THE POSSIBILITY OF DEVELOPING ENGLISH MAGIC TRICKS PROBLEM-BASED ACTIVITIES TO ENHANCE SENIOR HIGH SCHOOL STUDENTS' ENGAGEMENT

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Abstract

One of the critical factors of successful teaching is the students' engagement. This research is aimed at producing a set of classroom activities that were designed based on magic tricks problems to engage Indonesian senior high school students in English classes. Such a set of classroom activities were expected to be to significantly help teachers implement English language 2013 curriculum in various school situations. As required by the curriculum, Indonesian teachers should promote higher order thinking as an integral part of preparing Indonesian younger generation to be able to compete and to collaborate with human resources across the globe. Through opportunity analysis, design, and development steps, this research has revealed the followings. First, it was necessary to develop English magic trick problem-based activities (EMPA) to enhance senior high school students' engagement. Second, the architecture of the activities was easy to understand. Last, the problem and language contents were found inline with the curriculum that was being used by all senior high school nationwide. Before publishing them widely, a least one research is necessary to try-out EMPA in "real classrooms." It is also important to note that the teacher that would use EMPA should understand the concept of problem-based learning and should learn the tricks beforehand.

Keywords: *magic trick, problem-based, engagement, English language teaching*

INTRODUCTION

Student engagement has become the focus of attention not only teachers and educators but also the scholars in the education field. A researcher (Trowlee, 2010) indicates that which topics of it has been developing since the mid-1990s. In his research, Trowlee (2010) defines the term of student engagement as the interaction between students and their institution involving the time, effort and other relevant resources to optimize the student experience, improve students' learning outcomes and development, and increase performance and reputation of the institution. The importance of student engagement has become the focus of attention by many teachers and scholars because to make students get engaged in classroom activities is a challenging effort for many English teachers. Teachers need to consider including interaction, exploration, relevancy, multimedia and (Taylor & Parsons, 2011) in their classroom activities.

Magic tricks are believed to be able to cover all of the aspects of engaging classroom activities. However, to be able to create 'student engagement' is still challenging for many English teachers at senior high school level. It is still considered challenging because many students barely engage in English teaching-learning activities in the classroom. There are various reason why these students are unwilling to get engaged in the classroom activities. Firstly, they perhaps do not know how to get engaged in the classroom activities. Secondly, they may be afraid to interact in English due to their low English proficiency. Lastly, there might be the lack of facilities or resources that can encourage students to engage in the activities. Moreover, the low-

key classroom activities and the absence of technology application in classroom activities sometimes can cause students to be reluctant to participate in the classroom.

Regardless the challenges that teachers should cope with, it is inevitable that student engagement is essential to make classroom activities more vivid and exciting. As the result of it, the lesson objectives can be achieved. In doing so, teachers need to be creative to develop their classroom activities. According to Taylor and Parsons (2011), teachers should include interaction, exploration, relevancy, multimedia, and technology in their instructions when they develop it to engage students.

Regarding to this, an idea to use magic tricks as a classroom activity was initiated. Magic tricks have not been very common to be applied for language teaching activities; however, they can be the alternatives if teachers can modify them so that they fit the language teaching context (In, 2009). The curiosity and the tendency of students to impress others make magic tricks attractive for them. Moreover, the mysterious nature and spectacular outcome of magic tricks also appeal the students to get engaged in classroom activities (p.1). Magic tricks are considered to be able to give a chance for students to interact, to explore, to have relevancy and to apply multimedia and technology when they are taking part in classroom activities.

This research was conducted to design a set of magic tricks problem-based English activities. It also investigated whether this collection of magic tricks could enhance student engagement in English classroom. It was expected that by using magic tricks, students would be willing to participate the activities actively and to use their English in natural classroom communication. As for avoiding too extensive investigation, this research focused on the Senior High School students' engagement.

Conceptual Framework

Slightly different from what Trowly defined above, Axelson and Flick (2011) also describe students' engagement as the involvement and interest of students in learning and their connection to their classes, their institution, and their friends. From the explanations above, it can be perceived that student engagement relates to how the student pay attention to and feel interested to the learning activities that teachers prepare. It also associates to the interaction of students with their educational environment. However, Trowlee (2010) thinks that student engagement is more than the students' involvement or participation. It has three dimension that represents a form of engagement:

a) Behavioral engagement, it typically relates to behavioral norms. Therefore, students who have this engagement will attend to the class, involve the classroom activity vividly, and demonstrate the absence of disruptive or negative behavior;
b) Emotional Engagement, it refers to affective reactions (i.e., interest, enjoyment, or a sense of belonging;
c) Cognitive Engagement, students would be invested in their learning, would seek to go beyond the requirement, and would relish challenge.

Student engagement is regarded having significant influence on achievement and learning; hence, many scholars theorised and researched about it (Kahu, 2011). It also becomes the concern of the English teacher since it is not easy to make student get engaged in the classroom activities. Students tend to get engaged if they think that their teachers get engaged with them, with the subject, and with the teaching process (Bryson & Hand, 2007).

Related to create student engagement, this research proposes the implementation magic tricks to engage students in classroom activities. It is widely known that magic may be the oldest and the most universal performing arts (Christopher & Christopher, 2005 as cited in Spencer, 2012, p. 47). Magic is an art so it is considered as a work produced by human creative skill and

imagination, and social life as well (The New Oxford American Dictionary, 2010 as cited in Spencer, 2011, p.88).

Spencer (2012) thinks that magic art has impossibility and amusement that are able to attract people's attention and to hold it. Furthermore, Ogren (2014) shares his experience to use magic in his classroom. He said that magic is effective strategy to motivate and inspire students to read, advance their physiotherapy, build confidence, and think creatively. He adds that magic can make classroom to be more fun and enjoyable. Even though the classroom becomes very enjoyable and interesting, the implementation of magic does not give negative effect to the comprehension of student towards the material (Moss et al., 2016).

Previous Studies

Many research studies have been conducted to find out if magic tricks can be implemented in teaching and learning process. In the section of conceptual framework, it was mentioned that a research conducted by Vichea In in 2009 examined the implementation of origami and magic tricks in teaching and learning process. The research resulted in an outcome that showed magic tricks successfully appeal students because of the mysterious and spectacular outcome of magic tricks that could trigger students' curiosity and ability to impress their peers.

Another research that has been mentioned in conceptual framework is a research conducted by Kevin Spencer. Spencer (2012a) conducted a research about the implementation of magic tricks in teaching learning process. In his research, he discovered that his Hocus Focus curriculum – a magic trick that he examined – demonstrated improvement in specific areas for special learners and in teacher efficacy, proficiency, and satisfaction. Furthermore, Hocus Focus also gave psychological, behavioural, and cognitive benefits for students. In his another research with similar topic, Spencer (2012b) found out that Hocus Focus also impacted all three domains of learning resulting in student improvement in on task behaviour, planning and sequencing, socialization and meaningful conversation, and fine motor skills/dexterity.

Furthermore, in 2013, Crossman conducted a project that examined whether magic could engage and create a positive learning environment. The result of her project determined that magic could assist with creating a positive learning environment. The next year, Ogren conducted a research about the implementations of magic tricks in teaching learning process. Ogren (2014) in his research found out that magic has been an effective strategy to motivate and inspire students to read, advance their physiotherapy, build confidence and think creatively. It also creates a fun and enjoyable classroom environment where students want to be. Moreover, it was also examined that magic tricks are effective for collaborative learning as figured out in a research performed by Adipramono & Nindhita (2016).

However, Moss and colleague (2017) managed a research that showed a result that was a little bit different from other research's outcomes. In their research, it was showed that magic tricks could diminish subsequent need for cognition but do not affect comprehension. The research also shows that magic tricks have tendency to diminish engagement with subsequent material (Moss et al., 2017).

Overall, from all research conducted, they showed that magic tricks are potential to be used in teaching learning activities. The consideration of good outcomes from previous studies, a research about the implementation of magic tricks in teaching learning activities will be continued. However, in this future research, the focus of the research will on the student engagement. It will examine to what extent magic tricks implementation can enhance student engagement.

Research Method

This research will be conducted applying ADDIE – *analysing, designing, developing, implementing,* and *Evaluating* (Branch, 2009). The procedure is much simpler that what has been written by Dick, Carey &Carey (2015). Analysing stage analysed the needs in implementing magic tricks. In designing state, the researcher will design the conceptual of magic tricks. Then, the researcher develope the magic tricks in order to be fit to the English language teaching concept in Senior High School. This research can be followed up with the research to implement and to evaluate magic tricks procedures and games.

Not all of ADDIE steps were conducted because of the limitation of the resources. Analysis step was conducted to know the opportunity of developing magic tricks to teach English for high scools in Pontianak. The next phase was designing and developing the magic tricks for English teaching. In developing, some actions were conducted such as developing the magic tricks so that they could fit English language teaching concept and developing lesson plan which has been inserted developed magic tricks in its planning.

Data were collected gradually during the analyzing stage taking place. The data were the students' condition, teachers' competence in utilizing school's facilities, and government regulation about curriculum implementation. The data were collected in need analysis stage through observation and interview. Afterwards, the researcher interviewed the teachers. The data from interview were validated through some ways. First way was calibration to select the teacher, experts, time to interview, place to interview and the way to interview. The other way is triangulation to get the data from more than one source in the same category. The data were grouped based on the group of data sources. From those qualifications, the researcher did the coding in order to interpret and illustrate the data through check-and-recheck. The instruments that were used to collect the data were observation sheet, open-ended interview questions, and questionnaire with five option scale.

From the collection of the data the researcher did qualitative data analysis. Using qualitative data analysis, the researcher evaluated the data from questionnaires and interview during need analysis process. The qualitative data analysis processes were conducted through coding, sorting, synthesizing, and theorizing.

Findings and Discussion

In analysis stage, what should be uncovered is the potential for change or enhancement of teaching and learning process through magic tricks games or techniques. The result of analysis stage is a clear description of the opportunity for the change. In short, this analysis stage is obviously opportunity analysis. Opportunity analysis in educational development research can defined as the stage of development research thas is intended to assess the potential for an enhancement of the quality of education or teaching process.

The types of opportunity in a development research may vary from a small chances within a current teaching procedure that leads to the learners' attention or engagement in the whole classroom interaction, to producing a new curriculum that may the learners' character nationwide. Whether the goal is as narrow as improving ther learners' attention by introducing a new ice breaking game or as broad as introducing a new curriculum, conducting an opportunity analysis helps provide an understanding of what would possibly take effects (positive and negative) if a particular teaching material, teaching strategy, or teaching approach is implemented.

One of the most important factor of analyzing the opprotunity of using magic tricks in high school English class is the curriculum. The first question that need a concise answer is whether the corriculum permit the teachers use magic trick technique in their classes. To answer the question, the researcher needs to identify the expected competencies and the suggested methodology in the curriculum. It is mentioned in the Minister of Education and Culture Regulation Number 69/2013 that grade ten learners are expected to understand, implement, and analyse factual, conceptual, and procedural knowledge based on their curiosity on hard science, technology, art, culture, and human science in the perspective of humanity, nationality, state, and civilization in relation to the causes and phenomena of occurrence, as well as to implement procedural knowledge on particular subject matters that are in line with their talents and interest for solving problems. It is indicated that English teaching should be driven to build intellectual probelm-solving capacity; that also means that language's various functions should be taught.

The competencies that should be taught in grade eleven and grade twelve are not much different from it in grade ten. Those functions that are taught in grade ten are also taught in grade eleven and twelve. The differnces are as follows. In grade eleven there is an additional competence or skill that is taught in this subject, that is metacognitive knowledge. Meanwhile, in grade twelve the learners also must learn metacognitive knowledge; almost the same as it in grade eleven. The difference is that analyzing skill is replaced by evaluating skill. It is a higher level or higher order thinking.

It can be figured out that magic trick will have good opportunities to be used in high school classrooms. The reasons are as follows. First, magic trick games alwas challenge the audience to gel involved intellectually. The audiences are challege to think and to figure out the magic secret. Second, magic trick tutorials are delivered in types of text that are also the types of text that are included in the curriculum.

Problem-Based Learning (PBL) in this research is adjusted to the practice of teaching and learning process in Indonesian curriculum. The most up-dated curriculum (Kurikulum 2013) focuses of the students' higher-order thinking using two types of process, namely learning and acquisition. In the curriculum, the learning process is called *pembelajaran langsung* (direct learning) and the acquisition process is called *pembelajaran tak langsung* (indirect learning). This idea wass found in the Minister of Education and Culture's Regulation Number 81A/2013. The curriculum promotes higher-order thinking skills, particularly analyzing, and recommends a teaching approach is called scientific approach. The scientific approach to teaching in high school consists of a five-step procedure, namely: observing, questioning, collecting information, associating or analyzing, and communicating. The official terms that are used in the curriculum are abserving, questioning, collecticting information, associating or analysing, and communicating what have been found in the analysing stage. The five-step procedure is identical to what Dyer, Gregersen, and Christensen (2011) found as the five skills of disruptive innovators: associating, questioning, observing, networking, and experimenting.

Based on the curriculum implementation guideline above and what was introduced by Dyer, Gregersen, and Christensen (2011), this research found a flexible model of magic trick language teaching strategy. The first strategy is teacher's prsentation and the second one is student's presentation. Each strategy may use two different procedure, namely OQCAC and QOCAC. OQCAC is the abreviation of Observing, Questioning, Collecting information, Associating, and Communicating. QOCAC is the abbreviation of Questioning, Observing, Collecting information, Associating, and Communicating.

Observing is the students' activity of observing what the presenters (teacher or student) shows. The presenter may show a magic game to make the audience curious. In Magic Trick 1 (See Figure 3), the presenter may demonstrate a magic of coin through bottle by acting as if he were

inserting a coin into a bottle. Expectdly th audience will get curious why and how it could be done.

Questioning is an activity of asking the audience in order to make the audience aware of more detailed problems. When the students are aware of the problems, it is expected that the problem-based learning will take place. The exixtence of problem in this learning will at least lead to two important activities, namely thinking and communicating. Those two activities are very important parts of engagement.

Collecting information is done through reading or/and listening more than one text of similat contents. More careful reading or listening will result in better information. Collecting information activities is done in a number of steps, that mainly consists of top-down and bottom-up, invidual, intra-group, inter-group, and classical. The variation of steps made the learners more engaged that only through one (individual) activity.

Associating activities are done by associating all data. By associating the data or facts, the learners will be able to solve problems. In associating step, the learners associate data and facts from different texts of similar contents. By associating data and facts, it is expected that the learners will learn how to solve problems.

Communicating is done through discussions. Different types and scopes of discussion will make learners learn to communicate in different levels of complexity. The simplest communication is through small group discussions and the most complex is through classroom-level discussion.

Based on the concepts that have been depicted previously, the idea to implement magic tricks in the effort to enhance student engagement seems to be sensible. Magic tricks which are amusing and can arouse the curiosity of students are believed to be able to meet the qualification of activity that can increase student engagement. Moreover, magic tricks can also enhance teacher engagement to the materials and activities that they have prepared. The higher teacher engagement is, the better student engagement will be; accordingly, Bryson and Hand (2007) states that students barely engage to the classroom activities unless their teachers engage to them and the activities. Hence, a research study will be conducted to investigate the implementation of magic tricks to enhance student engagement. Limitedly, the research study will research on senior high school student engagement.

CONCLUSION

There is a big opportunity to develop English magic tricks problem-based activities to enhance senior high school students' engagement. *Students and teachers will potentially use the activities because the curriculum and the learning situation support such activities. The design stated that the teachers' role should be the facilitators, the students' role are the problem creator and the problem solver, the materials' role are as the model texts and the source of activities. The construction of the activities is flexible in terms of sequence: (1)* Observing, Questioning, Collecting information, Associating, and Communicating (OQCAC); and (2) Questioning, Observing, Collecting information, Associating, and Communicating (QOCAC). *As a suggestion, this research should be followed up with two more steps, namely: implementation and evaluation. Teachers may use this research result only as trial or controlled implementation. It is not suggested to use this as a part of daily bases practice.*

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