

Thinking critically while storytelling: Improving children's HOTS and English oral competence

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ABSTRACT

Although studies on the development of higher order thinking skills (HOTS) as part of Bloom's revised taxonomy have grown significantly among adult learners, little is known about its use for teaching English to young learners. In the Indonesian context, HOTS is mandated by the scientific-based 2013 national curriculum. This study investigates the development of HOTS strategies and possible challenges through storytelling among seventh grade students to improve their speaking ability. This Classroom Action Research (CAR) obtains data from classroom observations, interviews with the teachers and students, and analysis of lesson plans. The findings reveal that, in its simple form, HOTS in storytelling was developed in young English learners through open-ended question, a strategy which enables students to practice speaking through giving opinion, comment, and imagination while analyzing and evaluating the story. However, due to their limited language competence and unfamiliarity with the story context, students still find difficulties in creating their own stories, the highest level of educational objective. The study finally comes up with ways to engage students in storytelling while developing their HOTS.

Keywords: English young learners; Higher Order Thinking Skill (HOTS); storytelling; revised Bloom's taxonomy

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INTRODUCTION

These days, higher order thinking skills (HOTS) has become a major theme in education, particularly among adult learners as it is considered an important medium to survive the information-loaded global world (Vijayaratham, 2012; Zohar & Cohen, 2016; Vainikainen, Hautamaki, Sulainen, & Kupiainen, 2015; Lee et al., 2016; Lee, 2014; Yen & Halili, 2015; Roets & Maritz, 2017). In all learning activities, including that of English language, students are encouraged to use their critical thinking skills to find solutions to their life

problems, so that teachers are demanded to facilitate them by providing higher order thinking-based activities. As such, many attempts have been made to include the use of HOTS in all school subjects (Resnick, 1987), and due to its increasing demand and importance, this theme has, in the last decade, started to be integrated in English language learning (Osman & Kassim, 2015; Li, 2016).

Despite its perceived benefits, however, the inclusion of HOTS among young learners is still rarely investigated as it needs much effort, particularly from

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teachers (Mathews & Lowe, 2011; Leon, 2015). Most HOTS activities are intended for adult learners to develop their reading and writing skills (Afshar & Rahimi, 2016) and, consequently, its use to improve children's speaking ability is understudy. In fact, as Collins (1991) argues, the incorporation of critical thinking skill into language arts will both improve learners' writing and speaking skills. To achieve this, teachers of young learners should make use of all methods and materials, including the use of storytelling. For children and young learners, story or narrative is the backbone of their life by which they dream, remember, anticipate, hope, despair, believe, doubt, plan, criticize, construct, learn, hope and love (Hardy, 1978). He, furthermore, explains that stories can be a process of constructing mind or critical thinking in making meanings which pervades all aspects of learning which is required in the classroom.

In Indonesian context, many studies have been conducted on the use of storytelling among young English learners (Setyarini, Damayanti, & Harto, 2008; Damayanti, 2017) including the inclusion of local stories (Muslim, Nafisah, & Damayanti, 2009). As a joyful learning strategy, storytelling can be an alternative to be implemented in the classroom so that learners can have a fun learning experience. For instance, Setyarini et al. (2008) investigates how child-friendly storytelling can improve the speaking ability of students. She found that the improvement of the students' speaking ability stems from their eagerness to give opinions, comments, and arguments in the discussion. This finding is in line with Yen and Halili (2015) that storytelling can stimulate students' critical thinking development through arguing and responding to the teachers' critical questions such as *why*, *how*, *how about*, and *what if*.

These studies, however, do not specifically address how storytelling can develop HOTS offered by Bloom's revised taxonomy (Anderson & Krathwohl, 2000). The current study, therefore, examines how storytelling can further be used to instigate HOTS activities among young English learners through oral skills as well as some challenges teachers may find in implementing this critical thinking skill within classroom action research.

High Order Thinking Skill (HOTS) as educational objectives

Nowadays, the development of HOTS in education is considered more necessary. The main purpose of education in the 21st century is to provide students with the ability to think critically, to know what they do and justify it based on their well-informed decision making (Zohar & Cohen, 2016; Gardner, 1999; Armstrong, 2009). Consequently, it is not surprising that most teachers have positive attitudes towards the use of HOTS in their teaching practices. They have made various efforts to apply HOTS activities in their classrooms. To support and develop students' critical thinking, teachers at higher education should be able to provide students with classroom environments and

practices which can support both students' sense of control and disposition for critical thinking (Stupnisky, Renaud, Daniels, Haynes, & Perry, 2008).

HOTS relates to educational objectives. As an effort to improve the results of learning process, learning objectives have undergone some significant changes. To have a more effective learning, Bloom's taxonomy of learning objectives developed in 1956 includes six objectives; knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, 1984). The six categories are a continuum of thinking skills ranging from the lowest (knowledge) commonly called Low Order Thinking Skill (LOTS) into the highest one (evaluation) called High Order Thinking Skill (HOTS). Although they are in the form of nouns, each of these objectives has some operational and identifiable words that teachers and other educators can use when assessing their students' learning achievement.

Many scholars, however, consider these educational objectives less operational and empowering. It is believed that noun is more rigid and less dynamic, making it hard to be classified in assessment activities. To make it more identifiable, Anderson and Krathwohl (2000) revised these educational objectives into six different objectives which are considered essentially similar but more easily identifiable. The objectives include six more operational verbs such as remembering, understanding, applying, analyzing, evaluating and creating. Compared to Bloom's taxonomy, these categories are considered more operational and easily identifiable. Besides, the revised taxonomy also includes 'creating' which is higher than just evaluating. It is the highest thinking skill that not all learners, particularly children, can perform. Like the original version, this revised one also ranges thinking activities from low order thinking skill (LOTS) into high order thinking skills (HOTS).

Considered important in improving the educational objectives, adults like teachers and teacher educators, should have good understanding about the HOTS development of their children or students. As educators, we have to be able to identify HOTS elements in our students' learning activities. Brookhart (2010) mentions three main characteristics of HOTS; transfer, critical thinking and problem solving. For her, learning should be more than merely remembering or understanding but transferring new knowledge into other new environment, which is the cognitive dimension of the revised Bloom's taxonomy. She also argues that assessing students' critical thinking can increase their academic achievement. Students should be directed to develop their critical thinking and curiosity for learning new information. Finally, the ultimate skill that students should have is their ability to identify problems which appear in their life and set a solution to these problem. So, problem solving skill is the highest criteria of HOTS in learning.

In practice, HOTS can be developed through students' learning activities. Teachers can involve their

students in various critical thinking activities which include observation, comparison, explanation, and prediction (Rodd, 1999, p. 351). As part of HOTS development scheme, students should be encouraged to take part in decision making process. These activities are expected to be able to nurture in students the ability to question the authority or to avoid absolutism (Mathews & Lowe, 2011). Teachers should involve students in classroom activities which enable them to develop their sense of scepticism to each information students receive from their environment.

HOTS can be both individual and social activities. Including verbal and quantitative reasoning, critical thinking can be developed both individually and in groups (Vainikainen et al., 2015). To nurture their critical thinking skills, teachers can involve students in these two types of activities. However, considering the importance of peers among teenagers, this skill can be developed more easily within social group. Studies show that HOTS is developed more in social or group than individual activities like group projects or other collective problem solving activities. Group problem solving is considered an effective way to develop higher order thinking skills among students (Vijayarathnam, 2012). To support social activities, Anderson, Howe, Soden, Halliday, and Low (2001) encourage the use of peers critiques of class works and other components which include direct instruction, modelling, coaching. In relation to the massive influence of technology in the life of today's young learners, cooperation in mobile learning game can be a useful media for developing critical thinking skills (Lee et al., 2016).

HOTS is applicable across disciplines. Although some studies show that most HOTS is applied in science and engineering subjects at higher education since university students are considered to have owned necessary skills to develop their critical thinking skills, others indicate that it can also be developed in non-science majors like English language learning. Critical thinking skill can even be taught in language teaching to non-language-majoring students (Minakova, 2014). Moreover, components of strategic thinking skills such as questioning, collecting information and investigating, can be used to improve language learning, especially the task-based approach (Osman & Kassim, 2015) as this study focuses.

HOTS in English language learning through storytelling

Although its implementation is not as old as in education, the use of HOTS in language learning has been firm and significant. Nevertheless, given the four language skills, most studies on HOTS focus on literacy, particularly writing skill (Osman & Kassim, 2015; Roets & Maritz, 2017; Minakova, 2014). It is believed that literacy, particularly writing, is the barometer of human thought and mind which necessarily needs critical thinking skill. This notion is also considered more acceptable among adult learners who rely most on reading and writing as the parameter

of their thinking activities. The focus on literacy (reading and writing) is not always relevant with English young learners who commonly rely on verbal acquisition of language as their main learning activity.

Unlike in adults, oral cycle plays a significant role in the learning process of young English learners. Among young children, language strongly relates to verbal, linguistic, and logic, thus language learning can serve as a good place for the development of critical thinking skills among learners. Borrowing one element of Bandura's (1997) self-efficacy, verbal persuasion is an important aspect of critical thinking strategies. Positive affect during task performance will enhance someone's efficacy (Mathews & Lowe, 2011), including English language young learners who rely on oral skills (listening and speaking). In a more specific context, Mali (2015) found that positive motivation from friends and teachers is a major attribution to students' speaking enhancement (p. 32) which may also be applicable among Indonesian students.

Of some language learning method for children, storytelling is the most favorite. It is the backbone activities by which children live and dream their life (Hardy, 1978). Considering the necessary role that storytelling has in children's language learning process, it can also be used to develop their critical thinking skills (Thomas & Thorne, 2009). This notion is supported by Douglas and Gomes (1997) who claim that stories may promote discussion, generate students' imagination and grow their involvement in their classroom activities. Storytelling can also become a means to improve students' oral communication skill because oral discussion of story content enables relation to their own life experiences by using their higher order thinking skill (Thomas & Thorne, 2009). Another claim on the strength of storytelling in promoting HOTS was also made by Weels (1986) who states that storytelling enables young learner to assimilate new ideas and help them understand new concepts linked to their lives more easily.

Moreover, story or narrative also relates to cultural understanding. This competence is an important part of critical thinking skill young learners should necessarily acquire for their successful future engagement in the global world. Again, Douglas and Gomes (1997) add that stories are also effective in increasing tolerance and understanding of people from other cultures. Through the medium of story, the listener can safely explore what all human beings have in common as well as how they differ from each other. Stories have the power to gently remove the children from their usual reality and for a time immerse the listeners in a different time and place. Through story imagination, each child can venture beyond the boundaries of individual experience and know what it is to share in another person's travels or feel another's sorrow or celebration. Therefore, integrating HOTS in storytelling should necessarily be applied among EFL young learners, particularly to improve their speaking ability which is the main skill required in storytelling activities.

The implementation of HOTS is influenced by age and psychological maturation. Most HOTS practices are implemented for adult learners in higher education (Stupnisky et al., 2008; Mathews & Lowe, 2011; Osman & Kassim, 2015). This choice seems to make sense considering the ability of adult learners to be engaged in HOTS-based activities such as questioning the authority, being skeptical and believing in relativity. However, as previously mentioned, these activities can, to certain extent, also be applied in learning activities among children, including young English language learners. So far, no studies specifically address how critical thinking skills relate to speaking ability. One study only investigates the relationship between reflective thinking and speaking ability among EFL learners (Afshar & Rahimi, 2016), not their critical thinking. As this study focuses, it will be more interesting to investigate how HOTS relates to speaking ability and how social support influences the attrition of speaking skill of year seven students who are the participants of this study.

Bloom's revised taxonomy, HOTS, and children's language learning

Considering the nature of children's thinking which is relatively less complicated than that of adults, the implementation of critical thinking in language learning, especially among young learners of English, may become more challenging. Roets and Maritz (2017) argue that mastery of HOTS is not easy to achieve, even for adult learners like nursing master students, as evidenced from their lack of logical order of thoughts, and let alone for children. Therefore, the development of HOTS may take time and need teachers' supports. Evidences show that although HOTS is encouraged in many educational policy documents, like the National Curriculum in the case of Indonesia (Ministry of Education and Culture, 2013), most classroom practices are still based on pedagogy of knowledge transmission focusing on low-order cognitive levels (Zohar & Cohen, 2016). As a common practice, especially among Asians, all learners, both adults and children are used to being taught to use low-order cognitive levels. For instance, students are often exposed to answer who, what, and when questions instead of why, what if, and how if. They are used to retrieving information without having the ability to apply or synthesize the information they receive from their environment. If they can perform these skills, reaching the stage of evaluating some phenomenon or creating a new object or idea, which is the highest continuum of HOTS, is even harder.

The development of HOTS among young English learners becomes more complex when it is handled by less competent teachers in both pedagogical and academic skills. Our observation as teacher educators who are involved in many teachers' trainings show that not all teachers have good understanding of HOTS that they cannot develop this skill in their students. In his study, Li (2016) found that most teachers in China hold insufficient understanding about the concept of HOTS.

Despite their positive attitudes towards its integration in language learning through reading, science and math, they do not believe it should be specifically taught in English classrooms. He furthermore argues that teachers should have training in developing content and pedagogical knowledge of teaching thinking skills.

To help develop students' HOTS, teachers should also be familiar with students' learning styles. Along with the issue of inclusive education, they should, in fact, know the learning style of each student. Yee, Yunos, Othman, Hassan, Tee, and Mohamad (2015) state that identifying students' learning styles is important in developing a more effective and conducive learning environment for learning HOTS (p. 143). Following Gardner's (1999) and Armstrong's (2009) multiple intelligences, some students may be more verbal and linguistic, some others are more spatial and physical, and the others tend to be more mathematical and logical. To anticipate these different learning styles, teachers should not only focus on cognitive aspect since high cognitive density does not guarantee the promotion of HOTS as it is more related to social cognition (Lee, 2014). Teachers should also focus on developing the critical thinking skills of their English learners in social interaction with their peers.

Considering these challenges in implementing HOTS in students' oral competence, it is reasonable that the development of critical thinking skills has a long process. As Zohar and Cohen (2016) argue, the development of HOTS may take time and faces challenges. Although HOTS is encouraged in many educational policy documents, most classroom practices are still based on pedagogy of knowledge transmission focusing on low-order cognitive levels. Therefore, this study examines some possible challenges that English teachers may encounter in developing HOTS through storytelling in their junior high school students.

METHODS

The study used two cycles of Classroom Action Research (CAR) (McTaggart, 1992) which included year eight students in two different junior high schools in northern Bandung of Indonesia for one semester in 2015. Data were collected through classroom observations, interview with the teachers and students, as well as analysis of teachers' written lesson plans for one semester in 2015. During the first month of the study, the teaching practices in two classrooms (each classroom has 30 students) Indonesia, were observed to identify HOTS practices whereas two teachers and eight students from the two schools were also interviewed to identify their understanding of HOTS. Two classes and two teachers were purposefully selected to provide more comprehensive account of teacher's teaching practices.

Following a guide, observations focused on identifying HOTS practices in the classroom and students' attitudes during the storytelling activity. Meanwhile, data from interviews with the students were aimed at investigating the students' responses and

comments on HOTS in storytelling to improve the students' speaking ability, whereas teachers' lesson plans were examined to identify how they have included Bloom's revised taxonomy in their teaching practices. Results were triangulated to answer research questions.

In the second month of the study, having identified the teachers' practices in storytelling as well as teacher's and students' understanding of HOTS, the researchers involved the participating teachers in a short training on storytelling strategies and how to develop a lesson plan which focus on deep learning, using HOTS as the main goals. The teachers were also asked to provide stories of Indonesian legends and folktales before they implemented this new strategy for the remaining semester.

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Finally, due to ethical requirements, approval was sought from school two principals, teachers, students and their parents. Prior to data collection process, an explanatory statement was provided to all participants describing what they were supposed to do during the observation, interview and document analysis. Participation in the study was voluntary and each participant was permitted to withdraw anytime during the data collection process.

FINDINGS AND DISCUSSION

The results of this study is divided into three sections: Bloom's revised taxonomy elements identified during storytelling activity in the first cycle of CAR, HOTS activities identified during the second cycle, and challenges teachers experienced in developing students' HOTS elements and some possible solutions offered.

Thinking skill activities in the first cycle of storytelling

Data obtained from observation, interview and document analysis during the first cycle show that students' thinking skills were limited to remembering and understanding the facts from the story which are only of knowledge and comprehension levels (Bloom, 1984). Students have not reached applying, analyzing and higher level. This means that they still have lower order thinking skills (LOTS) as they only remembered, understood, and mentioned aspects of stories they had learned during the learning process. For example, when the teacher asked some possible meanings from the story title, the students only provided one single exact answer without trying to find out other alternative meanings. During the discussion, the students were only

able to remember the name of the characters of the story and some important events in the story without providing logical justification to their answers.

This LOTS activity also influences the learning process. Students tend to show low engagement when they are only individually exposed to knowledge and comprehension questions. Observations show how students in both classrooms were not really engaged in the learning process due to teacher's inability to involve them in more challenging activities. They did not really enjoy listening and then discussing the story told to them due to teachers' ways of organizing learning activities. The story was not really familiar to the students so that they ignored the discussion and show psychological boredom when taking part in the classroom activity. These practices do not represent the philosophy of the 2013 National Curriculum which emphasizes learning autonomy, local content, and group project. Besides, HOTS should also be developed through social activities like group project (Vainikainen et al., 2015; Vijayaratnam, 2012).

Some reasons underlie the minimum implementation of HOTS activities in the first cycle. First, the teacher did not give some *open-ended* questions such as *how*, *why*, *why if*, and *how if* which lead to their use of HOTS. Thus, the teachers did not stimulate students' higher order thinking when reading the short story by inviting them to think more critically based on evidences in the story. During this first cycle, the teachers simply asked the characters in the story, the plot and the conflicts occurred, for example, "*who were they in the story? when and where did the farmer go?*" Such these remembering and understanding questions belong to lower order thinking skills as they do not require students to think critically by providing their opinions, reasons (agreement and disagreement) and sharing their experience relevant to the story.

Teachers seemed to have problems in implementing HOTS within storytelling. Interviews with teachers show several problems they face in running HOTS activities. The first problem relates to teachers' lacking the knowledge of story and storytelling process. The two participating teachers are not used to reading stories loudly, let alone writing their own stories. One teacher said that "we never develop our own story...so far we only adapt the story available in the textbook". Copying stories from textbooks does not provide teachers with necessary storytelling competence which can attract the students' minds and stimulate their critical thinking skills.

In addition to low reading habit, the teachers also highlight their insufficient linguistic knowledge which include grammar and reading skills. Due to this low grammar skill, they cannot creatively improvise the stories taken from the textbooks. One teacher said, "I just know that story always use simple present tense and never think that other tenses can be used in this context". Such statement indirectly indicates that the teacher did not have sufficient ability to compose their own stories, particularly those which relate to the

students' cultural backgrounds. Insufficient reading skill also inhibits their ability to vary the questions given to the students by involving them in HOTS activities.

Teacher's inability to implement HOTS in storytelling activity is also amplified by students. During the interviews, many students said that they only understood a little about the stories their teachers told them. The two teachers also could not internalize the storytelling process into their hearts and minds so that they could not engage their students. Most students did not understand what the story was about and found difficulties in understanding the content of the story, let alone associating the stories into their real life conditions. One student states,

... the story is hard to understand. I found many new words, new contexts I don't know. Some features and objects I also never met before... I am very confused, really confused.

Similarly, document analysis also supports this absence of HOTS activities. Lesson plans of storytelling written by the teachers show how teachers still use LOTS questions. Students were only asked to tell the names of the characters in their story and its plot without further investigating the content of the story using HOTS activities. These abovementioned findings show how the two teachers have just implemented the first two LOTS (remembering and understanding) and have not moved to the remaining elements of the educational objectives (Bloom, 1984; Anderson & Krathwohl, 2000) which include applying, evaluating, analyzing and creating.

HOTS activities in the second cycle of storytelling

Having evaluated the learning process in the first cycle, the researcher involved the two teachers in a training of high order thinking skills. After the reflection phase, they are exposed to storytelling techniques and various exercises of Bloom's revised taxonomy of educational objectives (Anderson & Krathwohl, 2000) which include analyzing, evaluating, creating. The participating teachers were trained to select their own stories, from the textbooks or other sources, relevant to their students' cultural backgrounds. As suggested by Muslim et al. (2009), the use of local stories can both improve students' comprehension and enable them to create their own stories. This ability of evaluating the stories told to them and creating their own stories based on their cultural background are two levels of higher order thinking skills (HOTS) that students need to acquire to survive the information-loaded era.

The result of classroom observation in the second cycle revealed some significant changes. During the learning process, the two teachers involved students in some HOTS activities with relatively high engagement. This change is caused by several reasons. First, the teacher chose an interesting and child-friendly story from their cultural background so the students were familiar with the story. Second, the teacher presented the story interestingly by using the visual media

(pictures and videos) accompanied by relevant physical gestures to help the students imagine the story. Third, to improve students' HOTS, the teachers provided students with some open-ended questions which do not require exact answers. Teachers' questions include *why*, *what will*, *how about*, *how if*, and *if you were* as seen from this extract,

Why did the farmer kill the hen?
If you were a farmer, what would you do with the hen?
How if the hen ran away and did not come back?
What will happen if ... ?

Confirming Rodd (1999), these questions enable the teachers to exploit their students' HOTS by comparing the story with that of their life as well as asking the students to predict what will possible happen to the main character in the story (the farmer and hen). These open-ended questions allow students to exercise questioning the authority and avoid absolutism (Mathews & Lowe, 2011). Meanwhile, students' ability to come up with some possible 'solutions to the problems' offered through these questions show their ability to 'transfer' problem into another context and offer a solution (Brookhart, 2010, p. 3) based on the group discussion within their social cohort (Vijayaratnam, 2012).

Similarly, observations show some identifiable evidences of HOTS development among students. For instance, during the storytelling process in the classroom, most students seemed to be curious about the story. In addition to answering LOTS open-questions about *The farmer and hen* in pairs or small groups, they kept discussing about the story with their friends. During the classroom discussion, some students even had the courage to go against their friends' comments when discussing some open-ended questions in the story. Supporting what Douglas and Gomes (1997) have claimed, stories may promote discussion, generate students' imagination and grow their involvement in their classroom activities. The teacher-led discussion during the storytelling process enables the participating young learners to assimilate new ideas from the story and link it to their own lived experience.

Furthermore, this gradual shift from LOTS into HOTS in the second cycle is also confirmed by teachers. Based on the interviews, the two teachers acknowledged that their students show higher enthusiasm and engagement when listening to stories derived from their cultural backgrounds. Students found it easy to relate the stories to their real life background when explaining the stories or answering the teacher's questions about the stories. One teacher said, "the story adapted from the daily context helps them to get better understanding. They may link the content of the story with their real life." Confirming the previous study (Muslim et al., 2009), cultural familiarity with the content of the story improves students' comprehension, despite their limited English speaking ability.

Besides cultural familiarity, learning media also increases engagement. The teachers believe that the

visual media used during the story telling such as pictures and videos, physical gestures, as well as open-ended questions helped them to discuss and tell the story more interestingly. With the help of these media, students can actively be engaged in classroom activities. One teacher contended,

I use pictures and video to help the students visualize the story, then I also use gestures to make the storytelling more interesting. When the story has been delivered, I ask them some open-ended questions to stimulate them to think and involve in the classroom activity.

That students were more actively engaged in the second cycle is also confirmed. Interviews with sample students show that they are more interested in listening to and discussing the story with their teachers. With teachers' use of pictures and other media, many students find it easier to understand the story which is also relevant with their cultural background. One student said,

I feel easier to understand the story presented by the teacher because the story is like our everyday life and the teacher also uses pictures to help us imagine the story.

These findings show that peers and learning media seem to serve as a positive support for the thinking development of students who are technology savvy (Lee et al., 2016). In addition to the benefits of media use (pictures/video) which supports not only students' verbal and linguistic but also spatial and physical styles of learning (Gardner, 1999; Armstrong, 2009), peers' discussion or critique encourages students and therefore improves their engagement and involvement in the storytelling process (Anderson et al., 2001; Yee et al., 2015). Besides, positive motivation from friends and teachers is a major attribution to students' speaking enhancement (Mali, 2015). As young learners, the participating students feel more challenged, motivated, enthusiastic and encouraged to express their feelings and imagination about the story and do not feel embarrassed of making mistakes which is a common phenomenon among English learners.

Moreover, the implementation of HOTS activities is also confirmed by document analysis. The participating teachers included HOTS activities such as 'evaluating' and 'creating' in their lesson plans. The learning outcomes mentioned in the lesson plans include students' ability to evaluate whether the story of 'the farmer and the hen' is good or bad, interesting or boring, and to extract relevant learned lessons. However, due to their limited vocabulary and language competence, students still find difficulties in creating their own interesting stories based on what they have heard from their teachers. This shows that they have not developed the ability to create something new out of the existing one, which is the highest level of HOTS (Anderson & Krathwohl, 2000).

In detail, open-ended questions relatively influence the students to develop their higher order thinking in

speaking. It was understandable because through open-ended questions, students are provoked to elaborate the answer and discuss it with the teacher (Resnick, 1987). Amplifying the philosophy of learner-centered in the 2013 curriculum, students get the autonomy to put their idea freely without getting restricted in terms of the correct answer to what questions (Moon & Nikolo, 2000).

Some challenges identified

Despite the relatively successful implementation of HOTS among the participating students, some challenges were identified. First, due to their limited linguistic knowledge, the two teachers found some difficulties in developing open-ended questions connected with the story given in the classroom. As classroom observation reveals, they still find it hard to develop questions which can stimulate students to evaluate the stories, synthesize some important issues as well as create stories of their own. To overcome the difficulties, the researchers provided teachers with some strategies and techniques for developing open-ended questions, which offered students an opportunity to develop their higher order thinking skills through giving the answers, opinion, and even arguments to the questions based on their own experience and prior knowledge related to the story they were learning in the classroom.

In fact, the implementation of HOTS activities in speaking skill is relatively novel. In terms of language skill, this study extends some previous studies which address the development of HOTS in reading and writing skills (Osman & Kassim, 2015; Roets & Maritz, 2017; Minakova, 2014). The fact that students can develop their HOTS during oral discussion in the classroom, not only reflective thinking (Afshar & Rahimi, 2016), shows that the use of open-ended questions such as why, how if, and as if can improve students' speaking ability.

In addition to this relatively successful implementation of HOTS activities, teachers still find challenges in implementing these critical thinking skills through storytelling. The challenges include teachers' limited storytelling skills, students' limited English proficiency, the provision of stories relevant with students' cultural backgrounds, and the financial and psychological cost of designing relevant learning media. One teacher said,

Sometimes I feel confused when I have to use high order thinking skills with my students. Their English language is not really good because they are still class seven. I am also not really good at story telling. Besides, making media for story telling is also expensive. Sometime I have to use my own money to prepare the learning media.

To help overcome these difficulties, some suggestions need to be offered. Based on their low confidence in carrying out effective and engaging storytelling, teachers need an in-house training on how

to deliver a story with appropriate expressions, intonation, gestures, and media which can finally enhance students' engagement. To enable students to reach the highest level of HOTS (creating), they need to be exposed to various stories, particularly from their own cultural backgrounds whose contents are familiar to them. Teachers also need to provide more creative learning media so that they can help students' comprehension, enhance engagement as well as support their development of HOTS.

Finally, the development of teachers' language competence takes time. The duration of 3-4 weeks is insufficient to upgrade teachers' skill of storytelling and grammatical competence. Echoing what has been recommended to Chinese teachers (Li, 2016), a lengthy and continuous training is necessary for the two participating teachers so that they feel more confident with their skill of storytelling and developing HOTS activities.

CONCLUSIONS

Based on the aforementioned results, this study concludes some important points. First, the provision of open-ended questions such as 'why, why if, how, how about and if you were' can stimulate and improve students' HOTS which eventually improve their speaking ability. These questions provide students with the opportunity to express opinions, arguments, comments, reasonable reasons related to the story discussed. As a consequence, various alternative and relative answers are more encouraged and rewarded than single fixed answer. However, the development of students' HOTS is still progressing as they have not reached the highest level of creating.

Second, the teachers still have some challenges in implementing HOTS, particularly in designing open-ended questions and composing new stories relevant to their students' cultural backgrounds due to their limited linguistic knowledge. They need to develop their language competence so that they can feel more confidence when exploring stories with open-ended questions. Finally, to become more professional storytellers, the teachers should also be exposed to more storytelling strategies so that they can engage students and incorporate elements of Bloom's revised taxonomy of higher order thinking skills. Further study should include more participating students and teachers from both junior and secondary schools so that a more comprehensive account of HOTS practices in the Indonesian context can be explored.

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