

CHAPTER I

INTRODUCTION

This chapter provides a brief depiction of the whole contents of the research which includes the statement of the problem, the aim of the research, and also the significance of the research including the scope. Other than that, this chapter presents the clarification of the term and paper organization as well.

1. 1. Background of the Research

Teaching thinking skills has become an important topic and goal in education (Halx & Reybold, 2006). By teaching thinking skills, the students are expected to be able to think more deeply, more consistently, more productively and more effectively than they otherwise might (Nagappan, 2001). Although thinking skill is not included in the four skills of language (reading, listening, writing and speaking), mastering it is considered as crucial as mastering the four skills. In fact, some researchers believe that thinking skill should go hand in hand with mastering the four skills of language. The teaching of thinking skills has always concerned improving higher-order thinking. Higher order thinking is mental processes of analysis, synthesis and evaluation which are usually employed in situations that demand problem solving, thinking, reasoning, assessing and concluding (Bloom et al., 1956). Bloom has done an exemplary job in making a cognitive taxonomy. His taxonomy comprises six categories namely; knowledge, comprehension, application, analysis, synthesis and evaluation which are organized in a logical order. It is suggested that the top three categories of the taxonomy (analysis, synthesis and evaluation) are considered higher-order thinking while the other three belong to lower-order thinking (Ennis, 1987). Higher-order thinking is different from lower-order thinking in the sense that it

produces information while lower-order thinking merely recall data from memory (Xu, 2014).

It is believed that in this 21st century, people with higher-order thinking skills become a great demand in the growing workforce. As a matter of fact, individuals with higher-order thinking and good communicative skills are more welcomed in both academic and vocational contexts (Mason, 2007; Rudd, 2007; Kosciulek & Wheaton, 2003). This is because, when they are equipped with those main skills they are likely to be able to negotiate, solve problems and maintain communication better. The needs for that kind of staffs in nowadays employment are growing bigger and bigger. However, the problem is no one is born with higher order thinking. Research show that “creative and critical thinking abilities do not develop automatically” (Nagappan, 2001, p. 3). This problem leads to the urge for teachers to teach thinking skill in addition to their main subjects especially English.

There are numerous teaching methods which are believed effective to be used in teaching higher order thinking skill and inquiry-based teaching is arguably the most popular one. Inquiry-based teaching is “a cognitive educational theory as well as a teaching practice” (Lee, 2014, p. 1237). It puts an emphasis on cognitive and discovery learning which promotes higher order thinking (Lee, 2014). The key element in this method is questions that are usually problems which students ought to solve in the end of the lesson. It is believed that through questions, students are able to achieve deeper understanding, discover knowledge and rules and apply them in their everyday situations (Lee, 2014). This method is then students-centered and should make them more engaged in the teaching and learning activities by participating actively (Neuby, 2010).

Inquiry-based teaching comprises five steps namely; engagement, exploration, explanation, elaboration and evaluation. These steps are scaffolding in which each of it builds on the previous one. The first step is engagement. In this step, teachers awaken the students' curiosity as well as give directions to where the lesson will go. They will then provide the students with questions for investigation and activate their prior knowledge. The second step is exploration. The students in this step "manipulate the materials, make discoveries and share their findings with classmates and the teacher" (Warner & Myers, 2008, p. 3). The teachers help them by observing, questioning and guiding. The next step is explanation. In this step, the students exhibit their understandings on the subject matter (Abell & Volkmann, 2006). They should be given opportunities to develop explanations based on their experiences. However, before that, the teachers should introduce some technical terms, concepts and content information for the students. The fourth step is elaboration where the students should communicate their ideas (Abell & Volkmann, 2006). This step enables students to make "connections between new concepts, principles, theories and real-world experiences by applying them to a new situation" (Warner & Myers, 2008, p. 3). The last step is evaluation. This is the step where the teachers assess the students' knowledge and give feedback to their performances. However, the evaluation should not only come from the teachers for being higher order thinker means the students have to make assessment for themselves.

As mentioned in the previous section that inquiry-based teaching utilizes questions and discussion to provoke students' thinking skills. The techniques can actually be elevated even further to something more challenging by engaging them into a debate. Debate, as described by Shuster and Meany (2005, p. 44), is "an organized public argument on a specific topic". They further explained that there are two teams in a debate, the one in favor of the topic and the one opposing

the issue. Debate demands each student to make arguments and rejections supported by research, reasoning and evidence (Burek & Losos, 2014), accordingly, implementing debate in a language classroom does not only provide students with an opportunity to practice English speaking skill, but also, it helps them build higher order thinking skill (Zare & Othman, 2013). A debate consists of three phases; case building, argumentation and conclusion. In the case building, each team are given certain amount of time to prepare and discuss their stances and their arguments in a debate. This is a crucial part of a debate since it highly influences the speakers' readiness to debate. The second phase is argumentation. In this phase, the speakers communicate their arguments that they have discussed in the first phase. This phase however does not only assign speakers to deliver their arguments but also their rebuttals to the opposing team. The last phase is conclusion and as the name suggests, in this phase each team have to conclude the debate by convincing that their team have better arguments to be given the upper hand.

Some studies have documented the use of inquiry-based teaching in language classrooms. A study by Arauz (2013) for example, incorporated inquiry-based instructions with digital technologies in teaching English as foreign language. It was found out in his research that the integration of technology in inquiry-based instruction brings about several benefits for students which include the improvement in linguistics skills, development of social skills and more knowledge about different perspectives and cultural aspects.

A similar study was also conducted by McElvain and Smith (2016) with bilingual students speaking French and English as the participants of their research. the research compared two approaches; inquiry-learning approach and traditional problem-solving approach. It was revealed in the study that the experimental group made significant mean increase in several aspects such as mathematical

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reasoning, bilingual verbal ability, higher motivation to learn and increased self-efficacy.

Employing inquiry-based teaching in the second language classroom, Lee (2014) also shared similar findings. The qualitative data in the study reported that inquiry-based teaching “enhanced students’ classroom engagement and fostered an effective and meaningful learning experience” (Lee, 2014, p. 1236). Furthermore, the participants in the study were asked to give feedbacks regarding the effectiveness and preference of the approach. The result of the questionnaires revealed that the students showed more enthusiasm in learning and indicated that this approach “reinforced their learning and understanding of the course material” (Lee, 2014, p. 1236).

The aforementioned studies confirm that inquiry-based teaching is beneficial to be employed in language classrooms. However, they did not cover the impacts of inquiry-based teaching on thinking skill which is regarded as a crucial skill that one should possess to gain a place in this 21st century growing workforce. For that reason, this study investigates how to promote higher-order thinking skills by incorporating debate into inquiry-based teaching.

1. 2. The Research Questions

The problems investigated in this research are formulated in the following questions:

- a. How is the incorporation of debate into the inquiry-based teaching used to develop the students’ higher-order thinking skills?
- b. Can the incorporation of debate into the inquiry-based teaching help the students develop their higher-order thinking skills?

1. 3. Hypothesis

In accordance with the research question above, the hypothesis in this research is hence “the incorporation of debate into the inquiry-based teaching can help students develop higher order thinking skill”.

1. 4. The Research Objectives

This research is aimed to investigate a technique to enhance the students’ higher order thinking skill in English classroom. Specifically, the research has two objectives which are first, to investigate if incorporating debate into the inquiry-based teaching can develop the students’ higher order thinking skills at all levels and second, to fathom how debate in inquiry-based teaching develops their thinking skills.

1. 5. The Significance of the Research

This research is expected to share both theoretical and practical contributions as follow.

Theoretically, the research should supplement the literature of higher-order thinking skills in language classroom particularly in Indonesia setting which can serve as a reference and recommendation for future research in the same field. Practically, if incorporating debate into the inquiry-based teaching is proven to be effective in developing the students’ higher order thinking skill, then English teachers should consider implementing such technique in their classrooms.

1. 6. Scope of the Research

This study is concerned on improving students’ higher-order thinking skills by incorporating debate into the inquiry-based teaching. The cognitive taxonomy that is used in this research is that which is proposed by Anderson and Krathwohl

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(2001) which is a revision to the Bloom's (1956). The taxonomy actually covers both lower order thinking skill (remember, understand and apply) and higher order thinking skill (analyze, evaluate and create). However, since the focus of the study is on higher order thinking skill, the writer tries to limit the discussion problem only on students' ability to analyze, evaluate and create.

1. 7. Clarification of Terms

Some of terminologies which are fundamental to the research are clarified in this section to avoid misunderstanding.

Higher Order Thinking

Higher order thinking is mental processes of analysis, synthesis and evaluation which are usually employed in situations that demand problem solving, thinking, reasoning, assessing and concluding (Bloom et al., 1956). In this research, however, the cognitive taxonomy that is used is that which is proposed by Anderson and Krathwohl (2001) where they suggest higher order thinking is reflected in students' performances to analyze, evaluate and create.

Debate

Debate, as described by Shuster & Meany (2005, p. 44), is "an organized public argument on a specific topic".

Inquiry-based Teaching Approach

Inquiry-based teaching is a student-centered approach which puts an emphasis on cognitive and discovery learning which promotes higher order thinking (Lee, 2014).

1. 8. Organization of the Paper

CHAPTER I INTRODUCTION

This chapter provides background of the research including the problems or the research questions, aims of the research, scope of the research, significance of the research and also the brief description of the methodology used in this research.

CHAPTER II THEORETICAL FRAMEWORK

This chapter discusses related theories, and related studies that support this research.

CHAPTER III RESEARCH METHODOLOGY

This chapter comprises the research methodology, such as research design, data collection, and data analysis.

CHAPTER IV FINDINGS AND DISCUSSIONS

This chapter provides the result of the research and discussion of the research findings.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusion of the research and also the implication of the research as well as the suggestion and recommendation for further research.

1. 9. Concluding Remark

CHAPTER I This chapter has presented the background of the research, the research questions and objectives, the significance and the scope of the research, the research methodology, the clarification of terms and the paper organization. Review of related literatures is presented in the next chapter.