



**THE DEVELOPMENT OF PROJECT-BASED WRITING
ASSESSMENT MODULE TO STIMULATE THE
STUDENTS' CRITICAL THINKING AND CREATIVITY**

A Thesis

**Submitted in Partial Fulfillment of the Requirements for the Master Degree in
English Education**

by

Tutik Lestari

0203516050

**ENGLISH LANGUAGE EDUCATION
PASCASARJANA
UNIVERSITAS NEGERI SEMARANG
2018**

APPROVAL

The Thesis entitled "**The Development of Project-based Writing Assessment Module to Stimulate the Students' Critical Thinking and Creativity.**" (The Case of SMA N 12 Semarang in Academic Year of 2017/2018) by:

Name : Tutik Lestari
Student Number : 0203516050
Study Program : English Education

has been examined and defended on October 17th, 2018 in front of the Board of Thesis Examiners.

Semarang, Oktober 2018

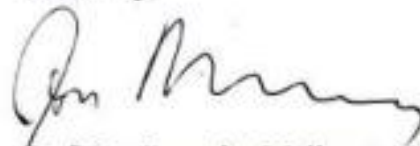
The Board of Examiners

Chairman,



Prof. Dr. H. Achmad Slamet, M.Si
NIP. 196105241986011001

Secretary,



Prof. Dr. Januaris Mujiyanto, M.Hum
NIP 195312131983031002

First Examiner,



Prof. Dr. Warsono, Dip. TEFL., M.A
NIP.-

Second Examiner,



Prof. Dr. Dwi Rukmini, M.Pd
NIP. 195104151976032001

Third Examiner,



Dr. Dwi Anggani Linggar Bharati, M.Pd
NIP. 195901141989012001

MOTTO AND DEDICATION

Motto:

1. The routine assessment describes the realization of assessment to stimulate the students' critical thinking and creativity.
2. In stimulating the students' critical thinking, the teacher has to evaluate the students' need.
3. The teacher has to evaluate the students' need to stimulate the students' creativity.
4. A project-based writing assessment need to be developed to stimulate the students' critical thinking.
5. An alternative way to stimulate the students' creativity is by developing a project-based writing assessment.
6. The project-based writing assessment module is effective in stimulating the students' critical thinking.
7. After doing the the project-based writing assessment module the students has significant improvement in their creativity skill.

Dedication:

This thesis is dedicated to English Language Education, Pascasarjana, Universitas Negeri Semarang.

ACKNOWLEDGEMENT

First of all, I would like to praise to Allah SWT, for the blessing given to me during my study in Graduate Program of Universitas Negeri Semarang, especially in completing this thesis.

Then, I would like to express my sincerest thankfulness to Dr. Dwi Anggani Linggar Bharati, M.Pd and Prof. Dr. Dwi Rukmini, M.Pd as my advisers, for his patience, helpful corrections, and positive criticism during my consultations for this thesis.

The writer also would like to express the thanks to Prof. Dr. H. Achmad Slamet, M.Si. as the director of Pascasarjana, Universitas Negeri Semarang, Prof. Dr. Totok Sumaryanto Florentinus, M. Pd. As the first deputy director, and Prof. Dr. Tri Joko Raharjo, M. Pd. as the second deputy director of Pascasarjana, have allowed the writer to study in Pascasarjana, Universitas Negeri Semarang.

My deep gratitude is extended to Prof. Dr. Suwandi, M.Pd., Alief Noor Farida, S.Pd. M.Pd., Desiana Jayanti Andaruli, S.Pd as my expert validators of my writing assessment module, who has given the criticisms, comments, and supporting advice for the improvement of this report.

My honor also goes to all lecturers of the English Department of Semarang State University for all the guidance and lectures during my study. I also would like to thank to Kusno, S.Pd., M.Si., the principal of SMA N 12 Semarang and the English teachers of that school, especially Noor Sahid, S.Pd., and the students of X IPS 2, for the permission and cooperation during this research.

I would like to devote my deepest appreciation to my parents (Kaswi and Sulastri) and brother (Agung) for their endless love, supports, and prayers. Special thanks are also devoted to my best partner, Aniq Mukoyyar, and my friends at the Under Graduate English Education of Unnes (Desi, Lina, Maila, Lisa), Rombel 2 of English Education Graduate Program 2016, my all boarding house friends, and all of my friends who might not be mentioned individually here and all people for the encouragement, great support, and a greater sense of togetherness.

I do realize that there are still many shortcomings in this thesis. Therefore, I would be grateful for any criticisms and suggestions for its betterment.

Semarang, Oktober 2018

Tutik Lestari, S.Pd

ABSTRACT

Lestari, Tutik. 2018. The Development of Project-Based Writing Assessment Module to Stimulate the Students' Critical Thinking and Creativity (The Case of SMA N 12 Semarang in Academic Year of 2017/2018). A Thesis. English Language Education, Graduate Program, State University of Semarang. First Advisor: Dr. Dwi Anggani Linggar Bharati, M.Pd., Second Advisor: Prof. Dr. Dwi Rukmini, M.Pd.

Keywords: Project-Based, writing, assessment, critical thinking, creativity

Assessment cannot be separated from teaching and learning activities since it is the process of getting data to know about the students' progress and achievement in gaining the learning objectives. Otherwise, the teacher gets difficulty in developing a higher-order thinking assessment which can stimulate students' critical thinking and creativity. Hence, this study aimed at describing the realization of assessment to stimulate the students' critical thinking and creativity, explaining the type of assessment needed by SMA students to stimulate their critical thinking and creativity, explaining the development of project-based writing assessment to stimulate the students' critical thinking and creativity, and explaining the effectiveness of project-based writing assessment in stimulating critical thinking and creativity of SMA students.

This study used Research and Development (R&D) which was done through seven steps. The subjects of this study were the students of X IPS 2 of SMAN 12 Semarang in the academic year of 2017/2018. Questionnaire, interview, observation checklist, and test were used as the instrument in collecting the data. The teacher collaborated with the researcher in developing the project-based writing assessment module. After the module was revised based on the experts' suggestions, main field testing was conducted. The module was utilized during the treatments.

The result of this study revealed that there was a significant improvement of the students' writing skill, critical thinking skill, and creativity skill. These skills improved after they were given treatments. It is proven by the mean score results of the pre-test and post-test. The students' score improvement of the writing skill was 67.55 to 80.11, critical thinking skill was 67 to 78, and creativity skill was 65.39 to 78.55. Moreover, the paired sample test results show that there is significant different between the result of pre-test and post-test. In other words, there is a significant improvement on the students' writing skill, critical thinking skill, and creativity skill after they did project-based writing assessment module during the teaching learning process.

TABLE OF CONTENTS

COVER	i
APPROVAL	ii
PERNYATAN KEASLIAN	iii
MOTTO AND DEDICATION	iv
ACKNOWLEDGEMENT	v
ABSTRACT	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
CHAPTER	
I. INTRODUCTION	
1.1 Background of the Study.....	1
1.2 Reasons for Choosing the Topic	5
1.3 Scope of the Study	6
1.4 Research Problems	6
1.5 Objectives of the Study	7
1.6 Significance of the Study	8
II. REVIEW OF PREVIOUS STUDIES, REVIEWS OF THEORETICAL STUDIES, AND THEORETICAL FRAMEWORK	

2.1	Reviews of the Previous Studies	12
2.2	Reviews of the Theoretical Studies	23
2.2.1	The 2013 Curriculum	23
2.2.2	Higher Order Thinking Skills (HOTS)	25
2.2.3	Critical Thinking and Creativity	27
2.2.4	Project-Based Learning (PjBL).....	28
2.2.4.1	Definition	28
2.2.4.2	Advantages	30
2.2.4.5	Steps	31
2.2.5	Assessment	32
2.2.5.1	Definition of Assessment	32
2.2.5.2	Proces Standart of Assessment	34
2.2.5.3	Writing Assessment	35
2.2.6	Research and Development.....	36
2.2.6.1	Definitions.....	36
2.2.6.2	Steps	37
2.3	Theoretical Framework	38
 III. RESEARCH METHODOLOGY		
3.1	Research Design.....	41
3.1.1	Qualitative Approach	41
3.1.2	Research and Development (R&D)	41
3.2	Research Procedure.....	42
3.2.1	Research and Information Collecting (Need Analysis)	42

3.2.2 Planning	43
3.2.3 Developing Preliminary Form of Writing Assessment Module	43
3.2.4 Validating Design	43
3.2.5 Main Product Revision	44
3.2.6 Main Field Testing	44
3.2.7 Final Product Revision.....	45
3.3 Subject of the Study	45
3.4 Instrument for Collecting Data.....	46
3.4.1 Observation	46
3.4.2 Interview	47
3.4.3 Questionnaire	48
3.4.4 Test.....	49
3.5 Method of Collecting Data.....	49
3.6 The Data Analysis Technique	51
3.6.1 Analyzing the Result of the Observation	51
3.6.2 Analyzing the Result of the Interview	51
3.6.3 Analyzing the Result of the Questionnaire	51
3.6.4 Analyzing the Result of the Test	52
3.7 Triangulation	53
IV. FINDINGS AND DISCUSSIONS	
4.1 Research Finding	54
4.1.1 Teacher’s Assessment on Students’ Writing	54
4.1.2 Type of Assessment to Stimulate Students’ Critical Thinking	59

4.1.3 Type of Assessment to Stimulate Students' Creativity	65
4.1.4 Development of Project-Based Writing Assessment to Stimulate the Students' Critical Thinking	69
4.1.5 Development of Project-Based Writing Assessment to Stimulate the Students' Creativity	87
4.1.6 The Effectiveness of Project-Based Writing Assessment to Stimulate Students' Critical Thinking	90
4.1.7 The Effectiveness of Project-Based Writing Assessment to Stimulate Students' Creativity.....	91
4.2 Discussions	94
4.2.1 Teacher's Assessment on Students' Writing	95
4.2.2 Type of Assessment to Stimulate Students' Critical Thinking	97
4.2.3 Type of Assessment to Stimulate Students' Creativity	99
4.2.4 Development of Project-Based Writing Assessment to Stimulate the Students' Critical Thinking	102
4.2.5 Development of Project-Based Writing Assessment to Stimulate the Students' Creativity	105
4.2.6 The Effectiveness of Project-Based Writing Assessment to Stimulate Students' Critical Thinking	107
4.2.7 The Effectiveness of Project-Based Writing Assessment to Stimulate Students' Creativity.....	108
V. CONCLUSIONS AND SUGGESTIONS	
5.1 Conclusions.....	109

5.2 Suggestions	112
REFERENCES	113
APPENDICES	124

LIST OF TABLES

Table	Page
4.1 Cognitive Skill Description	69
4.2 Basic Competence and Indicators	70
4.3 The indicators of Critical Thinking for SMA Students.....	72
4.4 Qualities for each Indicator of Critical Thinking	73
4.5 The Distribution of Meetings	74
4.6 Schedule of the Main Field Testing	81
4.7 Scientific Approach and Project-based Combination stages	85
4.8 The indicators of Creativity for SMA Students	88
4.9 Students' Critical Thinking Mean Score.....	90
4.10 Paired Samples Test of Pre-test and Post-test of Critical Thinking Skill	91
4.11 Students' Creativity Mean Score	92
4.12 Paired Samples Test of Pre-test and Post-test of Creativity Skill	92
4.13 Students' Writing Skill Mean Score	93
4.14 Paired Samples Test of Pre-test and Post-test of Creativity Skill	94

LIST OF FIGURES

Figure	Page
2.1 Research and Development Steps	39
2.2 Theoretical Framework of the Present Study.....	40
3.1 Research and Development Simplification Steps	42
4.1 Steps in Developing the Assessment Module	61
4.2 The Example of Learning Objectives in the Assessment Module	76
4.3 The Example of Observing Activity	77
4.4 The Instruction Example to Foster the Students' Creativity	89

LIST OF APPENDICES

Appendix

1. The result of observation sheet on the teacher's document	124
2. The example of the teacher's lesson plan	125
3. The result of observation sheet on the teaching-learning process	141
4. The interview guidance for the English teacher	142
5. The questionnaire for the English teacher.....	143
6. The questionnaire for the students	146
7. The result of the questionnaire analysis.....	148
8. Critical thinking indicators rubric	150
9. The result of expert validation sheet	151
10. The pre-test instrument	157
11. The result of the observation checklist	159
12. The post-test instrument	160
13. Creativity indicators rubric	162
14. The Result of the Students' Critical Thinking Skill in the Pre-Test and Post-Test	163
15. The Result of the Students' Creativity Skill in the Pre-Test and Post- Test.....	164
16. The Result of the Students' Writing Skill in the Pre-Test and Post- Test.....	165
17. Official letter	166
18. The product of writing assessment	167

CHAPTER I

INTRODUCTION

This chapter presents the background of the study, the reasons for choosing the topic, the research problems, the objectives of the study, the significance of the study, the scope of the study, the definition of key terminologies, and the outline of the report.

1.1 Background of the Study

Assessment cannot be separated from teaching and learning activities. Assessment is the process of getting data to know about the students' progress and achievement in gaining the learning objectives. The teachers use assessment to measure whether the students are able to complete the required standard of the learning process or not. A good assessment has validity and reliability in assessing the students' performance and it is utilized as a reflection of how effective the teacher conducted the teaching and learning activity. Formal and informal assessments are the types of assessment which can be used by the teacher in assessing the students' progress in achieving the learning goals. Formal assessment tends to have a more systematic and planned assessment than informal assessment which is incidental (Brown, 2004, pp. 5-6).

Assessment has to be relevant and appropriate with the learning goals in the used curriculum. Each country has a curriculum as a tool which is used for meeting the demand of their society and the world. The used curriculum in Indonesia might be different from other countries since the challenge differs in

each country. The curriculum in Indonesian has changed several times which have an important role in the development of English language teaching in Indonesia. It is the way to fulfill the demand and the need of the society. Moreover, it is the effort to follow the development of science and technology. In addition, the importance of curriculum has stated in the Regulation of Republic Indonesia number 20 of 2003 about National Education System that curriculum is the set of plan and arrangement which contains learning objective, content, learning material and method used for the guidance of the implementation in the learning activity to achieve the objective of education.

The newest Indonesia curriculum is the 2013 curriculum which has been revised for several times. The latest revised 2013 curriculum is in 2017. The characteristic of the 2013 curriculum is learner-centered where the students have to learn individually or by small group discussion, so they can build up their knowledge, experience, and skill through the scientific approach. Based on *Permendikbud* number 81A of 2013 about curriculum implementation, scientific approach consists of five steps, namely observing, questioning, experimenting, associating, and communicating. However, the teacher can apply the steps of scientific approach randomly as long as based on the learning objectives.

One of the objectives of the 2013 curriculum is the students are able to think creatively and critically. The 2013 curriculum emerges Higher Order Thinking Skill (HOTS) at all levels of education in order to enhance students' understanding and critical thinking. Moreover, the 2013 curriculum integrates *Penguatan Pendidikan Karakter (PPK)* and *4C* namely creative, critical thinking,

communicative, and collaborative. In this case, the students have to find the information by themselves rather than getting information from the teacher. The process of getting information needs students' critical thinking and creativity which belong to HOTS. Mainali (2012, p. 7) stated that HOTS has great benefits for the students, such as they will have a long-term memorization toward the information since they have a clear understanding of the conceptual knowledge, and they can use the information in a new context easily.

Based on revised Bloom's cognitive taxonomy, HOTS consists of the top three elements namely, analyzing, evaluating, and creating. The students' ability is more than just memorizing the pattern. This is the teachers' challenge to stimulate students to think critically and creatively in major skills (listening, reading, speaking, and writing). In order to know whether the students have achieved HOTS or not in their learning process, the teacher needs assessment. Nevertheless, the teachers have difficulty in conducting an assessment which is shown in the monitoring and evaluation of the 2013 curriculum implementation in senior high school in 2014. In the standard assessment, the teacher should assess the students in three aspects namely cognitive aspect (knowledge), affective aspect (attitude), and psychomotor aspect (skill). HOTS should cover all these aspects of assessment.

Since the Indonesian central government has determined English as a compulsory subject to be taught in schools from junior high school until university, the English teacher should master the curriculum in the way delivering the students to meet the learning objectives include HOTS in four basic language

skills. Senior high school level especially, the students are supposed to be able to think logically and reasonably toward the issues. The teacher as facilitator should facilitate the students to stimulate their HOTS by using a relevant task and assessment of each skill.

Major language skill is divided into productive skill and receptive skills. Productive skill (speaking and writing) is more complicated than receptive skill (listening and reading). English Foreign Language learners (EFL learners) like Indonesia students have difficulty in performing the writing skill. It is because writing skill focuses on both linguistics accuracy and content organization (Celce-Murcia, 2001, p. 213). The quality of students' writing depends on the students' knowledge and teacher's assessment. Since HOT should emerge from the students' writing skill, the teacher needs a relevant assessment to stimulate their critical thinking and creativity. Making some project of writing assessment is an alternative way that can be done by the teacher. Project Based Learning (PjBL) is a learning method which uses a project as the media. To create a product, the students need to do some activities such as exploring, assessing, interpreting, synthesizing, and informing. PjBL includes six steps, namely basic question decision, project plan, schedule arrangement, monitoring, test the project, and evaluation (Kemendikbud, 2014).

Therefore, the writer conducted a research and development on developing the writing project assessment that can stimulate the critical thinking and creativity of senior high school students. The writer hopes these projects

writing assessment will give positive effect and effective to the students' writing skill based on the 2013 curriculum need.

1.2 Reasons for Choosing the Topic

Based on the background of the study above, there are five reasons why the writer chose the topic. Those reasons are:

- 1.2.1 Writing belongs to a productive skill which is a difficult skill to be taught and to be learned since this skill needs the other language skill, such as vocabulary and grammar (linguistic features, coherence, and cohesiveness). It is a line with Celce-Murcia (2001, p. 213) that writing skill focuses on both linguistics accuracy and content organization. In addition, the students can explore their critical thinking and creativity through writing because writing can be done by oneself every time they want.
- 1.2.2 The English teachers get difficulty in conducting and developing writing assessment within students' higher order thinking skill, especially in the way of stimulating the students to be critical in thinking and creative.
- 1.2.3 The 2013 curriculum needs students to have higher order thinking skill that benefit them in the global challenges. Students need to be critical in their thinking because having reasonable thinking is an important skill in making a decision in any situation. In addition, students also need to be creative since being innovative can prepare them for the future challenges in work and life.

- 1.2.4 A project is one of authentic assessment that is a good alternative as a learning model in improving the students' learning achievement and can stimulate the students to be critical thinking and creative in their writing.
- 1.2.5 The researcher did the Research and Development on developing project-based writing assessment in stimulating the senior high school students' critical thinking and creativity in English learning.

1.3 Scope of the Study

The researcher focused on developing project-based writing assessment in English learning at the tenth-grade students of SMA N 12 Semarang. The project-based writing assessment was designed based on the 2013 curriculum needs. In addition, it is based on the need analysis which had been conducted before. In this study, comic strip was chosen as the project-based writing assessment which was limited to basic competencies 3.8 that distinguish between social function, text structure, and linguistic elements of some oral and written narrative texts by giving and soliciting information related to the popular legend, simple, in accordance with the context of its use.

1.4 Research Problems

The research problem can be stated as follows:

- 1.4.1 How is the realization of routine assessment to stimulate the SMA students' critical thinking and creativity?

- 1.4.2 What type of assessment is needed by SMA students to stimulate their critical thinking?
- 1.4.3 What type of assessment is needed by SMA students to stimulate their creativity?
- 1.4.4 How does the development of project-based writing assessment stimulate the students' critical thinking?
- 1.4.5 How does the development of project-based writing assessment stimulate the students' creativity?
- 1.4.6 How effective is project-based writing assessment in stimulating critical thinking of SMA students?
- 1.4.7 How effective is project-based writing assessment in stimulating the creativity of SMA students?

1.5 Objectives of the Study

Based on the research problems above, the objectives of this study are:

- 1.5.1 to analyze the routine assessment in order to describe the realization of assessment to stimulate the students' critical thinking and creativity,
- 1.5.2 to analyze the students' need in order to explain the type of assessment needed by SMA students to stimulate their critical thinking,
- 1.5.3 to analyze the students' need in order to explain the type of assessment needed by SMA students to stimulate their creativity,
- 1.5.4 to analyze the need analysis result in order to develop project-based writing assessment module to stimulate the students' critical thinking,

- 1.5.5 to analyze the need analysis result in order to develop project-based writing assessment module to stimulate the students' creativity,
- 1.5.6 to analyze the main field testing result in order to evaluate the effectiveness of project-based writing assessment module in stimulating the critical thinking of SMA students, and
- 1.5.7 to analyze the main field testing result in order to evaluate the effectiveness of project-based writing assessment module in stimulating the creativity of SMA students.

1.6 Significance of the Study

This study is expected to give some benefits of each question. For the first question, theoretically, it contributes to the development of the 2013 curriculum implementation theory which has been revised for facing the world challenges and to fulfill the demand of the society. It also provides the routine assessments that have been applied by the English teacher and how he constructs the lesson plan to stimulate the students' critical thinking and creativity. Practically, it shows the reflection for the English teacher of his teaching activities whether it is appropriate with the learning objectives and the expectation or not. In addition, it is useful for realizing kind of routine assessment used by the English teacher.

The answer to question 2 about the type of assessment needed by SMA students to stimulate their critical thinking is useful for, theoretically, it contributes towards the theory of critical thinking which has some indicators to be reached since it is the skill in facing the 21st century challenges. Moreover, it adds

the readers' insight about type of assessment needed by SMA students to stimulate their critical thinking. Practically, it helps the teacher in designing the types of assessment which can stimulate students' critical thinking especially in senior high level. The teacher can improve the students' critical thinking skill by looking at the appropriate teaching method, techniques, etc. and the other requirements.

The answer to question 3 about the type of assessment needed by SMA students to stimulate their creativity is useful for, theoretically, it contributes towards the theory of creativity which has some indicators to be reached since it is the skill in facing the 21st century challenges. Moreover, it adds the readers' insight about type of assessment needed by SMA students to stimulate their creativity. Practically, it helps the teacher in designing the types of assessment which can stimulate students' creativity especially in senior high level. The teacher can improve the students' creativity skill by looking at the appropriate teaching method, techniques, etc. and the other requirements.

The answer to question 4 about the development of project-based writing assessment to stimulate the students' critical thinking is useful for, theoretically, it contributes to the theory of research and development study (R&D) which can be simplified based on the need. It also improves the readers' knowledge about the stages in developing project-based writing assessment which can stimulate the SMA students' critical thinking. Practically, it provides the example of project-based writing assessment which is designed based on the 2013 curriculum characteristics which can stimulate the students' critical thinking. In addition, it

motivates the teacher or the other assessment developers in designing an appropriate assessment which based on the 2013 curriculum and students' need.

The answer to question 5 about the development of project-based writing assessment to stimulate the students' creativity is useful for theoretically, it contributes to the theory of research and development study (R&D) which can be simplified based on the need. It also improves the readers' knowledge about the stages in developing project-based writing assessment which can stimulate the SMA students' creativity. Practically, it provides the example of project-based writing assessment which is designed based on the 2013 curriculum characteristics which can stimulate the students' creativity. In addition, it motivates the teacher or the other assessment developers in designing an appropriate assessment which based on the 2013 curriculum and students' need.

The answer to question 6 about the effectiveness of project-based writing assessment in stimulating critical thinking of SMA students is useful for theoretically, it contributes towards the assessment theory which can be developed based on the need. In addition, it gives the insight for the readers whether project-based writing assessment effective to stimulate the SMA students' critical thinking or not. Practically, it gives evaluation towards the effectiveness of project-based writing assessment in stimulating the critical thinking of SMA students. It encourages the teacher in developing the other assessment based on the need.

The answer to question 7 about the effectiveness of project-based writing assessment in stimulating creativity of SMA students is useful for, theoretically, it

contributes towards the assessment theory which can be developed based on the need. In addition, it gives the insight for the readers whether project-based writing assessment effective to stimulate the SMA students' creativity or not. Practically, it gives evaluation towards the effectiveness of project-based writing assessment in stimulating the creativity of SMA students. It encourages the teacher in developing the other assessment based on the need.

CHAPTER II

REVIEW OF PREVIOUS STUDIES, REVIEWS OF THEORETICAL STUDIES, AND THEORETICAL FRAMEWORK

This chapter presents some previous studies which relevant to the topic, some theories concerning the study, and the theoretical framework of the study.

2.1 Reviews of Previous Studies

There are various studies have been conducted concerning this study. Those studies are about the 2013 curriculum, assessment, writing, writing assessment, project-based learning, and higher-order thinking includes learners' critical thinking and creativity.

Curriculum is an inseparable part of education since it is a fundamental plan of learning as guidance to achieve the expected education outcome. The newest curriculum in Indonesia has been evaluated in order to evaluate the readiness of the implementers and the facilities. Several studies (Jaedun, Hariyanto, & Nuryadin, 2014; Sundayana, 2015; Fauzan & Latip, 2015; and Rumahlatua, Huliselana, & Takaria, 2016) focused on the teachers' readiness in implementing the 2013 curriculum. They collected the data by giving a questionnaire containing some indicators and they analyzed the data qualitatively and quantitatively. The questionnaire results showed that the teachers are ready to implement the 2013 curriculum and have adequate competence in developing a lesson plan (Sundayana, 2015). However, there are some inhibiting factors including the lack of the handbooks for teachers and students, inadequate teachers

and students' mental readiness, the dissemination of 2013 curriculum have not covered all schools, and the teachers' role in the classroom as facilitator, classroom manager, motivator, and informant cannot be optimized since there is time limitation, different range of students' skills, big number of students in a classroom, and the improper assessment tool (Rumahlatua, Huliselana, & Takaria, 2016; Nugraheni & Faridi, 2016). On the other hand, the previous study conducted by Jaedun, Hariyanto, & Nuryadin (2014) and Wati, Bharati, & Hartono (2014) pointed out that the teachers have inadequate understanding of the principles, procedures, and techniques of the authentic assessment, and the students' tasks do not show the authentic tasks. Moreover, the teachers also have difficulties in implementing the authentic assessment, formulating the indicators, designing the assessment rubric for the skills, and gathering the scores from multiple measurement techniques (Retnawati, Hadi, & Nugraha, 2016; and Maba, 2017).

The previous studies above gave a contribution to this present study regarding the obstacles in implementing the 2013 curriculum especially the teachers' difficulty in designing the assessment. The teachers have to understand the principles, procedures, and techniques of the authentic assessment as the assessment technique in the 2013 curriculum. Based on this issue, the researcher conducted this present study in order to develop an assessment which was project-based to stimulate the learners' critical thinking and creativity as one of the objectives of the 2013 curriculum.

Many studies on assessment have been carried out since assessment is one of the important things in conducting the learning process in order to know the students' progress and achievement in gaining the learning objectives. According to Trisanti (2014, also see; Marhaeni & Dantes, 2014; Aliningsih & Sofwan, 2015; Taufina & Subroto, 2016) authentic assessment is the core in the 2013 curriculum that should be implemented during the teaching and learning process. They suggest that teachers, especially English teachers have to understand clearly about what is meant by authentic assessment. Based on the interview results, some English teachers still do not know how to implement authentic assessment in their classroom precisely. They should learn more and get further information on authentic assessment since authentic assessment is needed to support the success of the 2013 curriculum in promoting the students' learning progress with higher order thinking skill. It is supported by several studies (Abosalem, 2016; Mohamed & Lebar, 2017) that authentic assessment is able to measure higher-order thinking skills and improves the students' performance.

Authentic assessment can be implemented by giving portfolio task, performance task, and project-based task. Several studies (Efendi, Usman, & Muslem, 2017; Bataineh & Obeiah, 2016; Faravani & Atai, 2015; Barabouti, 2012; Delgoshaei, Kharrāzi, & Talkhabi, 2012; Efthymiou, 2012; Yurdabakan & Tolga, 2009) show that portfolio as an alternative assessment gives benefits in promoting the students' language skills and making linkages among assessment, curriculum, and student learning. They focused on different language skills including listening skill, reading skill, speaking skill, and writing skill. The

findings showed that portfolio assessment had a significant influence on students' reading skills, speaking skills, and writing skills, but it was not effective for listening skills. Portfolio assessment has been used in various levels of education. Barabouti, 2012; Delgoshaei, Kharrāzi, & Talkhabi, 2012; Efthymiou, 2012 focused on the implementation of portfolio assessment to young learners. On the other hand, Syafey (2012) and Faravani & Atai (2015) focused on advanced EFL learners and Yurdabakan & Tolga (2009) focused on secondary students. They suggest that the teachers should have a good time management since portfolio assessment implementation is time-consuming. It is as the challenges when using the portfolios in the classroom.

Other task types of authentic assessment are a project-based assessment. According to Lee (2005 also see Indrianti & Istanto, 2013; Wachyu & Rukmini, 2015; Gunawan, Sahidu, Harjono, & Suranti, 2016; Mali, 2017; Anazifa & Djukri, 2017; Hasani, Hendrayana, & Senjaya, 2017) Project-based learning (PjBL) is an instructional approach in a form of constructivist and collaborative model including contextual and meaningful learning in a real-life situation. The result of these previous studies mentioned that PjBL is an effective model for improving students' knowledge and performance skills by creating a real product of the given materials in the classroom. Moreover, PjBL provides the students' learning opportunity and foster their higher order thinking skill (Lee, 2005). In addition, PjBL succeeded in building the students' creativity with a deep comprehension of the subject matter (Akinoglu, 2008). The result of the study by Sumarni, Wardani, Sudarmin, & Gupitasari (2016) shows positive effects of PjBL

on the students' cognitive, affective, and psychomotor skills. The previous studies on PjBL suggest that the teacher should consider the time management issues by designing the lesson plan carefully and using guided implementation. Furthermore, the linkages between the students' ability and the real students' product should be considered.

The results of those previous studies showed that project-based learning can stimulate the student's creativity and critical thinking. This present study differed from those previous studies since my study aimed at developing a project-based assessment model for English learning in senior high level. In addition, comic strip was chosen as the project for enhancing the students' critical and creative writing. Those previous studies also warned that some considerations before implementing PjBL have to be thought, such as time management, students' ability, and also whether related to the learning objectives or not. Those kinds of suggestion became the foundation for designing the lesson plan for this study.

As stated in the 2013 curriculum, secondary students should be able to integrate the skills including listening skill, reading skill, speaking skill, and writing skill. A need analysis on University writing curriculum conducted by Astuti (2009) found that writing is the most difficult skill to be taught and to be learned. Aininna (2014), Sholeh (2015), Arifiana (2015), and Aunurrahman, Hamied, & Emilia (2017) in their observation study also stated that students' competencies are lower than the other skills. Furthermore, several studies (Satriani, Emilia, Gunawan, 2012; Wuzaro, 2012; Farida & Margawati, 2014; Ghufroon & Hawa, 2015; Anggrayani, Sofwan, & Saleh, 2015; Parida, Rout, &

Swain, 2017; Mumpuni & Nurpratiwiningsih, 2018) focused on students' creative writing in a different school level. In improving students' writing skill, they used a different method of teaching writing such as peer review, mind mapping, writing workshop, intervention, collaborative writing, and web-based learning technique. The results of the studies mentioned that those methods are effective to enhance students' creative writing with the benefits of each method. They suggest that in developing students' writing abilities, either teachers or students should study and demonstrate the writing process in every stage.

Those previous studies gave a contribution toward this present study related to the issue that writing was still problematic for Indonesian students than the other language skills. Therefore, many researchers focused on enhancing students' writing ability in their studies since writing is an important skill which has to be mastered by the Indonesian learners. In the way improving students' writing ability, I conducted a study using comic strip as the project-based assessment in stimulating not only the students' writing skill but also their critical thinking and creative skill.

Assessing students' competency in writing skills is needed to know how successful they convey their ideas through their writing as the communication. There are several studies that focused on assessing the students' writing skill. Al-Maamari (2016) mentioned that in the assessment practice and subject matter knowledge transfer need to be integral and critical in the communication. The students need opportunities to convey their ideas by interacting and sharing with others. On the other hand, Javed, Juan, and Nazli (2013) focused on the secondary

schools writing an assessment of five major content areas namely completion, sentence making or syntax, comprehension, grammar, and handwriting. The result shows that comprehension is the best aspect that the students can perform than the other aspects. In addition, Zakaria & Mugaddam (2013) and Nadri & Azhar (2016) found that the students were unable to organize their writing well, so either the teachers or peers need to give feedback in the students' process of writing. Khan (2011) added that lack of constructive feedback will cause the same errors repeatedly. That is why feedback is really important in the learning process.

Those previous studies proved that in assessing students' writing need feedback from either their teacher or peer. Seeing the importance of feedback during the process of writing, teachers have to provide the constructive feedback in order to make the students' writing better. Moreover, constructive feedback from peers is also required since the students need to share their ideas by interacting and sharing with others. Therefore, the students will be accustomed to the given feedback and revise their writing from the prewriting until the final writing. Hence, this study focused on the writing assessment which feedback is an inseparable aspect in the students' writing process. During the teaching-learning process, both peer and teacher gave feedback to the students' writing in every stage.

Higher Order Thinking (HOT) is also needed to be applied in the teaching and learning process since it is a challenging aspect in 21st century. HOT includes critical, logical, reflective, metacognitive, and creative thinking. These skills are really important to encounter the future challenges. Higher-order

Thinking skill (HOTS) encompasses three high levels in revised Bloom's taxonomy namely the skill to analyze, evaluate, and create. Several studies (Wang & Wang, 2014; Tanujaya, 2015; Yen & Halili, 2015; Samritin & Suryanto, 2016; Anasy, 2016; Sulaiman et al., 2017; Widana, 2017; Kusuma, Rosidin, Abdurrahman, & Suyatna, 2017) conducted a study on the implementation of higher-order thinking in teaching science. The interview results showed that teachers have been already applied the learning activities which can inculcate students' thinking skills. It can be proved with their lesson plan which includes the higher-order thinking aspect of the assessment and learning processes. However, there are some constraints they faced in implementing HOTS in their classrooms including the different level of students' ability and motivation, different teachers' competence and perception, time-consuming, and requiring appropriate alternative assessments to evaluate HOTS.

Various strategies were applied to improve students' HOTS (e.g. Chinedu, Kamin, & Olabiyi, 2015; Mainali, 2012; Barak & Dori, 2009). They mentioned that HOTS should be applied in the teaching and learning activities since the students will face more complicated future challenges. The studies carried out by Chen (2016) and Toyoda (2015) suggest that group work in collaborative learning should involve thinking tasks to create a social context for learning and provide students with a comfortable environment in order to conduct higher cognition proactively. In addition, the students can share their life experiences with their peers.

One of the important aspects of HOTS in 2013 curriculum that has to be engaged is being critical learners. Based on the interview results of 14 British teachers conducted by Shaheen (2016), critical thinking is important both in educational purposes and real-life situation, so the teachers should give the students the opportunities to share their ideas and opinion critically relate the theories and the real-life situation. Masduqi (2011) and Fatimah (2015) mentioned in his study that English teachers need to apply alternative strategies in their teaching practice in order to activate students' critical thinking skills. However, the students' critical thinking does not directly come up since it needs a process and much more intensive training on critical thinking assessment (Djiwandono, 2013). Many researchers conducted study about how to enhance the students' critical thinking in the learning process using various teaching strategies (Vijayarathman, 2009; Gómez, 2010; Zhou¹, Huang & Tian, 2013; Sharadgah, 2014; Fung, 2014); Kitota, Ahmada, & Semana, 2014; Bouanani, 2015; Zaida & Sofwan, 2015; Rajagukguk & Simanjuntak, 2015; Azizah & Fahriany, 2017; Martaida, Bukit & Ginting, 2017; Wang & Seepho 2017). The teaching strategies that they have used to promote critical thinking skills, group discussion, task-based learning, inquiry teaching, concept mapping, analytical questioning, internet-based environment, structured reading lessons, reflective writing intervention, discovery learning model, and cooperative learning. Another study on the importance of critical thinking was conducted by Areni and Syafri (2015) who found that the implementation of a critical thinking guideline stimulates students to be able to develop skills of interpreting, analyzing, reasoning, and

evaluating critically. It can be concluded that each teaching strategy has specific contributions to the critical thinking skills development.

The other important aspect of HOTS in 2013 curriculum is creative skills. It is in line with Hürsen, Kaplan, & Özdal (2016) who stated that creativity has a great importance for the pre-school individuals, primary school, secondary school, and individuals of higher education. There was a significant effect on students' creativity when their teacher used a creative teaching method (Nuraida, 2017). She suggested that teachers in all education level need to be creative in their teaching since creating a new product or making an innovation are required in 21st century. Lucas (2016) mentioned in his study that when teachers understand creativity they are, consequently, more effective in cultivating it in learners and when students have a better understanding of what creativity is, they are better able to develop and to track the development of their own Creative Habits of Mind (CHoM). That is why creativity's development in school should be explored. The study that was carried out by Malarsih & Herlinah (2014) showed that the teacher did creativity activity through dance creation. In addition, Gholamian (2013) carried out a study on improving students' creativity through Discovery Learning with 50 students of sixth grade as the subject of the study. He divided the students into experimental group and control group. The teaching method of an experimental group used Discovery Learning method while the control group used the traditional teaching method. The results show that the guided discovery learning is an efficient way of improving the students' creative skill.

Those previous studies on HOTS gave a contribution to this present study in giving insight about the importance of critical thinking and creativity for facing the 21st century challenge. That is why; I conducted the study on stimulating the students' critical thinking and creativity through project-based writing assessment as the development model designed by the English teacher and me. The difference between my study and the others is in the model used to stimulate the students to be critical and creative in thinking. This present study used comic strips as the project to enhance the students' critical thinking and creativity in their writing.

The previous study carried out by Megawati and Anugerahwati (2012) showed that the students' writing ability improved during the conducted cycles using comic strips. Ali (2013) and Cimermanová (2015) also showed that the use of comic strips facilitated the undergraduate students' reading comprehension. The teacher and the students created their own comic strips in order to develop high-level of thinking. Moreover, there was a significant effect of using comic strip stories on the students' vocabulary mastery (Rokhayani & Utari, 2014; Arast & Gorjian, 2016; Ahmad, Sadigh, & Gorjian, 2017).

Those previous studies on using comic strips in the teaching process gave a contribution to this present study. The differences between my study and the previous study are the methodology used during the research. This present study used research and development methodology while the other used classroom action research. Moreover, this present study focused on the students' critical and creative writing skill, whereas the others dealt with the reading and vocabulary

mastery. In addition, the previous studies chose undergraduate and junior high school students, while this present study used senior high school students.

After reviewing some studies, the writer used the combination of those previous studies to conduct a new study. Since students' writing achievement is still low than the other skills, the writer decided to focus on writing skill. In addition, English teachers still have difficulties in arranging higher order thinking assessment that should be applied when implementing the 2013 curriculum. Concerning the importance of being critical and creative learners, teachers are demanded to facilitate the students with HOTS assessments. According to the several studies, project-based learning has many advantages toward the students' learning process and outcome. The writer finds that a study related to the development of project-based writing assessment to stimulate the students' critical thinking and creativity has not been conducted. Therefore, the writer wants to work on this particular topic.

2.2 Reviews of Theoretical Studies

This review of theoretical studies gives an explanation of some theories related to the study. These are about (1) 2013 Curriculum, (2) Higher Order Thinking Skills, (3) Project-based Learning, (4) Writing Assessment, and (5) Research and Development.

2.2.1 2013 Curriculum

According to the Regulation of Republic Indonesia number 20 of 2003 about National Education System, curriculum is a set of plan and arrangement which

contains learning objective, content, learning material, and method used to the guidance of the implementation in the learning activity to achieve the objective of education. Moreover, according to White (2004, p.2) the aims of curriculum are (1) to develop the students' spiritual, moral, cultural, mental and physical at the school and even the society; and (2) to prepare the students in facing the world challenge in the future. In other words, curriculum is a fundamental plan or program of learning which includes the objectives, teaching materials, teaching strategies, assessment methods, and other components of teaching and learning as a guide to achieve the expected education outcome.

The Indonesian curricula have changed several times which have an important role in the development of English language teaching in Indonesia and these are the way to fulfill the demand and the need of the society. Nowadays, 2013 curriculum is the newest curriculum that is implemented in schools. The characteristic of the 2013 curriculum is learner-centered where the students have to learn individually or by small group discussion, so they can build up their knowledge, experience, and skill through the scientific approach. Based on *Permendikbud* number 81A of 2013 about curriculum implementation, scientific approach consists of five steps, namely observing, questioning, experimenting, associating, and communicating. However, the teacher can apply the steps of scientific approach randomly as long as based on the learning objectives.

One of the objectives of the 2013 curriculum is the students are able to think creatively and critically. The 2013 curriculum emerge Higher Order Thinking Skill (HOTS) at all levels of education in order to enhance students'

understanding and critical thinking. Moreover, 2013 curriculum integrates *Penguatan Pendidikan Karakter (PPK)* and *4C* namely creative, critical thinking, communicative, and collaborative. In this case, the students have to find the information by themselves rather than getting information from the teacher. The process of getting information needs students' critical thinking and creativity which belong to HOTS.

2.2.2 Higher Order Thinking Skills (HOTS)

HOTS is not only doing a simple memorization of the knowledge but also transferring the knowledge into a new situation which needs variety of cognitive processes. According to (Lewis & Smith, 1993, p. 136) in Polly and Ausband (2009, p. 29) Higher Order Thinking Skill (HOTS) is "occurring when a person takes new information and information stored in memory and interrelates and/or rearranges and extends this information to achieve a purpose or find possible answers in perplexing situations." Based on Mainali (2012, p. 6) and King, Goodson & Rohani (2011) HOTS includes critical, logical, reflective, metacognitive, and creative thinking. According to Brookhart (2010, p. 3-8) the definition of higher order thinking is divided by three categories. Those are higher-order thinking as a transfer, critical thinking, and problem-solving.

a. Transfer

Higher order thinking as transfer means the students are able to apply the knowledge and skills they got in a new context which students have not thought before. The students are able to relate their learning to the situations beyond the classroom association. In other words, teachers need to form

students into self-learning students who are able to do their own learning in various situations outside the school.

b. Critical thinking

Higher order thinking as critical thinking means the students are able to apply wise judgment or critical judgment and produce reasonable critique. Teachers need to equip students with being able to reason, reflect, and make sound decisions which come from themselves.

c. Problem-solving

Higher-order thinking as problem-solving means that students are able to solve both closed problems and open-ended problems either inside or outside the school. The ways students solve the problem differ from each other depending on their own assumption, critical thinking, and creative thinking.

In addition, Arwood (2011, p. 48) stated that HOTS not just learns patterns such as doing imitation, copy, or match patterns, but HOTS requires various cognitive processes. While creativity is the ability to innovate and helps prepare pupils for future challenges in work and life. Robert Epstein at the University of California, San Diego in Talat and Chaudhry (2014, p. 93), outlines four proficiencies crucial for creative expression: (1) Capturing: developing new ideas, (2) Challenging: giving students stimulating problems to solve, (3) Broadening: increasing creativity by learning interesting facts and figures, (4) Surrounding: relating to interesting and diverse concepts and culture.

2.2.3 Critical Thinking and Creativity

Critical thinking is an individual intellectual thinking skill including reflective and reasonable thinking that is focused on making a decision of what to believe or do (Ennis, 1985, pp. 45). Critical thinking comprises reasoning, analyzing, problem-solving, scientific thinking, judgment, and deciding accurately. In addition, Facione (1990) in Djiwandono (2013) stated that the following skills create critical thinking, namely:

- a. Interpretation: the ability to comprehend information
- b. Analysis: the ability to identify the main arguments presented
- c. Evaluation: the ability to judge whether this argument is credible and valid based on the logic and evidence given
- d. Inference: the ability to decide what to believe or do based on solid logic, and to understand the consequences of this decision
- e. Explanation: the ability to communicate the process of reasoning to others
- f. Self-Regulation: the ability to monitor one's own thinking and correct flaws in logic.

The following are the indicators to judge whether the student belongs to critical learners:

- a. Stating and interpreting issues related to the topics clearly and comprehensively.
- b. Analyzing issues related to the topics carefully.
- c. Collecting information from multiple sources precisely.
- d. Synthesizing and evaluating evidence from multiple sources effectively.

- e. Drawing a conclusion clearly and effectively, supported by available evidence.

While creativity is the ability to innovate and helps prepare pupils for future challenges in work and life. Robert Epstein at the University of California, San Diego in Talat and Chaudhry (2014, p. 93), outlines four proficiencies crucial for creative expression: (1) Capturing: developing new ideas, (2) Challenging: giving students stimulating problems to solve, (3) Broadening: increasing creativity by learning interesting facts and figures, (4) Surrounding: relating to interesting and diverse concepts and culture.

The following are the indicators to judge whether the student belongs to creative learners:

- a. Synthesizing ideas, processes, experiences or objects
- b. Making and communicating connections to think of many possibilities.
- c. Thinking and experiencing in various ways and using different points of view.
- d. Thinking of new and unusual possibilities.
- e. Generating and selecting alternatives.

2.2.4 Project-Based Learning (PjBL)

This sub-chapter presents the definition of PjBL, the advantages of PjBL, and the steps in conducting PjBL.

2.2.4.1 Definition

Project-based Learning is adapted from „learning by doing“ approach (Hewett, 2001) in Talat and Chaudhry (2014, p. 90), in which students learn something by

touching, moving, observing, and making or hearing a sound. Based on Talat and Chaudhry (2014, p. 90) "PjBL encompasses performance-based assessment, the classroom environment, and a student-driven–teacher-facilitated learning relationship." Performance based assessment means teacher assesses the students by giving interactive task which can stimulate students to become student-centered, creative, and critical thinking toward the given issues or materials and then the students are assessed in the process of performing the target language (Brown, 2000). Students need teacher's guidance as for the instructional strategy in doing PjBL. It is a line with Dresher (2013, p. 3) that PjBL is an instructional strategy where the students participate actively in the learning process to find answers of the complex questions. Another definition of PjBL comes from Bell (2010, p.39) who stated that PjBL is an innovative approach where students being critical either in their own inquiry learning or small group discussion and being able to create projects which reflect their knowledge. It can be concluded that Project-based Learning (PjBL) is an instructional strategy where the students learning by doing, learning by inquiry to answer the questions, and create products as their knowledge reflection. Students fully engage and take charge of their learning process by thinking critically and creatively. Students follow the teacher's instruction, but they have their own voice to decide something since PjBL allows students to make their personalized learning and more differentiation in learning.

2.2.4.2 Advantages

The following are some advantages of Project-based Learning based on Kemendikbud (2014):

- a. Improving students' learning motivation
- b. Enhancing students' problem-solving skill
- c. Students fully engage in the learning process and succeed in solving the complex problems
- d. Improving collaboration
- e. Motivating students to develop and apply communication skill
- f. Increasing students' skill in carrying out the sources
- g. Giving the students experiences in organizing the project, making the time schedule, and finding various sources
- h. Providing learning experiences which can be useful in a real-life
- i. Involving students to learn to get information and show the knowledge they have got, then implementing in a real-life
- j. Making an enjoyable learning circumstance, so either teacher or students enjoy the teaching and learning process.

In addition, Harmer (2014, p. 11-16) mentioned the advantages of Project-based Learning approach as follow:

- a. improve academic achievement,
- b. helps students develop a wide set of skills beyond traditional academic subject knowledge,
- c. sustain students' motivation and enjoyment,

- d. students are able to learn at their own pace in their own way,
- e. enabling outreach,
- f. better cooperation and integration between students and staff, and
- g. give students the opportunity to learn by revision.

Furthermore, Mali (2017, p. 180) found some advantages in their research.

Those are:

- a. Student Responses
- b. Learn from each other
- c. Promote learning autonomy
- d. Practice a cooperation skill
- e. Share a responsibility to complete a project
- f. Enable the teacher to learn technology from his students
- g. Practice to be an open-minded person
- h. Promote a relaxed atmosphere in the group

2.2.4.3 Steps

Project-based Learning has some steps in order to make the learning runs well.

Here are some steps of Project-based Learning model by *Kemendikbud* (2014):

- a. Start with an essential question

Learning process begins with the essential questions which can give students instructions in doing the activity. Teacher guides students in finding a problem on the material they learn.

b. Design a plan for the project

The project is planned by teacher and students collaboratively, so the students have ownership in their project. The planning consists of the role of the activity and the time needed for completing the project.

c. Create a schedule

Teacher and students create the schedule collaboratively to finish the project. This step includes deadline arrangement and making a time schedule.

d. Monitoring the students' project

Teacher takes responsibility toward the students' project by monitoring them until they have completed the project. The teacher monitors the students by giving feedback and finding out the students' difficulties in the process of completing the project.

e. Assess the outcome

Assessment is done in order to help the teacher in measuring the students in achieving the goals. It uses rubric and test in the process of learning.

f. Evaluate the experience

Teacher and students do reflection toward the activities and the completed projects at the end of the lesson. Each group presents their difficulties during the project completion.

2.2.5 Assessment

This part consists of the general definition, the type, and the process standard of assessment; and the writing assessment.

2.2.5.1 Definition of Assessment

An assessment involves in teaching process which is done by the teacher. Assessment is an ongoing process including a much wider domain such as assessing the students' performances, students' responses on a question, students' comment, etc. that can be done by self, teacher, or other students (Brown, 2004, p. 4). In addition, Taras (2005, p. 467) stated that assessment refers to a judgment which can be justified according to objectives comparatively or numerically ratings. The teacher needs assessment to know the students' improvement in achieving the learning objectives. The two functions of an assessment are formative assessment and summative assessment.

First, formative assessment occurs during the teaching and learning process where the teacher has to give feedback to the students in order to help them in forming their competence. This assessment focuses on the developing students' language ability. Formative assessment can be in form of formal assessment and informal assessment. The example of formative assessment in a formal form is a diagnostic test which is a test to help the teacher and students identify problems they face in learning a language. While the example of formative assessment in an informal form is whole class open-ended discussion of a topic.

Second, summative assessment is used to measure or summarize what students have learned at the end of the course. It focuses on the students' achievement of learning objectives and how well the students have accomplished

objectives. Summative assessment can be in form of formal assessment and informal assessment. The example of summative assessment in a formal form is a mid-term test, final exam, and quizzes. The example of summative assessment in an informal form is drafting and revising writing before a final essay.

2.2.5.2 Process Standard of Assessment

Based on the *Permendikbud* number 23 of 2016 about Educational Assessment Standards that it is a criterion regarding the scope, objectives, benefits, principles, mechanisms, procedures, and assessment instruments of students' learning outcomes that are used as a basis for assessing student learning outcomes in primary and secondary education. Whereas, assessment is the process of gathering and processing information to measure the achievement of learning outcomes of students.

The assessment of student learning outcomes in basic education and secondary education includes three aspects namely attitude, knowledge, and skill. An attitude assessment is an activity carried out by educators to obtain descriptive information about the behavior of students. While the knowledge assessment is an activity carried out to measure the knowledge mastery of students. Whereas the skill assessment is an activity carried out to measure the ability of students to apply knowledge in carrying out certain tasks.

The assessment mechanism is carried out during the preparation of the lesson plan based on the syllabus. The assessment of attitude aspects is done through observation or other relevant assessment techniques. Then, the assessment of aspects of knowledge is carried out through written tests, oral tests,

and assignments according to the competencies assessed. While the skill assessment is carried out through practices, products, projects, portfolios, or other techniques in accordance with the competencies assessed.

2.2.5.3 Writing Assessment

Writing is a productive skill where teachers should give more effort since it is claimed as the most difficult skill in learning language (Aragón-Jiménez, Baires-Mira, and Rodriguez, 2013; Kellogg, 2008; Weigle, 2002; Valette, 1967). According to Mayers (2005, p. 2) writing is a skill to produce language by organizing ideas, putting them on paper, reshaping, and revising which can improve with practice. Moreover, Celce-Murcia (2001, p. 206) pointed out that writing is the ability to express ideas with reasonable coherence, accuracy, and choose the appropriate writing mechanics such as spelling, punctuation, formats, etc.

Brown (1994) in Weigle (2002, pp. 15-16) mentioned some characteristics of writing as follow:

- a. Written language is permanent and can be read and reread as often as one likes
- b. Writers generally have more time to plan, review, and revise their words before they are finalized
- c. Written language tends to be characterized by longer clauses and more subordinators
- d. Writing is formal since it includes social and cultural uses
- e. Written texts tend to contain variety words

Vocabulary, spelling, and grammar must be mastered first before the students put their ideas in a paper clearly. The students need to follow a series of steps in developing their writing skill. In assessing the students' writing, "a test must consequently be so structured that they measure the various aspects of students' progress toward the acquisition of the skills" (Valette, 1967). Some basic considerations in assessing writing were proposed by Weigle (2002, p. 39) are (1) considering what is the purpose of the test by specifying the expected language ability, (2) defining the construct of the test by determining what factors are involved in real world language use and what factors are essential to be measured, (3) writing as performance assessment which involves both the observation of behavior in the real world and a simulation of a real-life activity, (4) considering the usefulness of the test which includes reliability, construct validity, authenticity, interaction, impact, and practicality.

2.2.6 Research and Development

This sub-chapter presents the definition of Research and Development the steps of Research and Development.

2.2.6.1 Definition

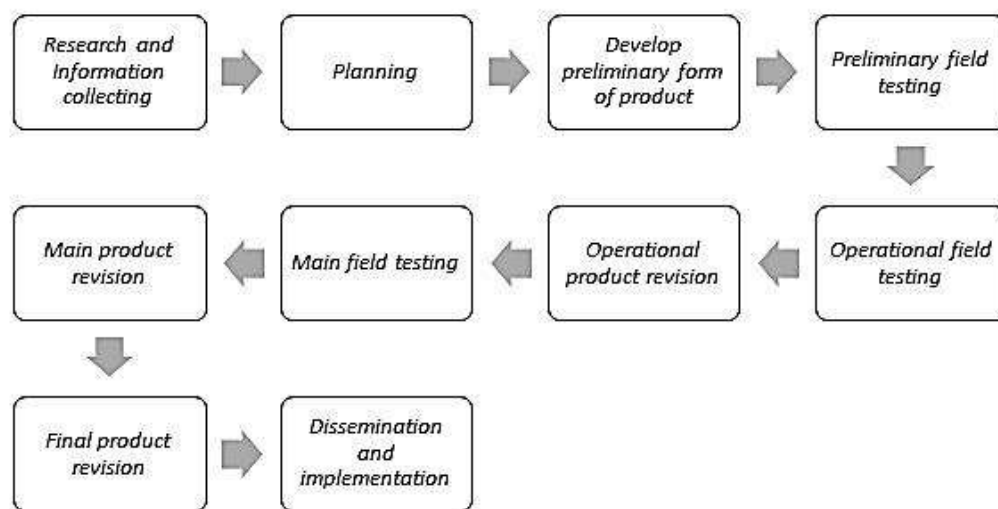
Research and Development (R&D) model was designed by Walter Dick and Lou Carey. R&D model includes creative and systematic work which is done to increase the stock of knowledge of humankind, culture, and society and to devise new applications of available knowledge (Manual, 2015, pp. 44-45). In addition, Akker, (1999, p. 5) stated that R&D is "an interactive, cyclic process of development and research in which theoretical ideas of the designer feed the

development of products that are tested in classroom settings, eventually leading to theoretically and empirically founded products, learning processes of the developers, and (local) instruction theories.” R&D is a great model in improving education since it involves a close relationship between systematic program evaluation and program development (Borg and Gall, 2003, p. 571).

2.2.6.2 Steps

The steps of Research and Development Model can be seen in figure 2.1. This R&D step was adapted from Borg and Gall (2003).

Figure 2.1. Research and Development Steps



According to Borg and Gall (1983, pp. 775-776) the R&D steps include:

- a) Research and information collecting includes a review of the literature, classroom observations, and preparation of report of state of the art.
- b) Planning includes defining skills, stating objectives determining course sequence, and small-scale feasibility testing.
- c) Develop a preliminary form of product includes preparation of instructional material, handbooks, and evaluation devices.

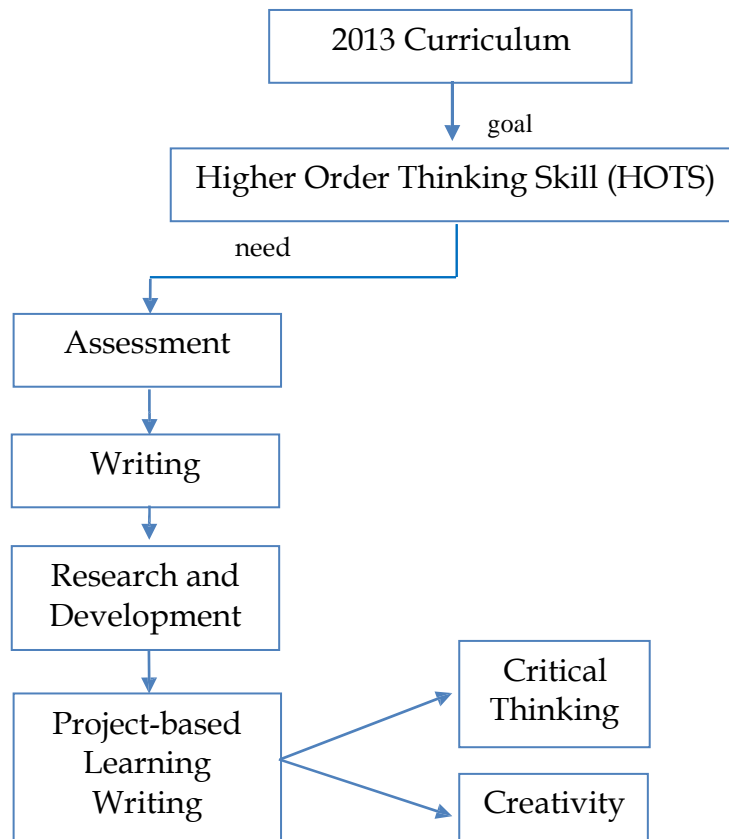
- d) Preliminary field testing is conducted in from 1 to 3 schools, using 6 to 12 subjects. Interview, observational and questionnaire data collected and analyzed.
- e) Main product revision includes revision of product as suggested by the preliminary field-test results.
- f) Main field testing is conducted in 5 to 15 schools with 30 to 100 subjects. Quantitative data on subjects' pre-course and post-course performance are collected. Results are evaluated with respect to course objectives and compared with control group data, when appropriate.
- g) Operational product revision includes revision of product as suggested by main field-test results.
- h) Operational field testing is conducted in 10 to 30 schools involving 40 to 200 subjects. Interview, observational and questionnaire data collected and analyzed.
- i) Final product revision includes revision of product as suggested by operational field-test results.
- j) Dissemination and implementation include reporting on product at professional meetings and in journals. Work with publisher who assumes commercial distribution. Monitor distribution to provide quality control.

2.3 Theoretical Framework

In this study, the researcher used the 2013 curriculum as the base analysis. The 2013 curriculum emerges Higher Order Thinking Skills (HOTS) in order to prepare students to face real world challenges in the future. HOTS is the main objective of the 2013 curriculum, in which students are not only doing a simple memorization of the knowledge but also transferring the knowledge into a new situation which needs a variety of cognitive processes. In order to know whether the learning goals have been achieved or not, the teacher needs assessment. Based

on the preliminary data and some previous studies pointed out that writing skill is the most difficult skill to be mastered since it is not only about the content but also a good writing has coherence, cohesive, accuracy, and use appropriate writing mechanics. By using Research and Development method, hopefully, researcher or English teachers can develop a good writing assessment. The writing assessment in this research will use Project-based Learning (PjBL) which is an innovative approach where students being critical either in their own inquiry learning or small group discussion and being able to create projects which reflect their knowledge. Some steps of PjBL have to be done to create product learning. Those steps are starting with essential question, designing a plan for the project, creating a schedule, monitoring the students' project, assessing the outcome, and evaluating the experience. By using PjBL hopefully students are able to think critically and creatively on their writing. The theoretical framework of this study is displayed as Figure 2.2.

Figure 2.2. Theoretical Framework of the Present Study



CHAPTER V

CONCLUSION AND SUGGESTION

By referring to the findings of the study, the writer provides conclusions and suggestions as follows.

5.1 Conclusion

The conclusion of this study was written based on the research objectives. First, the English teacher had already known and applied the project-based assessment, but he never did any development of project-based writing assessment which can stimulate the students' critical thinking and creativity. In addition, he got difficulty in designing the rubric assessment for assessing the students' writing skill. He tended to use LKS as the media in assessing the students' competence.

The second findings indicated the type of assessment needed by SMA students which can stimulate their critical thinking. The assessment should be based on the 2013 curriculum characteristics and it should refer to the top tree level of Bloom's cognitive taxonomy namely analyzing, evaluating, and creating. Group discussion is one of the teaching strategies that can stimulate students' critical thinking. In addition, an assessment which can stimulate students' critical thinking must contain open ended questions in order to make the students to be more open minded. The indicators of critical thinking skill are explaining issues, collecting information (evidence), solving problem, student's position (perspective, thesis, or hypothesis), and concluding and relating outcomes (implications and consequences).

The third findings indicated the type of assessment needed by SMA students which can stimulate their creativity. In stimulating the students' creativity, the teacher has to be innovative first. The teacher needs to be a good planner, executor, and evaluator. The teacher is not only good in planning the lesson but also in realizing the plans. The teacher must be an open minded person in order to develop the students' creativity. The key of this activity is giving freedom for the students without any exception as long as it is related to the learning activity. There is no mistake in the process of learning. The indicators of creativity skill are idea generation, acquiring competencies, taking risks, innovative thinking (novelty or uniqueness), and creative production and innovation.

The fourth and fifth conclusion is about the development of project-based writing assessment to stimulate the students' critical thinking and critical thinking which was conducted in three stages namely 1) research and information collecting; 2) developing preliminary form of product included studying the 2013 curriculum then determining the syllabus and basic competence, considering the need analysis result and the indicators of critical thinking and creativity for SMA students; and 3) main field test consisted of expert validating, main product revision, main field testing, and final product revision.

The sixth finding indicated that project-based writing assessment module was effective to stimulate students' critical thinking. It was proved by the result of the pre-test and post-test. The mean score of the students' critical thinking in the pre-test was 67 whereas the post-test was 78. The paired sample test result shows

that the score of t-value (10.599) is higher than the t-table (1.6871) and Sig. (2 tailed) value (0.00) is lower than 0.05. It means that there was a significant improvement on the students' critical thinking skill by using the project-based writing assessment.

The seventh finding indicated that project-based writing assessment module was effective to stimulate students' creativity. It was proved by the result of the pre-test and post-test. The mean score of the students' critical thinking in the pre-test was 65.39 whereas the post-test was 78.55. The paired sample test result shows that the score of t-value (11.7066) is higher than the t-table (1.6871) and Sig. (2 tailed) value (0.00) is lower than 0.05. It means that there was a significant improvement on the students' creativity skill by using the project-based writing assessment.

5.2 Suggestion

Based on the conclusion, the researcher would like to offer some suggestions to be considered by English teachers and the next researchers.

1) For English teacher:

Considering to the research findings, the teacher especially English teacher can use this project-based writing assessment and the most important that the teacher should develop their own assessment then it can stimulate students' critical thinking and creativity as one objective in the 2013 curriculum.

2) For the next researcher

The other researchers can use this thesis as one of their references in conducting their further research on developing project-based writing assessment for other genres or at other educational levels.

REFERENCES

- Abosalem, Y. (2016). Assessment techniques and students' higher-order thinking skills. *International Journal of Secondary Education*, 4(1): 1-11.
- Ahmadi, N., Sadighi, F., & Gorjian, B. (2017). The effect of children's comic strip stories on beginners' English vocabulary retention. *Journal of Applied Linguistics and Language Learning*, 3(3): 55-63.
- Aininna, N. (2014). The benefits of using dialogue journal writing for improving students' writing of personal letter. *Journal of English Language Teaching*, 3 (1), 10-21.
- Akinoglu, O. (2008). Assessment of the inquiry based project implementation process in science education upon students' point of views. *International Journal of Instruction*, 1(1), 2-12.
- Akker, V. (1999). Principle and Methods of Development Research. En J. Van den Akker, N. Nieveen, R.M. Brach, K.L. Gustafson, & T. Olimpiade. (Eds.) *Design Methodist and Developmental Research in Education and Training* (pp. 1-14). The Netherlands: Kluwer Academic Publishers
- Aliningsih, F., & Sofwan, A. (2015). English teachers' perceptions and practices of authentic assessment. *LANGUAGE CIRCLE: Journal of Language and Literature*, 10(1), 19-27.
- Al-Maamari, F. (2016). Community of assessment practice or interests: The case of EAP writing assessment. *Indonesian Journal of Applied Linguistics*, 5 (2), 272-281.
- Aragón-Jiménez, C.E., Baires-Mira, D.C., Rodríguez, G.S. (2013). An Analysis Of The Writing Skill Difficulties Of The English Composition Students At The Foreign Language Department Of The University Of El Salvador. SPaper of Undergraduate for Degree Of Licenciadas En Lenguas Modernas Especialidad En Francés E Inglés.
- Arast, O., & Gorjian, B. (2016). The effect of listening to comic strip stories on incidental vocabulary learning among Iranian EFL learners. *Journal of Applied Linguistics and Language Learning*, 2(1), 1-7.
- Anasy, Z. (2016). HOTS (higher order thinking skill) in reading exercise. *TARBIYA: Journal of Education in Muslim Society*, 3(1), 51-63.
- Anazifa, R. D., & Djukri. (2017). Project-based learning and problem-based learning: are they effective to improve student's thinking skills?. *Jurnal Pendidikan IPA Indonesia*, 6 (2), 346-355.

- Anggrayani, M., Sofwan, A., & Saleh, M. (2015). Improving students' organizing ideas in writing analytical exposition text with mind mapping technique. *English Education Journal*, 5 (1), 1-5.
- Areni, G.K.D., & Syafri, F. (2015). Critical thinking in teaching writing book review. *LANGUAGE CIRCLE Journal of Language and Literature*, 10(2), 141-150.
- Arifiana, C. (2015). Improving students' skill in writing recount text by using peer review technique. *Journal of English Language Teaching*, 4(1), 1-8.
- Arwood, E.L (2011). *Language Function An Introduction to Pragmatic Assessment and Intervention for Higher Order Thinking and Better Literacy*. London: Jessica Kingsley Publishers.
- Astuti, P. (2009). A needs analysis in developing a writing curriculum for efl education students: A case study at the department of english education of semarang state university. *LANGUAGE CIRCLE Journal of Language and Literature*, 4(1), 31-40.
- Aunurrahman., Hamied, F.A., & Emilia, E. Exploring the tertiary efl students' academic writing competencies . *Indonesian Journal of Applied Linguistics*, 7(1), 72-79.
- Azizah, H., & Fahriany. (2017). The relationship between students' text awareness and critical thinking disposition with their reading comprehension. *TARBIYA: Journal of Education in Muslim Society*, 4(1), 104-113.
- Barabouti, M. (2012). The Writing Portfolio: an alternative assessment tool with young learners of English. *Research Papers in Language Teaching and Learning*, 3(1), 123-145.
- Barak, M., & Dori, Y. J. (2009). Enhancing higher order thinking skills among inservice science teachers via embedded assessment. *Journal of Science Teacher Education*, 20, 459-474.
- Bataineh, R. F., & Obeiah, S. F. (2016). The effect of scaffolding and portfolio assessment on jordanian efl learners' writing. *Indonesian Journal of Applied Linguistics*, 6(1), 12-19.
- Bouanani, N. (2015). Enhancing critical thinking skills through reflective writing intervention among business college students. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 5(1), 50-55.

- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *Taylor & Francis Group: The Clearing House*, 83, 39-43.
- Borg, W.R and Gall, M.D. (1983). *Educational Research: An Introduction* 4th Edition. London: Longman Inc.
- Borg, W.R and Gall, M.D. (2003). *Educational Research: An introduction* 7th Edition. New York. Longman
- Bouanani, N. (2015). Enhancing critical thinking skills through reflective writing intervention among business college students. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 5(1), 50-55.
- Brookhart, S.M. (2010). *How to Assess Higher Order Thinking Skills in Your Classroom*. USA: ASCD.
- Brown, H.D. (2000). *Principle of Language Learning and Teaching, Fourth Edition*. New York: A Pearson Education Company.
- Brown, H.Douglas. (2004). *Language Assessment: Principles and Classroom Practices*. New York: Pearson Education, Inc.
- Celce-Murcia, M. (2001). *Teaching English as a Second Foreign Language*. Third Edition. USA: Heinle&Heinle.
- Chen, M.H. (2016). Theoretical framework for integrating higher-order thinking into l2 speaking. *Theory and Practice in Language Studies*, 6(2), 217-226.
- Chinedu, C.C., Kamin, Y., & Olabiyi O. S. (2015). Strategies for improving higher order thinking skills in teaching and learning of design and technology education. *Journal of Technical Education and Training (JTET)*, 7(2), 35-43.
- Cimermanova, I. (2015). Using comics with novice EFL readers to develop reading literacy. *Procedia - Social and Behavioral Sciences*, 174, 2452 – 2459.
- Cohen, L., Manion L., and Morrison, K. (2007). *Research Method in Education*. Sixth Edition. New York: Rouldege Taylor and Francis Group.
- Creswell, John W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Fourth Edition. Los Angeles: SAGE.
- Creswell, John. W. (2003). *Research design qualitative, quantitative, and mixedmethods approaches*. Second Edition. Los Angeles: SAGE.
- Delgoshaei, Y; Kharrāzi, K; & Talkhabi, M. (2012). The impact of portfolio evaluation method on the development of children’s reading skills. Paper

presented at *The Fourth International Conference of Cognitive Science (ICCS 2011)*, Iran, 356-360.

- Djiwandono, P.I. (2013). Critical thinking skills for language students. *TEFLIN Journal*, 24(1), 32-47.
- Dresher, P. A. (2013). The effects of implementing project based learning in the middle school science classroom. Paper for degree of Master of Science in Science Education Montana State University.
- Dunsmuir, S., et al. (2014). An evaluation of the writing assessment measure (wam) for children's narrative writing. *Assessing Writing*, 23. 1-18.
- Efendi, Z., Usman, B., & Muslem, A. (2017). Implementation of portfolio assessment in teaching english writing. *English Education Journal (EEJ)*, 8(2), 187-198.
- Efthymiou, G. (2012). Portfolio assessment of speaking skills in english as a foreign language in primary education. *Research Papers in Language Teaching and Learning*, 3(1), 200-224.
- Ennis, R. H. (1985). *A Logical Basis for Measuring Critical Thinking Skills*. The Association for Supervision and Curriculum Development.
- Faravani, A., & Atai, M.R. (2015). Portfolio assessment and the enhancement of higher order thinking through multiple intelligence and dialogic feedback. *Issues in Language Teaching (ILT)*, 4(1), 1-25.
- Farida, A.N., & Margawati, P. (2014). Travel writing; An application of writing workshop to enhance students' creative writing. *LANGUAGE CIRCLE Journal of Language and Literature*, 10(1), 17-23.
- Fatimah, S. (2015). Devoting to enhance the critical thinking skill and the creativity of students in seventh grade through pbl model with jas approachment. *Indonesian Journal of Science Education*, 4 (2), 149-157.
- Fauzan, & Latip, A.E. (2015). Curriculum readiness and program evaluation in implementing indonesian national qualifications framework curriculum (KKNI). *TARBIYA: Journal of Education in Muslim Society*, 2(2), 191-203.
- Fung, D. (2014). Promoting critical thinking through effective group work: A teaching intervention for Hong Kong primary school students. *International Journal of Educational Research*, 66, 45-62.
- Gholamian, A. (2013). Studying the effect of guided discovery learning on reinforcing the creative thinking of sixth grade girl students in qom during

- 2012-2013 academic year. *Journal of Applied Science and Agriculture*, 8(5), 576-584.
- Ghufron, M. A., & Hawa, M. (2016). The effect of collaborative writing technique in teaching argumentative essay writing viewed from the students' creativity. *LANGUAGE CIRCLE: Journal of Language and Literature*, 10(1), 49-60.
- Gunawan., Sahidu, H., Harjono, A., & Suranti, N.M.Y. (2017). The effect of project based learning with virtual media assistance on student's creativity in physics. *Cakrawala Pendidikan*, 36 (2), 167-179.
- Gómez, J.C. (2010). The impact of structured reading lessons on the development of critical thinking skills. *Electronic Journal of Foreign Language Teaching*, 7(1), 32-48.
- Harmer, N. (2014). Project based learning: Literature Review. School of Geography, Earth and Environment Sciences.
- Hasani, A., Hendrayana, A., and Senjaya, A. (2017). Using project-based learning in writing an educational article: An experience report. *Universal Journal of Educational Research*, 5(6), 960-964.
- Hürsen, C., Kaplan, A., & Özdal, H. assessment of creative thinking studies in terms of content analysis. *Procedia - Social and Behavioral Sciences*, 143, 1177-1185. doi: 10.1016/j.sbspro.2014.07.574
- Indrianti and Istanto, J. W. (2013). Implementing project-based approach to nurture learners' cultural awareness at the beginner level. *Electronic Journal of Foreign Language Teaching*, 10(1), 276–291.
- Istanto, J.W., & Indrianti. (2013). Implementing project-based approach to nurture learners' cultural awareness at the beginner level. *Electronic Journal of Foreign Language Teaching*, 10(1), 276–291.
- Jaedun, A., Hariyanto, V.L., & Nuryadin, E.R. (2014). An evaluation of the implementation of Curriculum 2013 at the building construction department of vocational high schools in Yogyakarta. *Journal of Education*, 7 (1), 14-22.
- Javed, M., Juan, W.X., & Nazli, S. (2013). A study of students' assessment in writing skills of the english language. *International Journal of Instruction July 2013*, 6(2), 129-144.
- Khan, I. (2011). Testing creative writing in pakistan: tensions and potential in classroom practice humaira. *International Journal of Humanities and Social Science*, 1(15), 111-119.

- King F.J, Goodson, L., & Rohani, F. 2011. Higher Order Thinking Skills. *Educational Services Program*. Available online at http://www.cala.fsu.edu/files/higher_order_thinking_skill.pdf
- Kitota, A.K.A., Ahmada, A.R.,& Semana, A.A. (2010). The effectiveness of inquiry teaching in enhancing students' critical thinking. *Procedia Social and Behavioral Sciences*, 7(C), 264–273. Available online at www.sciencedirect.com
- Kim, Y., & Yazdian, L.S. (2014). Portfolio assessment and quality teaching. *Theory into Practice*, 53(3), 220-227.
- Kokotsaki, D., Menzies, V., and Wiggins, A. (2016). Project-based learning: A review of the literature. *Improving School*, 19(3), 267 – 277.
- Kusuma, M.D et al. (2017). The development of higher order thinking skill (hots) instrument assessment in physics study. *IOSR Journal of Research & Method in Education (IOSR-JRME)*,7(1), 26-32.
- Lee, I. (2005). The implementation of project-based learning: a study in two Hong Kong secondary English classrooms. *The Journal Of Asia TEFL*, 2(1), 21-54.
- Lok, M., & Chiu, B. (2012). Using group discussion as an intervention strategy in novel teaching to study students' attitudinal changes. *Hong Kong Teachers' Centre Journal*, 11, 173-196.
- Lucas, B. (2016). A five-dimensional model of creativity and its assessment in schools. *Applied Measurement in Education*, 29(4). <http://dx.doi.org/10.1080/08957347.2016.1209206>
- Maba, W. Teachers' perception on the implementation of the assessment process in 2013 curriculum. *International Journal of Social Sciences and Humanities*, 1(2), 1-9.
- Mainali, B.P. (2012). Higher order thinking in education. *Academic Voices a Multidisciplinary Journal*, 2(1), 5-10.
- Malarsih., & Herlinah. (2014). Creativity education model through dance creation for students of junior high school. *HARMONIA : Journal of Arts Research and Education* 14 (2) 147-157.
- Mali, Y.C.G. (2017). EFL students' experiences in learning CALL through project based instructions. *TEFLIN Journal*, 28(2),170-192.
- Manual, F. (2015). *Guidelines for Collecting and Reporting Data on Research and Experimental Development – Chapter 2. Concepts and definitions for identifying R&D* <http://dx.doi.org/10.1787/9789264239012-en>

- Marhaeni, A.A.I.N., & Dantes, N. (2014). Toward authentic language assessment: a case in Indonesian EFL classrooms. *The European Conference on Language Learning 2014, Official Conference Proceedings*.
- Martaida, T., Bukit, N., & Ginting, E.M. (2017). The effect of discovery learning model on student's critical thinking and cognitive ability in junior high school. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 7(6), 1-8. doi: 10.9790/7388-0706010108
- Masduqi, H. (2011). Critical thinking skills and meaning in English language teaching. *TEFLIN Journal*, 22(2), 186-200.
- Megawati, F., & Anugerahwati, M. (2012). Comic strips: a study on the teaching of writing narrative texts to Indonesian EFL students. *TEFLIN Journal*, 23(2), 184-205.
- Merc, A. (2013). The effect of comic strips on EFL reading comprehension. *International Journal on New Trends in Education and Their Implications*, 4(1), 54-64.
- Mertler, Craig A. (2011). *Action Research, Improving Schools and Empowering Educators (3rd Edition)*. California: Sage Publications, Inc, and its translation by Daryatno. 2012. *Action Research, Mengembangkan Sekolah dan Guru*. Yogyakarta: Pustaka Pelajar.
- Meyers, A. (2005). *Gateways to Academic Writing: Effective Sentences, Paragraph, and Essays*. New York: Pearson Education.
- Mohamed, R., & Lebar, O. (2017). Authentic assessment in assessing higher order thinking skills. *International Journal of Academic Research in Business and Social Sciences*, 7(2), 466-476.
- Mumpuni, A., & Nurpratiwiningsih, L. (2018). The development of a web-based learning to improve of a creative writing ability of PGSD students. *Cakrawala pendidikan*, 2, 1-15.
- Nadri, Y and Azhar, A. (2016). Self-Assessment of critical thinking skills in EFL writing courses at the university level: Reconsideration of the critical thinking construct. *Arab World English Journal*. 57-71.
- Nasruloh, M. I. (2013). Teacher-student interaction in a project-based learning classroom. *Journal of English and Education*, 1(1), 142-153.
- Nugraheni, W. Y., & Faridi, A. (2016). The role of students and teachers in English classes using the 2013 curriculum. *LANGUAGE CIRCLE: Journal of Language and Literature*, 10(1), 59-66.

- Nuraida. (2017). The effect of creative teaching technique to creative problem solving ability in students. *TARBIYA: Journal of Education in Muslim Society*, 4(1), 53-62.
- Parida, A., Rout, P., & Swain, B.K. (2017). An action research study on improving seventh standard students' creative writing skill in english. *Journal Of Humanities And Social Science (IOSR-JHSS)*, 22(6), 17-20. doi: 10.9790/0837-2206011720.
- Pemerintah Republik Indonesia. 2003. *Undang-Undang Republik Indonesia No 20 Tahun 2003 Tentang Sistem Pendidikan Nasional*. Jakarta.
- Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia 2013. *Peraturan Menteri Pendidikan dan Kebudayaan no. 81 A tentang Implementasi Kurikulum 2013*. Jakarta: Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia.
- Polly, D and Ausband, L. (2009). Developing higher order thinking skills through WebQuests. *Journal of Computing in Teacher Education*, 26(1). 29-34.
- Rajagukguk, W., & Simanjuntak, E. (2015). Problem-based mathematics teaching KITS integrated with ICT to improve students' critical thinking ability in junior high schools in Medan. *Cakrawala Pendidikan*, 34 (3), 347-356.
- Retnawati, H., Hadi, S., & Nugraha, A.C. (2016). Vocational high school teachers' difficulties in implementing the assessment in curriculum 2013 in Yogyakarta province of indonesia. *International Journal of Instruction*, 9(1), 33-48.
- Rokhayani, A., & Utari, A.R.P. (2014). The use of comic strips as an english teaching media for junior high school students. *LANGUAGE CIRCLE Journal of Language and Literature* 8(2), 143-149.
- Rumahlatu, D., Estevanus, K. H., & Takaria, J. (2016). An analysis of the readiness and implementation of 2013 curriculum in the west part of seram district, maluku province, indonesia. *International Journal of Environmental & Science Education*, 11(12), 5662-5675.
- Sarigoz, O. 2012. Assessment of the high school students' critical thinking skill. *Procedia-Social an Behavioral Sciences*, 46. 5315-5319.
- Satriani, I., Emilia, E., & Gunawan, M.H. (2012). Contextual teaching and learning approach to teaching writing. *Indonesian Journal of Applied Linguistics*, 2 (1), 10-22.
- Shaheen, N. (2016). International students' critical thinking-related problem areas: UK university teachers' perspectives. *Journal of Research in International Education*, 15(1) 18-31. doi: 10.1177/1475240916635895.

- Sharadgah, T.A.A. (2014). Developing critical thinking skills through writing in an internet-based environment. *International Journal of Humanities and Social Science*, 4(1), 169-178.
- Sholeh, K. (2015). The implementation of multiple intelligence learning model which is oriented to students' participation in academic writing. *The Journal of Educational Development*, 3(1), 48-56.
- Sulaiman, T., Muniyan, V., Madhvan, D., Hasan, R., & Rahim, S.S.A. (2017). Implementation of higher order thinking skills in teaching of science: A case study in Malaysia teaching. *International Research Journal of Education and Sciences (IRJES)*, 1(1), 1-3.
- Sumarni, S., Wardani., Sudarmin., & Gupitasari, (2016). D. N. Project based learning (PBL) to improve psychomotoric skills: a classroom action research. *Jurnal Pendidikan IPA Indonesia (JPPI)*, 5(2), 157-162.
- Sundayana, W. (2015). Readiness and competence of senior high school english teachers to implement curriculum 2013. *Indonesian Journal of Applied Linguistics*, 5(1), 29-36.
- Suryanto & Samritin. (2016). Developing an assessment instrument of junior high school students' higher order thinking skills in mathematics. *Research and Evaluation in Education*, 2(1), 92-107.
- Suyanto, S. The implementation of the scientific approach through 5ms of the revised curriculum 2013 in Indonesia. *Cakrawala Pendidikan*. Available at <https://journal.uny.ac.id/index.php/cp/article/view/18719/pdf>.
- Syafei, M. (2012). Backwash effects of portfolio assessment in academic writing classes. *TEFLIN Journal*, 23 (2), 206-221.
- Taufina., & Subroto, W.T. (2016). The application of authentic assessment in integrated thematic teaching and learning process in elementary school level. *IJCTA*, 9(2), 959-965.
- Taras, M. (2005). Assessment – summative and formative – Some theoretical reflections. *British Journal of Educational Studies*, 53(4), 466–478.
- Talat, A., and Chaudhry, H.F. (2014). The effect of PBL and 21st century skills on students' creativity and competitiveness in private schools. *The Lahore Journal of Business* 2(2). 89–114.
- Tanujaya, B. (2015). Instrument development of higher order thinking skill in mathematics instructional on senior high school. *Journal of Indonesian Students Assessment and Evaluation*, 1 (1), 65-74.

- Toyoda, E. (2015). Relationship between higher-order thinking skills and 12 performance. *Electronic Journal of Foreign Language Teaching*, 12(2), 200-218.
- Trisanti, N. (2014). English teacher's perspective on authentic assessment implementation of curriculum 2013. *The 61 TEFLIN International Conference, UNS Solo*, 1173-1175.
- Talat, A., and Chaudhry, H.F. (2014). The effect of PBL and 21st century skills on students' creativity and competitiveness in private schools. *The Lahore Journal of Business* 2(2). 89–114.
- Tuckman, B.W. (1999). *Conducting Educational Research (5th Ed)*. New York: Harcourt Brace & Company
- Valette, R.M. (1967). *Modern Language Testing: A Handbook*. New York: Harcourt, Brace, & World.
- Vijayaratanam, P. (2009). Cooperative learning as a means to developing students' critical and creative thinking skills. *Proceedings of the 2nd International Conference of Teaching and Learning INTI University College, Malaysia*.
- Wachyu, M. I., & Rukmini, D. (2015). The effectiveness of project based learning and problem based learning for teaching biography text writing to highly and lowly motivated students. *Language Circle: Journal of Language and Literature*, 10(1), 61-71.
- Wallace, Michael. J. 1998. *Action Research for Language Teachers*. New York: Cambridge University Press.
- Wang, S., & Seepho, S. (2017). Facilitating chinese efl learners' critical thinking skills: the contributions of teaching strategies. *SAGE Open*, 1-9. doi: 10.1177/2158244017734024
- Wang, S and Wang, H. (2014). Teaching and learning higher order thinking. *International Journal of Arts & Science*, 7(2), 179-187.
- Wati, A., Bharati, D.A.L., Hartono, R. (2014). The scientific approach in teaching speaking for various texts. *English Education Journal (EEJ)*, 4(2), 145-150.
- Weigle, C.S. (2002). *Assessing Writing*. United Kingdom : University Press, Cambridge.
- White, John (Ed). (2004). *Rethinking the School Curriculum: Values, aims and purposes*. New York: Routledge Falmer.

- Widana, I.W. (2017). Higher order thinking skills assessment (hots). *Journal of Indonesian Students Assessment and Evaluation*, 3 (1), 32-44.
- Yen, T.S., & Halili, S.H. (2015). Effective teaching of higher-order thinking (hot) in education. *The Online Journal of Distance Education and e-Learning*, 3(2), 41-47.
- Yurdabakan, I., & Tolga, E. (2009). The effects of portfolio assessment on reading, listening and writing skills of secondary school prep class students. *The Journal of International Social Research*, 2(9), 526-538.
- Zaida, N., & Sofwan, A. (2015). Incorporating critical thinking skills into an english textbook for junior high school students of semarang city. *The Journal of Educational Development*, 3(2), 148-157. Retrived from <http://journal.unnes.ac.id/sju/index.php/jed>
- Zakaria, A.A.S., & Mugaddam, A.R.H. (2013). An assessment of the written performance of the sudanese efl university learners: a communicative approach to writing. *World Journal of English Language*, 3(4), 1-10.
- Zhou, Q., Huang, Q., & Tian, H. (2013). Developing students' critical thinking skills by task-based learning in chemistry experiment teaching. *Creative Education*, 4(12A), 40-45. [doi:10.4236/ce.2013.412A1006](https://doi.org/10.4236/ce.2013.412A1006)