A Need Analysis in Developing Project-Based Writing Assessment Module to Stimulate Students' Critical Thinking and Creativity

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Abstract

This case study aimed at evaluating an existing writing assessment which can stimulate the students' critical thinking and creativity of SMA students. Moreover, this study investigated the type of assessment needed by SMA students to stimulate their critical thinking and creativity. The writing assessment evaluation was carried out through a need analysis. The subjects of this study were the English teachers and the tenth grade students of SMAN 12 Semarang in the academic year of 2017/2018. Questionnaire, interview, classroom observation, and teacher's document observation were used as the instrument in collecting the data. This study utilized the qualitative descriptive design which tends to find the data by observing the context directly and then a data interpretation was conducted. The major findings showed that the teacher got difficulty in developing a higher-order thinking assessment which can stimulate students' critical thinking and creativity. In addition, the English teachers had already known and applied the project-based writing assessment, but he never did any development of project-based writing assessment which can stimulate the students' critical thinking and creativity. 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.

Keywords: Project Base Writing, Senior High School, Assesment

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1. Introduction

Assessment cannot be separated from teaching and learning activities. 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). The teachers use assessment to measure whether the students are able to complete the required standard of the learning process or not.

Assessment has to be relevant and appropriate with the learning goals in the used curriculum. White (2004, p.2) stated that the aims of the 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. Each country has a curriculum as a tool which is used for meeting the demand of their society and the world. 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. 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 a 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 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. Brookhart (2010, pp. 3-8) stated that the definition of higher-order thinking is divided into three categories. Those are higher order thinking as a transfer, critical thinking, and problem-solving. 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.

Both critical thinking and creativity are the important skill to be developed to prepare learners in facing the 21st century challenges. Critical thinking is an individual intellectual thinking skill including reflective and reasonable thinking that is focused on making a decision on what to believe or do (Ennis, 1985, pp. 45). In addition, Sarigoz (2012, p.5315) stated that critical thinking comprises reasoning, analyzing, problem-solving, scientific thinking, judgment, and deciding accurately. Whereas, creativity is the ability to innovate and helps prepare pupils for future challenges in work and life. Moreover, Marshall (1974,

p. 10) in Khan (2011, p.111) stated that creativity is the ability to create one's own product or experience by exploring the information and ten form a unique thing.

Based on the 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, most of the English teacher gets difficulty in designing and developing the higher-order thinking assessment. Jaedun, Hariyanto, & Nuryadin (2014) and Wati, Bharati, & Hartono (2014) pointed out that the teachers have an 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). Several studies (Abosalem, 2016; Mohamed & Lebar, 2017) pointed out that authentic assessment is able to measure higher-order thinking skills and improves the students' performance.

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. 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. Furthermore 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.

Therefore, the researcher conducted a need analysis research on developing the project-based writing assessment module that can stimulate the critical thinking and creativity of senior high school students.

2. Methods

This study used the qualitative approach where the analysis of the data is described in narrative ways or in form of words. The data analysis presents in form of description instead of number presentation. According to Creswell (2003), qualitative research is inclined to use open-ended questions where the participants can freely express their feelings or views. Qualitative research tends to find the data by observing the context directly and then the researcher makes an interpretation of what they find.

The subjects of the study were English teachers and tenth grade students of SMA N 12 Semarang in the academic year 2017/2018. The school was chosen because the 2013 curriculum has been implemented in all classes, especially tenth grade. In this study, the researcher used four kinds of instruments to collect the data. There were teacher's document observation, teaching-learning process observation, interview, and questionnaire.

3. Findings and Discussion

In this phase, the researcher presents the findings and discussions of the developing project-based writing assessment module to stimulate students' critical thinking and creativity. The sections in this part will follow the statement of the research objectives.

3.1. Teacher's assessment on students' writing

The lesson plan was arranged based on the 2013 curriculum by showing the activities which consisted of discovery learning and problem-based learning method. Nevertheless, there was no rubric of assessment used in assessing the students' knowledge and skill. The teacher had not applied project-based learning in his lesson plan yet, notably when assessing the students' writing skill. The students just wrote whatever they want to write without any specific instruction from the teacher that could stimulate the students' higher order thinking skill. In other words, the teacher got difficulty in developing a writing assessment which can stimulate students' critical thinking and creativity. 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). It means that nowadays some teachers still get hard in designing the assessment rubric for each skill especially writing skill.

In this phase, the researcher observed the teacher's documents and teaching-learning process to know the realization of the routine assessment which was used by the English teacher, especially in assessing the students' writing ability. The teacher used textbook or LKS as the daily assessment to get the students' score. The conducted assessments did not enclose the students to have HOTS. The students tended to be passive and could not develop their critical thinking and creativity. Moreover, the teacher did not apply any project-based writing assessment in the teaching-learning process. The students just memorized words, sentence patterns, and emphasizing reading skill. By looking for the narrative text from the internet, the students tended to copy the story instead of paraphrasing or creating a new story. In assessing the students' writing, the teacher just assessed the grammar, choice of words, and also text originality.

3.2. Type of assessment to stimulate students' critical thinking

Today's assessment must be able to stimulate students' critical thinking since one of the objectives of the 2013 curriculum stated that the students must be able to think critically. In this case, the students have to find out the information by themselves rather than getting information from the teacher. In other words, the learners-centered must be implemented in a class rather than teacher-centered. The students can find information from various sources.

The teacher said that discussion was one of the activities that can stimulate the students' critical thinking. The discussion was done in a small group where all members shared their opinion, comment, suggestion, or ideas of their own. They learned from each other's argument and got a new insight to enrich their understanding of something or a case. By doing so, the students could share their opinion and they actively followed the lesson. It is a line with the theory of Vygotsky that learners can only achieve their internal development processes by cooperating with their peers which are competent people (Vygotsky, 1978 in Lok and Chiu, 2012). Moreover, the research finding from the study which was conducted by Wang and Seepho (2017) also stated that group discussion was effectively improved the students' higher-order thinking skill. It means that this finding agrees with the theory which still exists till now that by doing group discussion the students can develop their critical thinking.

In addition, an assessment which could stimulate students' critical thinking must contain open-ended questions in order to make the students be more open-minded. The example of open-ended questions is using *why* and *how* instead of *what, where, when*, etc. Hence, the students will have intellectual curiosity and find out the knowledge from many sources until they are satisfied. While answering the students' question, the teacher should not directly answer due to make the students think more about that and finally can answer their question by themselves. Giving clues was one of the activities for enhancing the students' writing skill.

Therefore, the researcher and the teacher developed the project-based writing assessment to stimulate the students' critical thinking, especially in their writing skill.

3.3. Type of assessment to stimulate students' creativity

In stimulating the students' creativity, the teacher has to be innovative first. The teacher needs to be a good planner, executor, and evaluator. As a good planner, the teacher designs the lesson plan well by suiting the teaching method or technique with the competence that will be achieved. The teacher must be an open-minded person in order to develop the students' creativity.

As a good executor, the teacher must give attention to the students' characteristic during the teaching process. The teacher is not only good at planning the lesson but also in realizing the plans. The learner-centered is a must during the teaching learning activity. Sometimes the teacher can invite the students to go outside the classroom to observe the surroundings in order to make the students have a broad mind. In case of writing, the students write sentences or even a text based on their direct observation. As a good evaluator, the teacher must evaluate the lesson with constructive feedback in order to make betterment for the next teaching-learning activity.

The teacher has to give the students an innovative instruction. For example, the teacher gives the students a story then the students continue the story with their own version. The key to this activity is giving freedom to 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 teacher must appreciate all the students' learning process.

In addition, the students like a picture as the media for learning English especially, for students' writing skill. Therefore, the researcher and the English teacher developed project-based writing assessment that can stimulate the students' creativity through a series of picture called comic strips since the students got difficulty in learning English

especially in writing skill and the teacher had never developed any project-based writing assessment that can stimulate their creativity.

4. Conclusion

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 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 and creativity. 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). Whereas, the indicators of creativity skill are idea generation, acquiring competencies, taking risks, innovative thinking (novelty or uniqueness), and creative production and innovation.

Recommendation for Further Study

This need analysis study was conducted to evaluate the existing routine assessment which can stimulate the students' critical thinking and creativity. The quality of an assessment is really important since the learners need a progressive learning process and a good outcome. By doing so, the learners can face the world challenges and the demand of the society. Hence, another evaluation on the assessment is really needed.

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