



# Developing HOT Project-Based-Speaking Assessment to Stimulate the Students' Critical Thinking and Creativity

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### Abstract

Most of English teachers do not comprehend how to construct items and develop High Order Thinking (HOT) project-based-speaking assessment to stimulate the students' critical thinking and creativity. Therefore, this study is conducted to develop project-based-speaking assessment to stimulate the students' critical thinking and creativity in English learning. This study uses research and development (R & D) at X IPA 1 of SMA N 15 Semarang. The data are gathered through interview, questionnaire, and observation which are aimed to know the existing of the implementation of HOT project assessment. Meanwhile, the data from pre-test and post-test are mini-drama performance to measure the students' learning achievement. During the implementation of assessment, the students prepare the concept and perform mini-drama performance. The results indicate that the implementation of project-based-speaking assessment successfully stimulate the students' critical thinking and creativity in English learning. Further, the results also show the students' scores improvement of pre-test and post-test where the speaking skill is 70.11 to 82.11, the critical thinking is 60.69 to 87.50, and the creativity is 62.08 to 85.83. Moreover, the students participate in the process of teaching and learning actively. They are able to work in a group discussion to write the drama script and arrange the concept of drama cooperatively. Finally, they can perform the drama performance successfully. In conclusion, the HOT project-based-speaking assessment is applicable to stimulate the students' critical thinking and creativity in English learning.

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## INTRODUCTION

Learning and assessment of learning outcomes are the essential components in the implementation of 2013 Curriculum. Thus, the success of learning can be known through assessment, and assessment results are also used to perfect learning. Hence, to implement the authentic assessment, the substance of 2013 curriculum encourages the teachers to successful develop High Order Thinking (HOT) assessment in the teaching and learning process. HOT requires the thoughtful consideration of current instructional techniques and the commitment for active student-centered teaching learning environment (Mainali, 2012).

Based on the results of monitoring and evaluation that had been done by the researcher about the implementation of 2013 curriculum at the senior high school level, it showed that most educators lacked understanding on formulating indicators and construct items for HOT speaking assessments combined with high-level thinking skills and students' critical thinking and creativity. They had not fully understood how to arrange instruments and rubric skills assessment. Another difficulty that faced by them was related to the developing project-based-speaking assessment which was the demand for assessment in the 2013 curriculum. They also claimed that they had not been able to design, develop the instruments, implement, process, report, and utilize the results of the assessment properly.

Thus, this study focuses on developing project-based-speaking assessment to stimulate the students' critical thinking and creativity in English learning. Project-based learning demands students to develop conceptual knowledge and creative thinking skills, according to the lifelong learning principle refers to the four pillars of education universal, that is learning to know (learning to know), learning with doing (learning to do), learning to live in togetherness (learning to live together) and learn to be yourself (learning to be) (Lidya, 2016). Therefore, the project based learning approach is

aimed at improving the quality of student learning.

Related to the assessment, the following studies show the realization of assessment to teach English in addressing the learning of HOT skills and evaluating of thinking skills. In conducting the study, the researchers implemented inquiry-based learning situated in real-world phenomena, as it was aimed at creating the study actively for students. The results indicated that assessment really connected between teaching and learning, and it could have an influence on the way teachers' teaching and students' learning (Adkins, 2017; Annuru, 2017; Elshawa, 2016; Fitriani, 2017). Thus, the assessment is also able to be applied in teaching English of speaking skill.

To achieve the communicative competence of speaking skill, learners requires the possession of knowledge about how to produce not only linguistically correct, but also pragmatically appropriate utterances (Irawati, 2016). It means that speaking is an interactive process of constructing meaning that involves producing and receiving and processing information. Further, the speaking activity should be applied in a project based in order to improve the students' learning achievement, and this study brought the students to explore their speaking ability into mini drama performance. The implementation of drama is able to improve the students' self confidence in expressing the experience and reflection as roles (Amri, 2016; Milchatun, Dwi Anggani LB, 2015; Sukrisno, 2016).

Moreover, previous research studies show that the implementation of drama performance have successfully courage the students to express their idea freely, have a good attention in speaking class, increathe their creative thinking during the group discussion, and they feel confident in solving problem (Amri, 2016; Ganiron, 2014; Wahyuni, 2013). Thus, by engaging the students into a group discussion, it was aimed at improving the students' activeness and contribution to the learning is being realized

through their performance or presentation (Astuti & Lammers, 2017).

Further, a discussion is a means of thoughtful consideration of the relationship involved in the topic or problem under study. Furthermore, in a group discussion, it gave chance to learners to exchange of information, opinion, and ideas. Thus, a further characteristic of a successful discussion is the apparent motivation of the participants: their attention to the speakers their expression that they were reacting to the humor, seriousness, or difficulty of the ideas being expressed (Astuti, 2018; Wiwiet Purwitawati Sholihah, 2017). Hence, the implementation of group discussion was also in line with the use of project-based learning to stimulate the students' activeness.

Therefore, the aim of project-based-speaking assessment in this study is to stimulate the students' critical thinking and creativity in English learning. Critical thinking is the ability to think clearly and rationally about what to do or what to believe (Iskandar, 2015). Further, critical thinking as the ability to analyze facts, generate and organize ideas, defend opinions, make comparisons, draw inferences, evaluate arguments and solve problems (Alidmat & Ayassrah, 2017). Meanwhile, creativity is the capacity of a person to produce compositions, products or ideas which are essentially new or novel and previously unknown to the producer (Gupta, 2015).

Furthermore, the project-based-speaking assessment was not only conducted to learn speaking skill, but it also covered the activities to learn English for skills of listening, reading, and writing. There, during the implementation of assessment, the students did listening to the recording related to the material and watching video, which it was aimed to build up the students learning excitement. The students also did reading activity of narrative text provided on the book and given by teacher (Faridi, 2016). They analyzed the text based on the social function, language features, and generic structure. Moreover, they writing of drama script in which they considered the concept of

drama performance. Lastly, they did speaking activity by doing mini drama performance. Those activities were conducted to stimulate the students' critical thinking and creativity. Therefore, the objective of this study is to develop HOT project-based-speaking assessment to stimulate the students' critical thinking and creativity in English learning.

## **METHOD**

This study used research and development (R & D) which was conducted at X IPA 1 consisted of 36 students of SMA N 15 Semarang. The steps of this study were the observation and information collection, the needs analysis, the preliminary product, the product design, the preliminary test, the main product revision, the field test, the operational product revision, and the final product. The result product of this study was a set of assessment (module) to develop project-based-speaking assessment to stimulate the students' critical thinking and creativity in English learning. Furthermore, the speaking project was mini drama performance.

The data were gathered through observation, interview, and questionnaire were aimed to know the existing of the implementation of HOT project assessment. Meanwhile, the data from pre-test and post-test of drama performance were to measure the students' learning achievement. The qualitative data in this study were collected from interview, questionnaire, observation checklist, and treatments. Meanwhile, the analysis of quantitative data gathered from pre-test and post-test.

## **RESULTS AND DISCUSSION**

This presented and discussed the results of all data and the interpretation of data analysis on the developing HOT project-based-speaking assessment to stimulate the students' critical thinking and creativity in English learning.

### Observation and Information Collection

The step of observation and information collection included the teaching and learning process, the interview and questionnaire to English teacher and the students. The results of observation showed that the teacher never gave any projects to students. She only explained the materials and then gave time for students to do the tasks. Lastly, she did checking the students' works, and she used the scores as the daily score.

The results of interview with English teacher indicated that she never gave project-based-speaking assessment to students but she had a desire to develop it. Likewise, the results of interview with all students at X IPA 1, they never did any projects during the learning.

Moreover, the results of questionnaire sheet from English teacher showed that she got difficulties in developing HOT assessment project to students. Likewise, the results from students, they got boredom in learning activities, so they were excited to do project-based-speaking assessment.

### Needs Analysis

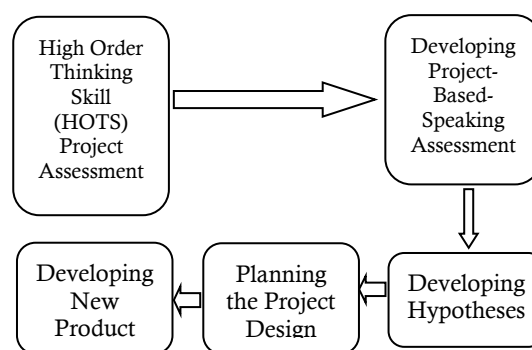
This was the further step based on the results of observation and information collection. Here, the the documents collected were the lesson plan, the assessment, and the students' work book. The results indicated that the teacher prepared the lesson plan before she conducted the teaching, but she did not make a learning concept to develop HOT project assessment or project-based-speaking assessment to students. Further, the students only used the worksheet (*LKS*) as the source in learning English. During the process of teaching and learning, they rarely did writing a text, arranging sentences, and speaking in English. They were used to listen to the teacher's explanation, read some texts on *LKS* and then do the assignment. Thus, the students never developed project-based-speaking assessment.

### Preliminary Product

Afterwards, the researcher did preliminary product by making drafts related to the needs on developing project-based-speaking assessments. The drafts consisted of the concept on developing the assessment included developing hypotheses (the teacher together with the students made the concept of drama and the scenes of drama script on the whiteboard included the narration and dialogue), planning the project design (the teacher divided the students into four groups where each group consisted of nine to ten students, and then they did the discussion to have one title of story and determine the roles for each member), and developing new products (the students developing the new product of drama performance).

### Product Design

The next step was designing the product of assessment, and the researcher with the teacher did collaboration in developing project-based-speaking assessment. We arranged the assessment by referring to the characters of 2013 curriculum. There, we made the lesson plan based on the syllabus and the training module published by the government. Thus, the following figure was the concept of implementing the assessment as stated in training module of the implementation of 2013 curriculum.



**Figure 1.** The Stages of Implementation the Assessment

In figure 1, the first was the stage of developing hypotheses, and it was meant to stimulate the students' creativity and critical thinking for analyzing the example of narrative text and making the drama script. Here, the teacher together with the students made a scene of drama script on the whiteboard included the narration and dialogue. Secondly, we did planning the project design of mini drama performance. In this stage, the teacher divided the students into four groups where each group consisted of nine to ten students. All groups did the discussion to have one title of story and determine the roles for each member. Lastly, the teacher controlled the students in developing new product of speaking project of mini drama performance. After that, teacher prepared the scoring sheets of speaking skill, critical thinking, and creativity to assess the students' performance.

#### Expert Judgment

After that, we did expert judgment where the assessment was evaluated by three experts in English language teaching who actively involved into the implementation of 2013 curriculum. The first expert encouraged the teacher to assure that the students were able to understand the indicators of scoring in order they fulfilled the requirements to pass the test successfully. The second expert suggested the assessment to provide some learning activities of writing, listening, and reading. Here, the project speaking assessment had covered all the English learning activities. Meanwhile, the third expert gave suggestion that the teacher's duty was not only to teach English, but also give caring to students. It was considering that every student had their own character and personality. Lastly, they gave criticism to the language appropriateness of this assessment.

Furthermore, from the inputs above, the structure of this assessment was redesigned to perfectly complete the needs of implementation of the assessment. Firstly, the part that needed to be revised was the using of teaching aids and media. Here, the teacher added more media

which related to the lesson, and it was to support the teaching and learning process. Afterwards, another part was the language appropriateness of the assessment. It was meant to provide the clear explanation for each step of the assessment in order the teacher or practitioner could apply the assessment successfully.

From the results of evaluation, we went to the next step, it was main product revision. We did revision in the part of meetings for implementing the assessment, in which it should be sufficient to stimulate the students' critical thinking and creativity in English learning. We also added some media to support the process of teaching and learning. It was aimed at building up the students' learning motivation.

#### Field Test (Try Out)

After the assessment had already been developed completely, then it was implemented in the experimental class of X IPA 1. There, the teacher had seven meetings for pre-test, treatments, and post-test.

In conducting pre-test, the teacher applied mini-drama performance to students. Thus, the following table was the result of students' pre-test which showed the mean score for each aspect.

**Table 1.** Students' Mean Score of Pre-Test

| Aspects           | Mean Scores |
|-------------------|-------------|
| Speaking Skill    | 70.11       |
| Critical Thinking | 60.69       |
| Creativity        | 62.08       |

According to the table above, it could be concluded that the students' speaking skill needed to be improved regarding in terms of grammar, vocabulary, pronunciation, comprehension, and fluency. Further, they still did not have good self-confidence when conveying their dialogues to their partners during the drama performance. They were really confused what should be said, so sometimes they did pauses. In addition, the students did not know how to arrange the sentences correctly. They were afraid if they spoke inappropriate

dialogue to express the characters, and their pronunciation was not clear enough, so their partner had difficulties to respond. It could be said that the cooperation was not achieved. Thus, it was meant that the teacher needed to implement the assessment of project-based-speaking in order to stimulate their critical thinking and creativity in English learning.

Based on the result of pre-test, the teacher continued to conduct the treatments for five meetings, and one meeting for post-test. Those meetings were conducted based on the assessment which aimed to stimulate the students' critical thinking and creativity in English learning.

In the process of teaching and learning, the students participated in every single meeting well. First, they did watching the short movie of narrative text. After that, they read and analyze narrative text. They also did the task of narrative text on their worksheet. Furthermore, they watched video of mini drama performance, and they were excited to have the drama performance. Therefore, the teacher gave the example of mini drama script, and taught them to understand the concept of drama. Moreover, the students were enthusiastic when the teacher explained the procedure to arrange the drama script. They had fully understood to prepare the concept of of mini drama performance. After that, they started to make a group discussion consisted of nine members, and one of them became the leader.

The leader of each group managed the members to have one title of drama story. Afterwards, they discussed to determine the roles for each member. They continued to prepare the needs of drama performance such as drama script, equipments, and properties.

In preparing the drama script, most of students were able to arrange the script systematically. They could analyze the story and generate their ideas in the group discussion. There, the teacher did controlling and checking on the students' working. Finally, the students performed their mini drama performance successfully and they could improve their score.

The following table was the result of students' post-test which showed the mean score for each aspect.

**Table 2.** Students' Mean Score of Post-Test

| Aspects           | Mean Scores |
|-------------------|-------------|
| Speaking Skill    | 82.11       |
| Critical Thinking | 87.50       |
| Creativity        | 85.83       |

From the table above, it showed that the students were able to explore their ability in the teaching and learning process. First, their speaking skill was improved by performing mini drama. They could speak in English well and fulfilled the speaking aspects included grammar, vocabulary, pronunciation, comprehension, and fluency. Second, the assessment of project speaking was able to stimulate the students' critical thinking. It looked when the teacher did observation during the process of working in group discussion for preparing the drama. The students could arrange the drama script and explore the story, so they performed the drama attractively. Further, the students also had improved their creativity during the implementation of assessment. They were able to discuss the topic of drama story, give suggestions, and solve the problems. Moreover, they prepared the properties to support the drama performance, so they expressed the role characters in the story well.

### **Operational Product Revision**

This step was the last revision of the assessment. The inputs were obtained from the results of field test during the implementation process of project-based-speaking assessment. There were some minor changes in the part of media and teaching and learning aids. There, the teacher needed to provide more media to support the process of implementing the assessment. The availability of media, it influenced to the students' activeness in participating the learning process, especially in preparing the concept of drama performance.s

### Final Product

After the assessment had been lastly revised, it was meant that the assessment had completely developed. The result product of this research was a set of assessment (module) to develop HOT project-based-speaking to stimulate the students' critical thinking and creativity in English learning. The assessment module consisted of several chapters as follows: (1) chapter I was the introduction. In this part, it covered the background of the assessment, objectives of the assessment, and the significance of the assessment, (2) chapter II was the reviews of theoretical studies. It covered the authentic assessment in 2013 curriculum, the definition of speaking, the project-based learning for teaching speaking, the definition of High Order Thinking (HOT) Skill, the definition of critical thinking, and the definition of creativity, (3) chapter III was the designing of the assessment. It discussed the steps and concept of group discussion and mini drama performance, assessing the students' learning achievement on speaking skill, critical thinking, and creativity, (4) chapter IV was the developing of the assessment. It discussed the concept of assessment, the instruments development, and the steps of teaching and learning process, (5) chapter V was the processing and utilization the results of assessment. It showed the scoring indicator and rubrics, and the reporting the results of assessment, (6) chapter VI was the appendices. It consisted of the example of narrative text and pictures, materials, the example of drama script, the example of video of drama performance, the lesson plan, and the results of implementation of assessment in SMA N 15 Semarang.

### CONCLUSION AND SUGGESTION

From the results and discussion, the researcher can conclude that the English teacher never gives and develops project-based-speaking assessment to students. Likewise, the students also never do any speaking projects during the teaching and learning process, whereas they are excited to have project-based-speaking

assessment. Second, the results indicate the fulfillment of developing project-based-speaking assessment. There, the needs of assessment have been fulfilled by considering the characters of 2013 curriculum. Third, the results show that the process of developing project-based-speaking assessment is based on the implementation of 2013 curriculum. Moreover, the process of developing assessment is by referring the syllabus of which the needs of the lesson for implementing the assessment in the teaching and learning process in English learning. Therefore, the assessment is included to the arrangement of lesson plan. Fourth, the project-based-speaking assessment effectively stimulates the students' critical thinking and creativity in English learning. It shows during the implementation of project speaking of mini drama performance. The students are able to explore their critical thinking, creativity, and speaking skill during both learning process and drama performance.

However, the English teacher needs to develop any projects in the process of teaching and learning, especially project-based-speaking assessment to students. The project should be referred to the needs of lesson material in syllabus. Further, the teacher should be able to provide teaching's aids and media to support the learning process. The availability of the media is not only for aesthetic purpose, but it also helps the students to receive the input and improve their participation in learning.

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