An Analysis Of Discovery Learning In Teaching English At The First Grade In SMAN 1 Bukittinggi

Novia Eriza[1,], Loli Safitri[2], Eriza[3], Hilma Pami Putri[4]*

[1,2,3,4]*Universitas Islam Negeri Sjech M.Djamil Djambek Bukittinggi, Bukittinggi,* Indonesia

A B S T R A K

Tujuan dari artikel untuk mendeskripsikan implementasi dari *discovery learning* dalam pembelajaran bahasa inggris di SMAN 1 Bukittinggi. Beberapa persoalan ditemukan bahwa belum konsisten dalam mengikuti langkah dari *discovery learning.* Bahkan ada langkah *discovery learning* yang terlewatkan dalam prakteknya, ini disebabkan ketersediaan waktu yang terbatas dalam pembelajaran. Tujuan dari penelitian ini untuk menganalisis bagaimana pengimplementasian *discovery learning* dalam pembelajaran bahasa inggis di kelas satu di SMAN 1 Bukittinggi. Metode penelitian yang gunakan deskriptif kualitatif dengan pertanyaan penelitian bagaimana penerapan *discovery learning* dalam pembelajaran bahasa inggris di kelas satu di SMAN 1 Bukittinggi. Proses pengumpulan data menggunakan teknis wawancara dan observasi checklist dengan informan berupa siswa dan guru bahasa Inggris SMAN 1 Bukittinggi. Temuan dari penelitian ini bahwa guru telah mengimplementasikan *discovery learning* dalam mengajar bahasa inggris. seperti: *stimulation, problem statment, data collection, data processing, verification, and generalization*. Meskipun masih ada yang ditemukan beberapa langkah yang kurang konsisten dilaksanakan oleh guru di beberapa pertemuan. Namun hal ini tidak mempengaruhi dalam mengimplementasikan langkah-langkah *discovery learning* dalam bahasa inggris di SMAN 1 Bukittinggi. Seharusnya guru membimbing siswa untuk mengidenifikasi historycal recount dan membuat hipotesis sementara. Sedangkan peneliti menemukan guru langsung mengarahkan siswa untuk mencari informasi mengenai historycal recount tersebut. Kesimpulan, bahwa dengan pengimpelementasian *discovery learning* yang digunakan guru mampu meningkatkan nilai yang bagus dan siswa menjadi aktif dalam proses pembelajaran.

Abstract

The purpose of the article is to describe the implementation of discovery learning in English language learning at SMAN 1 Bukittinggi. Several problems were found that were not consistent in following the steps of discovery learning. There are even discovery learning steps that are missed in practice, this is due to the limited availability of time for learning. The aim of this research is to analyze how discovery learning is implemented in English language learning in first grade at SMAN 1 Bukittinggi. The research method uses qualitative descriptive research with the research question how to apply discovery learning in English language learning in first grade at SMAN 1 Bukittinggi. The data collection process used interview techniques and checklist observations with informants in the form of students and English teachers at SMAN 1 Bukittinggi. The findings from this research are that teachers have implemented discovery learning in teaching English. such as: stimulation, problem statement, data collection, data processing, verification, and generalization. Although it was still found that several steps were not consistently implemented by teachers in several meetings. However, this does not affect the implementation of discovery learning steps in English at SMAN 1 Bukittinggi. Teachers should guide students to identify historical recounts and create temporary hypotheses. Meanwhile, researchers found that teachers directly directed students to look for information regarding the historical recount. The conclusion is that by implementing discovery learning used by teachers, they are able to increase good grades and students become active in the learning process.

1. Introduction

English as the international language that is used many people around in the world. English serves for many people as a bridge into the worlds of higher educational, science, international trade, polities, tourism or only other venture which interest them. Beside, English is the essential part that has to been mastered by Indonesian people to face the globalization era and develop social quality of life. In Indonesia, English is not mother tongue for Indonesian people, but English is used as the second language for communication.

In Indonesia, the English language was adopted as a foreign language. Included in the education curriculum that is run by every school and becomes local content in Elementary School, a compulsory subject in Junior and Senior High Schools, and complementary subjects in universities. In recent years, the curiculum has changed dramatically due to the impact of globalization. This change also occurs in the learning process caused by curriculum changes that require each school to use asaintific-based learning model. One of the recommended models in the curriculums 2013 is discovery learning. This approach model is considered to be very effective not only in improving student learning outcomes but also increasing student learning motivation if it is carried out in a planned manner based on the implementation procedures. Discovery learning is an approach model that encourages students to find their own knowledge based on their own observations.

According to Bruner, discovery learning is a learning model that incorporates all students in the process of learning activities in order to acquire knowledge that can lead to beneficial outcomes (Siti Lastari, Riana Eka Budi Astuti, 2018). Discovery learning, according to Piaget, is new knowledge gained via interaction with the social environment that is sought by the individual himself (Piaget, 2005). In other words, if the student discovers an idea, theory, guideline, or knowledge from examples he encounters in his own life, the learning process will go smoothly and creatively. In conclusion, discovery learning is a learning process in which the delivery of material is presented incompletely and requires students to be involved in determining for themselves a concept or principle that is not yet known based on the material being studied.

Discovery learning, according to Hosnan, is a model built from the 2013 curriculum that is relevant to the real world and will be utilized as a concept to address difficulties in obtaining knowledge that is stimulated during learning (Hosnan, 2014). This indicates that students are seeking knowledge that they will acquire on their own. Another expert, Wilcox, stated that discovery learning encourages students to study actively in order to grasp concepts, and that the teacher has a role in this by selecting experiences in experiments that students will conduct (Wicox, 2014). Although students actively participate in learning, the teacher's role in learning is as critical.

Discovery learning is a process of discovery conducted by students that will be used as a basic principle and concept for students. according to Robert B Sund, is a conceptual process in which students internalize a principle (Robert B Sound, 2013). In short, Discovery learning is a learning process in which the delivery of material is presented incompletely and requires students to be actively involved in determining their own previously unknown concepts or principles. In the line with curriculum policy, learning process must be saintific and independent in learning. In the implementation of discovery learning, there are six steps that must be followed that the process of discovering the concept of knowledge and student activity can be achieved as expected. According to the agency for human resource development, education and culture and education quality assurance, in implementing discovery learning there are several steps that must be applied such as; stimulation, problem statements, data collection, data processing, verification, and generalization (Kemendikbud, 2014). Based on this statement, we can say that in discovery learning, it is also necessary to pay attention to steps are appropriate in learning.

Based on the results of observations made at SMAN 1 Bukittinggi, reseacher found that the teacher had implemented discovery learning in teaching English. However, teacher still seem to have missed some steps in implementing discovery learning when teaching. Like when looking for information related to the material being studied. The teacher only gave limited time for students to find and collect the information. Sometimes the teacher also did not seem to provide opportunities for students to present the findings that have been made and the teacher directly guides students to made the concept of the material. In the generalization stage some students tend not to be able to determine concepts or principles that were accordance with the material. Based on discovery learning, there were six steps that must be taken in the learning process, namely stimulation, problem statements, data collection, data processing, verification and generalization. However, the researcher found were still some steps that had not been implemented properly. For example, in the expression congratulation and compliment material, at the data collection stage. The teacher only gave a little time and does not provide opportunities for students to present the results that have been collected by students. When teacher asked to put forward concept of the expression, some students had difficulty in determining the right concept for this material. Learning like this causes a lack of student productivity and low student understanding in learning English. Meanwhile, SMAN 1 Bukittinggi was one of the favorite high schools that has diverse student abilities and tends to be better at learning.

Based on the phenomena above, the researcher intends to conduct a research that focuses on the title 'An Analysis of Implementation Discovery Learning in Teaching English at fisrt grade in SMA N 01 Bukittinggi in Academic Years 2021/2022'.

2. Methods

This kind of this research was qualitative descriptive research. That was researcher analyzes how the implementation of discovery learning in teaching English. The researcher selected this method because it conveys a broader understanding of the teacher and students' views on analysis of discovery learning. Gay states that descriptive research involves collecting data to answer the question concerning the current status of the subject of the study (Gay, 1990). It means that if the researcher conducts descriptive research, the research should collect the data and try to describe based on the current status found by the researcher. The informants of this study is a English teacher and students of class X SMA N 1 Bukittinggi. Researcher form of observations and interviews. The data is completed by the teacher interview. The researcher choose X IPA1 and X IPA2 as informants to collect the data. The instruments in collecting data ware interview and observation. In this case, the researcher conducted research at SMAN 1 Bukittinggi which is located at Pakan Kurai, Kec. Guguk Panjang, Kota Bukittinggi, West Sumatra.

3. Results and Discussion

This chapter presents the research findings and their discussion in which it presents the types of classroom interaction, An Analysis of Discovery Learning In Teaching English At First Grade In SMAN 1 Bukittinggi Academic Year 2021/2022. The researcher has several finding which are described below:

3.1. Descriptif of The Data

The data in this research were collected from observations and interviews with Mrs. Dra. Liana Safitri in class X and the students at the first grade in SMAN 1 Bukittinggi. There were two clas as samples in this reaserach was XIPA1 and XIPA2 class. As previously mentioned, the researcher wanted to know how the teacher's implementation discovery learning in teaching English. Data collection was carried out by observation and interviews.

Analysis of observation Checklist
Table 1.

No	Aspek	Sub Indikator	Meeting 1		Meeting 2		Meeting 3		Explenation
			IPA 1	IPA 2	IPA 1	IPA 2	IPA 1	IPA 2	
1	Stimulation	The teacher asking questions that direct students into problems in learning	✓	✓	✓	✓	✓	✓	Guru menghadapkan siswa pada sebuah teks, agar timbul motivasi siswa untuk menyelidiki. Kemudian memberikan pertanyaan-pertanyaan, menganjurkan siswa membaca buku, melihat gambar atau bercerita materi
		The teacher provides stimulation in raw form or displayed with media that is as attractive	✓	✓	✓	✓	✓	✓	
2	Problem Statment	The teacher guides students in identifying problems	✓	✓	✓	✓	✓	✓	Siswa menentukan sendiri tanpa arahan guru dan guru langsung mengarahakan ketahap mengumpulkan informasi mengenai materi
		The teacher guides students to determine temporary hypotheses	✓	✓			✓	✓	
3	Data Collection	The teacher assigns students to collect information related to the problem statement	✓	✓	✓	✓	✓	✓	Guru mengarahkan siswa mengumpulkan informasi dengan membaca buku, melalui percobaan secara langsung dan bertanya serta mengamati.
		The teacher guides students in gathering information	✓	✓	✓	✓	✓	✓	
4	Data Processing	The teacher monitors students in processing data from information that has been collected	✓	✓	✓	✓	✓	✓	Guru mengarahkan siswa mengolah data dengan diskusi, dan bertanya. Kemudian mengeksplorasi kemampuan konseptual siswa dalam kehidupan nyata.
		The teacher directs students in analyzing the information	✓	✓	✓	✓	✓	✓	
5	Verification	The teacher guides	✓	✓	✓	✓	✓	✓	Guru mengarahkan siswa melakukan

No	Aspek	Sub Indikator	Meeting 1		Meeting 2		Meeting 3		Explenation
			IPA 1	IPA 2	IPA 1	IPA 2	IPA 1	IPA 2	
		students in proving the data obtained with the problems discussed							verifikasi dengan mempraktikkan secara langsung, bertanya dan berdiskusi.
		The teacher guides students in relating the information obtained with their knowledge	✓	✓	✓	✓	✓	✓	
6	Generalization	The teacher asks students to conclude the results of the analysis that have been collected	✓	✓	✓	✓	✓	✓	Guru mengarahkan siswa untuk membuat kesimpulan dan menggeneralisasi hasil simpulan pada suatu kejadian maupun permasalahan yang serupa.
		The teacher provides direction and nests for each group that provides their findings in the form of rewards or praise and provides motivation	✓	✓	✓	✓	✓	✓	

From the table above, it can be seen that there were three meetings conducted by researchers in IPA 1 who followed the discovery learning steps. The steps of discovery learning such us stimulation, problem statements, data collection, data processing, verification and generalization. In the aspects, there are two sub-indicators that are considered by the research during conducting research in the two class. The following is described further. The three research meetings in class XIPA1 and XIPA2 it can be seen that the teacher has implemented discovery learning even though at the second meeting in class XIPA1 the teacher did not give directions for students to identify historycal recount material first. The teacher directly directed the students to immediately find and collect information about the dog that made history.

To complete this research data, the researcher also interviewed the English teachers which was conducted on 8 Januari 2022. The researcher used Indonesian to interview teachers. This interview was conducted with the aim of finding out more about the implementation of discovery learnings and asking questions that researchers could not find during observation. Based on interviews researcher can conclude several things related to the implementation of discovery learning in English learning have been carried out in accordance with the steps of discovery learning. This is in accordance with

what the researcher saw in the observation in accordance with the information provided by the teacher when interviewed especially problem statement.

First meeting, based on observations made by researcher in the field, at the first meeting the researcher found that the teacher came to the class and said greeting to the students as introductory step in teaching. Then the teacher asked how the students were doing that day. After that, the teacher asked students with instill attitude religious to pray together, the students together say a prayer before learning process. Then, the teachers asked who is absents today without did attendance by saying every the students' name in the class. After the introductory step in teaching has done by the teacher, the teacher did review about the last material in recent meeting. The students was asked by the teacher to tell something about simple pasten material that they have learned, then the teacher asked the students to give some example that relate with the material. After done some reviewed about previous material, the teacher began the new learing material. The teacher make effort in a certain way to rouse students curiousity. The researcher found that the teacher was rouse activity to the students and the teacher directly taught about same material. When the teacher taught about new material, the students excited because they have got any rouse at the begining and can find some vocabulary in the past tense. The researcher found that dominantly the students and active, and the material can be understood clearly by students. The teacher did write anything in font of the class, which is this situation will make the students excited and being focus to learning process. Most of the students in the class did pay attention with what the students was said. At the middle time of learning process, the teacher began to write some thing in whiteboard. The teacher asked the students to write the sentense in simple past tense in whiteboar. Then, she would asked the students to determine the correct sentence from some of sentences that have been made by theother students. The teacher allow the students used their phone to help them in learning such as, using dictionary, searching references, etc. While the students was creating the sentense, the teacher control the students by walking to every students' desk. Beacuse the time was up, the teacher asked the students to continue their task at home.

The second meeting, the teacher still did different material from the first meeting. The teacher also pays attention to the situation in each class. At this meeting, the teacher asks students to work in pairs with their friends to study historycal recount text. The teacher greeted the students, "Good morning, students. How are you?". As usual the teacher checks attendance before starting the learning process. The teacher invites students to pray together as instilling a religious attitude, "let's say basmalah" then students follow the teacher's instructions "Bismillahirrahmannirrahiim". After that, the teacher reviews the previous material. to start class, and wake up students. He asks students to distribute papers containing historycal recount sheets. The teacher gives 5 minutes for students to look at the text. After all the preparations are complete, the teacher asks one of the students to find out the meaning and information contained in Because of the limited time the teacher did not give directions to students to identify the text, but the teacher directly directed students to find information based on the text that had been given by the teacher.

Then, the teacher instructs students to convey the information that students get from the text. The student reads the text information aloud, and the teacher records the statement on the blackboard. After each student representative conveyed this, they repeated what information they had collected. The teacher repeats several statements to guide students in reconfirming the answers they have got. After this activity is finished, the teacher immediately asks the students together to check whether the statement that has been conveyed is true in the text and shows where it is. While participating in this lesson, students looked enthusiastic in submitting their opinions regarding the material presented by the teacher. At the end of the lesson, the teacher gives some evaluations about their learning outcomes, then the teacher also gives an explanation about the material that has been learned that day as well as some previews of the new material that will be taught in the next meeting.

The third meeting, the teacher came to class with descriptive text material for students. Then the teacher greets students as the first step in teaching. The teacher says "assalammualaikum wrb", students say "waalaikummussalam wrb sir". The teacher does instill a friendly attitude with a smile to students to make the class atmosphere warm. Since then the teacher invites students who have a firm mentality to pray together, "before we start our lesson today, let's start praying together and ideally our way of learning is glorified by Allah SWT", the students pray together before the learning process. Then, the teacher checks attendance while students prepare their books and learning tools. Before the teacher starts class, he or she reviews the last material, and asks students to tell something about their previous meeting. After the review, the teacher carried out several introductory steps in teaching such as stimulating students with phenomena related to the material.

The teacher explains the material while writing on the blackboard. After that, the teacher divided the students into a text in the form of an Indonesian artist to discuss what was given by the teacher. Students are given the opportunity to express their opinions which are shown in front of the class. Before asking students to find and collect information about texts about one of these artists, the teacher first explains descriptive texts. The teacher also explains current things in the descriptive text and examples. After all students understand the material the teacher guides students to pay attention to the text that has been given by the teacher. As the facts are found, the teacher asks students to make inferences about information and see information about the artist that occurs in real life. While students are doing their work, the teacher goes around the class and guides students who are having difficulties. Here it is also seen that students are active in asking questions that can make it easier for them to find the information they need. Then, the teacher also gives some reviews and evaluations about learning. the teacher also asked students to try to explain back the material they got in the meeting. Here you can see almost all the students conveying their opinion. Due to limited time, students cannot complete their assignments on the same day. Then the teacher asked them to finish it at home, and instructed them to prepare well to perform in the next meeting. In closing, the teacher thanked the students and said "see you at the next meeting, students". Students answered "see you too miss".

According to the information given by the teacher, the researcher found that probelem statement it has been done by the teacher but there are times when the teacher skips this step because the teacher thinks it can be equated with verification. In building students' interest in identifying problems, the teacher provides more popular materials for students. As well as to make hypotheses from problem identification, the teacher also provides information that can be handled by students by providing interesting material that makes it easier for students.

3.2. Analysis of The Data

Researcher would describe discovery learning step was represented to answer the research question: how was the implementation of discovery learning in teach English in first grade at SMAN 1 Bukittinggi. The researcher analysis data conducted interviews and observations as below:

3.2.1. Stimulation

Based on researcher have found, the teacher used several pictures and texts to provide a stimulus for students in learning. Through this, the teacher asks students to identify the object in the picture. On the other hand, the teacher also gave some questions that can build students' interest in starting learning. This was because the teacher wants students to later identify about the images displayed. It was seen that the teacher gave pictures that were familiar to students such as one of the great Indonesian artists, pets and one of the American presidents in the recount text material. Students can adjust to the knowledge and almost all students know the pictures given by the teacher. That is important to prepare pictures that match the experience and knowledge that students have. Because it can attract students' interest and students find it easier to find information about the material being

taught. Then, Some texts and pictures given by the teacher are presented in the form of incomplete information, students were given texts that have never been studied before. Students were directed to identify information related to the recount text given by the teacher. The teacher also adjusts to the student's experience so that it can be easier to stimulate and to seek information from several sources to match the learning being studied by students.

3.2.2. Problem statement

It was carried out by the teacher who was guided to books, texts and some explanations that were directed by the teacher. it was seen that the teacher gave several questions to build students' interest in identifying in historical recount text. However after giving the text, the teacher immediately guides students to read books and search the internet using cellphones. Then, the teacher directs students to seek information while students should be given the opportunity to identify the problem first. The teacher also did the same thing where the teacher directly directed students to find and collect information about the descriptive text being studied. while the teacher should provide opportunities for students to identify the text to be used. This may be important in the problem statement stage but the teacher just skips it. Next, the teacher guides students to determine temporary hypotheses before students look for information related to the problem. There were several questions given by the teacher in order to direct students in determining the temporary hypothesis, but the researcher did not find the teacher guiding students in identifying texts related to the recount text. However, it seems that the teacher directly directs the rest to answer questions and students seek additional information through module books and the internet.

3.2.3. Data Collection

In the aspect of data collection, the teacher guides students to collect information related to problems from various sources. The teacher explains the material clearly, both the purpose, the problem to be carried out, as well as the time and place of the experiment. As an activity to work on recount text, students are not required to bring materials and tools. Then the teacher invites the students to do the activity of making recount text by guiding them to the textbook. As long as students are assigned to work on an assignment, the teacher runs the class and ensures that all students understand the assignment. When the teacher went around the class, there were some students playing and making noise and telling stories with their friends. Because the teacher has motivated students not to make a fuss during the learning process except doing the assignments given by the teacher, the students return to focus on working on the text. In addition, the teacher guides students in collecting information. The researcher found that this was done by the teacher with a text guide that had been provided by the teacher and students could search for additional information through their cellphones.

In this case, students are allowed to search for information with their cellphones because some texts are not provided with more complete information. while in some meetings students are not allowed to look at cellphones because it can interfere with concentration and the text given is complete or will be given an explanation by the teacher. But of course the materials and sources are complete, available in the module book or text sheet given by the teacher.

3.2.4. Data Processing

This stage was processing, the teacher monitors students in processing the information data that has been collected together. Information received from data collection regarding the text. The teacher guides students to group and separate the function, structure, and future language of the historical recount. Then, the teacher guides each student to determine it into examples of historical recount text found by students. The teacher also directs students to make a text from the materials that have been collected according to their respective titles. Then analyzed the structure of the text made by the

students themselves. The teacher guides students to group and separate the function, structure, and future language of the historical recount.

Here, the teacher was seen guiding students to analyze categories and the relationships between categories. Based on observations, some students have been able to analyzed any text given by the teacher. For example, when the teacher asked the students to explain about the function of Text, they gave a good response. Sometimes some other students also seem to provide additions to complement the opinions of previous students. Then, the teacher directs students to analyzed the information that will be used as a concept for students. Through collected data from images and texts, the teacher asks students to analyze. At the first meeting, the teacher guides the students to analyze the function, structure, and language of historical recounts with examples of historical recount texts that students find. At the second meeting, students were directed to analyzed the structure of the text made by the students themselves. At the third meeting, the teacher guides students to group and separate the function, structure, and future language of historical recounts. Then the teacher guides each student to determine this to be an example of a descriptive text that students find.

3.2.5. Verification

At this stage, the teacher guides students in proving the data obtained with the problems discussed. At the first meeting, students provide evidence related to the material they have collected to examine the truth of the information or things students have obtained, while the teacher must direct students to see and re-examine the results of their work whether students can be concluded for students or not. With this indicator, the teacher checks one by one the opinions of the student worksheets and some student opinions that have been written on the blackboard. Then the teacher justifies if there ware errors or student answers that ware not quite right with the material. At the second meeting, the teacher gave an opportunity to group representatives to present the results that had been made by students. Then the results that have been presented are collected to be rated. At the third meeting, the teacher gave an opportunity for several students to convey what they encountered about the descriptive text that had been written in the book according to the descriptive text examples found by the students. Then the teacher gave a direct response whether it was true or still not right, if it was not right, the teacher gave additional. Then, the teacher guides students in connecting the information obtained with the knowledge students have. Based on the evidence that had been collected by the students, the teacher gave directions to the students to relate the information that had been obtained with the knowledge possessed by the students. Sometimes at this stage the teacher was seen to re-explain the material being studied. According to the teacher's statement, it was a duty for students to better understand the material.

3.2.6. Generalization

In this last indicator, students are asked to conclude the results of the analysis that have been collected and provide direction and suggestions for students. Students are gave the opportunity to present the results that had been obtained and the conclusions of the work that had been gave. Based on observations, the teacher invited several students as representatives to come to the front of the class. So that students dare to appear, the teacher gave marks to students who dare to appear in front of the class. In addition, the teacher must make clarifications. So, after presenting the assignment, the teacher helps the students to make conclusions and clarify their assignments. In this case, the teacher invites several students to talk and conclude the material. Then, to close the meeting, it's time for the teacher to clarify wrong or right, and summarize the material from stimulation activities to generalization activities.

Next indicator, the teacher gave an opportunity for some students to conclude and conceptualize what the students had found about historical recounts. Then the teacher gives direction and motivation to students to be even more active in finding and learning what they have found. At the

second meeting, the teacher asked several questions related to the historical recount that the students had learned. Then from the question the teacher asked some students to conclude as a new concept that can be used as knowledge for students. At the third meeting, the teacher gave an opportunity for several students to conclude and create concepts from what the students had found about descriptive texts. Then the teacher gives direction and motivation to students to be even more active in finding and learning what they have found.

References

Adhisty, K. (2021). *Mual-muntah merupakan masalah yang mendominasi ketika pasien mendapatkan kemoterapi dalam tatalaksana kanker. Pasien tentunya mengalami penurunan kualitas hidup yang dapat mempengaruhi biopsikososial dan spiritualnya. Pengukuran asam lambung pada saliva p. 8.*

Aditama, A. Y., Mardiyantoro, N., Sibyan, H., & Hidayat, M. (2022). Penerapan Metode Certainty Factor Pada Sistem Pakar Diagnosa Penyakit Ayam Kedu Berbasis Web. *Device*, *12*(1), 43–50. Kementrian pendidikan dan kebudayaan. 2014. *Implementasi Kurikulum2013 SMP Bahasa Inggri.* Jakarta: Bumi Aksara

Gay, L. R. (1990). *Educational Research Competencies for Analysis and Application.* Singapore: Merril

Hosnan. (2014). *Pengemangan bahan ajar penulis teks prosedur kompleks dengan model pembelajaran discovery learning menggunakan audio visual.* 2014. p.280

Piaget. (2005). *Belajar dan Pembelajaran.* Jakarta: PT Rineka Cipta.p.98

Robert B. Sund. (2016). *kurikulum 2013 dan pembelajaran,*Jakarta: Rajawali Press

Siti Lastari, Riana Eka Budi Astuti. (2018). "The Implementation of discovery learning towards students activeness in learning material song in SMA N Guntur Demak," tell jurnal 1. p. 514

Sugiyono. (2013). *Memahami Penelitian Kualitatif.* Bandung : Alfabeta.

Suharsimi Arikunto. (2006). *Procedur Penelitian Suatu Pendekatan Praktek*, Jakarta: Rineka cipta.

Suryabrata, S. (2011). *Metodologi Penelitian.* Jakarta: Raja Grafindo Persada

Suyanto, Bagong. (2005). *Motode Penelitian Social: Berbagai Alternatif Pendekatan*, Jakarta: Prenada Media.

Wilcow. (2014). *Pengemangan bahan ajar penulis teks prosedur kompleks dengan model pembelajaran discovery learning menggunakan audio visual.* p.283