

Original Research

Developing A Model of HOTS Questions for Narrative Reading Text for IX Grade Students of SMPN 2 Jorong

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Received: 01 August 2019

Revised: 24 January 2020

Accepted: 02 February 2020

Abstract

Teachers are required to have good reading material with various questions exercises to meet students' interest to improve their reading ability. This developmental research was undertaken to develop a model of instructional material of HOTS questions for narrative reading texts for IX grade students of SMPN 2 Jorong. The development of the model in R & D research involved the following framework: needs assessment, reference study, material development, expert validation, tryout, revision, and final product. The subject of the research was the students of grade IX of SMPN 2 Jorong. The instruments used were observation sheet, questionnaire sheet, students' test result, and validity and advisability test sheet to take the data. The final product was a Model of HOTS Questions For Narrative Reading Text in the form of instructional material consisting of Cover; Introduction, and Content. The content of the product consisted of 2 Units that contain narrative reading texts with the titles Hansel and Grethel, Malin Kundang, and Rapunzel. Each story was inserted with HOTS questions to ask the students to generalise, to analyse, to compare, to distinguish, and to correlate. Based on the result, the model of HOTS questions was efficient and advisable to be implemented.

Keywords

HOTS questions , reading, narrative text, Junior High School (SMP)

1. INTRODUCTION

In recent years, many stresses have been given to the teaching of thinking skills in reading classroom. The Indonesian Constitution no 20 year 2003 verse 3 about education purposes on creating faithful, healthy, knowledgeable, smart, creative, and self-supporting students person. Based on the purposes, Higher Order Thinking skills (HOTS) questions exercises are introduced in teaching activities to enable learners to apply their skills in their real life, to analyse them, to evaluate them, and even to think creatively.

For supporting the Indonesian Constitution no 20 year 2003 verse 3, HOTS questions tests are applied in recent National Examinations. They are tested in the form of questions that make the learners think critically, analytically and smart. However, the result of the National Examination, South Kalimantan shows decreasing scores compared with those of 2017. In 2017 the scores were 52.90 and they declined to 51.67 in 2018 with 1.23 percentage difference.

The decline scores may be caused by the teaching activities that do not support the daily activities of giving HOTS questions exercises to the learners. This phenomena also happens in the ninth grade classroom teaching activities in SMPN 2 Jorong. According to the observations, the teachers seldom give HOTS questions exercises to the learners in reading class activities. Furthumore, this condition is worsened by the supporting student text books that do not add HOTS questions exercises in reading text.

Problem is multiplying in the ninth level of SMPN 2 Jorong. The students analitically thinking is considerably low. It can be seen by the students' tryout results of final examination held by the school. Only 35% of the learners get the minimum scores which is targetted by the school.

For solving the serious problem, the researcher tries to make an instruactional material contains questions exercise that may be able to raise students' high order thinking skills. Students' high order thinking skill (HOTS) is a kind of exercises that train learner to think critically and, to solve problems (Brookhart, 2010).

In reading classroom, teachers need qualified reading materials with some questions exercises to fill students' need to train their higher order thinking. This opinion is like what Miskiah (2015) stated. She said that the learning material plays a very essential role in a learning process, it is the representation of teacher's explanation in the classroom. On the other hand, learning material is one of the learning aid to reach the core competency. Surely it also helps teachers in several learning process, helps learners to perform a determined competency completely and integratedly. Furthermore, learning material may be inferred as series of facts, concept, and foundation to make the learning process easier to understand (Abidin, 2012).

This study designs an instructional material about narrative texts with higher order thinking questions exercises that may stimulate student's higher order thinking skills. For Junior High School learners, narrative reading texts are interesting to discuss and they inspire their imagination, critical thinking, and teach good moral values and good models that they may learn from. Relating to that considerations, HOTS questions exercises are suitable to be discussed in learning narrative text, even though they also can be applied in many learning materials.

High Order Thinking Skill (HOTS) is in terms of transfer, critical thinking and, problem solving (Brookhart, 2010). HOTS is the ability to think critically, logically, reflectively, metacognitively, and creatively. Based on this research, HOTS questions mean the questions that can be answered by high thinking order skills which cover 5 (five) key words, they are the questions to generalise, analyse, compare, distinguish, and correlate. The Development of Higher Order Thinking Skill (HOTS) questions exercises is purposefully designed to provide information for teachers to modify the learning material, to help students raising their creativity and to let them think in their own style to solve problems.

The Development of Higher Order Thinking Skill (HOTS) questions exercises may also be trained in narrative reading class activity. Richards and Reinandya (2002) stated that teaching reading process needs 6 (six) levels of thinking process, that is level of knowledge, comprehension, application, analysis, synthesis, and evaluation. These levels should be combined together in the learning process. If the students only learn several levels, the students mind wouldn't grow creatively and think analytically. If the stimulus in the teaching reading process do not cover one of the levels of thinking process it is predicted that the students are not able to inspire the others to solve several problems they face.

Compared with several previous studies of HOTS questions, this research applied HOTS questions based on a story that is favourable to the teenagers and suitable to junior High School students age, so by the questions they are trying hard to find the probable answer that may raise their higher thinking level.

Developing HOTS questions exercises for reading narrative text also supports the government policy on Curriculum 2013. It has 4 (four) aspects to explore that is the aspects of knowledge, skill, affective, and attitude. It also supports the Minister Regulation No 21 year of 2016. The regulation regulates the Content Standards of the Middle and the Elementary Education whereas the students should master the core competency includes spiritual attitude, socially attitude, knowledge, and skill competency.

By this research, hopefully, the design of HOTS questions of narrative text material may improve the students' HOTS level and creates faithful, creative, knowledgeable, and self-supporting students in Indonesia. It is expected also be inspiring writing for the other research about how to create and raise smart Indonesia students.

The research of HOTS questions is initiated by Bloom's Taxonomy, whereas the students' analytical ability should be trained by answering several task that ask them to dig their analytical thinking. HOTS questions are also inserted in National Examination question in recent years, however HOTS questions are rarely applied in classroom activities. This research is supposed to fill the student's need of having such exercises.

Dealing with the limitation of the research problem, we propose two research questions. *First*, how to develop a model of HOTS questions for narrative reading text for IX grade students of SMPN 2 Jorong? *Second*, how is the effectiveness of a model of HOTS questions for narrative reading text in IX grade students of SMPN 2 Jorong?

Based on these research questions, this research objectives are: (1) to develop a model of HOTS questions for narrative reading text for IX grade students of SMPN 2 Jorong; (2) to find out the effectiveness of a model of HOTS questions for narrative reading text for IX grade students of SMPN 2 Jorong.

2. METHODOLOGY

This research is a developmental research. This research is undertaken to design an instructional material of HOTS questions exercise for reading narrative text for the eighth grade students. The study in designing a supplementary material is for the eight learners of SMPN 2 Jorong. According to Borg (2012) the model involves the following framework procedure, namely: needs assessment, reference study, material development, expert validation, tryout, and final product.

2.1. Needs Assessment

Need assessment is planned at the first stage of development to be made in order to get information in terms of topic and kinds of exercises related to the proportion of the supplementary materials. The subjects of the need analysis are the English teacher and the ninth grade students. The English teacher is the one who has

information of the situation in learning and teaching process and students are the ones who use the developed workbook. There are some activities should be carried out in this step;

Firstly, an informal observation is conducted in order to see the application of HOTS questions in learning narrative text in SMPN 2 Jorong. These activities are done by observing the process of teaching English and the material in the classroom and having questions and answer session with the students to get the information related to the application of HOTS questions. This activity is also intended to get information about the learning situation and a relevant workbook for the students.

The next activity in this stage is having an interview session with the English teacher. Interview with the English teacher is intended to gather information about the current textbook and the expected product of the workbook. The interview is hold to get information in terms of the aspects of the course description, course outline, current textbook, and the expected, the same questions for teacher are also asked to the students in form of questionnaire to make sure that HOTS questions are needed by the students. However, the researcher guides and give the examples of HOTS questions in each number of questionnaire when the students answer the questionnaire.

2.2. Material Development

At this stage, the content is developed. As the supplementary material contains exercises, the activities in this stage will deal with them. After the general instructional objectives are formulated from reference study stage previously, the specific instructional objectives are formulated. The specific instructional objectives are elaborated into indicators that are used to develop the workbook. Relating to the task, material should lead the students to be able to answer HOTS questions. Therefore, the task will cover the demand of course outline.

2.3. Expert Validation

The experts who are involved in this stage are the expert in teaching English to Junior High School material, a national examination questions writer, and the second is the expert in education or lecturer. All of the experts validate the content of the workbook through the expert judgment, some consideration related to strength and weaknesses of the instructional material are identified and the content is improved. The criteria of the expert's validation include the language of the text and the questions inserted below the narrative text

2.4. Try-out

At this stage, the supplementary material developed is tested to the students to the students, within the purpose to know whether the supplementary material acceptable and useable. The data from try-out will be analyzed and used to revise the product.

2.5. Revision

The validation is done by the teachers and the expert of English educations. Based on the inputs and evaluation of the experts, after that the product is revised to further improve quality and get a decent product to be applied.

2.6. Final Product

The product is the supplementary instructional material of HOTS questions on narrative text for the ninth grade students in SMPN 2 Jorong. It is in the form of a workbook which consists of practice and project based on the goal and objective required in the course outline.

To make the research is well arranged the researcher applies 4 Instruments development, they are: Observation sheet, scoring sheet of the test result, the test, the test advisability, and normalized Gain formula To determine the effectiveness of developing a model of HOTS questions for narrative reading text.

3. RESULTS

3.1. Need Assesment

Based on the need assesment result, the average score of the HOTS exercice application reaches 4.2 scores with 84% (Table 1). It means that the application of HOTS questions in the English classroom activities is seldom applied in the classroom. In this situation, the research of developing the model of HOTS questions is continued.

Table 1. Classroom observation result of need assesment

No.	HOTS Exercise	Observation		
		1	2	Mean
1	Teacher does not ask to generalise based on the narrative text	3	4	3.5
2	Teacher does not ask to analyse based on the narrative text	4	4	4
3	Teacher does not ask to compare based on the narrative text	5	5	5
4	Teacher does not ask to distinguish based on the narrative text	4	5	4.5
5	Teacher does not ask to correlate based on the narrative text	5	3	4
Total score		21	21	
Mean score		4.2	4.2	4.2
Percentage		84%	84%	

The result of the need assesment is then continued with the result of the questionnaire given to the teacher and the expert to fill on.

The mean score of the teachers, questionnaire is 3,18 and the percentage reaches to 63.6% based on the table of the questionnaire scoring (Table 2). It it means that the result fulfils the condition to continue the research of developing the model of HOTS questions.

The result of the student's questionnaire also shows

that the research needs to continue because the students urgently expect the models of HOTS questions introduced in English text book. It shows that the percentage of the questionnaire is 84%. It The result of the mean score of the questionnaire is 3.98 (4.00) based on the table, it fulfils the condition to continue the research to develop the model of HOTS questions. It means that the model of HOTS questions needs to be developed for the ninth grade students for narrative reading text.

3.2. Reference Study

The result of the reference study consists of material of the narrative reading text, the instructional goal based on syllabus, and the course outline. The material is presented in form of text book.

- Narrative Reading Text

The narrative reading text consist of three fairytales, they are Hansel and Grethel, Malin Kundang, and Rapunzel's story.

- The Instructional Goal

The result instructional goal is shown in Table 2. The material according to the course outline is the text about the fairy tales that have the function to entertain and have several moral values to ponder, text structures, and language features. Based on *the Basic Competence*, the phrase able to compare contain the part of the ability to think high whereas the students are asked to think deeply about how to differentiate of something by comparing.

- Course Outline

The material outline is the main material which is determined by the government. The following table shows the course outline related to the narrative text for the ninth grade students.

3.3. Material Development

Result of material development can be observed in Table 4 and HOTS questions are served in Tabel 5.

Table 2. Basic competence

No.	Basic competence	Descriptions
1	Basic Competence 3,7	The students are supposed to be able to compare the social function, text structure, language feature of some narrative text both written and orally by giving and asking the information related to fairy tales, shortly and simple according to the context.
2	Basic Competence 4,7	The students are supposed to be able To get the meaning contextually related to the social function, text structure, and language feature on the narrative text both written and orally, very short and simple related to fairy tales.

Table 3. The course outline

Learning Material	Activities
Fairy tales that has several moral values to think about, good examples, and various characters, simple past tense sentences, adverbial phrases: a long time ago, once upon a time, in the end, happily ever after, and the topic gives good model and create good characters.	The teacher tells some fairy tales and the students listen to the story, asksome information related to the story and discuss the messages from the story. Doing reflexion based on the process and the learning results.

Table 4. Systematic of the material development

Parts of the book	Explanation
The initial part	
The cover and the book's title	It contains the identity of the instruction material that is, the title, the writer, illustration, grade of the education, and year of publishing.
Foreword	It contains the general description of the instructional material
Content list	It contains the the order of the material together with the subtitle and the page of each of the title and the sub title.
The content part	
Basic Competence	Unit Narrative Text Title Key Words of HOTS Questions
3.7 To compare the social function, text structure, language feature and some narrative text both written and orally by giving and asking the information related to fairy tales, shortly and simple accordiong to the context.	Unit 1 Hansel and Grethel to generalise to analyse
	Unit 2 Malin Kundang to compare to distinguish
4.7 To get the meaning con textually related to the social function, text structure, and language feature on the narrative text both written and orally, very short and simple related to fairy tales.	Unit 3 Rapunzel"s Story to correlate
The closing part	
Summary	It contains the important information about the material.
References	It contain the sources of the references of the book.
Writer's biography	It contains the writer's profile
Back cover	It contains the short description of the material.

Table 5. List of HOTS Questions

Keywords of HOTS Question	The questions Exercise
To generalise	1. What can you learn from the story? 2. From the story we can infer that 3. What is the writer's intention of writing the story above?
To analyse	1. What probably had made hansel feel to his Grethel ? 2. Why do you think Malin Kundang ordered his mother to go away? 3. What probably had made the witch hate Rapunzel ?
To compare	1. Who do you think had the worst character based on the story? 2. What would likely had happened to Rapunzel if she had lived with her parents? 3. What would Malin Kundang likely do if his mother was rich?
To distinguish	1. Can you give an alternative to make Malin Kundang save from the curse? 2. Can you give an alternative to make Malin Kundang save from the curse? 3. Who do you think the most patient character based on the story?
To correlate	1. What would likely happen if the step mother had loved the children? 2. What would likely happen if Malin Kundang had welcome his Mother in front of his wife? 3. How did likely Rapunzel think before she had known her mother?

3.4. Expert Validation

The validation is made by 2 (two) English teachers. According to their examinations, Table 6 shows the list of the revised question.

Table 6. The revised questions

Original question	Revised question
What are the moral value can we get by reading the story?	What are the moral values can we get by reading the story?
What made the witch treated Rapunzel bad?	What probably <u>had</u> made the witch treated Rapunzel bad?
What was Hansel's character compared with Grethel?	What was <u>probably</u> Hansel's character compared with Grethel?
What made Hansel and Grethel love each other?	What <u>probably had</u> made Hansel and Grethel love each other?

Based on the result, it is categorised into advisable because the result belongs to the highest category. It means that the Product is considered valid because the percentage reaches 81-100% very advisable to be implemented.

3.5. Try Out

The percentage of students score is 68.8%. It means that the HOTS questions exercise need to be revised and continued to the second exercise. Table 7 shows the criteria whether the test is continued or not.

Tabel 7. Scoring Sheet of the Test Result

Scale	Mean Score	Qualification	Follow up
4	81-100%	Very good	Implemented
3	71-80%	Good	Implemented
2	51-70%	Fairly good	Revised
1	<50%	Poor	Revised

Based on the scoring sheet, the students' average score is categorized into fairly good and the questions should be revised.

3.6. Revision

Revision is essential for developing every model of learning questions. For making the model better, the researcher revises the part of questions to make the students easier to answer the questions. The result of the students mean score is 84.8% after the questions are revised based on the questions revision. It means that the score is very good and can be answered by almost students with good mark.

3.7. Final Product

The product is the supplementary instructional material of HOTS questions on narrative text for the ninth grade students in SMP N 2 Jorong. It is in the form of a workbook which consists of practice and project based on the goal and objective required in the course outline.

To make the research is well arranged the researcher applies 4 Instruments development, they are: Observation sheet, scoring sheet of the test result, the test, the test advisability, and normalized Gain formula To determine the effectiveness of developing a model of HOTS questions for narrative reading text.

4. DISCUSSION

The mean score of the teachers questionnaire is 3,18 and the percentage reaches to 63.6 % based on the table of the questionnaire scoring, it fulfils the condition to continue the research of developing the model of HOTS questions.

The result of the student's questionnaire also shows that the research needs to continue because the students urgently expect the models of HOTS questions introduced in English text book. As can be seen from the students' score, it is decided that the HOTS questions can be effectively applied for narrative reading text for IX grade students. And the model of HOTS questions plays significant role in teaching narrative reading text for IX grade students of SMPN 2 Jorong. Furthermore, the model of HOTS questions influences the narrative reading text ability for IX grade students of SMPN 2 Jorong. However, the questions should be easy to

undersand and should be suitable to the students' vocabulary and the language of the narrative text should be short with about 400-600 words to help the students easily understand the content.

5. CONCLUSION

The designing of HOTS question is done by the following procedures, they are need assesment, material development, expert validation, try-out, revision, and final prduct. The content of the product consists of three fairy tales, they are Hansel and Grethel, Malin Kundang, and Rapunsel. Each story completed with HOTS questions excercise with the questions to ask the students to generalise, to analyse, to compare, to distinguish, and to correlate. The design of HOTS questions plays significant role in teaching narrative reading text for the eighth grade learners of SMPN 2 Jorong.

The design of HOTS questions will influence the understanding of narrative reading text ability for the

eighth grade students of SMPN 2 Jorong. It is suggested to insert several HOTS questions in some students' reading text, to introduce English teachers to some example of HOTS questions for some reading text, and to do some research about HOTS question related to students learning material.

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