Exploring the Potentials of Problem-based Learning in Online English Addition Language (EAL) Course for University Students

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Abstract. Although it is warmly debated upon its effectiveness, problem-based learning has been broadly adopted as a teaching approach for a higher education. In EAL teaching, there has been a little attempt to incorporate problem-based learning approach in the curriculum. As of wide ranges of earlier studies show the benefit of problem-based learning for offline learning, this paper aims at discussing the potential contribution of problem-based learning for the online EAL course, and proposes a concept to guide implementation of the online PBL in the classroom to create a meaningfully and experientially active learning for EAL learners. Despite of its weaknesses, this paper shows problem-based learning has the potentials not only help learners develop their language skills, broaden their knowledge, improve their effective problem-solving ability, and boost their effective collaboration skills, but also help them develop their intrinsic motivation leading to lifelong learning.

Keywords: Problem-based learning, English as a foreign language, Online course

1 Introduction

Growing demand of English teaching in Indonesia has challenged the recently applied teaching systems of English across educational levels in the country. In higher education level, English has been administered more than a decade with the aim to make the graduates ready for a very tough job competition. Although, it has long been a part of the curriculum, results of the English teaching in higher education is still far away from satisfying. In fact, the teaching of English in the level in general has a limited hour for teaching, and focuses more on empowering learners' understanding rather than their language skills. Thus, the curriculum and teachers' competencies to which in some respects associated with efficacy of delivery methods for both offline and online modes need to be developed (Anderson et al., 2000).

At this time, a lot of things change very rapidly, including the field of English teaching. Since educators begin to perceive the importance of technology, it has been adopted to their teaching activities which in turn replaced their traditional teaching modes. This pandemic time of Covid-19 make the presence of technology becomes clearly perceptible. There has been a massive increase of move from offline to online learning due to school shut-down aimed to prevent the virus

transmission. This situation makes the interaction among teachers and language learners becomes borderless. Distance learning considered as a non-formal education, as of now, seem to be potential to replace formal system of education if the situation insists long-lasting overtime (Mishra et al., 2020). Therefore, online learning has been heatedly discussed among researchers (Armstrong, 2011; Kumi-Yeboah et al., 2020; Luan et al., 2020; Mishra et al., 2020). In certain point, they agree that practice of online learning is not without challenge. There is a need to develop a curriculum which can accommodate changes in the content knowledge and learners' experience, in addition to enabling learners to critically think. Language researchers have conducted research on the use of teaching strategies for online language learning (Lan et al., 2020). Although, the earlier studies have shown their positive contribution to learners' language development, ability to solve an open-ended problem through critical discussion in the target language, one of the other most important aspects of language learning, remains largely under-researched. This paper aimed to discuss the potential contribution of problem-based learning in the online teaching of English as an Additional Language (EAL) course for higher education, not only to develop learners' language skill, and content knowledge but also their critical thinking skill.

2 Problem Based Learning (PBL)

Problem based learning (hereafter referred to PBL) has been adopted by many different fields of studies to develop learners' potential through the process of solving problems. This is a collaborative learning approach originated from health science in the late 1960's aimed to increase reasoning skills and to promote the integration of material across subjects (Ram, 1999). It is a tradition where learning should be experiential and meaningful (Hmelo-Silver, 2004). Learners learn about subjects through their real-life situation, and make use of their knowledge and skills in the process of solving problems (Harland, 1998). PBL is generally organized in a learning group with supports from teachers as facilitators who help identify area of learning required and then guides the learners through stages as depicted in Fig. 1. In PBL learning process, learners are presented with succinct issue scenario to which learners can analyze and formulate information on the issues based on teachers' demonstration on how to manage problem solving stages through classifying information from discussion into one of the four categories; "facts, hypotheses (ideas), learning issues and action plan" (Ram, 1999). At the end of those earlier stages of problem presentation and formulation, learners commit to one of hypotheses and select issues they will carry on independently through surfing for information from different resources to find possible solution. This is the stage where learners begin to identify deficiency of knowledge pursuant to the issues. Following independent learning or often referred to self-directed learning, learners begin to evaluate their hypotheses and share information they have learned to their group members to re-examine their hypotheses through the benefit from new insight they have gained as they attempt to solve the existing issue. Eventually, learners reflect their abstract knowledge and see their achievement in solving the issues (Hmelo-Silver, 2004; Ram, 1999). During all these learning stages, teachers have to ensure that learners apply their new knowledge appropriately to formulate problem-solving model. In addition to encouraging learners to develop wider and dynamic knowledge, effective problem-solving ability, and effective collaboration skills, PBL also helps learners develop their intrinsic motivation leading to lifelong learning.
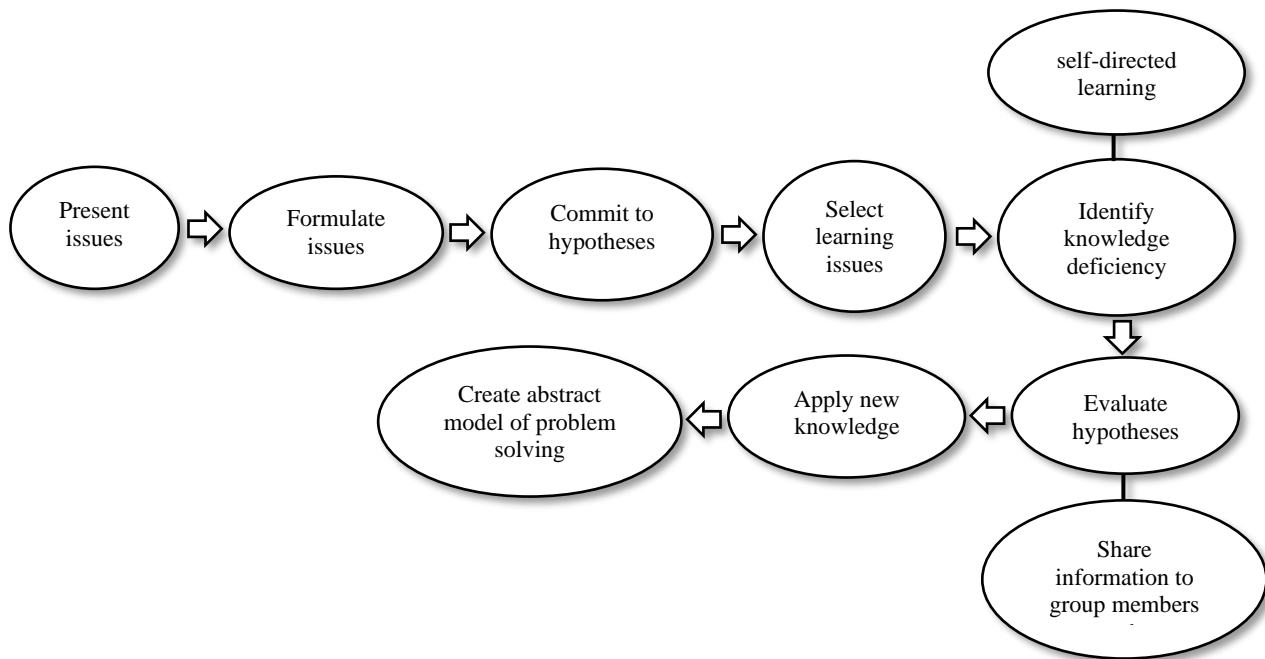
Fig.1 PBL Stages

3   Using PBL in Online EAL Course

Problem Based Learning is a pedagogical approach aimed at encouraging learners to learn to solve a real-life problem to which it requires learners to independently broaden their recent knowledge to solve the existing issues at hand. Independent learning encourages meaningful and experiential learning that will create a long term memory, as learners develop the knowledge themselves in order that they can deal with the need (Hmelo-Silver, 2004; Ram, 1999). Likewise, PBL increases learners' motivation and engagement, develops their language learning and skills, accommodates their individual differences, fosters them to learn cooperatively as well as gives them chance to incorporate between content and language learning.

In English course for non-English language students, learners typically learn about EAL to develop their four language skills. However, it hardly touches their skill to solve problem. To develop both learners' English language skills and their skill to solve problem, the following concept of PBL for online English language teaching is proposed. (1) teachers as facilitators can provide learners with authentic cases relevant to situation, they encounter most in their real life. These learning cases can be distributed to learners in formats of audio or video tapes or short reading texts.

Using online platform such as zoom meeting; learners are broken down into groups of four or five depending on number of learners in the classroom. Task of each group will be to deal with the case to find out ways to solve the learning case. (2) learners begin to collect information based on series of predetermined questions to help them understand the background and formulate the issues. (3) Once information is obtained, each group begins to commit on one of many hypotheses and (4) choose learning issues they will further learn independently. (5) In this stage, learners are engaged in self-directed learning (SDL) through independently gathering information to meet knowledge deficiency they identify in the earlier stage. (6) once information is collected, learners will re-examine their hypotheses to see how best their abstract model satisfies the need. This stage involves sharing information to group members. (7) With the benefit from the critics and comments from the sharing, learners begin to apply the new knowledge to improve their existing abstract model of problem-solving. (8) Learners generate abstraction.

In addition to the eight stages of PBL for content knowledge and critical thinking development, infrastructure for language skill development has to be well prepared, including how learners should convey their ideas in either spoken or written forms. Therefore, learners' exposure to varieties of written and spoken texts which enable them to present their work through observing, imitating and modifying the given examples becomes essential aspect in the process. Although, PBL is time consuming for both teachers and students, this approach appears to be worth applied when compared to the results achieved from conventional pedagogical approach. This approach allows teachers to optimize their teaching time to focus on students and play their role as facilitators. Therefore, clearly defined learning materials, stages, and guiding questions to work on the projects as well as varieties of examples on how to report their abstraction in both spoken and written format should be made accessible. To facilitate learning, communication among teachers and students have to take place intensively borderless to time and space. Therefore, group discussion for each group where teachers are involved in have to be available. Some studies showed that WhatsApp, Instagram, Facebook, and Telegaram are some of the most popular social media among young learners of this century and so it is believed to have the potential to facilitate discussion leading to enhancement of learners' long-term comprehension (Bamigboye & Olusesan, 2017; Kind & Evans, 2015; Lumby et al., 2014).

4 Concerns and limitation for PBL in Online EAL Course

Despite of its potential as an effective approach to foster meaningful and experiential learning for language learners, this approach appears to have concerns and limitations. First, the existing classroom management will change radically. Second, PBL is very time consuming, students may require additional time out of the class to complete their jobs. In EAL course, not only do learners need to read several reading materials in order to support making their abstraction, but they also have to convey their ideas in a written format. With the load of assignments, they require additional time to finish the job. Third, although quality of information broadly available both offline and online, learners still find it hard to seek for good ones due to limited knowledge. Fourth, as it is an EAL class, English language becomes the main language to use. Learners have to be capable of performing their English language skills at least in the level of intermediate. For students with low performance of English, this situation becomes an issue. Fifth, some students may regard learning materials in PBL irrelevant to the aim of learning English. For students with either low English skills

or low reading motivation, they will find these activities discouraging, thus at the end they become such a "free rider" in the program. Sixth, learners without experience in group work may encounter difficulties to share and discuss their ideas. This situation has the potential to hamper the process in PBL. At the end, teachers will be encountered with abundant of working load as they have to stand ready as a facilitator throughout the project and to engage learners in the educational process taking place in and beyond the scheduled online class. It means, teachers have to be ready to receive a lot of messages, request to have mini-session of face to face online meeting, and extended working time. As this situation will be very time consuming for teachers, their performance in research, conducting regular project of community service and other administrative duties will likely be affected. To provide learners with quality of education through PBL, learning needs to be made slowly step by step to ensure that everyone is ready. As it focuses on deep and comprehensive learning, teachers may face dilemma of covering less materials than in conventional teaching approach.

5 Conclusion

The approach of problem-based learning in EAL classroom is all about paradigm which believes that learning should be meaningful and experiential. Not only are learners encouraged to develop their EAL skills through practicing the language to convey ideas, but also their reasoning skills to make their ideas logic and acceptable. Problem based Learning exposes learners to real-world situations and fosters the learners to independently make use of their knowledge and skills in the process of solving problems. Therefore, independent learning is highly promoted in this approach. Although it is proven to provide many benefits, the use of problem-based learning in language learning is not without obstacles, teachers and students will face different roles and responsibility within a radical change of classroom management to which both may feel discomfort of the situation. Therefore, comprehensive analysis and planning, supported with supportive institutional policies and infrastructures for online learning are essentially required.

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