

**THE STAGES OF CONCERNS OF USING DISCOVERY
LEARNING IN TEACHING ENGLISH
AT SENIOR HIGH SCHOOL**

THESIS

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**FAKULTAS TARBIYAH DAN KEGURUAN
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of Education in English Language Teaching

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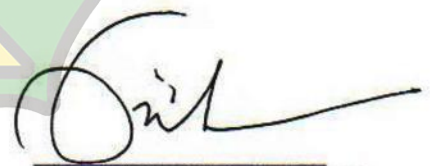
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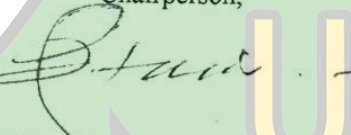
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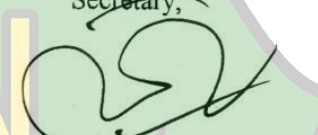
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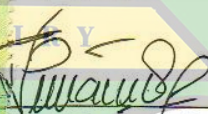
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TEACHING ENGLISH AT SENIOR HIGH SCHOOL**

adalah benar-benar karya saya, **kecuali semua kutipan dan referensi yang disebutkan sumbernya.** Apabila terdapat kesalahan dan kekeliruan di dalamnya, maka akan sepenuhnya menjadi tanggungjawab saya. Demikianlah surat pernyataan ini saya buat dengan sesungguhnya.

Banda Aceh, 24 Agustus 2020

Saya yang membuat surat pernyataan,




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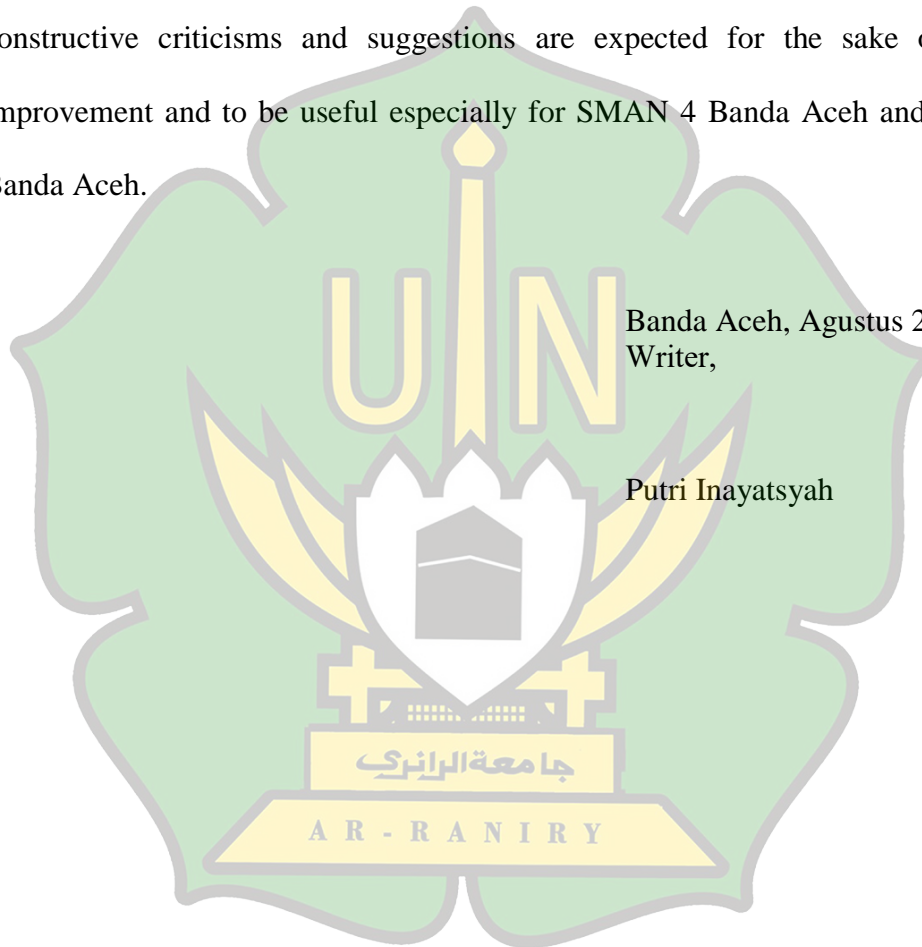


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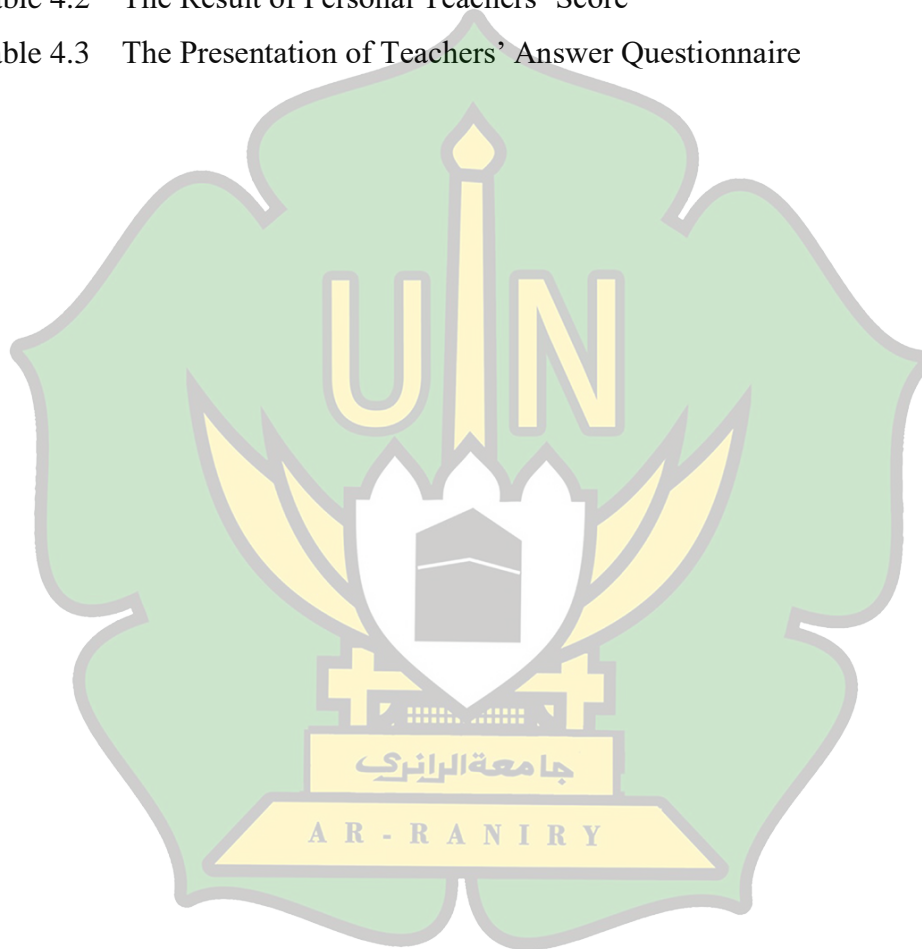
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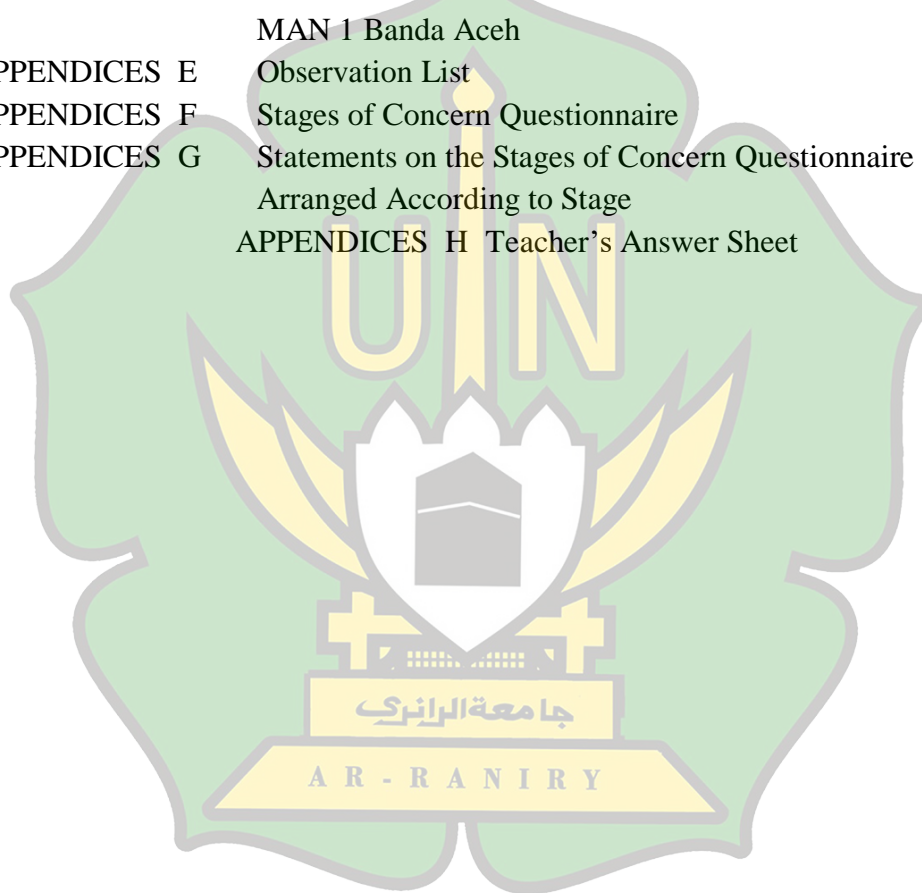
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ABSTRACT

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Keyword : concern; discovery learning;

This study aimed to investigate the English teachers' concern about using the discovery learning model in teaching English and how English teachers implemented discovery learning in the classroom. The problems of this research were; the first, English teachers did not apply the discovery learning model was a state in the lesson plan; second, the English teachers were not able to used appropriated and effective learning models in the teaching-learning process; third, the students were not able to solve their problems in learning. The population in this research were English teachers at SMAN 4 Banda Aceh and MAN 1 Banda Aceh. The sampling method used was purposive sampling, in which nine English teachers were chosen. This research used mixed-method approaches; qualitative and quantitative methods and data were collected using two methods included observation and questionnaire. Qualitative data were collected using an observation checklist and quantitative data were collected using stages of concern questionnaire. Miles and Huberman's (1994) framework to analyze the qualitative data and SoCQ manual, and the statistical formula to analyze quantitative data. The result of observation showed teachers and students are very enthusiastic and interested in using the discovery learning model. The use of discovery learning models can increase activity, creative thinking skills, and student learning outcomes. The finding of the questionnaire that the highest stage of English teachers' concern is in stage 1 (Information) 89,44%. There is a positive significant relationship between English teachers' concerns and the implementation of the use of discovery learning models. Most of the English teachers understood and have a high motivation to be involved in the development of discovery learning models, made lesson plans, and used discovery learning models in teaching English. The results showed that English teachers wanted to get a lot of information and interested in learning more about the discovery learning model. Teacher's interactions in planning and implementing discovery learning models need to be improved.

CHAPTER I

INTRODUCTION

This chapter presents the background of the study, research question, research aim, scope of the study, the significance of the study, and research terminologies.

A. Background of Study

The quality and success of the learning tend to be influenced not only by the competence of a teacher but also by the accuracy of the learning model used. The learning model is a plan or a pattern that was used as a guide in planning teaching and learning activities. According to Arends (2012), the learning model is a plan or a pattern used as a guide in planning learning in class. The learning model refers to the learning approach that be used, included teaching objectives, stages in learning activities, learning environment, and classroom management. The learning model is chosen needs to consider the characteristics of the students, learning material, and the facilities and infrastructure available. Teachers needed to learn more about the strengths and weaknesses of the learning model in teaching.

In Indonesia, there are four models applied in primary and secondary education. According to the Ministry of Education and Culture (2014), number 103 of 2014 concerning learning in primary and secondary education, the implementation of the 2013 curriculum recommended using a scientific approach with inquiry-based learning, discovery learning, the problem-based learning, and

project-based learning. The discovery learning model is a learning process that occurs when the students are not presented with the final material, but students are expected to organize by themselves, while problem-based learning is a learning model that faced a real problem, where the problem is used as a stimulus that trains students to think critically. students can solve these problems and gain knowledge of important concepts that are learned. (Illahi, 2012). Based on the social constructivism approach, both two models have different characteristics and different effects when used in certain contexts. Therefore, the use of a model in the 2013 curriculum can be assigned students as subjects (student-centered) of learning and the teacher as a facilitator in the learning process.

The discovery learning model was introduced in the 1960s by one of the founders of constructivism theory by Jerome Bruner. According to Bruner (1960, as cited in Ministry of Education and Culture, 2014, p. 1) "Discovery learning can be defined as the learning that takes place when the student is not presented with the subject matter in the final form, but rather is required to organize it himself". The discovery learning model was made students more active because students make their discoveries are by being stimulated to make conclusions with the guidance of the teacher during the learning process outcomes can imprint on student's memories and developed students' thinking abilities. The learning model applied in the 2013 curriculum the teachers created active classrooms, there are many learning methods and models that can be applied by teachers. In this case, the teacher remains an important role in the learning process. The basic idea of this type of learning model is students can design their experiments in the domain

of their knowledge, concluded their own domain rules and they can build their knowledge.

In Indonesia, English began to be learned from elementary school, junior high school, and senior high school, as well as universities and other non-formal educational institutions. English learning is expected to help students get to know themselves, their culture, and the culture of others. In learning English, there are four skills that students must master, including speaking, listening, reading, and writing.

Writing is one of the language skills used indirectly, not face to face with other people. According to Nunan (2003, p.88) "Writing is a productive and effective activity because students are required to be able to produce written works in the form of sentences, paragraphs, and texts. However, writing can be the most difficult thing to do because students may have difficulty just deciding the first sentence to write". Based on the above, writing becomes the most difficult skill for the second language learner to master because it needs a long process and complex skills to produce good writing. Besides, students were required to produce written works in the form of text to complement certain basic competencies in English subjects. Therefore, English teachers need to consider appropriate learning models to be applied in teaching writing. In this thesis, the purpose of discovery learning in teaching English is focused on writing.

The purpose of writing learning in this study is how the English teacher can guide students to be able to write in English. Therefore, besides motivated the students, teachers also need to have strategies and innovations in learning writing.

The most important reason for learning to write is as a skill itself, writing skill is one of the basic abilities in language learning and is as important as speaking, listening, and reading. Students have to know how to write letters, poems, reports, advertisements, and so on. Students also need to know the rules in writing such as generic structure, and language features, which are aspects of language that must be considered in writing such as vocabulary (dictionaries), grammar (tenses and punctuation), as well as in speaking skills, students need to know how to pronounce (pronunciation) good and correct in learning English.

Based on pre-observations, the researcher has conducted a teaching practice program (PPL) one of school at Aceh. The researcher found that some English teachers' problems faced in implemented discovery learning. First, English teachers did not apply the discovery learning model was a state in the lesson plan. The English teacher has to use the discovery learning model for teaching and learning in the classroom. Second, English teachers were not able to use appropriate and effective learning models. Most learning models used by teachers were conventional learning models with lecture methods. This shows students lack participation and active interaction between teachers and students, students and students rarely occurs, so the students learning outcomes were less than optimal. Third, in the learning process, the students were not able to solve their problems in learning. The learning process tends to be centered on the teacher (teacher-centered), the English teacher is still low able to manage in chosen media and strategies, and it has not maximized in arousing student motivation.

Referring to the statement above, discovery learning model learning is a series of learning activities that maximal involved all students' abilities to search and investigated systematical, critical, logical, and analytical, so they can formulate their findings. In this context, the discovery learning model is a model to improve the way active students in learning to discovered and investigated by themselves. So the results get in permanented, memorable in their mind, and unforgettable for students.

The researcher has researched in two schools at Banda Aceh. This study aimed to investigate the English teachers' concerns on using the discovery learning model in teaching English and how English teachers implemented discovery learning in the classroom. This research intended to fill in the gap by exploring the English teachers' perceptions, concerns, and teachers implemented in teaching English by using the discovery learning model at Senior High School. It is important to improve English teachers' understanding and knowledge of English about the use of the discovery learning model. Hence, their perceptions and concerns can be better.

Previous studies have been conducted related to this topic. One of them was conducted by Hasiholan (2015) entitled "Analysis of the Chemistry Teachers' Perception, Understanding about the Implementation of the Discovery Learning Model in Muara Bungo Jambi". The results of this study showed from 12 chemistry teachers based on different teaching experiences in general, this study reveals a fact, this is due to the teacher's knowledge and understanding still low, so it does not support the implementation of learning by using the discovery

learning model when teaching in the class. Although teachers generally agree with the implementation of discovery learning models, without a strong understanding, it was difficult to do. This finding indicates that teachers needed to learn to use discovery learning through separate training.

Another study was conducted by Mislinawati and Nurmasyitah (2018) entitled “Teacher Constraints in Implementing Learning Models Based on the 2013 Curriculum at SD Negeri 62 Banda Aceh”. The results of data analysis, the constraints faced by teachers at implementing the 2013 curriculum learning model was prepared the lesson plan (RPP) the teacher wrote the learning model, but the teacher does not write down the syntax in the model, because the teacher does not understand the learning steps accordingly the syntax that exists in the learning model so teachers were low to able to stimulate students to find out for themselves the problems that exist in the learning material the role of teachers is more dominant than students. Students were not allowed to find their concepts that are being discussed, as well as in the classroom management teachers are less able to direct students who were less able to be actively involved, and teachers do not get around the available time.

Another research was conducted by Zaifuddin (2016) entitled “Peringkat Keprihatinan Dan Tahap Penggunaan Komunikatif Guru Dalam Pelaksanaan Kurikulum Bahasa Inggris Berasaskan Sekolah”. This study also aims at identifying changes made by the teachers in implementing ESBC, challenges to the process of changes, and how the teachers carried them out. Results showed that the highest stage of teachers’ concern is in stage 3 (Management) followed by

stage 5 (collaboration). The highest level of use of the communicative approach is level 4 (routine) followed by level 3 (mechanical). There were significant differences between gender, education, and training towards teachers' stage of concern but not for years of teaching. There were significant differences between gender and years of teaching in the level of use of the communicative approach whereas no significant differences were found in education level. The result of the study shows that the involvement of teachers in planning and implementing ESBC should be increased.

The study was carried out by Joseph (2013) entitled "Teacher Concerns Associated with The Implementation of Project/Problem-Based Learning". This research used mixed-methods; quantitative (SoCQ) and qualitative (semi-structured interviews) methods. This study focused on the challenges and concerns teachers face in the implementation of Project/Problem Based Learning (PBL). Its purpose is to assess the effectiveness of a professional development model designed to specifically address teacher concerns associated with the implementation of PBL. To expand the amount of information gained relative to the implementation of PBL, future research could incorporate the two additional diagnostic tools within the CBAM. In Stage 5 (Collaboration) scores peaked at the end of the two-weeks indicating teachers have concerns about working with others in regards to PBL. Results indicated that regardless of the years' teachers were associated with the innovation, concerns requiring more information about PBL and how it would affect them personally were present. Besides, concerns of

teachers were resolved after completing the two-week professional development designed to administer to those concerns.

B. Research Questions

In this study, the writer would like to answer the research question as follows:

1. How is the English teacher use the discovery learning model implemented in the classroom?
2. What concerns are most common among English teachers regarding implementing the discovery learning model?

C. The Aim of the Study

The aims of this research as follows:

1. To explore how English teachers implemented discovery learning in the classroom.
2. To investigate English teachers' concerns regarding implementing the discovery learning model.

D. Significance of the Study

The results of this study are expected to give both theoretical and practical benefits as follows:

1. Theoretical Benefit

Theoretically, the result of this research is expected to give a supported theory of discovery learning model that can be applied to improve the students' writing skills. The discovery learning model is a model where students are given

a chance to observe, think, ask, and discover the material by themselves. It is appropriate with the 2013 curriculum which is based on the scientific view. It is an interested model that motivated students in the classroom. Moreover, this model lets students be more active in the classroom. Hence, it is expected for the teacher to apply the discovery learning model to teach writing skills.

2. Practical Benefit

a. English Teachers

The findings of this study can be used by teachers to facilitate the process of change in the implementation of discovery learning at school. The study also presents recommendations for several interventions to solve teachers' problems with the adoption of new learning models found in curriculum changes. Thus, the right decisions can be made, about what and how to provide interventions during the implementation process. Also, the findings of this study can contribute to the development of new curriculum models to guide change to the point of effective implementation. The result is expected to be able to give information to the teachers about the discovery learning model in their teaching classroom.

b. Students

The implementation of the discovery learning model can help students developed text writing skills. Improve students' creative thinking skills in learning English through discovery learning models. Activated the ability to think critically in finding a simple concept to deal with a problem in the teaching and learning process.

c. For other researchers

The findings of this study gave more description and information about English teachers' concerns used the discovery learning model. This research can help the next researchers who want to research more about teachers' concerns and discovery learning model. Finally, this study contributed to the research on change and teachers' concerns about the adoption of an innovation. The findings of this study can help the facilitators of change to make appropriate decisions on when and how to provide support to individual teachers during the implementation of the discovery learning model in the classroom.

3. The Terminology of the Study

The researcher explains more about some essential terms to this research, including:

1. The Stages of Concern

Fuller established the concern theory in the late 1960s, which focused on determining teachers' concerns as an important tool in measuring the quality of an educational intervention. Hall and Hord (2001 as cited in George, Hall, and Stiegelbauer, 2013, p.57) state that concern as “an important aspect that involves feelings, attitudes, thoughts, and ideas, of an individual reaction related to innovation in the process of change”. Moreover, they classified teachers' concerns as three developmental phases in response to new situations or demands arising from the adoption of a new learning model: self, task, and impact.

In this study, this research focused on teacher concerns in three aspects of implemented discovery learning. The first aspect was self-concern that illustrates

the concern of English teachers about their efficacy to successfully used the learning model of discovery learning. The second aspect was the task-concern of attention that involves management in the discovery learning model. The third aspect was the impact-concern that illustrates the impact of the teacher; Teachers' concerns about the change and include experiences, difficulties, concerns, or constraints that reduce their motivation for discovery learning models in their classrooms.

2. Discovery Learning

According to Rusman (2013, p.133), discovery learning is “a learning theory that is defined as a learning process that occurs when students are not presented with final material but are expected to organize themselves.” In this study, in the discovery learning model, the teacher's role as a facilitator, motivator, and learning manager was very important in implementing discovery learning in the classroom. In discovery learning teacher has an important role to encouraged students to think critically and work hard and appear confident, they can find something in learning, teachers also become a source of learning for students for supporting their findings and teachers play a role in binding relationships between students and learning plans, they did in the learning process.

CHAPTER II

LITERATURE REVIEW

This chapter discusses the literature review related to this research. This provides a theoretical background on the concept of the ability to develop discovery learning models. Thus, this chapter contains the following titles: definition of learning models, types of learning models, learning models in the 2013 curriculum, definitions of discovery learning, characteristics of discovery learning, the purpose of discovery learning, the role of the teacher in discovery learning, advantages and disadvantages of discovery learning, the procedure of discovery learning, and the stages of concern questionnaire.

A. Definition of Learning Model

The learning model is a conceptual framework that describes systematic procedures in organizing learners' learning experiences to achieve certain learning goals, and serves as a guide for learning designers and teachers in planning and implementing teaching and learning activities. According to Trianto (2007), the learning model is a reference to a learning approach including objectives, syntax, environment, and management systems. Meanwhile, according to Rusman (2012), the learning model is a broad and comprehensive approach and can be classified based on learning objectives, syntax (sequence patterns), and the nature of the learning environment. The learning model is very closely related to student learning styles and teacher teaching styles. Through the learning model, the

teacher can help students to get information, skills, ways of thinking, and express their ideas.

Learning models are defined as conceptual frameworks that describe systematic procedures in organizing learning experiences to achieve learning goals. According to Suhana (2014, p. 37) “the learning model is one approach to anticipate changes in the behavior of students in an adaptive or generative manner. The learning model is very closely related to the style of learning students (learning style) and the style of teachers teaching (teaching style), both of which are abbreviated to SOLAT (Style of Learning and Teaching)”. Further, Suprihatiningrum (2013) argues that the learning model is a design in which describes a learning process that can be carried out by the teacher in transferring knowledge and values to students. Thus, the learning model is a conceptual framework that describes a systematic procedure in organizing learning experiences to achieve learning goals. Therefore, learning models tend to be perspective, which is relatively difficult to distinguish from learning strategies.

Based on some of the opinions expressed by experts, the researcher concludes that the learning model is a learning pattern illustrated from the beginning to the end of the learning activities that are arranged systematically. It is used as a guide for planning learning activities to achieve the stated learning objectives. In application, the learning model used is corresponding to the needs of students. For the right model, it is important to consider its relevance to the achievement of teaching objectives.

B. Characteristics of Learning Model

According to Joyce, Weil, and Calhoun (2009, p. 13) the characteristics of the learning model into the following aspects:

1. Syntax

The learning model has a syntax or sequence or stages of learning activities termed phase that describes how the model is in practice, for example how to start a lesson.

2. Social System

The social system describes the form of cooperation between teachers and students in learning or the roles of teachers and students and their relationship with each other and the types of rules that must be applied. In some learning models, teachers act as centers of learning activities and resources, but there are also roles of teachers and students in a balanced manner, each model assigns different roles to teachers and students.

3. The Principle of Reaction

The principle of reaction shows the teacher how to students' values and how to respond to what students do. For example, in a learning situation, the teacher rewards students for their activities or takes a neutral attitude.

4. Support System

Support systems describe the conditions needed to support the implementation of learning models, including facilities and infrastructure, such as tools and materials, teacher readiness, and student readiness.

5. The Impact of Direct Learning and Accompaniment

The impact of direct learning is the result of learning achieved by directing students to the expected goals while the accompaniment impact is other learning outcomes produced by a learning process as a result of the creation of a learning atmosphere experienced directly by students.

The learning model is a learning design that will be implemented by the teacher in the classroom. By looking at some special characteristics and characteristics of the learning model mentioned above, it can be concluded that before teaching, the teacher must determine the learning model that will be used. With the learning model, the teacher can carry out the learning process following the patterns, objectives, behavior, environment, and planned to learn outcomes. Thus the learning process will run well and precisely following the subjects.

C. Kinds of Learning Models in the 2013 Curriculum

The use of appropriate learning models is one of the determinants of success in learning activities carried out by teachers. Thus, the teacher can choose the types of learning models that are appropriate for the achievement of expected learning objectives. The 2013 curriculum which is currently applied by the government, the Ministry of Education and Culture No. 81A of 2013 regulates that the learning process in the 2013 curriculum should consist of five learning experiences namely observing, asking questions, gathering information, associating, and communicating, which is abbreviated as 5M. This learning experience is known as a scientific approach. The Ministry of Education and Culture (2014) made it clear that the learning models applied to implement a

scientific approach include discovery learning (DL), problem-based learning (PBL), and project-based learning (PjBL).

1. Discovery Learning

The discovery learning model is defined as a learning process that occurs when teaching material is not presented in its final form. According to Kurniasih and Sani (2014, p. 64) states “students are required to carry out various activities to gather information, compare, categorize, analyze, integrate, reorganize material and make conclusions. The steps of learning are stimulation (giving stimulation), problem statements (questions/problem identification), data collection, and data processing, verification (proof), generalization (drawing conclusions or generalizations)”. Based on the description above, it is implicitly known that by not presenting teaching materials in the final form, students can think critically and creatively to find concepts, laws, and principles of teaching materials. Simultaneously, students' skills in identifying problems, collecting data, processing data, making evidence, drawing conclusions, and conveying ideas can be honed. Besides, it is very possible for the emergence of great curiosity in finding concepts, laws, or principles of teaching materials.

2. Problem-Based Learning

The problem-based learning model is a learning model that is based on the many problems that require authentic investigation, that is, investigations that require real resolution of real problems. According to Eggen and Kauchak (2012, p.307) state, “a learning model based on this problem is the interaction between the response stimulus, the relationship between two directions of learning and the

environment”. In this model, students work on authentic problems to compile their knowledge, developing inquiry and higher-order thinking skills, developing independence, and self-confidence.

3. Project-Based Learning

According to Sani (2016, p.226-227) explains that “the project-based learning model is a learning model that is carried out to deepen students' knowledge and skills by making work or projects related to teaching materials and competencies”. Projects made are related to community needs, such as simple water pumps, organic fertilizers, handicrafts made from plastic waste or paper/cardboard waste, and others. Projects made can be simple or just prototypes. This project-based learning model includes activities to solve problems, decision making, investigations, and making work skills. Students learn in groups and each group can make different projects. The teacher is only as a facilitator in helping to plan, analyze the project, but not to provide direction in completing the project.

Anticipating various educational problems in Indonesia, there are various kinds of issues around education, such as the many burdens of subjects in schools that have been studied by students, learning more oriented to memorization less on understanding, the low quality of learning especially in the fields of mathematics and science, the lack of students character, there is a crisis of national character, and national exams become a scourge in education, students, teachers, and society. The 2013 curriculum makes various strategic policies, both related to subjects, learning paradigms, learning strategies, learning approaches, learning models, and evaluation of learning. This thesis specifically discusses

learning models in the 2013 curriculum that focus on the discovery learning model.

Because discovery learning more familiar in this era. Almost of the teacher in the school used discovery learning model in teaching English. The discovery learning model emphasizes the formation of knowledge or concepts from experience. Discovery learning uses reflection as the key to understanding. The teacher introduces experiences in such a way as to increase relevance or meaning, using a sequence of questions during or after the experience to guide students to reach specific conclusions. In essence learning, discovery learning model emphasizes the formation of concepts by students in learning. In discovery learning, students develop concepts based on facts. Discovery learning's focus is on the active involvement of students to build concepts or knowledge.

D. Discovery Learning Model

1. Definition of Discovery Learning

Discovery is a learning model developed based on the view of constructivism. This model emphasizes the importance of understanding the structure or important ideas of discipline, through the active involvement of students in the learning process. According to Hanafiah and Suhana (2009), the discovery learning model is “a learning activity that optimally involves all students' abilities to search and investigate systematically, critically, and logically so they can find their knowledge, attitudes, and skills as a form of behavior change. There are 3 types of this learning model, are guided discovery/inquiry, free discovery/inquiry, and modified discovery/inquiry”. This model functions as

(a) building commitment among students to learn, which is manifested by involvement, sincerity, and loyalty towards finding and finding something in the learning process, (b) building attitudes, creative, and innovative in the learning process to achieve teaching objectives, and (c) develop a confident and open attitude towards the findings (Hanafiah dan Suhana, 2009).

According to Daryanto (2014), learning with discovery learning students are encouraged to learn largely through their active involvement with concepts and principles, and teachers encourage students to have experience and conduct experiments that allow them to find principles for themselves. The understanding discovery learning according to Jerome Bruner is a learning method that encourages students to ask questions and draw conclusions from general principles of practical examples of experience. The basis of J. Bruner's idea is the opinion of Piaget who states that children must play an active role in learning in class. For this reason, Bruner uses what he calls discovery learning, in which students organize the material learned with a final form.

Based on the above understanding, it can be concluded that discovery learning is a model for developing active students' learning by discovering themselves, investigating themselves, then the results obtained will be faithful and long-lasting in memory, students will not be easily forgotten. By learning discovery, children can also learn to think analytically and try to solve their problems. This habit will be transferred to social life. In discovery learning, students can make estimates (conjecture), formulate a hypothesis, and find the

truth by using an inductive or deductive process, making observations, and making extrapolations.

2. The Characteristics of Discovery Learning

According to Hosnan (2014, p.284), the characteristics of discovery learning are:

- a. Explore and solve problems in creating, combining, and generalizing knowledge.
- b. Fully student-centered.
- c. Activities in combining new knowledge and existing knowledge.

There are several characteristics of the learning process that are highly emphasized by the theory of constructivism, are: emphasizing the learning process rather than the teaching process, encouraging independence and initiative and learning in students, viewing students as creators of the will and goals to be achieved. It is of the view that learning is a process, not an emphasis on results, encouraging students to investigate, respecting the role of crisis and learning experiences, encouraging the development of a natural love of the environment for students to build new knowledge and understanding based on real experiences.

Based on the features of constructivism learning above, the implementation of discovery learning in the classroom as follows: encouraging students' independence and initiative in learning, the teacher opening by asking questions and gives students some time to respond, encourages students to think at a higher level, students are involved actively in the dialogue, or discussions with a teacher or other students, students engage in the knowledge that encourages and challenges discussion.

3. The 5 Principles of Discovery Learning Model

According to Weibell (2011, p. 164), the discovery learning model integrates the following 5 principles:

d. Principle 1: Problem Solving.

Instructors should guide and motivate learners to seek solutions by combining existing and newly acquired information and simplifying knowledge. This way, learners are the driving force behind learning, take an active role, and establish broader applications for skills through activities that encourage risks, problem-solving, and probing.

e. Principle 2: Learner Management.

Instructors should allow participants to work either alone or with others, and learn at their own pace. This flexibility makes learning the exact opposite of a static sequencing of lessons and activities, relieves learners from unnecessary stress, and makes them feel they own learning.

f. Principle 3: Integrating and Connecting.

Instructors should teach learners how to combine prior knowledge with new and encourage them to connect to the real world. Familiar scenarios become the basis of new information, encouraging learners to extend what they know and invent something new.

g. Principle 4: Information Analysis and Interpretation.

Discovery learning is process-oriented and not content-oriented, and is based on the assumption that learning is not a mere set of facts. Learners learn to analyze and interpret the acquired information, rather than memorize the correct answer.

h. Principle 5: Failure and Feedback.

Learning doesn't only occur when we find the right answers. It also occurs through failure. Discovery learning does not focus on finding the right result, but the new things we discover in the process. And it's the instructor's responsibility to provide feedback since without it learning is incomplete.

4. The Purpose of Discovery Learning

Discovery learning aims to make students able to solve problems and draw conclusions from the problems being studied. Students learn to find patterns in concrete and abstract situations. Skills learned in discovery learning situations in some cases, are more easily transferred to new activities and are applied in new learning situations. According to Bell (1978, as cited in Cahyo, 2013, p.104-105), the discovery learning model has six purposes. The purpose of discovery learning as follows:

- a. Students have the opportunity to be actively involved in learning.
- b. Students learn to find patterns in concrete, abstract situations, and as well as predict additional information provided.
- c. Students learn to formulate questions and answer strategies that are not ambiguous and use questions and answers to obtain useful information in finding.
- d. Students form effective ways of working together, sharing information, and hearing and using the ideas of others.
- e. Several facts show that the skills, concepts, and principles learned through discovery are more meaningful.

- f. Skills learned in discovery learning situations in some cases are more easily transferred to new activities and are applied in new learning situations.

Based on the purpose above, affirms that the discovery learning model wants to direct students to be more active both individually and in groups to learn, the character of students is preferred so that skills can be built effectively and the teacher must be skilled in choosing relevant issues to be taught to the class, the problem comes from learning material that challenges students and is following student reasoning. In the future, we will get more qualified outputs because competent young Indonesian scientists will be born.

5. The Role of Teacher in Discovery Learning Model

Discovery learning is one of the learning models used in modern constructivist approaches. In discovery learning, students are encouraged to learn on their own through active involvement with concepts and principles. The teacher encourages students to have experience and conduct experiments by enabling them to find principles or concepts for themselves. According to Kosasih (2014), the role of the teacher is no longer a supplier of knowledge. Teachers pay more attention to students' cognitive growth and development and creativity. This kind of learning process is often referred to as student-centered to develop student competencies and help students develop their self-concept. In this case, the role of the teacher as a motivator, facilitator, learning manager is expected.

1. Motivator, which encourages students to want to think and work hard to be able to learn well. They appear confident that they too can find something important and useful.

2. Facilitator, the provider of learning resources needed by students to realize their findings. Learning resources in question can be in the form of various reference materials or learning environments that are appropriate to the learning context.
3. Learning managers, namely arranging relationships between students and the learning plans they will carry out, for example by pairing up, discussing groups, and visiting certain places so that their activities take place effectively (Kosasih, 2014, p. 84).

According to Mulyasa, et al. (2016, p. 131) The role of the teacher in learning discovery can be described as follows:

- a. Helping students to understand the objectives and procedures of activities that must be carried out;
- b. Check that all students understand the purpose and procedure of activities that must be carried out;
- c. Explain to students how to work safely;
- d. Observing each student during their activities;
- e. Give students sufficient time to return the tools and materials used;
- f. Discuss the conclusions for each type of activity.

Based on the opinion above, the teacher acts as a guide by giving opportunities for students to learn actively. Teaching and learning activities take place from teacher-oriented to student-oriented. In this case, students carry out various activities to gather information, compare, categorize, analyze, integrate, reorganize materials, and make conclusions as a product of their findings.

6. Discovery Learning Model Procedure

The operational steps of discovery learning according to Kurniasih and Sani (2014, p. 67) consist of the following:

1. Preparation Steps for Discovery Learning

- a. Setting learning goals.
- b. Identifying the characteristics of students (prior knowledge, interests, style learning, and so on).
- c. Choosing the subject matter.
- d. Determining the topics that students need to learn inductively (from examples of generalization).
- e. Developing learning materials in the form of examples, illustrations, tasks, and so on to be learned by the students.
- f. Setting the lesson topics from simple to complex, from concrete to the abstract, or from the stage enactive, iconic to the symbolic.
- g. Conducting the assessment process and student learning outcomes.

The conclusion of this theory shows that every learning has to be prepared carefully, a teacher must prepare the condition of students in advance so that students are orderly and serious in learning so that students are ready with physical and spiritual conditions are ready to follow the lessons carried out.

2. The Implementation of Discovery Learning Application Procedures in Classroom

Besides steps that are mentioned above, the Ministry of Education and Culture (2013) also proposes some application procedures of the discovery

learning model. The learning process consists of five main learning experiences are observing, asking questions, gathering information, associating, and communicating. Procedure in applying discovery learning model in teaching and learning activities in class, according to Syah (2004, p.244 as cited in Ministry of Education and Culture, 2013), there some procedures that should be implemented in the teaching and learning activities in general as follows:

a. Stimulation

First of all, at this stage students are faced with something that confuses, then proceeds to not give generalizations, so that the desire to investigate itself arises. Besides that the teacher can start PBM activities by asking questions, encouraging reading books, and other learning activities that lead to problem-solving preparation.

In this activity, the teacher provides stimulants, which can be readings, pictures, and stories by learning material that will be discussed, so that students get a learning experience through reading, observing situations, or looking at pictures. Stimulation serves to provide conditions for learning interactions that can develop and assist students in exploring material. In this case, Bruner provides stimulation by using questioning techniques, namely by asking questions that can expose students to internal conditions that encourage exploration. Thus a teacher must master the techniques in providing stimulus to students so that the goal of activating students to explore can be achieved.

b. Problem statement

After stimulation, the next step is the teacher allows students to identify as many problem agendas as relevant to the subject matter, then one of them is chosen and formulated in a hypothetical form (temporary answers to problem questions), whereas according to Syah (2004) the selected problems must then be formulated in the form of questions, or hypotheses namely statements as a temporary answer to the questions asked.

In this activity, students are required to find any problems encountered in learning, they are given the experience to ask questions, observe, search for information, and try to formulate a problem. Allowing students to identify and analyze the problems they face is a useful technique in building students so that they are accustomed to finding a problem.

c. Data collection

When exploration takes place the teacher also allows students to gather as much information as is relevant to prove whether or not the hypothesis (Syah, 2004). At this stage, the function is to answer the questions or prove whether or not the hypothesis.

In this activity, students are given the experience of finding and collecting data/information that can be used to determine alternative solutions to the problems encountered. This activity also achieves accuracy, accuracy, and honesty, and accustoms students to find or formulate various alternative solutions to problems. Thus students are allowed to collect (collection) a variety of relevant information, read literature, observe objects, interview with resource persons,

conduct their trials, and so on. The consequence of this stage is that students learn actively to find something related to the problem at hand, thus inadvertently students connect the problem with the knowledge.

d. Data processing

According to Syah (2004), data processing is an activity to process data and information that has been obtained by students both through interviews, observations, and so on, then interpreted. “All information readings, interviews, observations, etc., all are processed, randomized, classified, tabulated, even if necessary calculated in a certain way and interpreted at a certain level of trust” (Djamarah, 2006, p.22).

This activity processing data is to train students to try and explore their conceptual abilities to be applied in real life, so this activity also trains their logical thinking and applicative skills. Data processing is also called coding/categorization which functions as concept formation and generalization. From these generalizations, students will get new knowledge about alternative answers/solutions that need to be logically proven.

e. Verification

Students do a careful examination to prove whether or not the hypothesis set earlier with alternative findings, associated with the results of data processing (Syah, 2004, p.244). Verification according to Bruner, aims that the learning process will run well and creatively if the teacher allows students to find a concept, theory, rules, or understanding through the examples he encountered in his life.

This stage directs students to check the truth and validity of the results of data processing, through various activities, including asking friends, discussing, and looking for various relevant sources, and associating them, so that it becomes a conclusion. Based on the results of processing and interpretation, or existing information, statements, or hypotheses that have been previously formulated are then checked, whether answered or not, whether proven or not.

f. Generalization

The generalization / drawing conclusions stage is the process of drawing a conclusion that can be used as a general principle and applies to all the same events or problems, taking into account the results of verification (Syah, 2004, p.244). Based on the results of the verification, the principles underlying the generalization are formulated. After concluding students must pay attention to the generalization process which emphasizes the importance of mastery of the lesson on the meaning and rules or broad principles that underlie a person's experience, as well as the importance of the process of organizing and generalizing from those experiences. In this activity, students are led to generalize the results of their conclusions on an event or similar problem, so that this activity can also train students' knowledge.

Based on the opinions above, it can be concluded that in applying this discovery learning model, a teacher is recommended not to provide full subject matter. Students are sufficiently given the main concepts for students to be guided so that they can find themselves until finally, they can organize the concept as a whole. For this reason, teachers need to provide the broadest opportunities for

students to get concepts that have not been conveyed by the teacher by solving problems.

Implementation of the discovery learning model is assisted by a discussion and assignment model, discussions to solve problems are conducted by a small group of students between three to five people with teacher's guidance and guidance. This activity is carried out on face to face. Thus in the discovery learning model, the communication model is used, not one-way communication or communication as action, but two-way communication. Students are allowed to search for and find themselves with problem-solving techniques. This stage requires a lot of guidance, especially for students who are not accustomed to facing such classroom conditions. This allows students to find meaning for themselves and allows them to learn concepts in the language they understand. Thus a teacher in the application of the discovery learning model must be able to place students in more independent learning opportunities.

In applying the discovery learning model the teacher acts as a guide by providing opportunities for students to learn actively, In the learning process, Bruner attaches great importance to the active participation of each student and is familiar with the different abilities. To support the learning process, the environment needs to facilitate the curiosity of students at the exploration stage. To facilitate a good and creative learning process must be based on the manipulation of learning materials according to the level of cognitive development of students. Manipulation of learning materials aims to facilitate

students' ability to think (represent what is understood) by the level of development.

7. Advantages and Disadvantages of Discovery Learning Model

Learning model certainly has weaknesses and strengths, in discovery learning can improve students' ability to solve problems because students are involved actively in learning, so students are not passive, besides made students learn independently. According to Nurdin dan Ardiantoni (2016, p.184), discovery learning models have advantages and disadvantages. The advantages of discovery learning models learning as follows:

- a. Can form and develop "self-concept" on self students so they can understand basic concepts and ideas better.
- b. It helps in using memory and transfer to new learning situations.
- c. Encourage students to think and work on their initiative, be objective, honest, and open.
- d. Encourage students to think intuitively and formulate their hypotheses.
- e. Give intrinsic satisfaction.
- f. The situation of the learning process becomes more stimulating.
- g. It can develop individual talents or skills.
- h. Give students the freedom to study on their own.
- i. Students can avoid traditional learning methods.
- j. It can give students enough time so that they can assimilate and accommodate the information.

Besides having several advantages, the discovery learning model also has several shortcomings. The following lack of discovery learning models include:

- a. Students have mental readiness and maturity, students must be brave and willing to know the situation around it well.
- b. The actual state of the class in our fat number of students then this model will not achieve satisfactory results.
- c. Teachers and students who are already very familiar with the old-style teaching and learning process then this discovery learning model will disappoint.
- d. There is criticism, that the process in the discovery learning model is too only concerned with the process of understanding, less attention to the development of attitudes and skills for students.

Based on the opinions above, it can be concluded that the discovery learning model the strengths of discovery learning models can develop basic concepts in students, students' memory capacity will be better, and can develop student creativity in their learning activities, and train students to learn on their own. The weakness of this model is that teachers are required to master the basic concepts, must be good at stimulating students, the desired goals must be really clear and the teacher is required to give questions that are directed towards the goal.

E. The Stages of Concern Questionnaire

The Stages of Concern Questionnaire (SoCQ) was the method used in this study. SoCQ describes the stages of concern for individuals in three broad

categories: self, task, and impact. It describes concerns for individuals just before the onset of innovation as focusing on self. These concerns target personal feelings associated with innovation. Most likely at this stage the individual is not concerned with issues related to implementing the innovation but rather focused on feelings of inadequacy or self-doubt. During the next stage of concern individuals or groups are task-focused. These individuals are usually at the beginning stages of the implementation of innovation. Their concerns often focus on areas such as logistics, preparations, and scheduling. The last stage of concern generally describes the concerns of an individual or group experienced in the implementation of the innovation. The concerns are labeled as impact and are focused on the intended impact produced by the innovation (Hall & Hord, 2001 as cited in George et al., 2013).

In the unconcerned stage (stage 0), teachers have little or no concern or involvement with the innovation. In the informational stage (stage 1), teachers lack knowledge about innovation and their role in its implementation. In this stage, they are interested in knowing about the general characteristics and other related information about an innovation. In the personal stage (stage 2) of concern, teachers feel disquiet about the effects the innovation may have on them as a person. In the management stage (stage 3), the concerns emerge about the operation and process of implementation, including the management of information and resources. The consequence stage (stage 4), encompasses the impact of the innovation, it may have, on student and teachers' learning. In the collaboration stage (stage 5), concern converges on coordination and cooperation

with various stakeholders. In the refocusing stage (stage 6), teachers consider how to modify the innovative practice and explore alternatives to the prevailing use of an innovation.

The intensity of each concern ranges from lower internal (stages 0–2, early-stage concerns) to higher external (stages 3–6, later stages concerns). According to Hall and Hord (2011), the sorted and classified feelings and perceptions are called concerns, which evolve into Stages of Concern (SoC). The concerns fall into three major patterns: self, task, and impact (see Table 2.1 and Figure 2.1 for the pattern of SoCQ). The nature of the stages may overlap and are not exclusive of each other. The concern stages are developmental, and categories are centered on self, task, and impact. Teachers' concern, though, may not progress sequentially and later-stage concerns are critical in improving teachers' professional practice (Fuller 1969 as cited in George et al., 2013).

Table 2.1
Patterns, Stage of Concerns, Definition, and Expression of the SoCQ

Level of Concern	Stage of Concern	Concerns of Teacher
Unrelated	0 - Unconcerned	Concern about or involvement with the discovery learning is not a priority.
	1 - Informational	An awareness of discovery learning and interest in learning more detail about it is indicated. The person seems to be unworried about the impact of the innovation on self. A focus is on general characteristics, effects, and requirements for use.
	2 - Personal	The individual is uncertain about the demands of discovery learning, his/her inadequacy to meet those demands and his/her role with discovery learning. This includes conflicts with existing structures, personal commitment, and financial implications.
		Focused on the process and tasks of using

Task	3 - Management	discovery learning and the best use of information and resources. Issues related to efficiency, managing, scheduling, and time demands are most important.
	4 - Consequence	Focuses on the impact of discovery learning on their students.
Impact	5 - Collaboration	Focuses on coordination and cooperation with others regarding the use of discovery learning.
	6 - Refocusing	Focuses on the increasing impact of discovery learning, including the possibility of major changes or replacing it with a more powerful alternative. Consideration of ideas about alternatives to the proposed or existing form of discovery learning.

Note: Adapted with permission from George, A., Hall, G. E., & Stiegelbauer, S. M. (2013). *Measuring implementation in schools: the stages of concern questionnaire* (3rd ed.). Austin, TX: SEDL

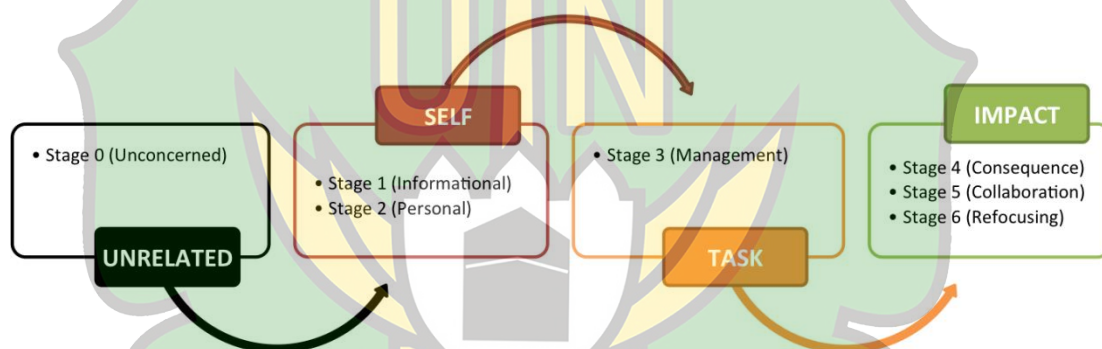


Figure 2.1. Patterns in the stages of concern questionnaire

In 1969, Fuller first published a paper on teachers' concerns. In 1973, Hall, Wallace, and Dossett developed the SoCQ instrument from Fuller's concern theory. The SoCQ manual asserts that, based on individual knowledge and experience with innovation, concern about an innovation progresses from no or little concern to more intense or peak concern. There are seven stages of concern, as described in the following paragraphs:

Stage 0 (Unconcerned)

Stage 0 is the lowest stage. In this stage, the respondent's concern about innovation is minimal. "The individual indicates little concern about or involvement with the innovation" (George et al., 2013, p. 8). An example of an expression by a teacher might be "I am concerned about some other innovation." (George et al., 2013, p. 8).

Stage 1 (Informational)

In this stage, the individual is acquiring information and interested in learning more about innovation. "The individual does not seem to be worried about him or herself to the innovation. Any interest is in impersonal, substantive aspects of the innovation, such as its general characteristics, effects, and requirements for use" (George et al., 2013, p. 8). An example of an expression by a teacher might be "I would like to know more about it." (George et al., 2013, p. 8).

Stage 2 (Personal)

In this stage, the individual shows concerns about the impact of innovation on his/her self. "The individual is analyzing his or her relationship to the reward structure of the organization, determining his or her part in decision making, and considering potential conflicts with existing structures or personal commitment" (George et al., 2013, p. 8). An example of an expression by a teacher might be "How will using it affect me?" (George et al., 2013, p. 8).

Stage 3 (Management)

In this stage, the individual concerns include doing tasks. “The individual focuses on the processes and tasks of using innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, and scheduling dominate” (George et al., 2013, p. 8). An example of an expression by a teacher might be “I seem to be spending all of my time getting materials ready.” (George et al., 2013, p. 8).

Stage 4 (Consequence)

In this stage, the individual concerns will be the impact of innovation on students. “The individual focuses on innovation’s impact on students in his or her immediate sphere of influence. Considerations include the relevance of the innovation for students; the evaluation of student outcomes, including performance and competencies; and the changes needed to improve student outcomes” (George et al., 2013, p. 8). An example of an expression by a teacher might be “How is my use affecting my students?” (George et al., 2013, p. 8).

Stage 5 (Collaboration)

At this stage, the individual starts to think of collaborating with others in the use of innovation. “The individual focuses on coordinating and cooperating with others regarding the use of the innovation” (George et al., 2013, p. 8). An example of an expression by a teacher might be “I am concerned about relating what I am doing with what my co-workers are doing.” (George et al., 2013, p. 8).

Stage 6 (Refocusing)

In this stage of concern, the individuals start to change the innovation for more benefits. “The individual focuses on exploring ways to reap more universal

benefits from the innovation, including the possibility of making major changes to it or replacing it with a more powerful alternative” (George et al., 2013, p. 8). An example of an expression by a teacher might be “I have some ideas about something that works even better.” (George et al., 2013, p. 8).



CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher explains about research methodology which consists of research design, the technique of collecting data, population, sample, and technique of data analysis used in this study.

A. Research Design

This study focused to investigate English teachers' concerns about the use of the discovery learning model and to explore how the English teachers implemented discovery learning in the classroom. The researcher used a mixed-methods research design to collect information from English teachers'. Mixed methods research involves “philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing or integrating of both approaches in a study” (Creswell 2014, p.293). The data were collected through observation and questionnaire. The result of the observation was shown from the students' and teachers' activity during the learning process in the classroom. The result of the questionnaire was carried out from the English teachers' answers to the questionnaire of SMAN 4 Banda Aceh and MAN 1 Banda Aceh.

This study was carried out at SMAN 4 Banda Aceh and MAN 1 Banda Aceh. According to Sugiyono (2016, p.117) “population is a generalization area consisting of objects/subjects that has certain qualities and characteristics applied by researchers to be studied and then take the conclusions”. The population in this study were all objects or subjects related to this research problem. The populations

of this study were English teachers of SMAN 4 Banda Aceh and MAN 1 Banda Aceh as the population.

According to Prasetyo & Jannah (2010, p. 119) states “The sample is part of the population to be studied”. Based on Riduwan and Kuncoro (2012, p. 40) “The sample is a part of the population that has certain characteristics or conditions to be studied”. It can be concluded that the sample was a part of the population that has certain criteria to study. The determination of the sample in this study was carried out using non-probability sampling techniques. As explained by Riduwan and Akdon (2009, p.209) “Non-probability sampling is a sampling technique that does not provide opportunities/opportunities for each member of the population to be a sample member”. There are several types of non-probability sampling, were accidental sampling, quota sampling, and purposive sampling. In this study, the researcher used purposive sampling, purposive sampling was a sampling technique with certain considerations. The samples of this study were nine English teachers from both schools at Banda Aceh who teach English by used discovery learning in the classroom.

B. Method of Data Collection

Data collection was two-part instruments used in collecting data, which are closed-ended questionnaires consisting of 35 questions and an observation checklist.

1. Observation

Observation is an important way to get certain information about people because what people say is not necessarily the same as what is done. According to

Creswell (2014) observation is a process to obtain data from the first hand by observing people and places at the time of the research. According to Sugiyono (2016), observations can be divided into participant observation and non-participant observation. In the participant observation, the researcher involved in the object of action research while in the non-participant observation the researcher was only as an observer and was not involved in the activity.

In this study, the researcher used non-participant observation. Therefore, the researcher observes directly and activities during the teaching and learning process in detail and records all phenomena that occur in the classroom to describe real situations during the teaching process. The research instrument in this observation checklist was adopted from Pratiwi (2014) the term consisted of six aspects were stimulation, problem statement, data collection, data processing, verification, generalization (see APPENDICES E). Observation is used to find a match between the discovery learning in the 2013 curriculum implemented by the government of education and the implementation of discovery learning conducted by English teachers in the classroom.

The process of observation carried out by researchers when conducting observations in the field. First, the researcher prepares a research instrument, made a recommendation letter from the university to the government education office after that the researcher submitted a request for permission to research at school. Second, the researcher arranged an observation schedule with each teacher from SMAN 4 Banda Aceh and MAN 1 Banda Aceh. Third, the researcher makes observations in class, before observing the researcher introduces himself when

entering the classroom and explains the purpose of the activity to make observations. Fourth, researchers sit in the back and make checklist observations, observe activities, and take notes during the learning process. Fifth, the researcher analyzes each observation that has been made.

2. Questionnaire

According to Sugiyono (2016, p. 199), the questionnaire is “a research instrument to collect data, participants or respondents fill out statements given by researchers.” There are two types of questionnaires; opened-ended and close-ended questionnaires. The type of questionnaire that the researcher used is a closed questionnaire, the questionnaire that has been provided the answer. In measuring the answers to the questionnaires submitted to respondents, the scale used is the Likert scale. Likert scale is used to measure the attitudes, values, opinions, behavior, and perceptions of a person or group of people about social phenomena.

The 35 items and 8 points Likert type questionnaire is designed to assess the concerns of respondents during the implementation of an innovation. By selecting a number from a scale of 0-7, teachers indicate the degree to which they have concerns toward innovation; numbers six and seven indicate the highest level of concern, one and two indicate very low concern and zero indicates that the issue is irrelevant. Self-concerns consist of information and personal; Task-concern is management; Impact-concern includes consequence, collaboration, and refocusing. That is zero represents Irrelevant, 1 and 2 represent Not true of me now, 3, 4, and 5 represent Somewhat true of me now, and 5 and 6 represent Very

true of me now (see APPENDICES F) (George et al., 2013). Each item in the questionnaire is a statement and each stage consists of five statements (see APPENDICES G). The 35 items in the questionnaire were given to all participants in the study.

The participants marked each item on a 0–7 Likert scale, where “0” represented a completely irrelevant item for the respondent and “7” represented a completely relevant item for the respondent. The researcher slightly modifies each question because it is related to the case study that was be examined so the respondent understands the research. The original survey by Hall’s research, the word “innovation” is used the whole time. The authors of the survey recommend changing that word to something the respondents will recognize (George et.al., 2013, p.25). For this reason, the word was modified rather than replace “innovation” to “discovery learning”.

C. Method of Data Analysis

The data analysis method is a process carried out by the researcher to analyze the data collected. This study involves two methods in analyzing data; observation and questionnaire.

1. Observation

The analytical method used in this study is a qualitative analysis method which is a method that aims to provide a comprehensive picture of the subject under study and is not intended to test the hypothesis (Sugiyono, 2016). Besides, observation is also collected and recorded of people’s behavior in their environment, particularly in the classroom where the learning process is taking

place. According to Miles and Huberman (1994 as cited Sugiyono, 2016, p. 337), there are three activities carried out in analyzing data including by:

- a. Data collection collected data at the research location by conducted observations by determining data collection strategies that are deemed appropriate and determining the focus and deepening of the data in the next data collection process.
- b. Data reduction, a process of selection, focusing, abstracting, the transformation of rough data in the direct field, and continued at the time of data collection, thus data reduction begins when the researcher focuses the area research.
- c. Presentation of data, which is a series of information organizations that enable research to be carried out. Presentation of data obtained by various types, networks, linkages of activities, or tables.
- d. Concluding, researchers must understand and respond to something that is investigated directly in the field by arranging patterns of direction and cause and effect.

2. Questionnaire

The researcher used the SoCQ Manual for analysis and interpretation of data for the primary needs describing teacher concerns about the discovery learning model. This SoCQ Manual prepared by Hall (1987) was developed by George et.al (2013) are stages of concern quick scoring device including raw scale score, total raw scores, and percentile tables. According to George e.al., (2013) the quick scoring device can be used to hand score the stages of concern

questionnaire (SoCQ) responses and to plot an individual profile. It is especially useful when only a small number of questionnaires need to be processed or when computer processing is not available. By following the step-by-step instructions, the SoCQ responses are transferred to the device, entered into seven scales, and each scale is totaled. Then the seven raw scale score totals are translated into percentile scores and plotted on a grid to produce the individual's SoCQ profile.

Furthermore, the use of the questionnaire in this research was to know the teachers perceive the research title which was called a survey, checklist, or schedule response by participants. The questionnaire used to the teachers was created adopted from George et.al (2013) and little modified. The questionnaire used was the checklist instrument. The questions consisted of 35 questions and the data were counted based on how much 0 (Irrelevant), 1, 2 (Not true of me now), 3, 4, 5 (Somewhat true of me now), 6, 7 (Very true of me now) from the 35 questions available.

The percentage calculated by using the formula as follows:

$$p = \frac{f_i}{n} \times 100\%$$

Where,

P: Percentage

Fi: Total of frequency

n: Number of samples

Sumber: Arikunto (2006, p. 81)

Hadjar (2010, p.36) stated that the mean of teachers' score was calculated by using the formula as follow:

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$

\bar{x} = The Mean

$\sum x_i$ = The Sum of Offset Score -i

n = A Number of Data

For data the percentage and categorized based on the results of the questionnaire, then it is clarified according to the grouping of available questions. According to Ridwan (2009, p.88), clarification of the percentage of respondents can be presented in the table:

Table 3.1

Likert scale score interpretation criteria

Rating score	Descriptions
81%-100%	Very high
61% - 80%	High
41% - 60%	Medium
21% - 40%	Low
0% - 20%	Very Low

The table above indicated the level of teachers' concerns based on the result of the questionnaire responses. The table above arranged the level score of teachers'. The table above shown from the low to high score of teachers about the implementation of discovery learning was to see whether their concerns, perceptions, opinions, and feelings about discovery learning. The list above showed the range of scores from the lowest to the highest score of teachers.

CHAPTER IV

FINDINGS AND DISCUSSION

A. Research Findings

The finding of the research shows the different responses from the observation and questionnaire. This research focused on the teacher implementation of the discovery learning model at two schools in Banda Aceh (MAN 1 Banda Aceh and SMAN 4). MAN 1 Banda Aceh identical to school A and SMAN initial as school B. In the research findings, the writer talked about several points in part A and part B there were; In part A discussed the result of observation, the result of the questionnaire, and in section talked about the discussion. This chapter answered two research questions in the previous chapter.

The first research question is “How is the English teacher use the discovery learning model implemented in the classroom?”, this research question answered through observation and the second research question about, “What stages of concern are most common among English teachers regarding implemented the discovery learning model?” this question answered by questionnaire.

1. Result of Observation

The researcher conducted an observation at two classes of the second grade of Senior High School A and school B in Banda Aceh. The writer has done observation by using criteria of discovery learning by Minister Education for both schools. The criteria become a guideline for the writer checking the Discovery Learning Model in both schools worked or not.

The result of observation was the researcher as an observer in this research, the writer sat in the corner of the class and note taking the activity teacher done in learning occur. The observation sheet used a checklist instrument if the teacher used that criteria in the observation sheet, so the writer chooses yes and diverse that the writer chooses no. The observation was divided into three parts such as opening activity, core activity, and closing activity. The researcher checklist and note-taking as what happened in the real situation.

a. The result of observation at school A:

In the opening activity, the teacher greets and prays before learning begins, checks the attendance of students and conditions a pleasant learning atmosphere. The teacher conveyed the benefits of studied explanation text and conveyed an outline of the activities to be carried out on that day.

In the core activity, the teacher distributes students into several groups before started the learning process. After distributed the group, the teacher started the stimulation by showed a video about the earthquake. Then the teacher presents preliminary questions about earthquakes. Students observed videos about earthquakes. After that, students answered preliminary questions about the earthquake given by the teacher. As a group, students discuss things related to earthquakes. Students together read the text presented about earthquakes. The teacher gave an example of how to identify the main idea and supporting ideas in the first paragraph of the text.

At the problem statement stage, in groups with texts presented on different topics, students asked questions about other natural events. As a group, students

asked each other and answered questions in turn about social functions, text structure, and linguistic elements of explanation text with appropriate responses.

At the data collection stage, students looked and found some explanation texts from various sources. In groups using an analytical tool to identify parts of the explanation text structure based on the examples that have given.

At the data processing stage, students determine the linguistic elements in the explanation text. As a group, students determine the topic of the explanation text they have compiled. Students determine the main idea paragraph by paragraph they have compiled. As a group, students compiled explanation texts based on the topics they have determined by paying attention to the structure of the text and the appropriate linguistic elements related to natural phenomena.

In the verification stage, students pasted their respective texts on the classroom wall for their friends to read. Each group presented their text to their friends who came to read. Individually students compiled explanation texts related to social phenomena.

In the closing activities, in generalization, the teacher listened to students' conclusion of reading material before. The conclusions are needed to see whether the previously described material could be understood well for the students. After the students gave the conclusions, the teacher provided reflections for the students. In the end, the teacher gave a greeting to the end learning process before leaving the class.

b. The result of observation at school B:

the opening activity, at the first meeting the teacher, enters the class, then the teacher invited students to pray. After it finished pray, the teacher checks the attendance of students, after that the teacher motivated students by informing the benefits of the material to be learned in English and daily life. Then the teacher conveys the learning goals and learning outcomes that are expected to be achieved by each student.

In the core activity, the teacher started the stimulation by gave some experience, to find out the extent to which students understand the causes and effect, the teacher tells an incident of teacher own experience about an accident that the teacher has experienced, and asked students the causes and effects that may arise from the accident. The teacher started the lesson by asking students to read a conversation that has given by the teacher.

In the problem statement stage, after completed the reading, the teacher invited students to ask questions about the content of the conversation. After that, several students asked questions related to the text given. Next, the teacher directs the discussion of the causes and effects. Based on the conversational text that has been read by students, the teacher explains the definitions, sentence structures, and examples of expressions to express the causes and effects. Students hear and observe the explanation from the teacher.

In the data collection stage, the teacher plays a game about cause and effect. For the game, the teacher prepares 2 sets of cards. One set is a group of cards that has the phrase cause, the other set is labeled with the phrase effect. The

number of cards is adjusted to the number of students. The teacher divides the class into 2 groups, were the cause and effect group. After that, the teacher distributes cards randomly according to the group. Cause card for cause group, effect card for effect group. After all the cards are dealt, each one looks for a match between cause and effect. Students are asked to work in pairs. Then each of them made a conversation according to a predetermined topic. The teacher emphasizes that the conversation must contain sentences that show cause and effect. Then the students appeared and brought the dialogue that had been made.

It the data processing stage, students compare the related / causal statements that have been learned with other expressions. Students compare the relationship/causal statements in English with those in their mother tongue or Indonesian.

It the verification stage, students state the relationship/cause and effect with English, inside and outside the classroom. Students write problems in using English to state the relationship/cause and effect in their learning journals. Students are asked to choose one of the 3 activities specified in the section determined by the teacher.

In the closing activity, at the generalization stage, the teacher provides feedback on the learning process and results, students conclude the cause and effects achieved that day. the teacher gives written tests to students to find out the achievement on this topic material. Conduct an assessment to determine the level of achievement of the indicators.

2. Result of Questionnaire

The questionnaire was distributed to find out the teachers' stages of concern on using discovery learning in teaching English at two schools senior high school. In this study, the researcher used the SoCQ Manual prepared by Hall (1987) was developed by George et.al (2013) and also used a Seven-point Likert scale to map and interpret teachers' responses. It consisted of 35 questions and divided into 7 option answers. The choices started from 0 (Irrelevant), 1, 2 (Not true of me now), 3, 4, 5 (Somewhat true of me now), 6, 7 (Very true of me now). The questionnaire was divided into 7 parts; unconcerned, information, personal, management, consequence, collaboration, and refocusing.

Table 4.1
Teachers' answer to SoCQ manual

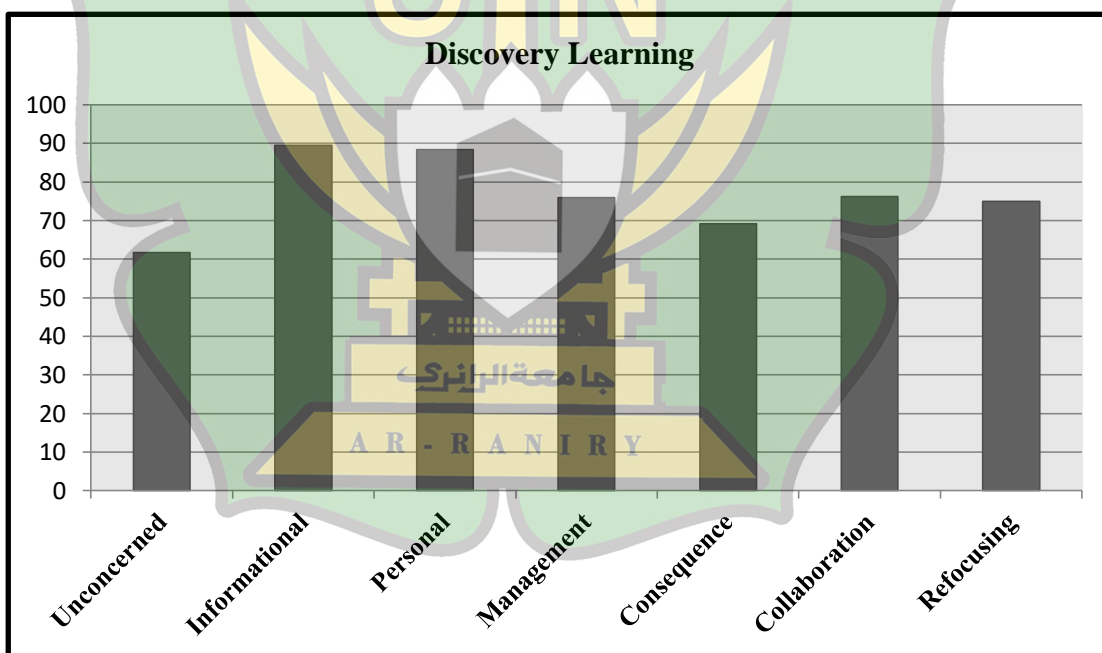
STAGES	0	1	2	3	4	5	6	Total
DL 1	81	96	95	88	76	91	94	621
DL 2	99	98	95	90	66	59	94	601
DL 3	40	84	87	56	97	76	69	509
DL 4	22	80	91	83	82	76	81	515
DL 5	96	84	85	83	63	64	65	540
DL 6	69	84	83	56	43	76	53	464
DL 7	69	84	80	52	43	76	52	456
DL 8	31	99	92	90	86	88	94	580
DL 9	48	96	87	85	66	80	73	535
Total	555	805	795	683	622	686	675	4821
Percentage	61,67%	89,44%	88,33%	75,89%	69,11%	76,22%	75%	535,65%
Mean	61,67	89,44	88,33	75,89	69,11	76,22	75	535,65

The table above concludes that the first teacher DL1 was very high in unconcerned as much as 96, the second teacher DL 2 was very high also at unconcerned the score 99, the third teacher DL 3 was very high in point consequence as much 97, the fourth teacher DL 4 was very high at personal as

much as 92, the fifth teacher DL 5 was very high related to unconcerned as much of score 96, the sixth DL 6 was very high in information 84, the seventh teacher DL 7 as much as 84 at information stage, the eighth teacher DL 8 was 99 in the information also, and the last one DL 9 was very high 96 scores at information.

The result of the table above showed the teacher score from stage 0 until 6, every stage has specific different class started from unconcerned, information, personal, management, consequence, collaboration, and refocusing. The teacher's score was not similar to another. The result of that answered the variety of teachers answer questionnaires. The questionnaire was valid and reliable.

Graphic 4.1 The stage of concern in the discovery learning model



The table showed the teachers both of school, in the term of the unconcerned showed the score 61,67%, it means that they were not involved in the teaching-learning process. The teachers believed that discovery learning does

not be a priority for them. They prefer to use another model in the learning that occurred. It seems like doubt about concern or not.

In the term of the informational showed the score 89,44%, it means about the teacher's awareness and interested in discovery learning. The teacher in this case seems to be unworried about the impact of the innovation on it. They can respect in every aspect included in the discovery learning as general characteristics, effects, and requirements used that model. The innovation as a new thing combining with another previous strength or weaknesses about it. The innovation appeared gave something new for its model especially for the teacher. That model is followed by a new era nowadays.

In the term of personal showed the score as much as 88,33% The individual is uncertain about the demands of discovery learning, the teacher inadequacy to meet those demands of role discovery learning. This includes conflicts with existing structures, personal commitment, and financial implications. The commitment of the teacher to use one model from the opening until closing activity.

In term of management showed 75,89%. The management focused on the process and tasks of using discovery learning. Not only resources as an important thing in this term, but also issues that are related to efficiency, managing, scheduling, and time in using the discovery learning model. The teacher should manage the schedule and time allocation walked correctly.

The consequence showed a score of 69,11%, it is focussed on the impact of discovery learning on their students. The teacher as a big effect in this term,

because the teacher should give a good impact on the students. The students always got what the teacher teaches in the classroom and they imitated. The teacher as a facilitator and students as a center. Although the teacher does not give full material for the student, a little material and clear instruction can be guided for all material. The impact can show from their outcome.

The collaboration showed 76,22% which focuses on coordination and cooperation with others regarding the use of discovery learning. The teacher should be coordinating the model used and work together between two important elements there were teacher and student to achieve the goal.

The refocusing term described 75% in increasing the impact of discovery learning, including the possibility of major changes or replacing it with a more powerful alternative. Consideration of ideas about alternatives to the existing form of discovery learning.

Table 4.2

The result of personal English teachers' concerns

No.	Nama	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q35	Total
1	DL1	5	5	1	5	5	5	7	2	7	7	7	2	7	7	7	5	5	6	5	6	5	7	5	7	7	6	6	6	7	1	4	6	6	5	6	190
2	DL2	5	6	2	2	1	7	7	6	5	7	6	0	7	7	6	6	6	5	6	7	7	5	7	7	6	5	6	5	4	5	6	4	6	5	6	188
3	DL3	6	6	1	1	6	2	5	5	2	6	6	1	5	4	6	2	5	5	5	2	2	6	2	6	5	5	5	6	5	1	5	6	5	2	6	148
4	DL4	7	5	0	5	5	1	4	2	5	5	5	0	5	5	7	7	7	5	7	5	3	4	3	7	7	7	5	7	7	0	5	5	5	1	2	160
5	DL5	6	3	2	5	5	3	5	5	3	5	5	2	5	5	5	2	5	5	5	5	5	4	6	6	5	5	4	5	5	3	5	5	5	5	5	159
6	DL6	5	6	0	2	6	2	5	5	3	6	4	2	3	5	6	3	6	5	6	2	3	4	5	5	3	5	5	5	5	2	2	3	5	2	5	141
7	DL7	5	6	0	2	6	2	5	5	3	6	4	2	3	5	6	3	5	5	6	2	3	4	5	5	3	5	5	5	5	2	2	3	5	1	5	139
8	DL8	6	5	1	2	6	6	6	5	6	6	7	1	6	7	7	6	5	6	6	6	2	7	2	7	6	7	6	6	1	5	6	6	2	6	181	
9	DL9	5	5	1	6	6	1	5	2	6	4	7	1	2	7	7	7	6	7	7	6	4	7	2	6	6	7	7	6	4	1	1	3	7	2	7	168
Total		50	47	8	30	46	29	49	37	40	52	51	11	43	52	57	41	50	49	53	41	34	48	37	56	48	52	49	51	48	16	35	41	50	25	48	1474

The purpose of giving the questionnaire for the teacher was to see their opinion of the use of discovery learning in learning English, especially in writing skills. The descriptive analysis of the questionnaire was conducted to find out the

distribution frequency of each item of the questionnaire and also focused on the raw scale of percentile score. Each raw has a different total score from 0-7 between one teacher and another teacher. The percentage calculated by using the formula as follows:

$$p = \frac{f_i}{n} \times 100\%$$

$$= \frac{1474}{9} \times 100\%$$

$$= 164$$

The score of teacher was very low (0% - 20%), low (21% - 40%), medium (41% - 60%), high (61% - 80%), and very high (81% - 100%). The total numbers of teachers were 9. It can be seen from the table above the total percentage of the teacher by using discovery learning in teaching English showed as much as 164. In other words, it can be concluded that the implementation of the use of discovery learning in teaching English at senior high school was very high especially in writing skills. The teacher able to implemented the discovery learning model in teaching English at Senior High School. The mean scores also answer the result of the implementation of that model. Almost all criteria are related to standard international implementation discovery learning in school especially in the classroom.

Table 4.3

The presentation of teachers' answer questionnaire

NO	QUESTIONS	0	1	2	3	4	5	6	7
1.	I am concerned about students' attitudes toward the discovery learning model.						√		
2.	I am concerned about revising the use of discovery learning					√			

3.	I am not concerned about the discovery learning at this time	√
4.	I would like to modify our use of the discovery learning based on the experiences of our students	√
5.	Coordination of tasks and people is taking too much of my time.	√

It can be seen from the table above that each teacher had a different answer toward the stage of concern on using discovery learning in teaching English at senior high school at SMAN 4 and MAN Model Banda Aceh. Both schools, most of the teachers done the discovery learning model appropriately to deliver information and knowledge.

B. Discussions

The first research question of this study was “How is the discovery learning model implemented in the classroom?” which was answered by using observation technique. The finding of observation showed that the teacher was interested, fun, and attractive in learning English by using the discovery learning model. For example, in opening activity, the teacher gave greeting for the students and the students answered the greeting from the teacher with high enthusiasm. Besides, in core activity, the teacher was flexible in delivered the knowledge and fully paid attention by the students’ explanation. Moreover, in closing activity, the teacher focused on reflected material to make sure the material was fully comprehended. In brief, the discovery learning refers to the student as a center in learning and the teacher only as a facilitator.

The second research question was “What stages of concern are most common among English teachers regarding implementing the discovery learning model?” which was answered by using the questionnaire technique. The total numbers of teachers were 9. The result of the questionnaire was based on SoCQ to make the researcher easy to qualify the result of the teacher questionnaire. It concludes that the first teacher DL1 was very high in unconcerned as much as 96, the second teacher DL 2 was very high also at unconcerned the score 99, the third teacher DL 3 was very high in point consequence as much 97, the fourth teacher DL 4 was very high at personal as much as 92, the fifth teacher DL 5 was very high related to unconcerned as much of score 96, the sixth DL 6 was very high in information 84, the seventh teacher DL 7 as much as 84 at information stage, the eighth teacher DL 8 was 99 in the information also, and the last one DL 9 was very high 96 scores at information.

Besides, the teachers’ toward the stage of concern on using discovery learning in teaching English at senior high school especially at SMAN 4 and MAN Model Banda Aceh worked very well which suitable with the standard of discovery learning created by experts. The teacher was an enthusiast in delivered the material by using the Discovery Learning Model and the students also received the material carefully.

Furthermore, the researcher would discuss 2 points in the questionnaire as stated before. The first point was the use of discovery learning worked as the expectation, almost all points in it suitable with the teacher at school A and B

Banda Aceh. Because the stages of concern on using discovery learning more focused on student's center and the teacher as a facilitator.

Based on the questionnaire results, the teacher agreed that the example teacher gave in implementation discovery learning in learning English at Senior High School in writing skill, students reported that they understand the contents of text when they joined in group., Thus, it can be concluded that the teacher liked the concern on using discovery learning in learning English at Senior High School.

The second point was teaching English. The result of the questionnaire showed that the students understand the distribution of exposition text by the teacher. In other words, the majority of students understood the text taught by their friends. The text was understood by students as a center when the teacher taught using discovery learning model.

This research related to the theory of kinds learning model by the Ministry of Education and Culture (2014), the types of learning models that can be used in this learning is discovery learning. Because discovery learning more focused on student's center and the teacher only as a facilitator on learning occurred. Based on theory in the literature review of the second chapter about the characteristics of discovery learning by Hosnan (2014, p.284), the characteristics of discovery learning are:

- a. Explore and solve problems in creating, combining, and generalizing knowledge.
- b. Fully student-centered.
- c. Activities in combining new knowledge and existing knowledge.

This research has occurred in three points above. The students solved the problem in the classroom about the material teacher gave. The students have responded more than the teacher as a facilitator in the learning process. The students created new knowledge by the guide of the teacher.

Discovery Learning Model in teaching English as a subject is one of the language learning taught in every formal education unit. According to Kusumaningputri (2010), learning English also helps students to be able to express ideas and feelings, participate in society, and discover and use the analytical and imaginative abilities that exist in themselves. In Indonesia, English began to be learned from elementary school, junior high, and high school, as well as universities and other non-formal educational institutions. Learning English was expected to help students get to know themselves, their culture, and other culture.

In summary, the teacher showed a positive concern for the use of discovery learning in Senior High School. In other words, the use of discovery learning improved students' ability in writing the learning English with the use of appropriate tenses, adjectives, and generic structure on it. Moreover, the implication of the discovery learning model helped the teacher to deliver knowledge for the pupils not only in writing but also modified other English skills such as reading, listening, and speaking. This learning model was very suitable for the modern era now on.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Based on the research findings in the previous chapters, it can be concluded that first, the teachers were interested, happy, and enjoy when delivering knowledge for the students by using the Discovery Learning Model. The point of discovery learning was focused on the student's center. The skill used in this research was writing skills in the English material that walked as expected. The teacher was only a facilitator in the teaching process. All material the students found by themselves. The implementation of discovery learning that teachers used in learning writing were very helpful for students to explore their brilliant ideas. The observation checklist was opening activity the teacher asked the greeting for the students and they had high enthusiasm and also looked very attentive while their teacher gave apperception about the material and the result of writing. Meanwhile, in the core activities, the students paid attention to the teacher's explanation and instruction where the teacher gave the material in very clear instructions to the students. In the process of teaching-learning, the students asked several questions related to the material.

Furthermore, the teacher created several real groups of the students, to make the learning process more powerful and enjoyed. Then the students read the material given by the teacher after than they conclude what have they read about. Each student had the responsibility to master the information and presented it to

another group about different materials. The last activity in the core activities was the students were tested individually to know how far they comprehend the topic based on what they had learned from the teacher and their friends.

In the closing activities, the teacher listened to students' conclusion of the material before. The conclusions are needed to see whether the previously described material could be understood well for the students. After the students gave the conclusions, the teacher provided reflections for the students. In the end, the teacher gave a greeting to the end learning process before leaving the class.

The result of the questionnaire both schools the teachers more concerned in terms of information related to a very high score 89,44% In this stage, the individual is acquiring information and interested in learning more about innovation. "The individual does not seem to be worried about him or herself to the innovation. Any interest is in impersonal, substantive aspects of the innovation, such as its general characteristics, effects, and requirements for use" (George et al., 2006, p. 8). The teachers have a big inspiration to follow and doing something new to newest. They love innovation a lot. The innovation teacher found from the upgrade model, read a lot of information, and communication one teacher and another teacher.

The result of English teachers, the first teacher DL 1 was very high in unconcerned as much as 96, the second teacher DL 2 was very high also at unconcerned the score 99, the third teacher DL 3 was very high in point consequence as much 97, the fourth teacher DL 4 was very high at personal as much as 92, the fifth teacher DL 5 was very high related to unconcerned as much

of score 96, the sixth DL 6 was very high in information 84, the seventh teacher DL 7 as much as 84 at information stage, the eighth teacher DL 8 was 99 in the information also, and the last one DL 9 was very high 96 scores at information. In brief, the teachers' scores were dominated by very high concern.

In summary, the researcher used the result of the observation checklist as a guide for gathering accurate data in the field. The result of the teacher's questionnaire was support from the result of observation occurred in the classroom. Both results of this research have a positive significant relationship.

B. Recommendations

This research can be one of the references for the next researchers to conduct their studies in the stages of concern using discovery learning in teaching English at Senior High School. The theory of discovery learning explores more than one theory in applying the material when the learning process occurs. The source from the list of references in this study was expected to help other researchers in conducting the same research.

For further research should prepare everything carefully, such as time allocation before conducting research class. The preparation needs to make planning better in reality. So, the implementation of discovery learning teacher's used to deliver material for the students. The small things also need more attention to erase misunderstanding later on. Although discovery learning was more focused on the students' center. The student should have more initiative and smart to create material better.

Beside that, it can be considered material for applying the Discovery Learning Model to improve teachers' ability to find and explore the material in writing expository text. The discovery learning in this research help the student more active in learning in the classroom, the purpose of that to convey knowledge from the teacher and other students in the class. The group is only as a formalist to see the responsibility of students based on divided material. Finally, the material can receive and save memories in their mindset correctly.

The advantages of discovery learning model were supports active engagement of the learner in the learning process, enables the development of long life in learning skills, personalizes the learning experience, highly motivating as it allows individuals the opportunity to experiment and discover something for themselves, builds on learner's prior knowledge and understanding, develops a sense of independence and autonomy, make them responsible for their own mistakes and results, learning as most adults learn on the job and in real-life situations, A reason to record their procedure and discoveries - such as not repeating mistakes, a way to analyze what happened, and a way to record a victorious discovery develops problem-solving and creative skills, finds new and interesting avenues of information and learning.

Discovery learning is one of the learning models used in the constructivist approach. In discovery learning, students are encouraged to primarily learn on their own through active involvement with concepts and principles. The teacher encourages students to have experience and conduct experiments by enabling them to find principles or concepts for themselves. Discovery learning arouses

students' curiosity, motivates students to continue working to find answers, students through discovery learning have the opportunity to practice solving problems, sharpening critical thinking independently, because they must analyze and manipulate information.

The discovery learning model can only be used for certain materials, then a teacher or a prospective teacher is advised to be able to choose and sort out which material is appropriate and suitable that can be applied in the learning process so that it does not take up his time nor does it involve only a few students because the discovery learning model requires the activeness of all students. Besides teaching aids (audiovisual, etc.) must be sought by teachers or prospective teachers who want to apply this method, the aim is to give students direct experience. The discovery learning model was developed of meta-cognitive skills (including some higher-level cognitive strategies) useful in long-life learning.

1. The teacher should try another cooperative learning model as problem-based learning, inquiry learning, and another model to improve teachers' skills in teaching English in the classroom.
2. The students can explore more knowledge and solve the problem based on experience.

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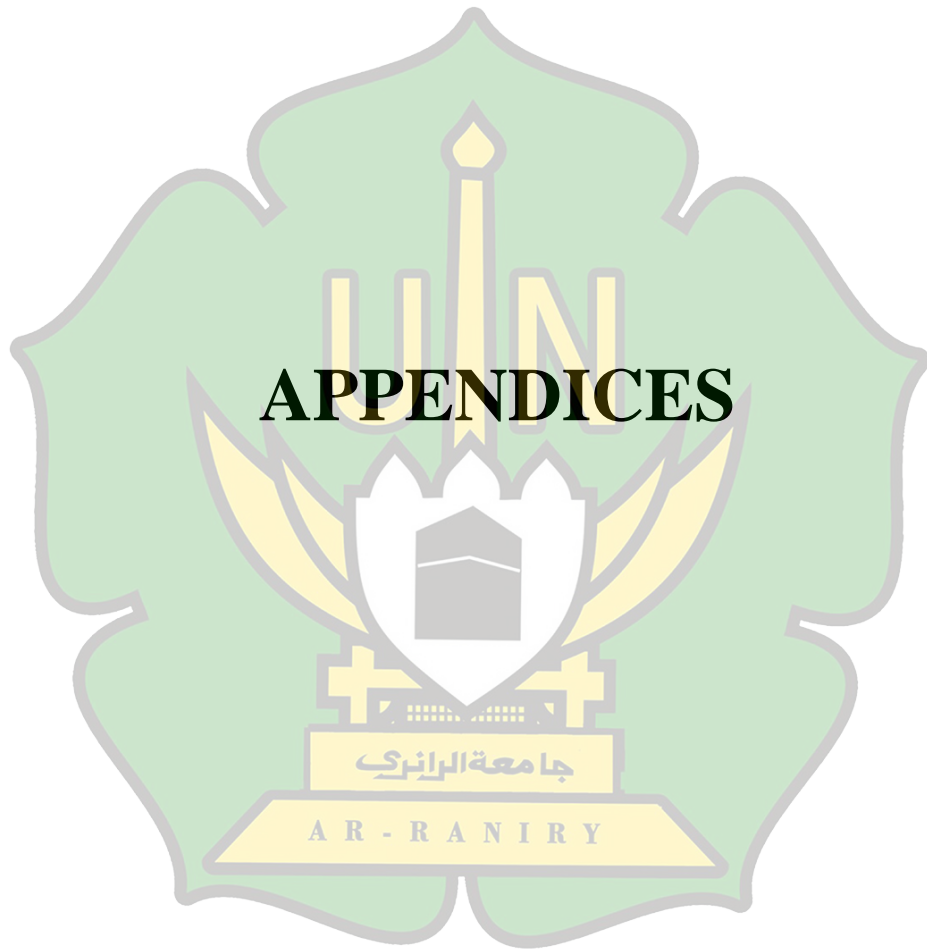
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APPENDICES





**KEMENTERIAN AGAMA REPUBLIK INDONESIA
UNIVERSITAS ISLAM NEGERI AR-RANIRY BANDA ACEH
FAKULTAS TARBIYAH DAN KEGURUAN**

Jl. Syekh Abdur Rauf Kopelma Darussalam Banda Aceh
Telp: (0651) 7551423 - Fax: (0651) 7553020 Situs : ftk.uin.ar-raniry.ac.id

Nomor : B-16412/Un.08/FTK.1/TL.00/12/2019

06 Desember 2019

Lamp : -

Hal : Mohon Izin Untuk Mengumpul Data
Menyusun Skripsi

Kepada Yth.

Kepala Kantor Wilayah Kementerian Agama Provinsi Aceh.

Di -

Tempat

Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry Darussalam Banda Aceh dengan ini memohon kiranya saudara memberi izin dan bantuan kepada:

Nama : Putri Inayatsyah
N I M : 140 203 268
Prodi / Jurusan : Pendidikan Bahasa Inggris
Semester : XI
Fakultas : Tarbiyah dan Keguruan UIN Ar-Raniry Darussalam.
A l a m a t : Desa Niron Sukamakmur Aceh Besar

Untuk mengumpulkan data pada:

MAN Model Banda Aceh

Dalam rangka menyusun Skripsi sebagai salah satu syarat untuk menyelesaikan studi pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry yang berjudul:

The Stages of Concerns of Using Discovery Learning in Teaching English at Senior High School.

Demikianlah harapan kami atas bantuan dan keizinan serta kerja sama yang baik kami ucapkan terima kasih.

An. Dekan,
Wakil Dekan Bidang Akademik
dan Kelembagaan,



Kode 505



KEMENTERIAN AGAMA REPUBLIK INDONESIA
UNIVERSITAS ISLAM NEGERI AR-RANIRY BANDA ACEH
FAKULTAS TARBIYAH DAN KEGURUAN

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Nomor : B-16412/Un.08/FTK.1/TL.00/01/2020

Banda Aceh, 29 November 2019

Lamp : -

Hal : Mohon Izin Untuk Mengumpul Data
Penyusun Skripsi

Kepada Yth.

**Kepala Dinas Pendidikan
Provinsi Aceh**

Di -

Tempat

Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry Darussalam Banda Aceh
dengan ini memohon kiranya saudara memberi izin dan bantuan kepada:

N a m a	: PUTRI INAYATSYAH
N I M	: 140203268
Prodi / Jurusan	: Pendidikan Bahasa Inggris
Semester	: XI
Fakultas	: Tarbiyah dan Keguruan UIN Ar-Raniry
A l a m a t	: Desa Niron Kec. Suka Makmur Kab. Aceh Besar

Untuk mengumpulkan data pada:

SMA Negeri 4 Banda Aceh

Dalam rangka menyusun Skripsi sebagai salah satu syarat untuk menyelesaikan studi pada
Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry yang berjudul:

The Stages of Concerns of Using Discovery Learning in Teaching English at Senior High School

Demikianlah harapan kami atas bantuan dan keizinan serta kerja sama yang baik kami
ucapkan terima kasih.

جامعة الرانيري

AR - RANIRY

An. Dekan,
Wakil Dekan Bidang Akademik
dan Kelembagaan,

Mustafa



KEMENTERIAN AGAMA REPUBLIK INDONESIA
KANTOR WILAYAH KEMENTERIAN AGAMA
PROVINSI ACEH

Jalan Tgk. Abu Lam U No. 9 Banda Aceh 23242
Telepon (0651) 22442-22412 Faksimile (0651) 22510 Website : www.acch.kemenag.go.id

SURAT REKOMENDASI

Nomor : B-265/Kw.01.04/2/PP.01.2/01/2020

Sehubungan dengan Surat Dekan Fakultas Tarbiyah dan Keguruan (FTK) Universitas Islam Negeri (UIN) Ar-Raniry, Banda Aceh Nomor B-16412/Un.08/FTK.1/TL.00/12/2019 tanggal 06 Desember 2019 perihal Mohon Izin Untuk Mengumpulkan Data Menyusun Skripsi, atas Nama : **PUTRI INAYATSYAH**, NIM : **140203268**, Prodi : Pendidikan Bahasa Inggris, Kepala Kantor Wilayah Kementerian Agama Provinsi Aceh pada prinsipnya tidak keberatan dan memberikan izin untuk mengumpulkan data di Madrasah Aliyah Negeri (MAN) 1 Banda Aceh dalam rangka menyusun skripsi sebagai salah satu syarat menyelesaikan studi pada Fakultas Tarbiyah dan Keguruan (FTK) Universitas Islam Negeri (UIN) Ar-Raniry yang berjudul : *"The Stages of Concerns of Using Discovery Learning in Teaching English at Senior High School"*, dengan catatan tidak mengganggu aktifitas belajar pada satuan pendidikan dimaksud dan jika telah terselesaikan penelitian agar mengirimkan satu eksemplar hasil penelitian ke Bidang Pendidikan Madrasah.

Demikian rekomendasi ini dibuat untuk dapat dipergunakan seperlunya.

Banda Aceh, 22 Januari 2020

An. Kepala

Plh. Kepala Bidang Pendidikan Madrasah,



MUKHLIS

Tembusan :

1. Kepala Kantor Wilayah Kementerian Agama Provinsi Aceh (sebagai laporan);
2. Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry, Banda Aceh;
3. Kepala Kantor Kementerian Agama Kota Banda Aceh;
4. Kepala MAN 1 Banda Aceh.



KEMENTERIAN AGAMA REPUBLIK INDONESIA
KANTOR KEMENTERIAN AGAMA KOTA BANDA ACEH
MADRASAH ALIYAH NEGERI 1 BANDA ACEH
Jalan Pocut Baren No. 116 Keuramat Banda Aceh
Telp. 0651-636804 Fax. 0651-29466
Website: manmodelbna.sch.id, Email: mandelbandaaceh@gmail.com

Nomor : B-778/Ma.01.90/TL.00/08/2020
Lamp : -
Hal : **Telah Melakukan Penelitian**

06 Agustus 2020

Kepada
Yth. Direktur Pasca Sarjana UIN Ar-Raniry
Darussalam Banda Aceh

Assalamu'alaikum, wr.wb.

Memenuhi maksud surat Saudara Nomor : B-16412/Un.08/FTK.1/TL.00/00/12/2019 tanggal 06 Desember 2019, perihal sebagaimana tersebut dipokok surat, maka dengan ini menyatakan bahwa :

Nama : PUTRI INAYATSYAH
N I M : 140203268
Program Studi : Pendidikan Bahasa Inggris
Semester : Genap 2020/2021

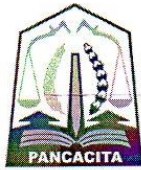
Telah melaksanakan tugas melakukan penelitian untuk mengumpulkan data Thesis dengan judul ***"The Stages of Concerns of Using Discovery Learning in Teaching English at Senior High School"*** pada Madrasah Aliyah Negeri 1 Banda Aceh.

Demikian surat ini kami sampaikan untuk dimaklumi dan dapat dipergunakan seperlunya.

Kepala,



Nursiah



PEMERINTAH ACEH
DINAS PENDIDIKAN
SMA NEGERI 4 KOTA BANDA ACEH
Jl. Panglima Nyak Makam No. 19 Kota Baru – Banda Aceh
Website: sman4bna.sch.id, Email: sman4bna@yahoo.com
Telp/Fax . 0651-7555689 Kode Pos : 23125

Banda Aceh, 28 Februari 2020

Nomor : 074/A.3/153/2020
Lamp : -
Hal : Telah Melakukan Penelitian

Kepada,
Yth. Dekan Fakultas Tarbiyah dan Keguruan
Universitas Islam Negeri Ar-Raniry
di
Banda Aceh

Dengan hormat, sehubungan dengan surat dari Dinas Pendidikan Aceh, Nomor : 070/B/111/2020 Tanggal 03 Februari 2020 perihal Izin Penelitian, maka bersama ini Kepala SMA Negeri 4 Banda Aceh, menerangkan bahwa :

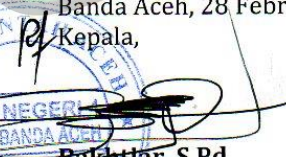
Nama : Putri Inayatsyah
NPM : 140203268
Prodi : Pendidikan Bahasa Inggris

Yang tersebut namanya di atas telah melaksanakan Penelitian pada SMA Negeri 4 Banda Aceh pada tanggal 11 s/d 27 Februari 2020, dengan Judul **"THE STAGES OF CONCERNS OF USING DISCOVERY LEARNING IN TEACHING ENGLISH AT SENIOR HIGH SCHOOL"**.

Demikian surat ini kami buat agar dapat dipergunakan seperlunya

Banda Aceh, 28 Februari 2020

Kepala,


Bakhtiar, S.Pd
Pembina Tk. I, IV/b
NIP. 19680325 199512 1 002



APPENDICES E

Teacher:

Class:

Date:

English Teacher Observation Checklist of using Discovery Learning Model

No	Langkah-langkah <i>Discovery Learning</i>	Aspek kegiatan guru	Tindakan		Ket.
			Ya	Tidak	
1.	Persiapan pelaksanaan model <i>discovery learning</i>	Menginformasikan tujuan pembelajaran, motivasi.			
2.	<i>Stimulation</i> (Pemberian rangsangan)	Menghadapkan peserta didik pada permasalahan yang menimbulkan rasa ingin tahu			
		Menghadapkan peserta didik pada suatu permasalahan agar timbul keinginan untuk menyelidiki sendiri			
3.	<i>Problem statemen</i> (pertanyaan/id entifikasi masalah)	Memberi kesempatan kepada peserta didik untuk mengidentifikasi sebanyak mungkin masalah yang relevan dengan bahan pelajaran			
		Membimbing peserta didik untuk merumuskan hipotesis (jawaban sementara) atas pertanyaan masalah			
4.	<i>Data collection</i> (pengumpulan data)	Guru membimbing dan mengawasi peserta didik untuk merancang kegiatan penyelidikan atau merancang rencana penyelesaian masalah			
		Memberi kesempatan kepada peserta didik untuk mengumpulkan berbagai informasi relevan dengan bahan ajar			
		Membimbing peserta didik belajar secara aktif untuk menemukan sesuatu yang berhubungan dengan permasalahan yang dihadapi			

5.	<i>Data processing</i> (pengolahan Data)	Memberi kesempatan peserta didik untuk mengolah, mengklasifikasikan, bahkan bila perlu menghitung dengan cara tertentu serta ditafsir pada tingkat kepercayaan tertentu.			
		Membimbing kegiatan mengolah data dan informasi yang telah diperoleh para peserta didik			
6.	<i>Verification</i> (pembuktian)	Memberi kesempatan kepada peserta didik untuk menemukan suatu konsep, teori, aturan atau pemahaman melalui contoh-contoh yang ia jumpai dalam kehidupannya			
		Guru membimbing peserta didik agar dapat berdiskusi dan membuktikan jawaban permasalahan			
		Guru membimbing peserta didik untuk meninjau ulang hasil pengumpulan dan pengolahan data dengan data atau teori pada buku sumber atau literatur lain yang berkaitan dengan materi			
	<i>Generalization</i> (menarik kesimpulan)	Membantu peserta didik menarik sebuah kesimpulan yang dapat dijadikan prinsip umum dan berlaku untuk semua kejadian atau masalah yang sama			
		Guru mengarahkan peserta didik merangkum kesimpulan			

Adapted and Motified from Pratiwi, Fitri Apriani. (2014). *Pengaruh Penggunaan Model Discovery Learning Dengan Pendekatan Saintifik Terhadap Keterampilan Berpikir Kritis Siswa SMA*. Skripsi Publikasi. FKIP Universitas Tanjungpura, Pontianak.

APPENDICES F

SoCQ 075

Stages of Concern Questionnaire

Name (optional): _____

The purpose of this questionnaire is to determine what people who are using or thinking about using various programs are concerned about at various times during the adoption process.

The items were developed from typical responses of school and college teachers who ranged from no knowledge at all about various programs to many years' experience using them. Therefore, **many of the items on this questionnaire may appear to be of little relevance or irrelevant to you at this time.** For the completely irrelevant items, please circle "0" on the scale. Other items will represent those concerns you do have, in varying degrees of intensity, and should be marked higher on the scale.

For example:

This statement is very true of me at this time.	0	1	2	3	4	5	6	7
This statement is somewhat true of me now.	0	1	2	3	4	5	6	7
This statement is not at all true of me at this time.	0	1	2	3	4	5	6	7
This statement seems irrelevant to me.	0	1	2	3	4	5	6	7

Please respond to the items in terms of **your present concerns**, or how you feel about your involvement with this Discovery Learning. We do not hold to any one definition of the Discovery Learning so please think of it in terms of your perception of what it involves. Phrases such as "this approach" and "the new system" all refer to the same Discovery Learning. Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with the Discovery Learning.

Thank you for taking the time to complete this task.

0	1	2	3	4	5	6	7
Irrelevant now	Not true of me now		Somewhat true of me now			Very true of me	

Circle one number for
each item.

1. I am concerned about students' attitudes toward discovery learning.	0	1	2	3	4	5	6	7
2. I now know of some other approaches that might work better.	0	1	2	3	4	5	6	7
3. I am more concerned about another discovery learning.	0	1	2	3	4	5	6	7
4. I am concerned about not having enough time to organize myself each day.	0	1	2	3	4	5	6	7
5. I would like to help other faculty in their use of discovery learning.	0	1	2	3	4	5	6	7
6. I have very limited knowledge of discovery learning.	0	1	2	3	4	5	6	7
7. I would like to know the effect of discovery learning on my professional status.	0	1	2	3	4	5	6	7
8. I am concerned about the conflict between my interests and my responsibilities.	0	1	2	3	4	5	6	7
9. I am concerned about revising my use of discovery learning.	0	1	2	3	4	5	6	7
10. I would like to develop working relationships with both our faculty and outside faculty using this discovery learning.	0	1	2	3	4	5	6	7
11. I am concerned about how discovery learning affects students.	0	1	2	3	4	5	6	7
12. I am not concerned about discovery learning at this time.	0	1	2	3	4	5	6	7
13. I would like to know who will make the decisions in the new system.	0	1	2	3	4	5	6	7
14. I would like to discuss the possibility of using Y discovery learning.	0	1	2	3	4	5	6	7
15. I would like to know what resources are available if we decide to adopt the discovery learning.	0	1	2	3	4	5	6	7
16. I am concerned about my inability to manage all that the discovery learning requires.	0	1	2	3	4	5	6	7
17. I would like to know how my teaching or administration is supposed to change.	0	1	2	3	4	5	6	7
18. I would like to familiarize other departments or persons with the progress of this new approach.	0	1	2	3	4	5	6	7
19. I am concerned about evaluating my impact on students.	0	1	2	3	4	5	6	7
20. I would like to revise the discovery learning approach.	0	1	2	3	4	5	6	7
21. I am preoccupied with things other than discovery learning.	0	1	2	3	4	5	6	7

22. I would like to modify our use of discovery learning based on the experiences of our students.	0	1	2	3	4	5	6	7
23. I spend little time thinking about discovery learning.	0	1	2	3	4	5	6	7
24. I would like to excite my students about their part in this approach.	0	1	2	3	4	5	6	7
25. I am concerned about the time spent working with nonacademic problems related to discovery learning.	0	1	2	3	4	5	6	7
26. I would like to know what the use of the discovery learning will require in the immediate future.	0	1	2	3	4	5	6	7
27. I would like to coordinate my efforts with others to maximize the discovery learning effects.	0	1	2	3	4	5	6	7
28. I would like to have more information on the time and energy commitments required by discovery learning.	0	1	2	3	4	5	6	7
29. I would like to know what other faculty are doing in this area.	0	1	2	3	4	5	6	7
30. Currently, other priorities prevent me from focusing my attention on discovery learning.	0	1	2	3	4	5	6	7
31. I would like to determine how to supplement, enhance, or replace the discovery learning.	0	1	2	3	4	5	6	7
32. I would like to use feedback from students to change the program.	0	1	2	3	4	5	6	7
33. I would like to know how my role will change when I am using discovery learning.	0	1	2	3	4	5	6	7
34. Coordination of tasks and people is taking too much of my time.	0	1	2	3	4	5	6	7
35. I would like to know how the discovery learning is better than what we have now.	0	1	2	3	4	5	6	7

Thank you for your help!

George, A. A., Hall, G. E., & Stiegelbauer, S. M. (2013). *Measuring implementation in schools: The stages of concern questionnaire* (Rev. ed.) (APPENDICES, pp.79-82 and as a PDF document on an accompanying CD-ROM.) Austin, TX: Southwest Educational Development Laboratory.