

## REVEALING TEACHERS' BELIEFS OF HIGHER ORDER THINKING SKILLS IN TEACHING READING AT JUNIOR HIGH SCHOOL

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### Abstract

Belief that the teachers have is a basic concept which will shape their works and all activities they do in the classroom practices. The way they plan the lesson, the decisions that they make, and the teaching method that they apply in the classroom are highly influenced by their beliefs. As Higher Order Thinking Skills (HOTS) and literary skill become important needs for the students to have in the 21<sup>st</sup> century learning, the teachers must have sufficient knowledge and understanding about it. This case study is aimed in revealing two Junior High School English teachers' beliefs about Higher Order Thinking Skills (HOTS) mainly in teaching reading. It also reveals how the two teachers apply their beliefs in teaching practices. The findings suggest that teachers' personal beliefs about HOTS vary from how the implementation of HOTS which should be conducted in the classrooms.

**Keywords:** teachers' beliefs, higher order thinking skills, HOTS, teaching reading.

### Introduction

In today's world, especially in foreign language learning, it is necessary for the students to achieve major skills such as reading, writing, speaking and also listening. But, beyond the achievement of those four major skills, the students need to develop what is commonly called with a higher order thinking skills (HOTS). It is a combination of four abilities, namely; the ability to solve the problem, creative thinking, argumentation, and making the decision. Higher Order Thinking skills cannot be separated from thinking skills of Bloom's cognitive domain which have been revised by Anderson and Krathwohl. The thinking skills of cognitive domain are divided into six levels includes knowledge, comprehension, application, analysis, evaluation, and creating [1].

The level of knowledge, comprehension and application are considered as the Lower Order Thinking skills, besides the level of analysis, evaluation and creation are defined as Higher Order Thinking Skills. [3] stated that there are three basic concepts of higher order thinking skills: (1) HOTS as a transfer of one concept to another concept. It means

that the students have to be able to acquire knowledge and skills as well as apply those knowledge and skills to a new situation; (2) HOTS as critical thinking skills, is assumed to be a cognitive process or a mental activity that allows knowledge to be acquired such as the ability understand the problems logically, reflective thinking skills and the ability to argue that focused on taking a decision or doing something; (3) HOTS as the ability of problem solving or the ability of finding a new way, unusual solution and defining the problems creatively.

Indonesian recent curriculum, namely Curriculum 2013, improves its content by enhancing the relevant materials which enrich students 'needs of analytical and critical thinking that appropriate to International Standard. Therefore, the classroom process and assessment are designed to meet the students' needs of improving their HOTS. Moreover, the result of the Program for International Student Assessment (2009) defined that most of the students in Indonesia have low ability in understanding complex information, theory, analysis, problem-solving, the use of tools and also investigating. Indonesian average

scores of PISA are increased from the year of 2009 to 2015, but the result suggested that reading and literacy skills in Indonesia are still lower than OECD countries average. For this reason, started from 2016, the government increases the involvement of HOTS in National Examination Blue Print. In this case, teachers are expected to develop materials that enable the students to have higher order thinking skills, increase their creativity, and build students' autonomy in solving the problem.

Reading comprehension is one of skill that somebody needs to master because it develops one's knowledge and the basic requirements for the people, particularly the students, to achieve their goals in learning and the future. In the area of English language learning, reading becomes the material that requires the teacher to explore more strategies in order to improve the students' reading comprehension. These strategies represent the important role of the teacher to find the appropriate reading comprehension strategies and reach the objectives of teaching reading comprehension. In general, there are two basic responsibilities of a teacher in language teaching; to provide a meaningful language learning environment and to contribute the students in their use of language [2]. Therefore, English language learning in Indonesia is designed to support the students for getting valuable experience in using English text in order to comprehend and apply factual, conceptual, and procedural knowledge through many language activities which one of them is reading. That is the reason why The National Examination, especially English subject, is dominated with reading.

In order to achieve this skill, teachers need to develop many kinds of strategies that are able to support the learning process in order to reach a good outcome. These strategies indicate the crucial role of a teacher to reach the goals of teaching reading comprehension. Generally, there are two basic responsibilities of a teacher in teaching a language in the classroom; to provide a

rich language learning environment and to assist the students in their use of language [3]. Thus, teachers' strategies in conducting language learning process in the classroom are needed in supporting the students to master the basic skills of language learning especially reading.

Teaching English is commonly practiced by different teachers who bring various experiences and knowledge into the classroom. Their behaviors during the learning process will influence students' learning outcomes based on their personal beliefs. [4] affirms that "teachers' beliefs influence their goals, procedures, materials, classroom interaction patterns, their roles, the students, and the schools they work in". By studying the teachers' beliefs, the result will become one of many references that may evaluate teachers' behavior towards the classroom. It will result in the improvement of students' achievements, especially in English language learning.

There are several other researchers who conducted the study about beliefs or beliefss related to language teaching. One of them is [5] who studied Teachers' Belief about Teaching Reading in a Secondary School in Lithuania. The study identified that teachers shared the beliefs that they lacked sufficient knowledge of how to meet the reading needs effectively of their students and these seemed to impact on how they constructed their identities as teachers. The study also recommended providing broader in-service teachers' education programs that expose teachers to a knowledge of reading processes and new reading methodologies for second language learners. In addition, [6] conducted research about Studying Teacher Beliefs in Language Grammar Teaching. This paper made a case for research on teacher beliefs in grammar teaching. It focused on understanding how teachers approach formal instruction and why. It explained much about the nature of grammar teaching as teachers perceive it, information which can be put to effective use in teachers' education and development programs.

Further, [7] also conducted a study about Reading Strategies to Develop Higher Thinking Skills for Reading Comprehension. This study reports an action research project that examined the foreign language reading comprehension of public school eighth graders who experienced a directed reading-thinking approach with the strategies for comprehension and application. The finding showed that the participants thought that the strategies and interactive reading task improved reading comprehension mainly in developing their critical thinking. Teachers play important role in assisting the students' development to achieve their goals of life optimally.

However, teachers' beliefs toward the teaching-learning process give a big influence on the students' learning development and outcomes. Concerning with those issues, this study focuses on English language teachers' beliefs about HOTS and its classroom practices in teaching reading. By revealing and understanding the teachers' beliefs and its practice, it can help especially for the teachers and the policy-makers in general, in developing and evaluating the foreign language education system to be more meaningful for the foreign language learners in Indonesia.

## Methodology

This chapter presents the discussion of research method. This is presented in eight headings. They are design of the study, subject of research, data collection procedures and data analysis technique.

### 1. Design of The study

To understand teachers' beliefs, the researchers conducted qualitative approach in the type of case study. Creswell (2009) states that case study is a strategy of inquiry in which the researchers explores in depth a program, event, activity, process, on one or more individuals. Therefore, the researchers used case study because the researchers needed to know deeper about the particular case regarding to teachers' beliefs about the application of HOTS mainly in teaching

reading. The researchers wanted to know in depth about teachers' beliefs of HOTS and how the teachers conducted HOTS in reading class.

### 2. Subject of Research

Two Junior High School English teachers were selected based on two criteria namely: public school teacher who has certified as professional teacher and has participated in HOTS training and private school teacher who has never participated in HOTS training. The first teacher (RI) is a female English teacher of a public school who has graduated from her Master degree of English Education program. She has been teaching English in Junior High School for fifteen years and has been certified as professional teacher. She has once participated HOTS training in a Teachers Community in her area. The second teacher (GI) is a male English teacher of a private school who has been teaching English in Junior High school for six months and has never participated in the HOTS training before. To ensure the anonymity and confidentiality, the name of the teacher were changed into T1 and T2.

### 3. Data Collection Procedures

The common forms of qualitative data are collected using interviews, observations, events, and questionnaires. A good data source is someone or something that able to reflect on the experience and provide information about the event. For the purpose of the study, the data will be obtained from research participants and will be in the form of interview transcripts, field notes, and documents.

In exploring teachers' beliefs of HOTS in teaching reading, the researchers used open-ended questions to interview the teachers. The data that were obtained from interview was in the form of interview transcripts. After interviewing the teachers, the researchers conducted a classroom observation in order to observe what the teachers do in their classroom practices and how they apply their beliefs of HOTS. Their

strategies of employing HOTS in teaching reading comprehension and also students' responds in the learning process were compared with interview and document analysis result. The documents were the secondary data included: the curriculum, lesson plan and course list which provided information about the course contents and class schedule of teachers involved in this research.

To answer the research question, three data collection technique were employed namely; Interview, Documents Analysis and Classroom Observation. A semi-structured interview was used in this research. It was about questions investigating teachers' beliefs about HOTS in teaching reading which includes teachers' beliefs about the ability in transferring more concepts in a new situation, thinking critically, making conclusion and solving the problems logically. The documents used were the curriculum, lesson plan, and course list which provided information about the course content and class schedule of the two teachers. Those documents were analyzed and then the results were compared to field notes and interview results. In observation stage, the researchers joined the classroom as a non-participant. The researchers stayed in the class to observe: how teachers employ HOTS in teaching reading comprehension and how teachers reflect their beliefs in teaching.

Multiple methods and multiple sources of data triangulation were used to check the trustworthiness of data. This research will use triangulation in the type of multiple sources of data by using participants, events (field notes), and documents to confirm the emerging findings. The researchers also used several methods or techniques such as interview, documents and observation, to collect the data and to make it more valid.

#### 4. Data Analysis Techniques

In analyzing the data, this research used Interactive Model proposed by Miles & Huberman (1994) which consist of three main components: (1) Data Reduction, (2)

Data Display, and (3) Conclusion Drawing and Verification that will be explained as follow:

##### a. Data Reduction

It refers to the process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written up field notes or transcriptions (Miles & Huberman, 1994). In this part, the data, taken from field notes of the observation, semi-structured interview and documents, were selected, organized and reduced to get the appropriate data which enable the researchers to answer the research questions. By doing this kind of activity, the data reduction presented a clear description and made the researchers easier to collect the data later and easy to search if it is needed.

##### b. Data Display

It can be called as data presenting is a method to arrange the data in order to draw the conclusion. This activity was conducted after the data were reduced. Looking at displays helps us to understand what is happening and to conduct some further analysis or caution on that understanding. The researchers classified and broke down the data and information that had been obtained and classified in order to analyze data in specific way. The data findings were displayed in this order: (1) teachers' beliefs of the higher order thinking skills, which were displayed into self-reflection, belief and knowledge about teaching, students and the content in stimulating the ability of transferring more concept in a new situation, thinking and arguing critically, making conclusion, defining the problems logically and solving the problems creatively; (2) the implementation of teachers' beliefs in their classroom practices which will be focused on how the teacher engages the students the ability of transferring more concept in a new situation, thinking and arguing critically, making conclusion, defining and solving the problem logically.

### c. Conclusion Drawing and Verification

The last step, conclusion drawing/verification, it involved stepping back to consider what the analyzed data mean and to assess their implications for the research questions. It was done by making conclusion and suggestion based on the data analysis. The writer will use triangulation to test the validation of the data by checking the field notes of the observation result, interview and documentation. The triangulation will help to validate the findings from all the instruments to inform one phenomenon. Hence, the researchers will find the true information relating to the phenomenon and the result of the research will be more credible.

## Findings and Discussion

### 1. Findings

This part elaborates two major parts namely: (1) Teachers' beliefs of HOTS in teaching reading which were viewed from several aspects namely: learning objectives, classroom techniques, teachers' role, students' role and assessment, (2) How the teachers applied their beliefs in classroom practices.

#### a. Teachers' beliefs of HOTS in teaching reading

The researchers elaborated the first findings related to teachers' beliefs about HOTS in teaching reading into several categories. They are the ability of transferring more concepts in a new situation, thinking critically, making conclusion and solving the problem logically. The followings categories were the findings of teachers' beliefs about HOTS in teaching reading.

*The ability of transferring more concepts in a new situation.* Generally, the participants assumed that the ability of transferring more concepts in a new situation is an essential skill that should be developed in teaching learning process. Teachers had efforts to stimulate students' ability of transferring

more concepts in a new situation by employing various teaching strategies to meet their learning objectives. In their opinion, it was important that the students should be able to apply their previous experiences into the new situations they met at the recent time. Their assumptions were clearly stated in their learning objectives of the lesson plan.

A meaningful learning will be achieved if the students are able to bring what they had known before into the recent knowledge that they get in the classroom. In the end of the learning process, they will be able to bring them into a real life. (Teacher 1)

... one of my learning objectives is that the students have abilities in applying what they have learned into their daily life. In teaching reading, it is important for the teachers to guide their students to use their previous knowledge to understand the reading text. But beyond those abilities, mastering vocabularies is the most important thing that the students have to do first before they are able to apply what they have learned at school into a new situation. (Teacher 2)

The teachers also believed that developing students' knowledge can be achieved through experiences. In accomplishing this goal, the students should become the center of teaching leaning process. Students' centered classroom activities had to be developed during the lesson. Teacher played important role as the facilitator of classroom activities.

The students are the center of the classroom. Teacher is the facilitator of the lesson. Guiding the students to be actively involved in classroom activities. (Teacher 1)

Teacher helps the students and gives them opportunity to ask questions during the lesson. Let them to be more experienced by their own way. (Teacher 2)

It can be concluded that teachers believed that HOTS, in the definition of the ability of transferring more concepts in a new situation was important to be conducted in teaching reading. As what

stated in their learning objectives, teachers had efforts to conduct meaningful learning situation for the students through experiences.

*Critical Thinking.* The two teachers had various beliefs about critical thinking. The first teacher (Teacher 1) assumed that thinking critically has the same meaning with curiosity. What meant by students' critical thinking is how the students express their curiosity about the materials delivered in their classroom. In reading comprehension class, the state of critical thinking would arise when the students had intention to know more about what they read. Questioning critically about what they learned can be defined as students' critical thinking.

In my opinion, critical thinking is the realization of curiosity. When my students want to know more and more about what they have learned and want to explore it deeper, it means that my students start to think critically. (Teacher 1)

The second teacher (Teacher 2) believed that students' critical thinking arose when the students gave feedback on what they had learned. Teacher should stimulate students' critical thinking by asking several questions related to the materials that they learned. When the students gave feedback to the questions that the teacher had given before and led them to think more questions, it meant that the students started to think critically.

...the students had achieved the critical thinking even not all of them. They gave positive feedback when I asked questions. Sometimes, they asked me something related to the materials. (Teacher 2)

However, the teachers had clearly defined their beliefs about critical thinking. Students' questions related to the materials were considered to be the evidence of critical thinking. In general, they believed that some of their students had practiced critical thinking during the reading class.

Bringing the goal of critical thinking into the classroom, teachers had done some efforts to stimulate their students to think critically. There was a good development brought by their efforts but it was not optimal because of the various level of students' abilities in comprehending the text.

*Making Conclusion.* In general, teachers believed that the ability of making conclusion was important to be conducted in reading comprehension classroom. Making conclusion in reading comprehension is the act of summing up the information that the students gained from the text which they have read. They believed that almost of the students had the ability of making conclusion as teacher had a certain time allotment for teaching reading strategy of drawing conclusion.

...as the national exam questions are dominated with reading text, it is important for us, the English teachers to teach the students about drawing conclusion. We give the students plenty opportunities to practice their skills in drawing conclusion. (Teacher 1)

...giving example of how to make conclusion to the students will provide them enough time in practicing it. Appropriate assessment should be made to meet the goal of the lesson. (Teacher 2)

It can be concluded that teachers had a strong belief about students' ability of making conclusion in reading comprehension classroom. They used certain strategies to achieve their goals in enhancing students' ability in making conclusion.

*Defining and Solving Problem Creatively.* Generally, the two teachers had the same belief of ability to define and solve the problems in reading comprehension classroom. In their opinion, vocabulary mastery was a major problem for the foreign language students to define the problem in learning. This would bring the students into difficulties in solving the problems as well.

They believed that the students would easily define the problems if they have enough vocabulary mastery. By having the ability of defining the problem, they would be able to solve the problems easily.

Defining the problem is considered as the major problem for the students in reading class. They often meet difficulties in understanding the text because English is foreign language which have many vocabularies that they have to master if they want to comprehend the text. (Teacher 1)

...most of the students have difficulties in understanding the text. Defining the problems can't be easily achieved by the students without mastering more vocabulary. The ability of solving the problem will be achieved by the students who have mastered enough vocabulary. (Teacher 2)

In conclusion, they had tried many strategies in stimulating the students to define and solve the problem in reading comprehension classroom. The major problem to achieve the learning goal of problem-solving was the vocabulary mastery. The students had been provided with real-life problems in explanations, example and exercises Teachers also had provided enough time for understanding the problems, defining the goal, and solving every problem in a single session. Limited vocabulary mastery made the students facing difficulties in understanding the state of the problem.

#### b. How Teachers Applied Their Beliefs in Their Classroom Practices.

Based on the classroom observation carried out by the researchers, the findings showed that all two teachers' beliefs of HOTS, which were categorized into four aspects namely: the ability of transferring more concepts into a new situation, critical thinking, making conclusion and problem solving in teaching reading, more or less influenced their teaching practices in the classroom. Those beliefs influenced their classroom practices in many aspects such as: learning objectives, classroom

techniques, teachers' role, students' role and assessment. What the teachers believed and the knowledge they had about HOTS brought them to decide the goals that they would achieve in their lesson. HOTS involvement in their lesson plan and textbook that they used to teach reading comprehension had proved that their beliefs about HOTS were clearly drawn in their learning objectives.

Their beliefs also influenced them of choosing appropriate teaching strategies to achieve HOTS in their reading class. As the demand of the recent curriculum evolved HOTS in its content, the teachers had great efforts to bring the students met their needs of 21<sup>st</sup> century learning. Unfortunately, there were some difficulties faced by teachers in delivering their teaching strategies which developed HOTS in its content. Students centered classroom which should be the core of teaching strategies in developing HOTS had not been very well conducted during the lesson. Teachers still became the center of the classroom. The students also had difficulties to be actively joined the classroom because of their lack of vocabulary mastery. What the teacher tried to stimulate were not very well understood by the students. This condition brought the class into passive atmosphere and made the teacher became the center of the classroom in delivering the materials.

## 2. Discussion

After collecting and analyzing the data, the researcher found that there is inconsistency between teachers' beliefs and their teaching practices. Those inconsistencies were reflected in their classroom teaching practices. What teachers had planned for their reading classroom was not well delivered in their classroom practices. There were some learning objectives that were missed when they were practiced in the classroom. Basically, the teachers had prepared the teaching learning process by making a lesson plan which contained HOTS in its content. But, when the teaching learning process started, both

of teachers and the students faced difficulties in conducting as what they had planned before. Students' lack of vocabulary mastery raised difficulties for them in following the classroom instruction delivered by the teachers. Some of the suggested activities could not be well conducted because the students were not able to follow the instructions.

The teachers, with their beliefs and limited knowledge of HOTS, tried to fulfill the students' needs of higher thinking skills in their classroom practices. Thus, they also tried to find appropriate teaching strategies to meet their goals of the lesson. As what the teachers said, they tried hard to develop HOTS in their classroom practices but students' vocabulary mastery became the main problem of conducting their classroom techniques. At last, teachers were only able to design the assessment that employed HOTS in it.

This study also showed that teachers still had limited knowledge related to HOTS developed in teaching reading. More HOTS training were needed for teachers so that they were able to create appropriate teaching learning process for the classroom with those kinds of the problems existed. By having more knowledge about HOTS in teaching reading comprehension, the teachers will have more references in shaping their beliefs. Those will end in better classroom practices with HOTS evolved in it.

### Conclusion

From this study, the researchers concluded that teachers' beliefs brought a great influence in shaping teachers' work in their classroom practices. Teachers' beliefs about HOTS in teaching reading which were discussed in this study were related to several aspects such as: learning objectives, classroom techniques, teachers' role, students' role and assessment. All participants of this study assumed that their beliefs combined with their previous knowledge would greatly affect their works in classroom practices.

Reflection of teachers' beliefs in their classroom practices showed that teachers, based on their beliefs, planned the teaching materials by making goals and strategies which led to the evolvement of HOTS in teaching reading. Their role as facilitators, initiators and motivators in the classroom and the students' role as center of the learning process were depend on the context of classroom activities. The inconsistencies of their beliefs and classroom practices might be influenced by several factors outsidess teachers' beliefs.

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