonexamples of an existing concept definition and asking students to classify both according to existing concepts.

- a. The example provides a description of something that is an example of material being discussed.
- b. non-example provides an illustration of something that is not an example of material being discussed.

The Example non-Example method is important because a concept definition is a concept that is known primarily only in terms of its definition rather than its physical nature. By focusing students' attention on examples and non-examples it is hoped that they will be able to encourage students to go deeper understanding of the learning material.

Advantages of the Example non Example learning model include:

1. Students depart from a definition which is then used to expand understanding of the concept more deeply and more complex.
2. Students are involved in a process of discovery, which encourages them to develop concepts progressively through the experience of Example non-Example.
3. Students are given something opposite to explore the characteristics of a concept by considering non-example parts that are possible there are still several parts which is a character from the concept that has been described in the example section.
4. Students are more critical in analyzing images.

5. Students know the application of the material in the form of sample images.
6. Students are given the opportunity to express their opinions.

Some weaknesses Example Non Example are all material can not be presented in the form of images and takes a long time. Learning procedures are as the following:

- 1.The teacher prepares pictures according to the learning objectives.
2. The teacher attaches pictures on the board or shows them through a projector.
3. The teacher gives instructions and gives the opportunity for students to pay attention or analyze images.
- 4.Through group discussions of 2-3 students, the results of the discussion from the analysis of the images are recorded on paper.
- 5.Each group was given the opportunity to read the results of the discussion.
- 6.Starting from the comments/results of student discussions, the teacher begins to explain the material according to the objectives to be achieved.
- 7.Conclusion

CHAPTER THREE

PICTURE AND PICTURE LEARNING MODEL

Learning media is various types of components in the student's environment that can stimulate to learn. In addition, the media are all physical tools that can present information messages and stimulate students to learn. Then it can be concluded that Media is any tool that can be used as a message distributor to stimulate students' thoughts, feelings, and willingness to learn. Media There are many types and kinds of learning, one of which is media visual, namely picture.

Picture Learning Model is one cooperative learning model which can be developed in the classroom. The cooperative learning model is a learning model that emphasizes the existence of groups. Cooperative learning is learning that consciously and systematically develops interactions that are sharpening, caring, and caring. The Picture and Picture learning model is a learning method that uses pictures and is paired or sorted into a logical sequence.

This learning has the characteristics of active, Innovative, creative, and enjoyable.

Whatever model is used always emphasizes the active participation of students in each learning process. Every innovative learning must provide something new, different and always attract students' interests. Each learner must generate interest in students to produce something or be able to solve a problem using methods, techniques, or ways mastered by students themselves obtained from the learning process.

The basic principles in the picture and picture cooperative learning model are as follows:

1. Each group member (student) is responsible for everything that is done in the group.
2. Every group member (student) must know that all group members have the same goal.
3. Each group member (student) must share the same tasks and responsibilities among the group members.
4. Each group member (student) will be subject to evaluation.
5. Each group member (student) shares leadership and needs skills to learn together during the learning process.

6. Each group member (student) will be asked individually to take responsibility for the material handled in the cooperative group.

This type uses image media in the learning process by installing or sorting pictures into logical sequences. In this way, students are expected to be able to think logically so that learning becomes meaningful.

The steps in the Picture and Picture Learning Model are as follows:

1. The teacher conveys the competencies to be achieved in this step the teacher is expected to convey what is the Basic Competence of the subject concerned. Thus, students can measure the extent to which they must master. Besides that, the teacher must also convey basic competency achievement, so that the learning criterion mastery that has been set can be reached by students.
2. Present material as an introduction. Presentation of the material as an introduction to something very important, from here the teacher provides momentum for the beginning of learning. Success in the learning process can start

from here. Because the teacher can provide motivation that attracts the attention of students who have not been ready. Though good motivation and techniques in providing material will attract students to learn more about the material being studied.

3. The teacher shows/shows pictures of activities related to the material. In the process of presenting the material, the teacher teaches students to be actively involved in the learning process by observing each picture shown by the teacher or by his friend. With a picture or pictures, we will save our energy and students will more easily understand the material being taught. In subsequent developments as a teacher can modify the pictures or replace pictures with videos or demonstrations of certain activities.
4. The teacher points or calls on students alternately to arrange or sort the pictures into a logical sequence. In this step, the teacher must be able to innovate, because the direct appointment is sometimes less effective and students feel punished. One way is by lottery, so

students feel they must carry out the assignments that must be given. Existing pictures are asked by students to be sorted, created, or modified.

5. The teacher asks the reason or rationale for the order of the picture. After that, invite students to find the basic competence demanded with indicators to be achieved. Invite as many roles of students and other friends to help so that the discussion process in the learning process is more interesting.
6. From the sequence of the picture, the teacher starts to embed the concept or material in accordance with the competency to be achieved. In the process of discussion and reading of this picture, the teacher must give emphasis to this achieved by asking other students to repeat, write or other forms with the aim of students knowing that it is important in the achievement of basic competencies and indicators that have been determined. Ensure that students have mastered the indicators set.
7. Conclusions or summary. At the end of the lesson, the teacher and students

draw conclusions as a reinforcement of the subject matter

Strengths and weaknesses of the Picture and Picture learning model.

Strengths:

1. The teacher knows better the abilities of each student.
2. Practicing logical and systematic thinking.
3. Helping students learn to think based on the point of view of a subject matter by giving students freedom in the practice of thinking,
4. Developing motivation for better learning.
5. Students are involved in class planning and management

Weaknesses:

1. Takes up a lot of time
2. Many students are passive.
3. The teacher is worried that there will be chaos in the classroom.
4. Many students are not happy when told to work together with others
5. Needed adequate support facilities, tools and costs

Picture and Picture learning model is a learning method that uses pictures and is paired or sorted into logical sequences. This learning has the characteristics of active, innovative, creative, and enjoyable. This Learning Model relies on images as a medium in the learning process. These images become a major factor in the learning process.

The basic principles in the picture and picture cooperative learning model are as follows:

1. Each group member (student) is responsible for everything that is done in the group.
2. Every group member (student) must know that all group members have the same goal.
3. Each group member (student) must share the same tasks and responsibilities among the group members.
4. Each group member (student) will be subject to evaluation.
5. Each group member (student) shares leadership and needs skills to learn together during the learning process.
6. Each group member (student) will be asked individually to take responsibility for

the material handled in the cooperative group.

The teaching procedures in the Picture and Picture Learning Model are as follows:

1. The teacher conveys the competencies to be achieved.
2. Presents the material as an introduction.
3. The teacher shows pictures of activities related to the material.
4. The teacher appoints students, in turn, to sort the pictures logically.
5. The teacher asks the reason or rationale for the order of the pictures.
6. From the sequence of the picture, the teacher starts to embed the concept or material in accordance with the competency to be achieved.
7. Conclusions or summary

CHAPTER FOUR

NUMBERED HEAD TOGETHER (NHT) LEARNING MODEL

One of cooperative learning which is used in many learning activities to engage students in learning is number head together. This cooperative learning model prioritizes collaboration between students in groups to achieve learning goals. Students are divided into small groups and directed to study predetermined subject matter. The purpose of forming cooperative groups is to provide opportunities for students to be actively involved in the thought process and learning activities. In this case, most of the learning activities are student-centered, i.e. studying subject matter and discussing to solve problems.

Number head together type of cooperative learning is one type of cooperative learning that emphasizes specific structures that are designed to influence student interaction patterns and have a goal of increasing academic mastery. There are three goals to be achieved in cooperative learning with Number head together (NHT) types, namely:

1. Structural academic learning outcomes
Aim to improve student performance in academic assignments.
2. Recognition of diversity aims so students can accept their friends who have various backgrounds.
3. Development of social skills Aims to develop students' social skills. These skills include sharing tasks, actively asking questions, respecting other people's opinions, wanting to explain ideas or opinions, working in groups and so on.

The strengths and weaknesses of the Numbered Heads Together learning model are as follows: Strengths are (1) every student becomes ready, (3) can conduct discussions in earnest, (3) smart students can teach students who are not smart.

Weaknesses are (1) it is not very suitable for large numbers of students because it takes a long time, (2) it is all group members are called by the teacher.

The application of NHT cooperative learning can be in six steps as follows:

1. Preparation. In this stage, the teacher prepares lesson plans by creating Learning Scenarios, Student Worksheets

that are compatible with the NHT type of cooperative learning model.

2. Group formation. The formation of groups is adapted to the NHT type of cooperative learning model. The teacher divides students into groups of 3-5 students. The teacher gives a number to each student in the group and a different group name. The group formed is a mixture of views from social background, race, ethnicity, gender and learning ability. In addition, the formation of groups used pre-test scores as a basis for determining each group.
3. Each group must have a textbook or guidebook. In forming groups, each group must have a textbook or guidebook to make it easier for students to solve the worksheets or problems given by the teacher.
4. Problem discussion. In group work, the teacher distributes student worksheets to each student as material to be studied. In group work, each student thinks together to describe and make sure that everyone knows the answers to the questions that have been in the worksheet or the questions that have

been given by the teacher. Questions can vary, from specific to general.

5. Calling member numbers or giving answers. In this stage, the teacher calls one number and students from each group with the same number raise their hands and prepare answers for students in class.
6. Giving conclusions. The teacher and students conclude the final answers to all questions related to the material presented.

There are several benefits to the NHT type of cooperative learning model for students with low learning outcomes proposed by Lundgren in Ibrahim (2000: 18), among others:

1. Improves attendance
2. Acceptance of individuals becomes greater
3. Distracting behavior becomes smaller
4. The conflict between people decreases
5. Deeper understanding
6. Increases kindness, sensitivity and tolerance
7. Higher learning outcomes

This learning model is best used because this model teaches students to be better prepared in mastering the material and learn to accept diversity with other groups because in this model students are required to discuss to solve a problem.

Basically, there is no learning model that is suitable for every subject, because each model or method of teaching faithful has advantages and disadvantages therefore teachers are required to be clever to choose the appropriate learning model.

CHAPTER FIVE

COOPERATIVE SCRIPT

Cooperative Script Learning is a model of cooperative learning. In the development of learning Cooperative Script has undergone many adaptations so that gave birth to some understanding and form that is slightly different from one another, but essentially the same. Some understanding of Cooperative Script learning including Cooperative Script is a cooperative learning scenario.

Cooperative scripts are learning methods where students work in pairs and verbally summarize the parts of the material being studied. Learning procedures are:

1. The teacher divides students into pairs. The teacher distributes the discourse/material for each student to read and make a summary.
2. The teacher and students determine who first acts as the speaker and who acts as the listener.
3. The speaker reads the summary as completely as possible, by including the main ideas in the summary. While the listener listens, corrects, points out the main ideas that are incomplete and helps

remember or memorize the main ideas by linking the previous material or with other material.

4. Switching roles, initially as a speaker is exchanged into a listener and vice versa, and do as above.
5. Teacher's conclusion.

Cooperative Script Learning is an explicit learning contract between teacher and students and students and students on how to collaborate. Based on the notions expressed above between one and the other with the same intent that there is an agreement between students and teachers and students and students to collaborate to solve a problem in learning in collaborative ways such as solving problems that occur in students' social lives. The cooperative script method is a learning method that develops collaborative efforts in achieving common goals. In the cooperative script learning method, students will be paired with friends and will act as speakers and listeners. The speaker makes conclusions from the material that will be delivered to the listener and the listener will listen, correct, point out the main ideas.

Advantages of the cooperative script are:

- Practicing hearing, accuracy.
- Every student gets a role.
- Practice expressing the mistakes of others verbally.

Disadvantages of the cooperative script are:

- Only used for certain subjects. Only two people or not involving the whole class so the correction is limited to those two people.

Cooperative script learning models are also called cooperative scripts are learning methods in which students work in pairs and verbally summarize the parts of the material they learn in the classroom. A cooperative script is a learning model that can improve student memory. It is very helpful for students in developing and linking facts and concepts that have been found in problem-solving. Cooperative script learning is one form or cooperative learning model.

Cooperative Script learning is based on the concept of constructivism, in this learning, an agreement occurs between students about the rules in collaboration. Problems that are solved together will be concluded together, the teacher's role is only as a facilitator who directs students to achieve learning goals. In

the interaction of students, there is an agreement, discussion, conveying opinions of the main ideas of the material, remind each other of the inaccurate conceptual errors, make conclusions together. Learning interactions that occur really dominant interactions between students and students. In student activities during Cooperative Script learning really empower students' potential to actualize their knowledge and skills, so it really suits the constructivist approach currently being developed.

CHAPTER SIX

STUDENT TEAMS-ACHIEVEMENT DIVISIONS (STAD) LEARNING MODEL

Student Teams-Achievement Divisions (STAD) is a cooperative learning model which is used to make the students active in learning. Starting with the delivery of learning objectives, delivery of material, group activities, quizzes, and group awards. STAD cooperative learning is a type of cooperative learning that is quite simple. It is said so because the learning activities carried out are still closely related to conventional learning, namely the presentation of information or subject matter.

Student Teams Achievement Division (STAD) learning model is a variation of cooperative learning that encourages students to encourage one another and help one another to master the skills taught by the teacher. In essence, STAD learning is a learning model that strongly involves students learning in heterogeneous groups consisting of 4-5 students. Learning activities begin with the delivery of learning objectives, the delivery of material, group activities, quizzes, and group awards.

STAD learning model is a cooperative learning model. All cooperative learning models are characterized by a task structure, goal structure and reward structure. In the

learning process with cooperative learning models, students are encouraged to work together on a joint task and they must coordinate their efforts to complete the assignment given by the teacher. The aim of the cooperative learning model is that students' academic learning achievement increases and students can receive a variety of diversity from their friends, as well as the development of social skills.

Cooperative learning is a learning model using a grouping system or a small team, which is between 4-5 people who have different academic abilities, gender, race or ethnicity. Cooperative learning is a form of learning that can improve learning so far. First, several studies have shown that the use of cooperative learning can improve student achievement while simultaneously increasing the ability of social relationships, fostering attitudes to accept self-deprivation and others, and can increase self-esteem. Secondly, cooperative learning can realize the needs of students in learning, thinking, solving problems and integrating knowledge with skills.

The steps of the STAD learning model can be seen in the table below:

Step	Indicator	Teacher's action
Step 1	Conveying objectives and motivate students	The teacher conveys the learning objectives and communicates basic competencies which will be achieved as well as motivating students
Step 2	Presenting information	The teacher presents information to students
Step 3	Organizing students to in study groups	The teacher informs the grouping Student
Step 4	Building a study group	The teacher motivates and facilitates student work in study groups
Step 5	Evaluation	The teacher evaluates learning outcomes about

Step 6	Giving awards	learning material that has been implemented The teacher rewards learning outcomes individual and group
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Strengths and Weaknesses of STAD learning Model.

The strengths of the STAD Cooperative learning model can be clarified as follows:

- a) Improve individual skills
- b) Improve group skills
- c) Increase commitment
- d) Eliminates prejudice against peers
- e) Not competitive
- f) Do not have a grudge

Weaknesses of STAD cooperative learning models can be elaborated as follows:

- a) Contributions from low-achieving students are lacking
- b) High achieving students will lead to disappointment because the role of smart members is more dominant.

The Relationship between the Application of the *STAD* Model and Student Learning Motivation and Achievement

In the teaching and learning process, the teacher as the instructor must be able to create conditions that can actively involve students. Thus, the interaction between teachers and students is expected to occur which in general will feel highly motivated if the teacher actively engages students in the teaching and learning process. In addition, students will better understand and understand the concepts of physics correctly.

Cooperative learning can increase student learning motivation consistently both for students who have high, medium and low abilities, and resistance or attachment to subject matter becomes longer. Cooperative learning which is packaged in various learning activities with the *STAD* model can foster student motivation and learning achievement. The teaching of physics presented with the *STAD* learning model makes it possible to provide social experiences because they will be responsible for themselves and their group members. The success of group members is a joint task.

In this STAD learning group members come from different levels of achievement, thus training students to tolerate differences and awareness of differences. Besides that, learning presented with the STAD model will train students to tell, write correctly what is researched and observed. When viewed from the implementation process, the *STAD* learning model activities more lead students to understand the material presented by the teacher, because students are active in the teaching and learning process. Based on the description above, teaching physics which is presented with the application of the STAD learning model will be able to increase student motivation and learning achievement.

STAD type of cooperative learning is one type of cooperative learning, by placing students in learning groups consisting of 4-5 heterogeneous people according to their level of achievement, gender, and ethnicity. The teacher presents the subject matter, and then students work in their team to ensure that all group members have mastered the material. At the end of the lesson all students are given a test about the material, provided that at the time of the test students may not help each other or work together between friends both

from teammates and with other teams. Student scores obtained are compared with the past average scores of the students concerned and points are awarded based on how far the students match the past performance as well. Each member's point is added up to get a team score, and teams that reach certain criteria are given a certificate or award.

CHAPTER SEVEN

JIGSAW LEARNING MODEL

One of the cooperative learning models is the jigsaw learning model. This model allows students to work in groups actively and develop their social skills. This learning model is designed to increase students' sense of responsibility towards their own learning and also the learning of others. Students not only learn the material provided, but they must also be prepared to give and teach the material to the group. In this jigsaw learning model student activity is very needed, with the formation of small groups of 3-5 people consisting of the original group and expert group.

In the Jigsaw Cooperative Learning Model, students are divided into several heterogeneous learning groups of 3-5 people using the original group and expert group patterns. The home group is the initial group of students consisting of the number of expert group members formed by taking into account diversity and background. The teacher must be skilled and know the background of students in order to create a good atmosphere for each group member. While the expert group, which is a group of students consisting of members of

other groups (origin groups) who are assigned to explore a particular topic and then explained it to the members of the original group.

Members from different origin groups meet with the same topic in expert groups to discuss and discuss the material assigned to each group member and help each other to learn their topic. Here, the teacher's role is to facilitate and motivate expert group members so that it is easy to understand the material provided. After the discussion is over, the group members then return to the original group and teach their group friends what they have gained during the meeting in the expert group. The expert group must be able to share the knowledge gained when conducting discussions in the expert group, so that knowledge is accepted by every member in the original group. The key to this type of Jigsaw is the interdependence of each student on the team members who provide the information needed. This means that students must have the responsibility and positive cooperation and interdependence to obtain information and solve given problems.

As the name implies, the technical implementation of this type of learning back

and forth like a saw. The steps in implementing Jigsaw learning models, namely:

1. Beginning of learning activities. The teacher can describe the contents of the topic in general, motivate students and explain the purpose of learning the topic.
2. Jigsaw cooperative learning material is divided into several learning sections depending on the many members in each group as well as the many concepts of learning material that students want to achieve and will learn.
3. Dividing Students into Origin Groups and Experts. Groups in cooperative learning jigsaw models consisting of 3-5 heterogeneous people both from academic ability, gender, and social background.
4. Determine Initial Scores Initial scores are the average scores of individual students in the previous quiz or the student's final grade individually in the previous semester.
5. Action Plan. Each group reads and discusses each sub topic and assigns expert members to join the expert group. Expert members from each group get together and integrate all the sub topics

that have been distributed according to the number of groups. Expert students return to their respective groups to explain the topics discussed. Students take individual or group tests covering all topics. Giving group awards in the form of individual scores and group scores or marks for group achievements.

Evaluation

When compared with traditional learning methods, the Jigsaw learning model has several advantages, namely:

1. Simplify the teacher's work in teaching, because there is already a group of experts tasked with explaining the material to his colleagues
2. Equitable mastery of the material can be achieved in a shorter time
3. This learning method can train students to be more active in speaking and opinion.

In its application, several problems are often encountered, namely:

1. Students who are active will dominate the discussion and tend to control the course of the discussion. To anticipate this problem, the teacher must really pay attention to the course of the discussion. The teacher must emphasize that the

group members listen first to the explanation from the experts. Then only ask questions if you don't understand.

2. Students who have the ability to read and think low will have difficulty explaining the material if appointed as experts. To anticipate this the teacher must choose experts appropriately, then monitor their performance in explaining the material, so that the material can be conveyed accurately.
3. Smart students tend to feel bored. To anticipate this the teacher must be good at creating an exciting classroom atmosphere so that intelligent students are challenged to follow the course of the discussion.
4. Students who are not accustomed to competing will find it difficult to follow the learning process.

The jigsaw method is one of the learning methods in Cooperative Learning. Cooperative Learning Type Jigsaw begins with an introduction to the topic that will be discussed by the teacher. Then the teacher divides the class into small groups and distributes textual material to each group. Everyone in each group is responsible for

studying the material received from the teacher. The next session formed expert teams or expert groups who came from the original group, arranged in such a way that the most important thing was that each expert group had members from different origin groups, then gave them an opportunity to discuss. After the discussion is over, then they return to the original group and give them an opportunity to discuss, this activity is a reflection of the knowledge they have gained from the results of the discussion in the expert group.

Jigsaw is one of the most flexible cooperative methods. The Jigsaw learning model is a variation of the Collaborative Learning model, which is a group learning process where each member contributes information, experiences, ideas, attitudes, opinions, abilities, and skills, to jointly increase the understanding of all members.

Cooperative learning type Jigsaw is a type of cooperative learning that consists of several members in one group who are responsible for mastering the learning material and are able to teach the material to other members in the group. The jigsaw learning model is an interesting strategy to use if the material to be studied can be divided into several parts and the material does not require the order of delivery. The advantage of this strategy is that it can involve all students in learning and at the same time teach others. In

learning the Jigsaw model, students work in heterogeneous teams. The students are given the task to read several chapters or units and are given an expert sheet consisting of different topics which should be the focus of attention of each team member as they read. After all, students have finished reading, students from different teams who have the same topic focus meet in a group of experts to determine their topic. The experts then return to their team and take turns teaching their teammates about their topics.

CHAPTER EIGHT

PROBLEM-BASED LEARNING MODEL

Problem-Based Learning (PBL) is characterized by real problems as a context for students to learn critical thinking and problem-solving skills, and gain knowledge. Problem-Based Learning is a curriculum development and teaching system that simultaneously develops problem-solving strategies and the basics of knowledge and skills by placing students in active roles as daily problem solvers that are not well structured.

Problem Based Learning (PBL) is a learning method that encourages students to get to know how to learn and work together in groups to find solutions to problems in the real world. Problem simulations are used to activate student curiosity before starting to study a subject. PBL prepares students to think critically and analytically and can obtain and use appropriate learning resources.

It can be interpreted that PBL is a learning process that is the starting point of learning based on problems in real life and from this problem students are stimulated to learn problems based on knowledge and experiences they have previously (prior knowledge) so that from prior knowledge new knowledge and experience will be formed. Discussions using small groups are the main

points in implementing PBL. PBL is a learning process where the problem is the main guide towards learning. Thus, existing problems are used as a means for students to learn something that can support their knowledge.

Less effective and efficient learning methods cause unbalanced cognitive, affective and psychomotor abilities, such as monotonous learning from time to time, teachers who are authoritarian and less friendly to students, so students feel bored and lack interest in learning. To overcome this, the teacher as a teacher and educator must always improve the quality of his professionalism by providing students with learning opportunities by involving students effectively in the learning process.

The success of learning in the sense of achieving competency standards is highly dependent on the ability of teachers to process learning that can create situations that enable students to learn so that it is the starting point for successful learning. The many theories and research results of educational experts indicate that learning will succeed if students participate actively in the learning process. On this basis came the term Active Student Learning Methods. One learning approach that accommodates CBSA is Problem Based Learning (PBL) developed from thinking democratic values, effective learning of

cooperative behavior and respecting diversity in the community.

Problem-based learning (PBL) aims to provide students with free space to think about concepts and solve problems related to the material presented by the teacher. Because basically, Mathematics aims to make students understand Mathematical concepts with everyday life. Having skills about the natural environment to develop knowledge about natural processes around, able to apply various mathematical concepts to explain natural phenomena and be able to use simple technology to solve problems found in everyday life.

Problem-based learning is derived from the theory that learning is the process by which learners actively construct knowledge. This concept explains that learning occurs from the actions of students, and educators only play a role in facilitating the construction of knowledge activities by learners. Educators must focus on helping students achieve self-directed learning skills.

Objectives of Problem Based Learning Methods Department of National Education (2003), Problem-based learning makes students become independent learners, meaning that when students learn, students can choose appropriate learning strategies, skillfully use these strategies for learning and be able to control their learning processes, and are

motivated to complete their learning. From this understanding, it is said that the main purpose of problem-based learning is to explore students' creativity in thinking and motivating students to continue learning.

Problem-based learning is not designed to help teachers provide as much information as possible to students, but problem-based learning is developed to help students develop thinking skills, problem-solving, and intellectual skills, learning various adult roles through involvement they are in real or simulated experiences and become independent learners.

From this understanding we can know that problem-based learning is focused on student learning development, not to help teachers gather the information that will later be given to students during the learning process.

Problem-solving steps in PBL learning have at least eight stages, namely:

1. identifying problems.
2. collecting data
3. analyzing data.
4. solving problems based on existing data and analysis.
5. choosing how to solve the problem.

6. plan the implementation of problem-solving.
7. conduct a trial of the specified plan, and take action to solve the problem.

There are 5 phases (stages) that need to be done to implement PBL as the following.

1. Orient students to the problem. Explain the learning objectives, logistics required, motivate students to be actively involved in the chosen problem-solving activity
2. Organize students for learning. Helping students limit and organize learning tasks related to the problem at hand
3. Guiding individual and group investigations. Encourage students to gather appropriate information, carry out experiments, and look for explanations and solutions
4. Develop and present the work. Helping students plan and prepare appropriate work such as reports, videos, and models, and help them to share assignments with friends.
5. Analyze and evaluate the problem-solving process. Helping students reflect on investigations and the processes used during problem solving.

In investigating a problem, things that need attention are as follows.

1. Read and analyze scenarios and problem situations. Check your understanding of the scenario by discussing it in your group. A group effort might be more effective in determining what are the key factors in this situation. Because this is a real problem-solving situation, your group will have to actively search for information needed to solve the problem.
2. List of hypotheses, ideas, or hunches
Write in a list of theories or hypotheses about the cause of a problem or ideas about how to solve a problem. You will also support or reject ideas as a result of your investigation. List other different ideas that need to be addressed.
3. List what is known. Make a post titled "What do we know?" on a piece of paper. Then find the information contained in the scenario.
4. Develop a problem statement. A problem statement must come from your analysis of what you know. In one or two sentences you must be able to explain what your group is trying to

complete, produce, respond to, test, or find out. The statement of the problem may have to be revised as new information is found and brought to bear on the situation.

5. List what is needed. Prepare a list of questions you think need to be answered to solve the problem. Their record is below the second list entitled: "What do we need to know?" Several types of questions might be appropriate. Some people might address concepts or principles that need to be learned to deal with the situation. Other questions may be in the form of requests for further information. These questions will guide searches that might occur online, in the library, or in other out-of-class searches.
6. List possible actions. List of recommendations, solutions, or hypotheses under the heading: What should we do?. List your plans for an investigation. This plan might include questioning experts, getting data online, or visiting a library.
7. Gathering and Analyzing Information. Divide the responsibility for collecting, organizing, analyzing, and interpreting

information from many sources. Analyze the information that you collect. You may need to revise the problem statement. You can identify more problem reports. At this point, your group might formulate and test hypotheses to explain the problem. Some problems may not require a hypothesis, not a recommended solution or opinion (based on your research data) might be appropriate.

8. Present the findings. Prepare a report where you make recommendations, predictions, conclusions, or other solutions that are right for the problem based on your data and background. Be prepared to support your recommendations. If appropriate, consider multimedia presentations using pictures, graphics, or sound.

Problem Based Learning is a learning process in which the involvement of students is greater in solving a problem through stages of the scientific method so that students can learn knowledge related to the problems presented by educators armed with prior knowledge so

that from prior knowledge, knowledge and knowledge will form a new experience.

Characteristics Learning with the PBL model begins with a problem that can be raised by students or teachers, then students deepen their knowledge of what they already know and what they need to know to solve the problem. Students can choose problems that are considered interesting to solve so they are encouraged to play an active role in learning. Problems that are used as the focus of learning can be resolved by students through group work so as to provide diverse learning experiences for students such as collaboration and interaction in groups, in addition to learning experiences related to problem-solving such as making hypotheses, designing experiments, conducting investigations, collecting data, interpreting data, making conclusions, presenting, discussing, and making reports. This situation shows that the PBL model can provide rich experiences to students. In other words, the use of PBL can increase students' understanding of what they are learning so that they are expected to be able to apply it in real conditions in their daily lives. Problem Based Learning aims to motivate student learning to become independent, help

students develop thinking skills and problem-solving skills, make possible the transfer of new knowledge, learn the role of authentic adults.

Principles of Problem Based Learning Methods are constructive processes and not acceptance, metacognition influences learning, and contextual and social factors influence learning. The criteria for selecting Problem Based Learning materials are:

1. The subject material must contain conflicting issues
2. The selected material is material that is familiar to students
3. The selected material is material that is related to the interests of many people
4. The selected material is material that supports the goals or competencies that students must possess
5. Materials selected are in accordance with student interests

The steps of the Problem Based Learning model, namely:

1. Student orientation to the problem
2. Organizing students to learn
3. Guiding individual and group investigations
4. Developing and presenting the work

5. Analyzing and evaluating the problem-solving process

The advantages of Problem Based Learning in its use are as follows.

1. Develop critical thinking and creative and independent skills
2. Increase motivation and problem-solving ability
3. Help students learn to transfer knowledge with new situations
4. there will be meaningful learning.
5. students integrate knowledge and skills simultaneously and apply them in relevant contexts.
6. PBM can improve critical thinking skills, foster student initiative in work, internal motivation to learn, and can develop interpersonal relationships in group work.

The disadvantages of Problem Based Learning in its use are as follows.

1. Less often students and instructors use this method.
2. Lack of learning time.
3. Students cannot really know what might be important for them to learn.

4. A teacher is difficult to be a good facilitator.

By using the PBL approach, students do not merely receive information from the teacher, because in this case, the teacher as a motivator and facilitator directs students to be actively involved in the entire learning process by beginning with problems related to the concepts being learned. Characteristics of PBL refer to the flow of constructivist education, where learning is an active process of learning to build knowledge. The active process in question is not only mental but also physical. That is, through physical activity students' knowledge is actively built based on the process of assimilation of experiences or materials learned with the knowledge they have and this takes place mentally.

In learning the teacher must be able to create a learning environment as a social system that has the characteristics of a democratic process and a scientific process. Problem-based learning is an answer to the practice of learning competence and responding to the development of social dynamics in society. Besides problem-based learning is basically a further development of

group learning. Thus, the problem-based learning method has the distinctive characteristic of using real-world problems as a learning context for students to learn about critical thinking and problem-solving skills, as well as to obtain essential knowledge and concepts from the subject matter.

CHAPTER NINE

MIND MAPPING LEARNING MODEL

Another cooperative learning model which helps students focus on the learning activity is the mind mapping model. The form of mind mapping is like a map of a street in a city that has many branches. As with road maps, we can make a holistic view of the subject matter in a very broad area. With a map, we can plan the fastest and most precise route and know where we are going and where we are.

Mind mapping can be called a route map that is used by memory, allowing us to arrange facts and thoughts in such a way that the way our natural brain works will be involved from the beginning so that remembering information will be easier and more reliable than using ordinary note-taking techniques.

Mind mapping is one way to record subject matter that makes it easy for students to learn. Mind mapping can also be categorized as a creative note-taking technique. Categorized into creative techniques because making mind maps requires the use of the imagination of the creator. Creative students will find it easier to

make this mind mapping. Likewise, with more and more students making mind mapping, he will be more creative.

A mind map has a central idea or word, and there are 5 to 10 other ideas that come out of that central idea. Mind Mapping is very effective when it is used to bring up hidden ideas that we have and make associations between those ideas. Mind Mapping is also useful for organizing information held. The shape of the diagram is like a tree diagram and its branches make it easy to reference one information to another information.

Mind mapping is a technique for preparing notes to help students use their full potential for the brain. The trick, combining the left and right brain work. With the mind mapping method, students can improve memory. This mind mapping can be utilized for almost all learning topics to help students focus on their learning.

CHAPTER TEN

MAKE A MATCH METHOD

Learning groups allow us to understand a concept based on the explanations of other members. They can shed light on issues you didn't understand before. Through group work, group members can compare each other's notes. This kind of learning group can be done through the Make a match method. The Make a match method is a learning activity to help students to make their groups. This method also allows students to develop their social skills. This avoids the learning activity which focuses on the teachers.

Learning centered on the teacher until now still finds some weaknesses. Weaknesses can be seen during the process of learning in the classroom, active interaction between students and teachers or students and students rarely occur. Students are less skilled at answering questions or asking questions about the concepts being taught. Students are less able to work in group discussions and problem solving provided. They tend to study individually. The knowledge gained is not built on its own gradually by students on the basis of their own understanding. Because students

rarely find answers to problems or concepts learned.

It turns out that a study has proven that after evaluating the learning outcomes of students in real life with such an approach student learning outcomes are felt to be not optimal. This is evident in the achievement of the student's final grade. The low achievement of this student's final grade is an indication that the learning undertaken has not been effective. The final value of the evaluation of learning does not include student performance and participation in learning, so it is difficult to measure student skills.

To improve this, it is necessary to develop an approach in learning that is more comprehensive and can link theoretical material to the reality in the surrounding environment. The cooperative learning model is based on the philosophy of social learning principles, this philosophy emphasizes that humans are social beings. Meanwhile, the cooperative learning model is a learning model that helps students learn academic content and social relations. The special features of cooperative learning include five elements that must be applied, which include; positive interdependence, individual responsibility,

face-to-face, communication between members and evaluation of group processes.

The cooperative learning model is not entirely new to the teacher. The cooperative learning model is a learning model that emphasizes the existence of groups. Each student in the group has different levels of ability (high, medium and low) and if possible, group members come from different races, cultures, ethnic groups and pay attention to gender equality. Cooperative learning models prioritize cooperation in solving problems to apply knowledge and skills in order to achieve learning objectives.

In order to increase student participation and activity in class, the teacher applies the make a match learning method. The method of making a match or looking for a partner is one alternative that can be applied to students. The application of this method starts from the technique that students are told to look for pairs of cards which are answers or questions before the deadline, students who can match the cards are given points.

One of the advantages of this technique is that students look for partners while learning about a concept or topic in a pleasant

atmosphere. The steps in applying the make a match method are as follows:

1. The teacher prepares several cards containing several concepts or topics suitable for the review session, one part of the question card and the other part of the answer card.
2. Each student gets a card that says questions or answers.
3. Each student thinks of answers/questions from the cardholder.
4. Each student looks for a pair of cards that match the card. For example, a card holder that reads defending the country will be paired with a card that reads about.
5. Every student who can match the card before the deadline is given points.
6. If a student cannot match his card with his friend's card or cannot find the question card or answer card will get a penalty, which was agreed upon together.
7. After one round, the cards are shuffled again so that each student gets a different card from before, and so on.
8. Students can also join 2 or 3 other students who hold matching cards.

9. The teacher together with students draws conclusions from the subject matter. In the application of the make a match method, several findings have been found that the make a match method can foster student cooperation in answering questions by matching the cards in their hands, the learning process is more interesting and it appears that most students are more enthusiastic about the learning process, and activeness students look at all when students look for their respective card pairs.

The make a match method provides benefits for students, including the following:

1. Able to create an atmosphere of active and fun learning
2. Learning material delivered is more attractive to students
3. Able to improve student learning outcomes to achieve completeness learn classically
4. An atmosphere of excitement will grow in the learning process
5. Cooperation between fellow students is realized dynamically.

6. The emergence of mutual cooperation dynamics that are evenly distributed across students.

The cooperative learning method of make a match based on findings in the field has a few weaknesses, namely:

1. Required guidance from the teacher to carry out activities
2. The available time needs to be limited so that students do not play too much in the learning process.
3. The teacher needs to prepare adequate materials and tools.
4. In a big class if it is not wise then what emerges is an atmosphere like a market with an uncontrolled crowd. Of course, this condition will disturb the peace of class learning on the left and right. Especially if the classroom building is not soundproof. But this can be anticipated by agreeing on some order commitments with students before the 'show' begins. Basically, controlling the class depends on how we motivate it at the opening step.

Based on teaching and learning activities using the make a match method, students appear to be more actively looking for pairs of

cards between answers and questions. With this method of searching for pairs of cards, students can identify the problems contained in the cards found and tell them simply and clearly together. In the application of the make a match method, several findings have been found that the make a match method can foster student cooperation in answering questions by matching the cards in their hands, the learning process is more interesting and it appears that most students are more enthusiastic about the learning process, and activeness students look at all when students look for their respective card pairs. This is done to make the students to work intensively in groups.

CHAPTER ELEVEN

THINK PAIR SHARE (TPS)

Think pair share is a cooperative learning model. Think pair share is a learning model in which students think independently about the problems given by the teacher then discuss with pairs and share the results of the discussion with friends in class. Think Pair Share (TPS) Type is widely used in the classroom in various teaching activities. Think pair share is a type of cooperative learning designed to influence students' interaction patterns.

This think pair share strategy developed from cooperative learning research and waiting time. Think pair share is an effective way to vary the atmosphere of class discussion patterns. Assuming that all recitation or discussion requires arrangements to control the class as a whole, and the procedures used in think pair share can give students more time to think, respond and help each other. The teacher estimates that only completes a short presentation or students read the assignment, or the situation is a question mark. Now the teacher wants students to consider more of what has been explained and experienced. The teacher chooses to use think-pair-share to

compare the questions and answers of the whole group.

The steps of think pair share are as follows:

Step 1: Think (Thinking). The teacher asks a question or problem that is related to the lesson and asks students to use a few minutes to think for themselves answers or problems.

Step 2: Pair (pairing). The teacher asks students to pair up and discuss what they have gained. Interaction during the time provided can unite the answers if a question raised unites ideas if a specific problem is identified. Normally the teacher gives no more than 4 or 5 minutes to pair up.

Step 3: Share (Sharing). In the final step, the teacher asks the pairs to share with the whole class they have talked about. This is effective for going around the room from couple to couple and continuing until around some couples have the opportunity to report. Think Pair and Share Learning Model uses the pair discussion method followed by plenary discussion. With this learning model students are trained on how to express opinions and students also learn to respect the opinions of

others while still referring to the material/learning objectives.

The steps of the Think Pair and Share learning model are as follows:

1. The teacher conveys the core material and competencies to be achieved.
2. Students are asked to think about the material/problems conveyed by the teacher.
3. Students are asked to pair up with friends next to the other students (a group of 2 people) and express the results of each other's thoughts.
4. The teacher leads a small plenary of discussion; each group presents the results of the discussion.
5. Starting from the activity, the teacher directs the discussion to the main problem and adds material that has not been revealed by students.

Advantages of Think-Pair-Share:

1. Give students more time to think, answer, and help one another.
2. Increasing participation will be suitable for simple tasks.
3. More opportunities for the contribution of each group member.

4. Easier interaction.
5. It's easier and faster to form groups.
6. A student can also learn from other students and convey their ideas to be discussed before they are delivered to the class.
7. Can improve self-confidence and all students are given the opportunity to participate in class.
8. Students can develop thinking and answering skills in communication between one another, and work to help one another in small groups.
9. Students can directly solve problems, understand material in groups and help each other with one another, make conclusions (discussions) and present in front of the class as one step evaluation of learning activities that have been carried out.
10. Allows students to formulate and ask questions about the material being taught because it indirectly obtains sample questions raised by the teacher, as well as getting an opportunity to think about the material being taught.
11. Students will be trained to apply the concept because of exchanging

opinions and thoughts with friends to get the agreement in solving problems.

12. Students are more active in learning because they complete their assignments in groups, where each group consists of only 2 people.
13. Students get the opportunity to present the results of the discussion with all students so that the ideas are spread.
14. Allows teachers to monitor more students in the learning process.
15. Increase the time spent on assignments. The use of TPS learning methods requires students to use their time to do the tasks or problems given by the teacher at the beginning of the meeting so that students are expected to be able to understand the material well before the teacher presents it at the next meeting.
16. Improve attendance. Assignments given by the teacher at each meeting in addition to actively involving students in the learning process are also intended so that students can always try to be present at every meeting. Because for students who are absent once, these students do not do the work and this will affect their learning outcomes.

17. Dropout rates are reduced. TPS learning model is expected to motivate students in learning so that student learning outcomes can be better than learning with conventional models.
18. Apathy is reduced. Before learning begins, students tend to feel lazy because the learning process in class only listens to what the teacher says and answers everything asked by the teacher. By actively involving students in the teaching and learning process, TPS learning methods will be more interesting and not monotonous than conventional methods.
19. Greater acceptance of individuals. In the conventional learning model, students who are active in the class are only certain students who are really diligent and quick in accepting material delivered by the teacher while other students are only "listeners" of the material delivered by the teacher. With TPS learning this can be minimized because all students will be involved with the problems given by the teacher.
20. More in-depth learning outcomes. The parameters in PBM are learning

outcomes achieved by students. With TPS learning the development of student learning outcomes can be identified gradually. So that at the end of learning the results obtained by students can be more optimal.

21. Increase kindness, sensitivity and tolerance. The collaboration system applied in the TPS learning model requires students to be able to work together in teams, so students are required to be able to learn to empathize, accept other people's opinions or admit sportsmanship if their opinions are not accepted.

Weakness of Think Pair Share (TPS) are as follows:

1. Requires simultaneous coordination of various activities.
2. Requires special attention in the use of classrooms.
3. The transition from the whole class to small groups can take up valuable teaching time. For that, the teacher must be able to make careful planning so as to minimize the amount of time wasted.

4. Many groups report and need to be monitored.
5. Fewer ideas emerge.
6. If there is a dispute, there is no mediator.
7. Hang on a partner.
8. An odd number of students has an impact on group formation because there is one student who does not have a partner.
9. A mismatch between the planned time and the implementation.
10. Think-Pair-Share learning methods have not been widely applied in schools.
11. Urgently requires the ability and skills of teachers, when learning takes place the teacher intervenes optimally.
12. Arrange teaching materials for each meeting with the level of difficulty in accordance with the child's level of thinking
13. Changing students' learning habits from those by listening to lectures is replaced by learning to think in solving problems as a group, this is a difficulty for students themselves.

14. Very difficult to apply in schools where the average ability of students is low and time is limited.
15. The number of groups formed is large.
16. Some students are confused, some lose their self-confidence, disturb each other between students because new students know the TPS method.

To conclude, there are three stages in the learning model TPS type cooperative. The three stages are a) Thinking stage. At this stage the teacher gives several questions or problems related to the material being studied learned, giving time for students to think for themselves the answers to the question or problem; b) Pairing stage. At this second stage the teacher" ask students in pairs with a group of friends and start to discuss questions or problems that have been given by the teacher in a certain time; c) Sharing stage. At this stage, the teacher asks a group representative for the presentation of the results of the discussion. During the discussion process, the teacher monitors and supervises students in groups. At the end of the lesson, the teacher and students conclude the results of learning.

CHAPTER TWELVE

DEBATE LEARNING MODEL

Debate is defined as a discussion and exchange of opinions on a matter by giving each other reasons to defend their respective opinions. Debate is an activity of arguing between two or more parties, both individually and in groups, in discussing and deciding problems and differences. Formally, debates are mostly carried out in legislative institutions such as parliaments, especially in countries that use the opposition system. In this case, the debate is carried out according to clear rules and the outcome of the debate can be generated through voting or jury decisions.

Other examples of formal debates are debates between legislative candidates and debates between presidential and vice-presidential candidates that are generally held ahead of general elections.

Competitive debate is a debate in the form of a game that is usually done at the school and university levels. In this case, the debate is carried out as a match with clear and strict rules between two parties who each support and oppose a statement. The debate was witnessed by one or several judges

appointed to determine the winner of a debate. The winner of the competitive debate is the team that successfully demonstrates better debate knowledge and ability.

Competitive debates do not aim to produce decisions but are rather directed towards developing certain abilities among participants, such as the ability to express opinions logically, clearly and structured, listen to different opinions, and foreign language skills if the debate is conducted in a foreign language.

However, some of the formats used in competitive debates are based on formal debates conducted in parliament. From this came the term "parliamentary debate" as one of the most popular styles of competitive debate. There are various parliamentary debate formats, each of which has its own rules and organization.

The most recognized parliamentary competitive debates in the world are the World Universities Debating Championship (WUDC) in the British Parliamentary style at the university level and the World Schools Debating Championship (WSDC) at high school level. International debate competitions generally use English as an introduction. There is no

translator assistance for any participant. However, some competitions give special awards to teams from countries that only use English as a second language.

Debate is a learning model with the syntax: students become 2 groups then sit face to face, students read the teaching material to be examined by each group, the presentation of the reading results by representatives of one group then responds to the other groups and so on alternately, the teacher guides make conclusions and add them if necessary.

Debate makes learning interesting and at the same time activating students in many ways. One method that can be used is the active debate model. Active debate models Active debate learning model is a modification of the open discussion models that occur on the campus. How to bring the atmosphere of the debate to a lower level of education?

The active debate learning model can be carried out with the following steps:

1. Make a controversial statement about the material we have given previously.
2. Form students in 2 large groups in the class. One group is the "PRO" group or supporters of the statement, while the

other group is the CON group or the group that rejects the statement. Please ask the PRO group why they support the statement. What reasons reinforce the statement? While the CON group must maintain its opinion is also accompanied by arguments that make sense. Manage the debate traffic so that Coachman debate does not occur.

Steps of the debate learning model are as follows:

1. The teacher divides the two groups of debating participants one pro and the other counter
2. The teacher gives the task to read the material to be debated by the two groups above
3. After completing reading the material the teacher points to one member of the pro group to speak when it was responded to or denied by the contra group. And so on until most students can express their opinions
4. While students express their ideas, the teacher writes the core/ideas of each conversation on the blackboard. Until a

number of ideas expected by the teacher are fulfilled

5. The teacher adds concepts or ideas that have not been revealed
6. From the data on the board, the teacher invites students to make conclusions or summaries that refer to the topics to be achieved.

By learning to debate properly and correctly, as well as participating in various debate competitions, students can be actively involved in an intellectual and scientific atmosphere. Healthy debate is able to improve students' abilities and train reasoning in the scientific field to exchange opinions and thoughts, as well as accommodate students to actualize themselves in verbal communication. In general, a debate that begins with a presentation in front of the class, followed by a debate will be effective in encouraging students to think about various aspects related to the topic. That way, you can hone a stronger understanding. Differences of opinion are common in a debate. In fact, because it is normal, differences of opinion are no

longer the main thing in a debate. However, more important is the way of expressing opinions. Both parties (maybe more) must be aware of their purpose in participating in the debate, which is to express their respective opinions. According to the Executive Director of Perkumpulan Prakarsa Binny Bintarti Buchori, Indonesian students have to learn how to have a good debate. Because at this time debate is an inseparable part of the development of student life itself. Of course, what is meant is a scientific debate. The rationale used in the debate must be based on facts and data, both national and international conditions. That way, the debates carried out have their own weight, of course, if it can be done by students, that ability will be a provision for the future. "Especially if you want to be a politician," said Binny. There is a tendency that debate has not become something that is considered important for the world of Indonesian education. Because, in learning debate, all students are required to play an active role in all teaching and learning processes. Indonesian students

and university students are known to be shy when it comes to appearing in discussions related to lessons. Moreover, if you have to argue with lecturers, students or Indonesian students, they are worried that they will be considered disrespectful. In fact, it has been found that the quality of learning will increase if the students participating in the learning process get ample opportunity to ask questions, discuss, and actively use the knowledge they have acquired. In this way, knowledge tends to be better understood and mastered.

For example, how to present an argument, break the opponent's argument, the structure of the debate, and the theme to be discussed. In a debate competition, all aspects shown during the debate are fully assessed by the jury. If participants say harsh or blasphemous words, then be prepared to get a discount from the judges. Debate allows students to play an active role in the learning process itself, both in the process of interaction between students and with teachers in the learning process. This is because the emphasis is

on developing analytical and critical thinking skills on the topics or issues discussed. Discussion in the form of debate is carried out by providing an issue that is as controversial as possible. This will lead to different opinions from students. Of course, in expressing opinions, students are required to use strong arguments. In debate competitions, usually, firmness and ferocity in the debate are not absolute things to win. Even by speaking gracefully, we can win the hearts of the judges. Not by flattery, but by playing a tone of voice to sound convincing and can influence others to believe what is said.

Students are required to seek, find and collect information independently and discuss with their groups to develop arguments that will be used during the debate. Then students defend their arguments and fight the opposing team's arguments with counter-arguments that contain strong facts and evidence. Students are trained to compete through the arguments they convey. The competitive atmosphere in a fun learning process will make students eager to learn. Because the active debate method is more concerned with the learning process than learning outcomes. A good learning process will definitely make student learning outcomes

good too. Based on the explanation of the debate above, it can be concluded that the active debate method is a learning method whose steps or procedures are in accordance with debate in general, which is more focused on the learning aspect. The debates carried out were not fighting each other, fighting, fighting or being hostile, but defending each other or arguing, both the support team and the opposing team believed that the arguments presented were true.

Debate is a very appropriate and strategic forum for developing thinking skills and hone skills speak. The debate can also make a beneficial contribution to human life. In teaching when using a presentation technique or method debate, is a method in which speakers from the pro and against expressing their opinion, can be followed by a rebuttal or unnecessary and group members can also ask questions to the debate participants or speakers. The debate can be a valuable method of encouraging thoughts and reflections, especially if students are expected to maintain opinions that are contrary to their beliefs alone. This is a method that actively involves every participant students in the classroom are not just the actors of the debate.

The purpose of this active debate method is to train students to strong arguments in solving a problem controversial and have a democratic attitude and mutual respect for every opinion is different. Moderators provide motivation and stimulus to students so that students do not run out of discussion material so that the moderator's accuracy in understanding a topic from various points of view is very necessary.

In general, importantly is not the frequency ask students, but rather the quality of student questions. How far are the level students' analysis and thinking in dealing with a problem case can be seen based on student questions? Experience and knowledge owned by students also affect the quality of student questions. Furthermore, the Active Debate method is a method where speakers from the pros and cons expressed their opinions each but no one loses and no one wins.

CHAPTER THIRTEEN

ARTICULATION LEARNING MODEL

Teaching is an art. Teachers are expected to employ various learning strategies in learning to ensure that students active in learning. The purpose of implementing a variety of learning strategies, learning methods and learning models is so that the teacher is easier, more effective and efficient in implementing learning so that what is the goal of learning will be easily achieved optimally. For students will cause feelings of pleasure, motivation, challenge so that learning becomes more meaningful and Active Innovative Creative Learning Effective and Fun. No more monotonous and tedious learning.

Specifically, in the learning model, it turns out that the amount is quite a lot. This is because there are always new innovations made by teachers, education experts and intellectuals both from within the country and from abroad. Whether or not an effective learning model is applied is not determined by the sophistication of a learning model, because in principle there is no one learning model that is the best. The best learning model is a learning

model that is relevant to the objectives to be achieved.

The articulation learning model is a model that the process is like a chain message, meaning what has been given by the teacher, a student must continue to explain it to other students in groups. This is where the uniqueness of this learning model. Students are required to be able to act as 'message recipients' while at the same time acting as 'messenger.'

The articulation learning model is a learning model that requires students to be active in learning in which students are formed into small groups, each student in the group has the task of interviewing his classmates about the material just discussed. The concept of understanding is very necessary in this learning mode.

Articulation Learning Model Steps are as follows:

1. The teacher conveys the competencies to be achieved.
2. The teacher presents the material as usual.
3. To find out the absorption of students, form groups of twos.
4. Assign one of the students to share the material just received from the teacher

and the partner listens while making small notes, then switches roles. So do other groups.

5. Assign students to take turns or randomly convey the results of the interview with their partner mates until some students have submitted the results of the interview.
6. The teacher repeats or explains the material if the student doesn't understand it.
7. Conclusion.

Weaknesses of articulation learning include:

1. A lot of time is needed Less material obtained
2. Many groups report and need to be monitored
3. Fewer ideas emerge If there is a dispute there is no mediator

The advantages of articulation learning:

1. All students are involved (get roles)
2. Train student readiness
3. Practicing the absorption of understanding from others

4. Suitable for simple tasks
5. Easier interactions
6. Easier and faster to form it
7. Increase children's participation

Articulation learning model is a model whose process is like a chain message, meaning that what has been given by the teacher, a student must continue to explain it to other students (his group partner). This is where the uniqueness of this learning model. Students are required to be able to act as a 'message receiver' as well as a 'messenger'. The articulation learning model is a learning model that requires students to be active in learning where students are formed into small groups where each student in the group has the task of interviewing their groupmates about the material just discussed. The concept of understanding is needed in this learning mode.

CHAPTER FOURTEEN

GROUP INVESTIGATION LEARNING MODEL

One of the cooperative learning models is Group Investigation. It is a form of cooperative learning model that emphasizes the participation and activities of students to search for learning material that is to be learned through available materials, for example from textbooks or students can search through the internet. Students are involved in planning, both in determining the topic and the way to learn it through investigation. This type requires students to have good abilities in communication and in group process skills. The *Group Investigation Model* can train students to develop their ability to think independently. Active student involvement can be seen from the first stage to the final stage of learning.

In the Group Investigation model, there are three main concepts, namely: research or *inquiry*, knowledge or *knowledge*, and the dynamics of the group or the dynamic of *the learning group*. Research here is the process of dynamics students respond to problems and solve these problems. Knowledge is a learning experience gained by students both directly and indirectly. Whereas group dynamics shows

an atmosphere that describes a group interacting involving various ideas and opinions and exchanging experiences through mutual argumentation processes.

There are some important things to do the *Group Investigation* method are:

1. Requires group ability. In doing each task, each group member must get the opportunity to contribute. In inquiry, students can search for information from various information from inside and outside the classroom. Then students collect information given from each member to work on the worksheet.
2. Cooperative Plan. Students jointly investigate their problems, which resources they need, who does what, and how they will present their projects in class.
3. Teacher's Role. The teacher provides resources and facilitators. The teacher rotates between groups watching students organize their work and helping students organize their work and helps if students find difficulties in group interaction.

Teachers who use the GI method generally divide the class into groups of 5 to 6 students with heterogeneous characteristics. The division of groups can also be based on the pleasure of being friends or the similarity of interest in a particular topic. Next students choose the topic to be investigated, conduct an in-depth investigation of the chosen topic, then prepare and present their report in front of the class.

Steps in Using the Group Investigation Model
The steps in applying the Group Investigation method, (Kiranawati (2007), can be stated as follows:

1. Topic selection. Students choose various subtopics in a general problem area that is usually described first by the teacher. The students are then organized into task-oriented groups of 2 to 6 people. The composition of heterogeneous groups both in sex, ethnicity and academic ability.
2. Planning a collaboration. The students together with the teacher plan specific learning procedures, assignments and general goals that are consistent with the various topics and subtopics that have been selected from step 1 above.

3. Implementation. The students carry out the plan that was formulated in step b). learning must involve a variety of activities and skills with a wide variety and encourage students to use a variety of resources both inside and outside the school. The teacher constantly follows the progress of each group and provides assistance if needed.
4. Analysis and synthesis. Students analyze and synthesize various information obtained in step 3 and plan to be summarized in an interesting presentation in front of the class.
5. Presentation of final results. All groups present an interesting presentation of the various topics that have been studied so that all students in the class engage with each other and reach a broad perspective on the topic. Group presentations are coordinated by the teacher.
6. Evaluation. The teacher and students evaluate the contribution of each group to classwork as a whole. Evaluations can include each student individually or in groups, or both.

The Six Stages in Cooperative Learning with the Group Investigation Method can be seen in the following:

Stage I
Identify topics and divide students into groups.

The teacher provides opportunities for students to contribute what they will investigate. Groups are formed based on heterogeneity.

Stage II
Plan assignments.

The group will share sub-topics with all members. Then make a plan of the problem to be studied, how the process and what resources will be used.

Stage III
Make an inquiry.

Students collect, analyze and evaluate information, make conclusions and apply their parts to new knowledge in reaching solutions to group problems.

Stage IV
Preparing the final project.

Each group prepares a final project that will be presented in front of the class.
Students present their work.

Stage V Other groups keep following.
Presenting the
final project.

Stage VI The test questions cover all
topics that have been
investigated and presented.

The Group Investigation learning model is a model that is difficult to apply in cooperative learning. This learning model has the following characteristics:

1. Cooperative learning with the *Group Investigation* method is student-centered, the teacher only acts as a facilitator or consultant so that students play an active role in learning.
2. learning is done to create an atmosphere of mutual cooperation and interaction between students in groups regardless of background, each student in the group integrates a variety of ideas and opinions, mutual discussion and argumentation in understanding a subject and solving a problem faced by a group.
3. cooperative learning with the *Group Investigation* method students are trained

to have a good ability to communicate, all groups present an interesting presentation of various topics that have been studied, all students in the class look at each other and reach a broad perspective on the topic.

4. there is the motivation that encourages students to be active in the learning process starting from the first stage to the final stage of learning.
5. cooperative learning with the *Group Investigation* method the learning atmosphere feels more effective, group collaboration in learning can inspire students to have the courage to express opinions and share information with other friends in discussing learning material.

The use or use of the learning model of the investigation group also has weaknesses and strengths. Strengths of learning the group investigation model are as follows:

1. Cooperative learning with the Group Investigation model has a positive impact on improving student achievement.
2. The application of the Group Investigation model of cooperative learning has a

positive effect, which can increase student motivation.

3. Learning is done to create an atmosphere of mutual cooperation and interaction between students in groups regardless of background.
4. The group investigation learning model trains students to have good abilities in communicating and expressing their opinions.
5. Motivate and encourage students to be active in the learning process starting from the first stage to the final stage of learning.

The Group Investigation learning method is one form of a method that emphasizes the participation and activities of students to seek their own material (information) lessons to be learned through these materials available, for example through textbooks, or via the internet. This method can train students to grow their ability to think independently and communicate skills.

CHAPTER FIFTEEN

SNOWBALL THROWING LEARNING MODEL

Teaching and learning activities are mainly conducted to improve students' learning competencies, therefore, using an appropriate learning model is very important. One of the learning models that may help students' learning competencies improvement is the Snowball Throwing model. It is one of the learning models developed based on a contextual approach (CTL). Snowball Throwing which according to its origin means 'a rolling snow ball' can be interpreted as a learning model by using a ball of questions made of paper which is rolled into a round ball and then tossed in turns among fellow group members. Judging from the approach used in Pkn student learning, this Snowball Throwing model combines communicative, integrative approaches and process skills.

This activity of throwing a question ball will make the group dynamic because student activities do not only think, but also write, mean, or speak. But they also do physical activities, namely rolling up paper and throwing it at other students. Thus, each group member will prepare themselves because in turn, they

must answer questions from their friends contained in the paper ball.

In the Snowball Throwing model, the teacher tries to provide an opportunity for students to develop skills in summarizing the contents of the news or information they obtain in real contexts and in complex situations. The teacher also provides experience to students through integrated learning using interrelated processes in natural situations and contexts of communication both social, scientific, accounting and social environment.

A group is formed which is represented by the head of the group to get an assignment from the teacher and then each student makes questions that are formed like a ball (question paper) and then thrown to other students where each student answers questions from the ball obtained.

Steps of snowball Throwing model:

1. The teacher presents the material to be presented.
2. The teacher forms groups and calls each group leader to give an explanation of the material.

3. Each group leader returns to his group, then explains the material delivered by the teacher to his friend.
4. Then each student is given a worksheet to write down any questions regarding the material that has been explained by the group leader.
5. Then the paper is made like a ball and thrown from one student to another for approximately 5 minutes.
6. After students get one ball / one question given the opportunity for students to answer questions written on the ball-shaped paper in turn.
7. The teacher gives a conclusion.
8. Evaluation.
9. Closing.

The use of the snowball throwing learning approach in enhancing student learning activeness is felt to be quite effective because it is able to develop the intellectual, social, and emotional potential that exists in students. Here students will be trained to express ideas and feelings intelligently and creatively and be able to find and use analytical and imaginative abilities that exist in themselves to deal with

various problems that arise in everyday life.

Strengths of the Snowball Throwing model:

1. Train student readiness.
2. Give each other knowledge.

Weaknesses of the Snowball Throwing model:

1. Knowledge is not broad only dwells on knowledge around students.
2. Not effective if the teacher could not utilize it properly.

Snowball throwing is also a development of the discussion method and is part of the cooperative learning method. However, in this method, learning activities are arranged in such a way that the teaching and learning process can take place more pleasantly. With the application of this method, group discussions and interactions between students from different groups allow for the sharing of knowledge and experiences in solving problems that may arise in discussions that take place more interactively and pleasantly.

CHAPTER SIXTEEN

COOPERATIVE, INTEGRATED, READING, AND COMPOSITION (CIRC) LEARNING MODEL

Improving the critical thinking skills of the students and social skill are very important for the students. This can be done through conducting cooperative learning. Cooperative Integrated Reading and Composition-CIRC (Integrated Reading and Writing Cooperative) learning model is a type of cooperative learning model is very useful to improve students' competence, especially language competence. Cooperative Integrated Reading and Composition-CIRC (Integrated Reading and Writing Cooperative) learning model is a special learning model of Indonesian Language in order to read and discover the main ideas, main ideas or, themes of a discourse.

This Cooperative Integrated Reading and Composition (CIRC) learning model can be categorized as integrated learning. integrated learning can be grouped into:

1. models in one scientific discipline which include connected models and nested models.

2. the model between studies includes a sequenced model, a shared model, a webbed model, a threaded model and an integrated model
3. models in cross students.

In CIRC learning or integrated learning, each student is responsible for group assignments. Each group member issues ideas to understand a concept and complete a task (task), so that formed understanding and a long learning experience. This learning model continues to experience growth from the elementary school level to elementary school. This learning process educates students to interact socially with the environment.

Steps The learning steps are as follows:

1. Form a group of 4 heterogeneous students.
2. The teacher gives discourse according to the learning topic.
3. Students work together to read each other and find main ideas and respond to discourse and written on sheets of paper. Present / read out the group results.
4. Teacher and students make conclusions together.

5. Closing.

From each of the above phases we can clearly note the following:

1. Phase One, Introduction to the concept. In this phase the teacher begins to introduce a new concept or term that refers to the findings during exploration. The introduction can be obtained from the teacher's information, textbooks, or other media.
2. Second Phase, Exploration and application. This phase provides opportunities for students to reveal their initial knowledge, develop new knowledge, and explain the phenomena they experience with minimal teacher guidance. This causes cognitive conflict in themselves and tries to do testing and discussion to explain the results of their observations. Basically, the purpose of this phase is to arouse interest, curiosity and apply students' initial conceptions of learning activities by starting with something concrete. During this process, students learn through their own actions and reactions in new situations that are still related, also proved to be very

effective in leading students to design experiments, demonstrations to be tested.

3. Third Phase, Publication. In this phase students are able to communicate the findings, prove, demonstrate the material being discussed. The discovery can be as something new or just prove the results of his observations. Students can provide evidence of guessing new ideas to be known by classmates. Students are ready to accept criticism, suggestions or vice versa to reinforce each other's arguments.

Strengths of the CIRC Learning Model The advantages of an integrated learning model or (CIRC) include:

1. The experiences and learning activities of students will always be relevant to the level of child development.
2. the activities chosen are appropriate to and depart from the interests of students and the needs of children.
3. all learning activities are more meaningful for students so that the learning outcomes of students will be able to last longer.

4. integrated learning can foster children's thinking skills.
5. integrated learning presents activities that are pragmatic (useful) in accordance with problems that are often encountered in the child's environment,
6. integrated learning can foster student learning motivation toward learning that is dynamic, optimal and appropriate
7. fostering children's social interactions such as cooperation, tolerance, communication and respect for other people's ideas.
8. arousing motivation to learn, broadening teachers' insights and aspirations in teaching

The weaknesses of the CIRC learning model are in this learning model can only be used for subjects that use language, so this model cannot be used for subjects such as mathematics and other subjects that use the principle of counting.

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Curriculum Vitae



Ida Ayu Made Sri Widiastuti was born in Karangasem, April 23, 1982. She is called shortly by Dayu Widia. She completed her senior high school SMKI Bali in 2000. She attended education in Indonesian Tourism Management (MAPINDO) majoring in Food and Beverage Service and

worked at several hotels in the Nusa Dua area from 2001-2006 including one of the star hotels in Singapore in 2001-2002. Some of the achievements that have been achieved including (1) being the first winner of the national fashion competition held by a company in Singapore; (2) the main female actress in a movie entitled "**Memamah Rembulan Mengejar Matahari**" which was produced by TVRI Pusat Jakarta in 1999, and (3) the main female actress in a short movie entitled "**Narakusuma**" produced by TVRI Bali in 2000.

She continued her undergraduate program (Bachelor degree) at University of Mahasaraswati Denpasar in 2006. After completing the bachelor degree in 2010, she was appointed as a lecturer in the English Language Education study program at the

University of Mahasaraswati Denpasar until now. Furthermore, in 2011, she continued her postgraduate program for master degree in 2 (two) universities, namely Udayana University (Linguistic study program with the concentration of Language Learning and Teaching) and University of Education Ganesha Singaraja (English Language Education program). She obtained her Masters degree in Humanities (M. Hum.) and Master of Education (M.Pd.) in 2013. Currently, she is studying in a doctorate program (English Language Teaching) at Malang State University (UM) since 2015 and gets a **Domestic Postgraduate Education Scholarship (Basiswa Pendidikan Pascasarjana Dalam Negeri, BPP-DN)** from the Ministry of Research, Technology and Higher Education (Kemristekdikti).

Since conducting her study, she has published some journals and conferences proceeding articles as follows:

1. Widiastuti, I. A. M. S., & Saukah, A. (2017). Formative Assessment in EFL Classroom Practices. *Bahasa dan Seni: Jurnal Bahasa, Sastra, Seni dan Pengajarannya*, 45(1), 050–063. <https://doi.org/10.17977/um015v45i12017p050>. (**Published, National Accredited**);
2. Widiastuti, I. A. M. S. (2018). EFL Teachers' Beliefs and Practices of Formative Assessment to Promote Active Learning.

- Asian EFL Journal, 20(5), 96–112. **(Published, Scopus indexed)**;
3. Widiastuti, I. A. M. S. (2018). EFL Students' Writing Interactions Through Weblog and Self-Assessment. *International Journal of Humanities, Literature & Arts*, 1(1), 43–51. <https://doi.org/10.31295/ijhla.v1n1.32> **(Published)**;
 4. Widiastuti, I. A. M. S. (2018). Teachers' Classroom Assessment and Grading Practices. *SHS Web of Conferences*, 42(42), 00052. <https://doi.org/10.1051/shsconf/20184200052> **(Published, Thomson Reuters indexed)**;
 5. Widiastuti, I. A. M. S., Mukminatien, N., Prayogo, J. A., & Irawati, E. (2019). Dissonances between Teachers' Beliefs and Practices of Formative Assessment in EFL Classes. *International Journal of Instruction*. **(Accepted, Scopus indexed)**;
 6. Widiastuti, I. A. M. S., & Mukminatien, N. (2019). Formative Assessment Practices Employed by English Teachers in Junior High School. *IOP*. **(Accepted, Scopus indexed)**;
 7. Widiastuti, I. A. M. S., Mukminatien, N., Prayogo, J. A., & Irawati, E. (2019). Students' Perception of Assessment and Feedback Practices: Making Learning Visible. *International Journal of Sustainability, Education, and Global*

Creative Economy (IJSEGCE), 2(1), 1–8.
(Published)

During her doctoral program at UM, she also obtained several research grants and scholarships from Ministry of Research, Technology, and Higher Education (Kemenristekdikti) including the **Doctoral Research Grant (Hibah Penelitian Doktor)** and **Sandwich-like program for the International Publication Quality Improvement (Peningkatan Kualitas Publikasi Internasional, PKPI)** at Griffith University, Australia both in 2018.

Moreover, she has published some books including **Basic English and Hotel Knowledge (2012)**, **Berita Dalam Penulisan Cerita Pendek (2013, 2017)**, **Getting in Touch in English (2015, 2018)**, and **Formative Assessment and Its Implementation Strategies (2019)**, **Classroom-Based Assessment for Professional Teachers (2018)**, **Lesson Planning and Material Development (2019)**, **Teaching and Learning for Effective Classroom (2019)**, **English for Professional Hotel Personnel (2020)**. Besides those published books, the author has also written a book entitled **“My Journey: Bridging Your Bright Future”** in February 2019 right after she completed the PKPI/Sandwich-like program. It tells a story about her journey during joining a scholarship of the PKPI/Sandwich-like program for three months in 2018.

Basically learning is an individual process, although most classes are arranged classically but the teacher's attention must still be individual, because each child has his own peculiarities, and has his own level of development. Learning is also a social process, especially in elementary school, learning together and solve problems. Learning must be in a conducive and pleasant atmosphere, so that each student has readiness to learn. Learning is a continuous process that does not stop, lifelong learning, learning something as a basis for learning other things further.

Learning is a process of building meaning, where every learning process must be meaningful for the child's growth and development process, both physically and psychologically, in a pleasant atmosphere, both for students and teachers. There is a paradigm shift in learning that is from Teaching to Learning (teaching and learning), and in the assessment of the process and learning outcomes must take place continuously with improvements at each stage (continuous improvement).

ISBN 978-602-5872-43-3

