AN ANALYSIS OF STUDENTS WRITING BY USING REFLECTIVE TEACHING AT PAHLAWAN UNIVERSITAS:

LAPORAN PENELITIAN



KETUA : CITRA AYU, M.Pd NIDN: 1023058002

ANGGOTA: Dr.Wida Rianti NIDN: 1029038302

ANGGOTA: MASDELIMA NIM: 1988203006

ANGGOTA: M.HAKIM NIM: 1888203002

PROGRAM STUDI PENDIDIKAN BAHASA INGGRIS FAKULTAS ILMU PENDIDIKAN UNIVERSITAS PAHLAWAN TUANKU TAMBUSAI TAHUN AJARAN 2021/2022

HALAMAN PENGESAHAN

PELATIHAN PENINGKATAN KEMAMPUAN MENGENAL HURUF PADA Judal ANAK DI TK TAQIFA

Peneliti/Pelaksana

Nama Lengkap Citra Aya, SS., M.Pd.

Pergunian Tinggi Universitas Pahlawan Tuanku Tambusai

NIDN 1023058002

Jabatan Fungsional Lektor

Program Studi Pendidikan Bahasa Inggris

Nomer HP 085130303009

citraayu1980 a gmail.com Alamat Surel

Anggota (1)

Nama Lengkap Wida Rianti, M.Pd

NIDN 1029038302

Perguruan Tinggi Universitas pahlawan Tuanku Tambusai

Anggota (2)

Nama Lengkap Putri Asi Lestari, M.Pd

NIDN 10111018901

Pergaman Tinggi Universitas Pahlawan Tuanku Tambusai

Anggota (3)

Nama Lengkap Fitri Annisa

NIM 1988203010

Nama Institusi Mitra

Alamat

Anggota (4)

Nama Lengkap M.Hakim 1988203017

NIM Nama Institusi Mitra

Alamat

Penanggung Jawab

Tahun Pelaksanaan Tahun ke 1 dari rencana 1 Tahun

Biaya Tahun Berjalan Rp 3 000 000

Mengetahui

An Dekar Universitas Pahlawan

MPENGA Mengetahui ctific LPPM Bangkina Ag. 12-11-2021

Citra Ayu, M Pd.

NIP/NIK 1023058002

Kettk

tamalina S Pd. M Pd NRPALK 096542104

Dr.musnar Indra Daulay

NIP-TT 096.542 108

Epiner Jago Carises in

CHAPTER I

INTRODUCTION

A. Background of the Problem

English proficiency and mastery becomes a necessity. Moreover, English proficiency is one of the main requirements in the world of work. The reason is, professionals are required to have the ability to speak English well. Unfortunately, the English proficiency possessed by Indonesian human resources (HR) is still considered low. Indonesia is ranked 74 out of 100 countries based on the EF English Proficiency Index (EF EFI) or the 2020 edition of the English proficiency index, released by EF Education Firs.

Learning a foreign language in this case English will be very useful in everything. Your potential and ability will increase. One of the most important things is a lack of confidence. The number of new vocabulary and different sentence structures with Indonesian, making many students lazy. This fear then makes them dislike. As a result, they have difficulty mastering English. Although various ways have been done to increase students' interest in English language materials, problems are widely encountered in the field.

For this reason, research is needed to be conducted on the problems faced by students in Learning English. Researchers can describe the symptoms of the problem, namely: a) students are unable to communicate with English both spoken and written; b) students lack mastery of English vocabulary; c) students do not like to learn English; d) students are unable to build English sentences

properly and correctly in the structure of sentences; e) Students are less able to identify information from a text read.

The results of an interview on November 18, 2018 conducted by researchers on the English Learning Implementation Plan (RPP) made by Students of Hero Tuanku Tambusai University have not reflected the RPP based on reflective teaching. And the results of observations of the implementation of learning also have not shown the implementation of learning in reflective teaching. This happens due to the imperfections of students at the beginning of preparing an English RPP skilled at writing a good English short essay (Witarsa, 2011).

Based on the results of the interview, it is necessary to improve the skills of teaching english short essays for students. Tatar material is more directed at the practice of developing an English RPP that demonstrates short essay writing skills, and the practice of implementing reflective teaching-based learning. Learning orientation needs to pay attention: learning objectives, supply materials based on needs, utilization, and selection of learning resources in the environment, excavation of English concepts learned through interacting with students. Therefore, it is necessary to be trained in reflective teaching-based English learning skills by focusing on aspects of writing short essays.

Efforts to improve learning for English students can be done by combining guided discovery models with reflective teaching. The thing that underlies the choice of reflective teaching activities is because so far reflective teaching activities have not shown the expected results as they should (Lalor, Lorenzi, and

Rami, 2015). Most students and lecturers do not do reflective teaching and do deep reflection when they finish teaching practice. The students and lecturers did not seem to practice reflecting on the learning process such as: assumption analysis, conceptual awareness, imaginative speculation, and reflective skepticism which showed reflecting activities from reflective teaching. This is important to be shown by students and lecturers because reflective practice can improve the quality of learning in terms of thinking and writing (Choy Chee, and Oo San, 2012). Lectures through optimizing reflective teaching activities are later expected to shorten the time to improve understanding in learning various skills that are impossible to learn alone, so that the involvement of skills in teaching English short essay writing can be increased and accelerated (Capobianco and Lehman, 2006).

The researcher finally researched and developed a comprehensive model development starting from planning, assessing, to implementing reflective teaching-based learning with the hope that a guidebook will be produced which specifically contains how to improve students' English short essay writing skills in the field. The development of the given model for students is finally expected to have an impact on the ability to write English short essays that appear when students prepare lesson plans, and the presentation of components of writing English short essays when students conduct learning, this also shows the abilities that students have, and English short essay writing skills that have been understood by students.

Thus, it is necessary to develop a Reflective Teaching -based Guided Discovery Model that can Improve Students' English Short essay Writing Ability in the hope of becoming a meaningful finding that can complement previous findings for increasing student competence, especially for English students.

B. Focus of the Research

Based on the description that has been disclosed in the background of the study, the formulation of the research problem is stated as follows:

- 1. How to develop a guided discovery model based on Reflective Teaching?
- 2. What is the character of the Guided Discovery model based on Reflective Teaching that is valid, practical and effective?

C. Purpose of the Research

Based on the focus of the research, the objectives of this research are;

- 1. Develop a Reflective Teaching model.
- 2. Produce a valid, practical and effective *Reflective Teaching* model character.

D. Expected Product Specification

The product specifications are expected from this research is the creation of a learning model-based *reflective teaching*, books Reflective Teaching models, books lecturer *Reflective Teaching* to Improve Writing Ability Short essay English.

E. Importance of Development

The development of the *reflective teaching* model is the ability to write short essays for students, especially students of English Education. Researchers see that so far the quality and quantity of student writing in the

form of published short essays has not revealed the students' actual English skills. Therefore, a *reflective teaching* model is needed so that students' short essay writing skills are more honed so as to produce quality writing.

F. Development Assumptions and Limitations

1. Assumption

The assumptions in this study are as follows: 1) are expected to provide alternative learning resources for students; 2) the teaching and learning process is not only face to face with the teacher, but can use the available time and technology; and 3) lecturers and students have never used *reflective teaching* learning models.

2. Development Limitations

The limitations of the product in this research are as follows: 1) for learning to write short essays for students and 2) for students of Universitas Pahlawan English Education.

E. Definition of Terms

In this study, several specific terms were used, namely: *reflective teaching* model, writing ability, and short essay with the following meanings.

- 1. The *reflective teaching* model is a specific form of a set of sequential teaching components and procedures to realize a process.
- 2. Writing ability is the ability to communicate in expressing opinions, ideas, and ideas in written language.
- 3. Short essay is a scientific work written among students in relation to their learning and education before completing their studies.

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Theoritical review

1. Learning Theory Constructivism.

Jean Peaget (in Ansyar 2015), argues that knowledge is obtained through a process of balance between experiences with knowledge or new things. Following Bruner (in Ansyar 2015. Ilham 2020) suggests that constructivist learning occurs when students construct knowledge and test a number of ideas and approaches based on experience and integrate them in new conditions. According to Mc. Brien and Brandt (in Willis 1997), Constructivism is said to be a learning approach about how someone learns.

According to constructivism theory, knowledge is a series of efforts to gain knowledge. For example, knowledge of rain; it is impossible for it to rain directly, but there are a number of processes that occur before. When it rains, one gains knowledge by gazing and observing and touching. On another occasion, someone again saw the rain. Continuous response to rain can make one's knowledge of rain more complete and detailed. (Slavin, 1994. Ansyar, 2015. Ilham, 2020).

Based on the description above, a conclusion is obtained, namely the Constructivism Learning Theory in learning activities, or learning to draw will try ideas and approaches based on understanding and experience that they already have, and apply them to a new condition. In other words, students will build

knowledge from their experiences. Each of these experiences will be accumulated, compiled, and assembled so that it will produce new knowledge, namely writing short essays.

2. Guided Discovery Learning Model.

Guided Discovery Learning Model Discovery learning model is a teaching and learning process by which lecturers provide opportunities for students to find information on their own without being guided (Suryosubroto, 1997: 192).

According to Sanjaya ($\underline{2008}$: $\underline{192-193}$), the guided discovery model has a number of steps, namely:

- a) Orientation.
- b) Formulate the problem
- c) Formulate a hypothesis.
- d) Collecting data.
- e) Test the hypothesis.
- f) Formulating conclusions..

According to Marzano (in Markaban, <u>2006</u>:16) the guided discovery learning model has several advantages, namely.

- a) Students can actively participate in learning
- b) Can create a sense of wanting to find.
- c) Connect with student problem solving skills.
- d) Become a means for lecturers and students to interact more intensively and also train students to communicate well.

e) The learning achieved is more imprinted and stored in the long-term memory of students.

However, the guided discovery model also has a number of drawbacks such as taking a lot of time, only a few students can follow this model, and it is limited to a few topics (Markaban, 2006:16).

Referring to the view above, it is necessary to make an effort to anticipate the weaknesses of this learning model, namely so that the lecturer selects the material to be taught, and it is important to analyze the students. The selection of the guided discovery model is based on the advantages of the model itself. Because students are required to be as creative as possible. Thus, the selection of this model is appropriate to be applied to Writing 2 learning in developing the creativity of lecturers and students.

3. Reflective Teaching Theory

In making justifications for decisions, lecturers should not rely on instincts or predetermined techniques, on the contrary, lecturers need to think about what is going on; what options are there; and other critical and analytical related questions (Norlander-Case in Hussin & Saleh, 2009). This situation is in accordance with the definition of reflective thinking according to Dewey (Hussin & Saleh, 2009) which is "turning a subject over in the mind and giving it serious and consecutive consideration". In the context of this study, reflective means thinking and reviewing ideas, treatments, and situations that exist in the teaching and learning process before further action is taken.

Reflective ability is based on the reflective concept of Dewey in LaBoskey, VK (1996) regarding the ability to think reflectively and be reflective. Reflective thinking ability consists of five components, including: 1) recognize or felt difficulty; 2) location and definition of the problem; 3) suggestions of possible solutions; 4) rational elaboration of an idea; 5) test and formation of conclusion.

Reflection in the context of learning formulated by Boud, *et al* (in Sirajuddin, 2009; Kurnia, 2006) is an intellectual and affective activity that involves students in an effort to explore their experiences to achieve new understandings and appreciations. When reflective thinking takes place in a learner, he learns what he is facing, assumes, evaluates, behaves, and applies his understanding. Hmelo & Ferrari (Song, Koszalka, and Grabowski, 2005) further concluded that reflection helps students to build higher order thinking skills.

One of the reflective learning models is the one formulated by *The International Center for Jesuit Education (ICAJE)*, namely the Ignatian Pedagogy Paradigm (Sirajuddin, 2009:195). This Ignatian Pedagogical Paradigm (PPI) has been applied to Jesuit schools around the world (ICAJE, 1993). According to Drost (Sirajuddin, 2009) the concept of reflective thinking through reflective learning is the core of PPI. The Ignatian Pedagogical Paradigm (PPI) consists of three main elements, namely experience (*experience*), reflection (*reflection*), and action (*action*). As according to ICAJE (1993), it can be seen in the figure below.

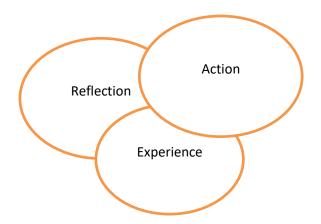


Figure 2.1. Paradigm Reflective Teaching Ignatian

So that these three elements can be applied properly then it takes a prelearning element (pre-learning element) ie context (context) and post-learning elements (post-learning element) the evaluation (evaluation). So that in its full application, PPI is applied systematically through five steps of reflective learning, namely: 1) context (context); 2) experience (experience); 3) reflection (reflection); 4) action (action); and 5) evaluation (evaluation).

4. Essay

a. Essay Definition

Essay is a type of written work that contains a combination of facts and opinions. Essays are more subjective from the author's point of view, which are analytical, speculative, and interpretive. Essays include narratives that can be in the form of criticism, arguments, literature from observations of everyday life and reflections of the author.

b. The Purpose of Writing Essays.

After understanding the meaning of an essay, it is time for you to understand its purpose. An essay can be used for the following three purposes:

- 1) Convincing Readers
- 2) Accepting the Author's Opinion
- 3) Providing Information Regarding the Topic Discussed

c. Essay Structure

The structure of the essay consists of an introduction, content or discussion, closing or conclusion. More clearly, let's review.

1) Preliminary

Similar to the purpose of the introduction in scientific writing, in the introduction to how to make an essay, the author can give a little opinion about the theme to be discussed.

2) Discussion / Content

The discussion or content is the part that explains the theme or topic of the essay in detail and detail. The author will describe the opinions in a row with the ideas arranged in the framework.

3) Closing or Conclusion

Being the final part in an essay, this closing or conclusion becomes a point in the form of a sentence that summarizes the important things that have been reviewed in the introductory and discussion chapters.

d. Types of Essays

There are various types of essays that we can read based on the purpose of the content. Among them:

1) Story Essay

A story essay is an essay that aims to describe, or present either an item, a person, or something else so that the reader can imagine it.

2) Argumentative Essay

This type of essay aims to convince the reader to accept the author's ideas, views, attitudes, or beliefs on an issue or problem.

3) Descriptive

Definition of descriptive essay is an essay that describes a person or thing.

4) Title

Header, is a type of essay published in a newspaper which is a place to channel public opinion in order to express their views on an event that is developing in the community.

5) Character Snippets

This type of essay allows a writer to insert a snippet (snippet) of a person's character on a related issue to the reader.

6) Personal

The difference between a personal essay and a character essay is that the character or nature presented in the essay is a piece of the character or nature of the author himself. In personal essays, the writer expresses his opinion in front of the issues raised in the essay.

7) Reflective

This essay is an essay written to reflect on a political issue, government policy, and others which is usually written by an expert to respond to these issues.

8) Critics

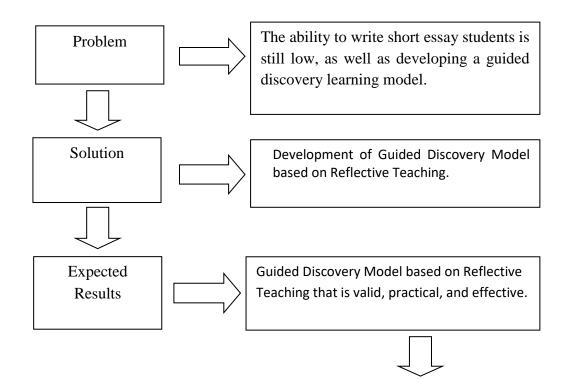
A critical essay is an essay that judges whether it is good or bad, useful or not, the advantages or disadvantages of something, whether in the form of works of art or literary works.

9) Research Short essay

Research short essay is a type of essay that contains the results obtained from a research.

B. Thinking Framework

Students' ability to write short essays is generally said to be in the low category. Learning by optimizing *reflective teaching is* expected to be able to overcome and improve students' abilities in writing short essays. This research is focused on developing a *reflective teaching* model to improve the ability to write short essays of English students. The explanation can be seen in the following conceptual framework:



Can improve the ability to write short essay students.

Figure 7.
Conceptual framework.

CHAPTER III

METHODO OF THE RESEARCH

A. Types of research

This research is classified as research and development (R&D). This research intends to produce a product that is valid, practical and effective. The expected product is the Development of a Reflective Teaching-based Guided Discovery Model to Improve Students' Short Essay Writing Skills.

B. Development Procedure

The model used to develop this problem-based learning model is the ADDIE Model (Brown and Green. 2011:10, Richey, et all, 2011:21; Prawiradilaga, 2007:21). The steps for developing a problem-based learning model for physics learning are in accordance with the ADDIE model shown in Table 5.

Table 5
Steps for Developing Problem-Based Learning Models for Physics Learning

No.	Stage Development	Activity	Description of the Activities Conducted on Research
1	2	3	4
I	Analyze (Analysis)	Assessment of need (needs analysis) Problem Analysis Characterization of learner population (Student analysis)	Analyzing the curriculum of English courses. Seeing the learning model applied by the lecturer in the learning process Analyze student characteristics
		Literature Analysis Analysis of goals and objectives	Looking at the literature related to the developed model Analyze and identify the skills that must be mastered by students with the developed learning model

2	Design	The product's	Determine the product to be
	(Design)	objectives	developed. The products
	(Design)	Objectives	developed are: 1) model books, 2)
		TDI 1 d	student books, 3) lecturer books.
		The product's	Determining the audience, the
		target audience	target audience in this study are
			English lecturers
		A description of	The product component produced
		the product's	is a problem-based learning model
		component and	for learning English which consists
		how they will be	of syntax, reaction principle, social
		used	system, support system,
			instructional impact and support.
		Prototype Design	Designing a problem-based
			learning model for learning
			English which is realized in the
			form of model books, student
			books, lecturer books.
3	Development	(Formative	Doing: expert validity (validation
	(Development)	evaluation)	by experts) for model books,
	(=:::	Formative	student books, lecturer books.
		evaluation	
		Prototype revision	Revise according to expert input
		The state of the s	so that prototype 2 is produced
4	Implementation	Limited trial	Conducting a limited trial as an
	(Implementation)	Zimica utai	initial stage of qualitative
	(miplementation)		evaluation quantum ve
		Revision	Revise the resulting product
		ICVISION	according to the input of a limited
			trial
		FGD	
		וטט	
		Revision	experts and practitioners
		Revision	Revise according to input during
	E. 1	Duo eti e - 1:4	FGD
5	Evaluation	Practicality	Conduct a practicality test by
	(Evaluation)		looking at the implementation of
			the model, practicality according
			to lecturers and practicality
			according to students
		Effectiveness	Testing the effectiveness of
			problem-based learning models for
			learning English through extended
			tests

The complete research steps are as follows:

1. Analysis Stage

At the analysis stage, a needs analysis is carried out on the importance of problem-based learning models for English language learning in the field today. Needs analysis includes: (a) Curriculum analysis (b) Analysis of English lecturers (c) Student analysis (d) Literature analysis (e) Concept analysis.

The theories and concepts are selected, reviewed and adapted to the needs of the research. Theories and concepts of the results of the analysis are shown in Table 6.

Table 6
Concept Analysis About Theory Related to Research

Theory, Con	Reference	
	1. Syntax	Joyce and Weil
	Reaction principle	(1992)
Theory	3. social system	
Model	4. Support System	
Construction	5. Instructional impact and	
	support	
Theory	ADDIE	Richey et
Model		all,(2011)
Development		
Reflective		Proet, J & Gill,
Teaching		K(1986)
Writing short	English	Barrs, M (1983),
essays		Hefernan (1990)

Based on the table above, it can be explained that the analysis stage gives birth to a rationale for the importance of the *Reflective Teaching* -based Guided Discovery model for learning English.

2. Design Stage

The initial stage of R & D research is making product planning (planning). These stages include: (1) the product's objectives , (2) the product's target

audience, and (3) a description of the product's components and how they will be used (Borg & Gall, 1989: 787). The product developed in this study is a *Reflective Teaching* -based Guided Discovery model for learning English, and the target audience is English lecturers.

3. Development Stage.

The development phase consists of three activity steps, namely: a) prototype design, b) formative evaluation and c) prototype revision.

a. Designing prototypes.

The activity of designing the prototype begins with developing a *Reflective Teaching* -based Guided Discovery model . This model is equipped with Student Books, Lecturer Books and Model Books.

Table 7
Reflective Teaching Model Prototype for Learning English

No	Research Prototype		
1	Book 1. Guided Discovery Model based on Reflective Teaching for		
	English Language Learning		
2	Book 2. Student Book		
3	Book 3. Lecturer's Book		

The development of the *Reflective Teaching* -based Guided Discovery model for learning English was carried out based on an analysis of theories and concepts as well as the results of research on the *Reflective Teaching* -based Guided Discovery model. The preparation of student books is based on the guidelines issued by the Ministry of National Education (2008) regarding the rules for writing teaching materials. Lecturer books are prepared to guide lecturers in applying the *Reflective Teaching* -based Guided Discovery model.

b. Conducting Formative Evaluation

Formative evaluation in this research is in the form of validation test activities by experts. The selection of experts is based on the background of expertise, needs, and the object of research. The validator names are shown in Table 8.

Table 8
Validator Name and Area of Expertise

No.	Validator Name	Areas of expertise
1	Prof. Dr. Atma Zaki,	Education
2	M.Pd	Education technology
3	Dr. Darmansyah, M.Pd	Education Evaluation
	Dr. Khairani, M.Pd	

c. Prototype Revision

The next step in the development stage is the revision of the prototype. After the validity test, revisions are made according to the input received. The result of the revision is prototype 2 of the *reflective teaching* model for learning English which is ready to be tested on a limited basis. Revisions are made based on input from experts.

4. Implementation Stage

The implementation phase is carried out through a limited trial. Early this evaluation emphasize on the aspect of the charge rather than on *outcomes*, so the devices - devices that were qualitatively tired arranged in both categories, and can be applied. Limited trials will be conducted on September 10 and 16, 2021 in Class. At the trial stage, the researcher asked the lecturers to run the Guided

Discovery model based on *Reflective Teaching* and use the tools that had been prepared. Researchers follow the learning process and record events during the process. After a limited trial, a discussion was held with the lecturer to get input on the syntax of the model and the learning tools used. After a limited trial process, a *Focus Group Discussion* (FGD) was conducted.

FGD is a product validation by practitioners and experts as well as product users, namely English lecturers. The purpose of the FGD is to get input on the products developed from practitioners in the field. The FGD was held on September 6, 2021 at the Hero University.

5. Evaluation Stage

In accordance with the ADDIE model, the evaluation phase aims to obtain empirical evidence of the results of the implementation of the model developed for students, then carry out a diagnosis and revision according to the results of the diagnosis. At this stage, an expanded trial was conducted in the form of an experiment. At this stage the goal to be achieved is to determine whether the product to be produced meets *its performance objectives*. Expanded trials were carried out in the form of experiments (Borg & Gall, 1983: 790). In this study, field tests were conducted using a quasi-experimental design in the form of a *pretest-posttest design*.

C. Product Trial

The product trial in this study was based on the development of a short essay writing model. This model starts from the view that the success or failure of the

writing process can be seen through the process of learning reflection and the product of the writing itself.

After the *reflective teaching* model along with its instruments and devices have been compiled, the next activity is followed by validation to experts (*expert judgment*). Experts involved in the validation of teaching models: 1) experts in the field of research methodology; 2) experts in the field of evaluation; 3) experts in the field of learning English; 4) English language practitioners (lecturers); and 5) the user of the learning model, which in this case is represented by the English Education student at Universitas Pahlawan as a representation of the *user* and the lecturer of English Education. The process of developing this *reflective teaching* based short essay writing model follows the following steps, namely: 1) The validation results are revised and a revised draft is obtained, 2) Trial. The revised initial draft was then piloted at the University to test the *fit* or not of the developed model. On the other hand, if the results of the analysis have not obtained an appropriate model, the instrument is revised again and tested and then analyzed again until a valid and reliable model is obtained.

D. Data Type

The type of data collected is qualitative data and quantitative data as the basis for determining the level of effectiveness, efficiency and attractiveness of the resulting product. Quantitative data is obtained from the results of a questionnaire about the needs of the product being developed while qualitative data is obtained from the results of a survey to students about the required needs. students in writing short essays.

The data for the development of this model consists of two types in the form of verbal data and non-verbal data. Verbal data in the form of descriptions of information in the form of sentences in the form of questionnaires and interviews. Non-verbal data in the form of the value of the ability to write from a given task.

Table 3.1 Types of Data

No	Phase	Activity	Results	
1.	Analyze	Doing theoretical studies	- Concept map theory from previous research.	
		studies	- Description of learning	
			tools.	
		Doing empirical studies	- Description of the	
			phases, means and	
			problems of learning Description of	
			requirements and product	
			design formulation	
2.	Design	Formulating expert		
		formulation		
		Formulate user		
		formulation		
3.	Development	Creating a learning structure	The draft of the learning model for writing short essays	
		structure	with a reflective teaching	
		Creating a support	approach	
		system		
		Making a learning		
		impact plan		
4.	Implementation	Implementing it for	Formulation of product	
		students	revision and improvement	
		Carry out		
		implementation to lecturers		
5.	Evaluation	Evaluating all stages	The product of the Guided	
٦.	Evaluation	that have been carried	Discovery Model based on	
		out from stages I-IV	reflective teaching that was	
		030 110111 0111500 1 1 1	developed	
			20, 210 pea	

D. Data Collection Instruments

The data collection used to develop *reflective teaching* -based products, namely through: questionnaires and interviews were used to collect qualitative

data from needs analysis, expert evaluation, small group trials and large group trials, to determine the percentage of product quality using a questionnaire developed in the form of numbers to get accurate data in the form of a questionnaire containing questions and answers with a Likert scale measuring scale (Sugiyono, 2013: 133-138) the collection technique is done by: (1) a questionnaire containing questions is equipped with an answer *checklist* column, respondents stay put a *checklist* ($\sqrt{}$) in the answer column/assessment the scoring system used refers to the Likert scale, the highest score for each item is 4 and the lowest is 1 (Sugiyono, 2012:133-138), (2) interviews, and (3) tests write short essays.

1. Questionnaire

This method is used to reveal respondents' opinions about the components of the learning process to write short essays in English with the aspects assessed consisting of: the process of writing with a guided discovery model based on *reflective teaching* which includes all components of the short essay as a whole consisting of the process of writing the title, abstract, background, background, research methods, discussion as well as conclusions and suggestions.

2. Interview

Interviews functioned as triangular data obtained from questionnaires. The *semi*-structured type *of interview was* deliberately chosen by the researchers so that the interviewed lecturers felt natural and provided actual information without being manipulated.

3. Test

The short essay writing test was used as the only instrument for collecting quantitative data. This test is carried out after the learning process through the *reflective-teaching-* based Guided Discovery model is applied. Because the test is used to reveal students' writing skills, 3 *raters are* needed to provide an assessment where the researcher himself is assisted by 2 (two) lecturers who are in charge of English writing courses in providing assessments.

Table 3.2 Data Collection and Research Instruments

No	Phase	Activity	Data collection	Instrument	Subject/
			technique		Source
1.	Analyze	Doing	Documentation	Document	Books,
		theoretical		review guide	journals,
		studies			research
					reports
			Documentation	Document	
		Doing		review guide	Learning
		empirical			Media
		studies			
			Questionnaire	Questionnaire	
				needs	Lecturer,
					student
				Description	
				of	
				requirements	
				and product	
				design	
				formulation	
2.	Design	Formulating	Questionnaire	Expert	Expert
		expert		formulation	
		formulation		questionnaire	
			Questionnaire		Lecturer,
		Formulate user			student
		formulation			
3.	Development	Creating a			
		learning			
		structure			
		Creating a			

		support system Making a learning impact plan			
4.	Implementation	Implementing it for students Carry out implementation to lecturers			
5.	Evaluation	Evaluating all stages that have been carried out from stages I-IV	Questionnaire	Validation Questionnaire Eligibility test questionnaire Effectiveness	Expert Expert Expert
			Test	test questionnaire Short essay writing test	student

E. Data analysis technique

The research data were analyzed descriptively, qualitatively and quantitatively. The data is used to determine whether the learning model is valid, practical and effective.

1. Validity and Practicality.

The opinions of experts (judgment experts) are used to test the validity of the model. The validator/expert responses were asked about the model and the product being developed, including construct validity and content validity. Furthermore, the degree of practicality and practicality criteria are determined based on the achievement value of observers and respondents in the application of the Learning Model. The practicality categories are as shown in the following table 10:

Table 10. Practicality Category.

Practical/easy-to-use rate (%)	Criteria
81 < tp < 100	Very practical
61 < tp < 80	Practical
41 < tp < 60	Practical enough
21 < tp < 40	Not practical
0 < tp < 20	Very impractical

Source: Riduwan, 2012.

The Reflective Teaching-based Guided Discovery Learning Model can be categorized as practical if more than 60% of respondents consider it quite practical.

2. Data Analysis of the Effectiveness of the Model.

The effectiveness of the development of the Reflective Teaching-based Guided Discovery Learning Model is obtained from the activities, interests, and abilities of students. This activity and interest data was obtained by calculating the total value of the observers who observed the activities, the observed activities as contained in the observation instrument.

Table 12. Student Ability Criteria.

interval	Criteria
1 < k 20	Very Ineffective
21 < k 40	Ineffective
41 < k 60	Effective enough
6 1<	Effective
kindergarten	
80	
81< kt 100	Very effective

Source: Riduwan, 2012

Analysis of Psychomotor Ability Results Data, was used to see whether the application of Reflective Teaching-based Guided Discovery Learning Model Development, lecturer books and student books affected learning outcomes and the development of students' psychomotor abilities. The variance normality test was conducted to analyze the learning outcomes of students' cognitive abilities.

BIBLIOGRAPHY

- Venville, G., Oliver, M. (2015). "The Impact of A Cognitive Acceleration Programme on Students in An Academically Selective High School". *Elsevier Thinking Skills and Creativity Journal* (15), 48 60.
- Witarsa, R. (2011). Analisis Kemapuan Inkuiri Dosen yang Sudah Tersertifikasi dan Belum Tersertifikasi dalam Pembelajaran Sains SD. (Tesis). Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- World Bank, Kementerian Pendidikan Nasional, Kingdom of the Netherlands. (2011). Mentransformasi Tenaga Pendidikan Indonesia, Volume I: Ringkasan Eksekutif. Kantor Bank Dunia: Jakarta.
- World Bank, Kementerian Pendidikan Nasional, Kingdom of the Netherlands. (2011). Mentransformasi Tenaga Pendidikan Indonesia, Volume II: Dari Pendidikan Prajabatan hingga ke Masa Purnabakti: Membangun dan Mempertahankan Angkatan Kerja yang Berkualitas Tinggi, Efisien, dan Termotivasi. Kantor Bank Dunia: Jakarta.
- Yeh, Y., Tsai, J., Hsu, W., et all (2014). "A Model of How Working Memory Capacity Influences Insight Problem Solving in Situations with Multilpe Visual Representations: An Eye Tracking Analysis". *Elsevier Thinking Skills and Creativity Journal* (13), 153 167.
- Yildiz, G., N., dan Pinar, S., E. (2014). "Examining Approval and Disapproval Behaviors of Teachers Working in Inclusive Classrooms". *International Journal of Instruction* 7 (1), 33 48.
- Yilmaz, K., Altinkurt, Y., Guner, M., dan Sen, B. (2015). "The Relationship Between Teachers' Emotional Labor and Burnout Level". *Eurasian Journal of Educational Research* (59), 75 90.
- Venville, G., Oliver, M. (2015). "The Impact of A Cognitive Acceleration Programme on Students in An Academically Selective High School". *Elsevier Thinking Skills and Creativity Journal* (15), 48 60.
- Witarsa, R. (2011). Analisis Kemapuan Inkuiri Dosen yang Sudah Tersertifikasi dan Belum Tersertifikasi dalam Pembelajaran Sains SD. (Tesis). Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- World Bank, Kementerian Pendidikan Nasional, Kingdom of the Netherlands. (2011). Mentransformasi Tenaga Pendidikan Indonesia, Volume I: Ringkasan Eksekutif. Kantor Bank Dunia: Jakarta.
- World Bank, Kementerian Pendidikan Nasional, Kingdom of the Netherlands. (2011). Mentransformasi Tenaga Pendidikan Indonesia, Volume II: Dari

- Pendidikan Prajabatan hingga ke Masa Purnabakti: Membangun dan Mempertahankan Angkatan Kerja yang Berkualitas Tinggi, Efisien, dan Termotivasi. Kantor Bank Dunia: Jakarta.
- Yeh, Y., Tsai, J., Hsu, W., et all (2014). "A Model of How Working Memory Capacity Influences Insight Problem Solving in Situations with Multilpe Visual Representations: An Eye Tracking Analysis". *Elsevier Thinking Skills and Creativity Journal* (13), 153 167.
- Yildiz, G., N., dan Pinar, S., E. (2014). "Examining Approval and Disapproval Behaviors of Teachers Working in Inclusive Classrooms". *International Journal of Instruction* 7 (1), 33 48.
- Yilmaz, K., Altinkurt, Y., Guner, M., dan Sen, B. (2015). "The Relationship Between Teachers' Emotional Labor and Burnout Level". *Eurasian Journal of Educational Research* (59), 75 90.
- Yurdugul, H. & Menzi Cetin, N. (2015). "Investigation of the Relationship between Learning Process and Learning Outcomes in E-Learning Environments". *Eurasian Journal of Educational Research* (58), 57 74.
- Zertuche, A., Gerard, L., Linn, C., M. (2012). "How do Openers Contribute to Student Learning". *International Electronic Journal of Elementary Education* 5(1), 79 92.
- Zhou, G., Kim, J., Kerekes, J. (2011). "Collaborative Teaching of an Integrated Methods Course". *International Electronic Journal of Elementary Education* (3), 123 138.
- Yurdugul, H. & Menzi Cetin, N. (2015). "Investigation of the Relationship between Learning Process and Learning Outcomes in E-Learning Environments". *Eurasian Journal of Educational Research* (58), 57 74.
- Zertuche, A., Gerard, L., Linn, C., M. (2012). "How do Openers Contribute to Student Learning". *International Electronic Journal of Elementary Education* 5(1), 79 92.
- Zhou, G., Kim, J., Kerekes, J. (2011). "Collaborative Teaching of an Integrated Methods Course". *International Electronic Journal of Elementary Education* (3), 123 138.