

Empowering English through Project-Based Learning with ICT

Ardi Marwan

*Politeknik Negeri Pontianak, Indonesia
ardirini@yahoo.com*

ABSTRACT

This paper reports the findings of an action research implementing project-based learning (PBL) with information and communication technology (ICT) in an English classroom. Twenty-five students from a vocational higher institution were interviewed after the conduct of three project activities over a six-week period. They were also observed while being exposed to a PBL teaching approach. Results of this study revealed that students could experience a more interesting and meaningful learning in a PBL English class. They were also becoming highly motivated to use English more intensively while exposed to this teaching approach. This research also proved that PBL with ICT could bring positive gains due to teacher's pedagogical and technological beliefs. Thus, it concludes that teaching with PBL and ICT would bring about a positive change once supported with teacher's belief about teaching and learning (pedagogical belief) and his belief about ICT (e.g., technology-supported learning offers better outcomes than that of the traditional one).

INTRODUCTION

The ways how English is taught and learnt are now undergoing some adjustments in order to keep up with the advancement of information and communication technology (ICT). Two decades ago, for example, online communication through internet was not a common view in an English classroom. But now, such a learning activity may easily be spotted in most modern classes. This phenomenon is a critical indication that teachers of English should always update their teaching approaches.

Previous research has suggested that ICT can make a difference in students' learning (Castro & Alves, 2007; Demiraslan & Usluel, 2008; Eteokleus, 2008; Ferdig, 2006; Marwan & Sweeney, 2010; Mouza, 2003; Murphy, 2007; Mutula & Bakel, 2007; Mwanza & Engestrom, 2003; Pajares, 1992). However, such a learning change can only be gained if multiple factors affecting the success from factors related to individuals (e.g. skills, knowledge, attitude and belief), implementation process (e.g. planning, responsibility, quality of resources and people involved) and whole organization (e.g. external influences, leadership, organizational culture) are considered in the process of implementation (Tearle, 2004). Among all these factors, teachers are regarded as the key persons who play a big part in determining the success of students' learning with ICT (Li & Bratt, 2004; Lim & Khine, 2006). Thus, research looking into how teachers use ICT for teaching and learning is always a necessity. In Kozma's (2003) view, teachers need to be innovative in the ways they use ICT. As such, it is their innovation which is mostly worth investigating (Marwan & Sweeney, 2010).

There has been a quite large number of research investigating how teachers use ICT for teaching and learning in general and many also see it within the setting of English classrooms. But studies how teachers specifically utilize this technology within the context of PBL for empowering students' English are still underrepresented in the research literature. The present study aims to fill this gap by examining teachers' use of ICT in a project-based English learning in Indonesia.

THEORETICAL REVIEW

ICT in Teaching and Learning

Research has proved that ICT facilities do not improve students' learning. It is how they are used for teaching and learning which makes students perform better in their learning (Lawless & Pellegrino, 2007; Lim & Chai, 2007; Lim & Hang, 2003; Lim & Khine, 2006; Mainka, 2007; Marwan & Sweeney, 2010; Morgan, 2001; Mouza, 2003; Moyle, 2006; Mwanza & Engestrom, 2003; Tearle, 2004). So, teachers play a key role in determining the successful use of ICT in education. As Lim and Chai (2007) argue, it is "the decision made by teachers, based on their pedagogical beliefs, that have significant influences on the effectiveness of teaching and learning in most learning environments, including computer-mediated ones" (p. 2). They further explain that pedagogical beliefs refer to teaching and learning related beliefs. Teachers who demonstrate traditional pedagogical belief (i.e. knowledge is transferred only by a teacher) may choose to teach using ICT with teacher-centered approach while those with constructive pedagogical belief will opt to adopt a learner-centered approach in their ICT mediated teaching (Marwan & Sweeney, 2010). Teachers usually develop their beliefs about teaching and learning when they undergo years of study at teacher training colleges where they are exposed to

information (including through teaching practice and classroom observation) about how to become effective teachers (Applefield, Huber, & Moallem, 2001; Lim & Chai, 2007). Overall, teachers' pedagogical beliefs influence "their perceptions and judgments, which, in turn, affect their behaviors in the classrooms" (Pajares, 1992, p. 307).

In addition to pedagogical beliefs, ICT can be effectively used if teachers have positive beliefs towards technology (Marwan & Sweeney, 2010; Russell, Bebell, O'Dwyer, & O'Connor, 2003). According to Russell et al (2003), teachers who demonstrate negative beliefs may consider that ICT may have no impact on teaching and learning. They may even think that it can harm students. If that is the case, technology facility will be a useless investment because teachers may decide not to use it (Cuban, 2001). If they do, it is only to make the management happy but not to make their teaching more meaningful (Marwan & Sweeney, 2010). In other words, ICT presence is only a symbol of prestige but not a means to bring about educational change (Russell et al., 2003; Tearle, 2004). In short, the use of ICT by teachers should be supported with their positive pedagogical and technological beliefs. This type of teachers can then demonstrate a greater chance to succeed in their use of ICT to enhance students' learning (Castro & Alves, 2007; Lee, 2002).

It is obvious that the successful use of ICT for any disciplines including English is determined largely by the quality of teachers (in terms of their pedagogical and technology beliefs and understanding) who use this type of technology into their teaching and learning programs.

Project Based Learning

Review of literature suggests that there is no consensus as to the definition of PBL. Despite the fact, researchers agree that "project-based is an instructional method centered on the learner" (Bas, 2011, p. 2). Bell (2010) points out that in a project based learning classroom, students are provided with a topic which they should develop through research or project work for their individual or group learning and teachers should monitor the project performed by students. Students, in this learning framework, are trained to be critical and responsible for their learning (Bell, 2010; Postholm, 2005, 2006) and this, for example, can be done through problem-solving activity (Barge, 2010; Bas, 2011; Kloppenborg & Baucus, 2004; Moss & Van Duzer, 1998).

According to Kloppenborg and Baucus (2004), with this PBL, students will experience much more meaningful and interesting learning where they should accomplish the assigned project. Normally, they are given freedom to plan and manage their project and the end product including the process involved should be presented in the class. More importantly, with this approach, students "have the opportunity to construct their creative knowledge and demonstrate their creative thinking and skills through their project" (Simpson, 2010, p. 44). In Barge's view (2010, p. 14), one of the keys for achieving the successful implementation of PBL is that there has to be "a high-level of self-motivation and personal responsibility for learning" from students (see also Stoller, 2006). Without this, students can easily give up their usually tiring and demanding project. Thus, teachers should always monitor their students' motivation and confidence (Maleki, 2005). One way of enhancing motivation and learning responsibility as well as confidence is through the creation of "a collegial atmosphere" where "students to actively engage in substantive dialog with faculty members regarding their course work and the application of knowledge within the context of their project" (Barge, 2010, p. 15). Providing feedback and support or encouragement is also another way that can boost students' learning motivation and confidence (Dornyei, 2001) and therefore reducing their level of second or foreign language anxiety (Casado & Dereshiswsky, 2004; Goshi, 2005; Kondo & Ling, 2004; Marwan, 2007).

Simpson (2010) provides the steps of PBL which include project start, development, report, and assessment. He explains that,

Starting the project involves selecting the topic that is of interest and relevance to students. The teacher can create guiding questions ... The project should be challenging and motivating such that students can develop and have the flexibility to work at their own level. Then, project development involves the research which is undertaken by all group members either individually, in pairs, or as a group. This should be decided by the group before commencing the project. Reporting to the class involves presenting and receiving feedback from other students. Lastly, assessment is when the final product is evaluated by an individual student, students as a group or a teacher. (pp. 58-59)

Adding to the project assessment issue, Simpson asserts that this innovative teaching approach does not merely apply a rigid type of assessment like a pencil-paper test but it employs a variety of assessment formats such as peer evaluation and portfolio. Even, the students may perform self-reflection as a means to evaluate his or her own learning. In Hutchinson's (2001) view, in a PBL, evaluation should not be targeted on students' language

competence (i.e. grammar and linguistics). Rather, in assessing the project, teacher should put more emphasis on the project making efforts and processes. In short, assessment integration (i.e. multiple assessments) is becoming an issue in a PBL environment (Simpson, 2010).

As suggested by the literature, PBL can be understood as a teaching approach which centers on learners and focuses more on the process or efforts. This type of innovation aims to assist learners to be more responsible towards their own learning and if they can develop this sense of responsibility, they can then optimize their learning gains.

METHODOLOGY

The present study aims to seek the answers to the following question: How well is the learning of English with PBL approach using ICT?.

Design of the Study

An action research design was chosen to empower students' English through PBL with ICT. This design was selected since the main intention of this research was to bring a new teaching approach (i.e. PBL with ICT) to the classroom and such an approach was also meant to tackle students' learning difficulties when exposed to conventional teaching ways. The ways that I used before the conduct of this action were rather monotonous where the materials of teaching were entirely taken from the available commercial textbooks. Students were rarely exposed to ICT and the application used for teaching was only PowerPoint for presentation. Just recently, I realized that this conventional teaching failed to help students to experience meaningful learning. After a few semesters with them, I could not see them make good progresses with their English learning. Accordingly, I decided to change the way I teach them.

Setting and Participants

A higher vocational institution where I currently work as a senior English teacher was chosen as the venue for this action research. One class of 25 students in this institution was selected. The students of this class possessed the ability to converse in English but often produced ungrammatical sentences and improper use of words. For the purpose of this research, all students were informed that their English learning from the beginning of semester 3 would undergo significant changes where more ICT-aided learning and project-based activities were to be incorporated. These diploma-level (3 year program) students studied English for two hours a week each semester and the programs of teaching (e.g. what and how to teach) were all determined by the teacher. Due to this autonomy, I then tried to bring this innovation into my EFL classroom.

Procedures

The implementation of PBL with ICT in this action research was tried out for 6 weeks. It was planned that students would complete a project over a two-week period. As previously stated, students of this class had only two hours to learn English in the classroom. So, the first two hours was used to introduce the project and develop the plan and the second hours were to hear from students about their project accomplishment in the form of class presentation. Overall, students were required to complete four projects involving ICT in this action research study.

In the first project, the students were assigned to write an email to a university overseas asking for information about the things they wanted to know (e.g. scholarship, course). This was a group project where each group should write an email using their leader's name and email. Prior to sending the email, the group should discuss the plan and search for the targeted overseas universities via laptops connected to internet in the classroom. While doing this, I was monitoring all the groups to check if they encountered difficulties when performing the task. The students were also informed that the project could be continued after the class and the email draft should be shown to me for suitability check, particularly, in terms of content and grammar before being sent to universities.

For the second project a selection of conversational topics were presented to students. I divided the students in a number groups and each group could choose the topics on the list (e.g. friendship, education, family life, pastime activities, love story and jobs) or they may propose their own topic but subject to my approval. They were instructed to plan a discussion activity in which such the discussion can be in the form of drama or role play and the activity should last between 15 to 20 minutes for each group. They were free to choose their own venue and all groups were obliged to videotape the discussion and create an interesting video or movie. These videos were to be displayed in the classroom were the subject for the class discussion.

Then, in the third project, I assigned the students to do two activities. Firstly, they should find the profile of a well-known university in an English speaking country from You Tube and this profile would be presented in

upcoming week meeting. Secondly, they should present a brochure which could be downloaded from the website about a Master program relevant to their discipline offered in the chosen university. Then, I asked them to find the answer to the questions related to the length of the program, entry requirement, course structure, scholarship (if any), and contact person. The program brochure and the answers to the questions should be presented to the class.

Data Collection and Analysis Strategies

This study used semi-structured interviews with each group performing the projects. The interviews were held after the accomplishment of all the projects. The purpose of the interviews were to identify students' perceptions about the learning experiences they had when exposed to the PBL activities. Then, to identify any possible change of behaviors during teaching and learning with this innovative approach, observation was also undertaken. During the observation, any important behaviors happening during the activities were noted. The documents or products made or collected by the students from the website were collected too for analysis. Then, all the collected qualitative data were screened and analyzed in search for emerging themes.

RESULTS

Project 1

The purpose of this project was to train students to write electronic mails in English to someone overseas whose first language is English. Writing was the first skill targeted to be improved through this activity and followed with speaking when they performed the presentation. However, listening and reading were also indirectly learnt when they were listening to their friends' talk during the group discussion or class presentation and when reading the responses from the person overseas whom they sent their email to.

During the planning phase, the students were busy talking about the university that would become their target. It was a quite interesting activity because there appeared differences within the group members when discussing some possible universities. When discussion on this was underway, some of the group members (two or three persons) were browsing the information from the internet and as recorded in the observation notes, they were all good at finding the information about universities based in other countries. Google was the search engine of their favorite. They simply typed the key words like universities in Australia and New Zealand and once the information came up, they then got into the website of individual university. After spending a couple of minutes doing this, most of the groups except one had no idea about the right person whom they should write their email to. Knowing such a problem, I then interrupted their activities informing them about how to find such contacts (i.e. based on the information they requested, for example, should they ask for scholarship information for international students, then they should link to the international office website of the selected university).

When monitoring them doing this planning and searching activity, some students were talking in Indonesian language and I stopped them from doing so. They were encouraged to ask questions to their peers about the English words or expressions they did not know. If no one in the group knew these words, they could then refer to me. It was not that easy to make some of them speak only in English, but this matter could soon be solved when I frequently listened to them undergoing the discussion. The results of observation proved that they did not use English at some stages of learning activity due their unfamiliarity of the English words or expression and also because of their lack of awareness regarding the importance of the total use of English in the class.

Prior the closing of the first meeting, all the groups were requested to present the draft of their emails for me to check. All the groups seemed to have been able to write quite well despite some minor grammatical mistakes. For these mistakes, I corrected them directly and provided a short explanation on them. Having done this, I then dismissed the class and instructed them to send the emails to their chosen universities after they finished their study on the day.

In the following week, all the groups were given time to talk to the class about their project beginning from displaying the content of their emails to the universities and the responses they received from the relevant persons. It was as expected that all emails received answers. The first three groups inquired about the course information handbooks from universities in New Zealand and England. The first group was promised by the university staff to receive the handbook at the sender's home address while two others were informed that such information could be accessed at the university website. Then, the last two groups requested information about scholarships for international students offered in two universities in Australia and Singapore respectively. They received similar responses where they were instructed to refer to a web link for the information on the scholarships. An example of email sent by one of the groups and the university staff overseas can be viewed in table 1 below.

Table 1: Emails from the group and university staff

The groups' email	The University staff's email
<p>I am writing to request for the handbook and/or brochures containing the information about the Master in Information and Technology courses offered in your university and also about things that future international students need to know. If you can mail me this package, please mail it to my address below.</p>	<p>Thank you for your email. Below is information on applying to our University and links to the courses offered. There are two ways to apply for Postgraduate study at our university.</p> <ol style="list-style-type: none"> 1. Apply directly online (submitting your supporting documents through the post). 2. Apply through one of our Overseas Representatives. For information on Representatives in your area, please go to the relevant country page. <p>Supporting documents: In addition to the completed application you will also need to submit two references, academic transcripts, a degree certificate and either a study or a research proposal (for research programmes). If your first language is not English you will also have to prove your English Language skills, usually by taking an IELTS or TOEFL test. Please do not hesitate to contact us if you have any queries.</p>

All students involved in this project expressed their excitement with this way of learning English. Communicating via email to a native speaker of English was a rewarding experience for them. “I never thought that I could make an email contact in English with a native speaker in Australia. After this first experience, I am thinking of writing and sending more emails in English to people overseas. I am sure my English writing will improve significantly through email exchanges” said one of the students in charge of sending email on behalf of the group.

This project-based activity was also viewed as a real life learning experience. Students maintained that email was a powerful tool both for empowering their English and finding information from people on different parts of the globe. Some of them who demonstrated good use of English even started to think of applying for jobs overseas by using emails as soon as they graduate from their current university.

Project 2

This project aimed to make students practice their speaking through videotaped conversational activities like drama and role play. The skills sought to be improved in this project were speaking and listening.

In the start of the project, students were sitting in groups of five and each group was instructed to choose a topic from five topics provided. The same topic might be shared between two different groups and each group might also propose their own topic. After ten minutes discussion, the groups decided to discuss the issues of education, friendship, profession or jobs, and family life. Two groups agreed to share the same topic (i.e. friendship).

Having decided their topics, all the groups began searching for samples of conversational activities from the internet. As of the first project, the groups used Google application to locate the materials they wished to use and they were all good at doing this. While observing them doing this search and find activity, I could note some website addresses accessed by the groups (see table 2).

Table 2: Samples of website pages accessed by the groups

Website address	Content
http://englishconversations.org/	Various English dialogues
http://www.agendaweb.org/listening/real-english-conversations.html	Daily life conversations
http://www.focusenglish.com/dialogues/conversation.html	Everyday English in conversation
http://www.talkenglish.com/	English lessons from basic to advanced level

Once the materials required for their group project were collected, the groups continued with next activity. Some of them began modifying the conversational samples taken from internet, for example, by substituting the names of the speakers with their names, changing the place names as well as adding and reducing sentences, while others began discussing the content of the conversations, distributing the roles to each of the group member and planning for the next meeting for practicing the discussion or conversation and the videotaping of the activity.

Students’ views of this project stage were all quite positive. Many of them found that this part required active participation of each group member because only by so doing, the group could accomplish the project with a success. In fact, one student argued,

Everyone was contributing actively in their group project. There was no chance for us to stay passive as we were competing with other groups and the teacher was around us monitoring our work. We are really learning English in this project.

Some of the students also began to realize that they were not only practicing their English speaking through discussions and conversations in this project, but they were informed “by Google” that there were a large number of learning resources which could be accessed with no charges from the internet.

In the meeting for project presentation, all the groups played the videos where everyone in the class could watch and listen. I could observe some interesting findings after observing their discussion and conversational activities and these findings indicated that all the groups put serious efforts to the project. First, I did not anticipate previously that students would dress like the persons they acted as. In one video, for example, some students in one group performed like a transgender and conversed in English talking about their family life including their own life as a transgender (see figure 1). Second, all the groups showed videos with background music and visual effect. Some of the groups were even surprised to see the creativity made by other groups.



Figure 1: Sample of Students’ Video

The presentation activity was not only filled with joys in terms of video (including music and visual effect) watching. Most importantly, students communicated exclusively in English. In the videos, I did not record the use of Indonesian words. However, as I have previously expected, some students might have memorized parts or

all the words or sentences they were speaking during their video recorded project. In an interview, they admitted that they tried to memorize the sentences to be spoken. “But, I did understand the meaning of these sentences before performing the drama. If I was unfamiliar with the words to be said, I would consult my colleagues” said one of them.

This second project required more time than that of the first one since the task was more challenging. The students argued that they had to get together outside their English class for several times in order to complete the project. But, they all seemed to enjoy the activity despite extra hours spent. They perceived that the hours they spent for making this project were so valuable since they could experience meaningful and fun learning.

Project 3

This project sought to enhance students’ speaking and reading skill. Speaking was practiced through group discussions when preparing for the project and project presentation while reading was through brochure skimming and scanning activity.

To start with, I informed the project that the students should be doing. In this regard, they ought to locate the profile of a university from English speaking countries from YouTube. Then, they were also instructed to figure out information about a Master program relevant to their discipline (in this case Information and Technology) offered in their designated campus. Just like the previous projects, all the students, sitting in their groups, were busy preparing for their task. They seemed to get accustomed with PBL. This could be seen from their enthusiasm and more active participations in this project stage. Everyone in the groups was contributing to the project work. When monitoring them undergoing this project planning and preparation activity, I could hardly find a student saying nothing for the groups. Each of them showed interest to the project. However, in this third project, I could still identify students (i.e. two persons) using a few Indonesian words when speaking in the group. Interviewed after the project, these students stipulated that they were unfamiliar with the words to be spoken and their friends too, when consulted, had no idea about the English version of the words. They admitted if they were reluctant to speak to me about the words. So, instead of asking me about the words, they simply said them in Indonesian language during the discussion. But, overall, the use of words other than English was very limited in the third project.

The students were proficient in locating the information from the internet. As such, the profile of a Western university and the brochure sample could be quickly identified. Most of the groups tried to view the video profiles from several universities before they picked one. An interesting learning atmosphere could be viewed during their university selection process where each member of the groups could say their preferences. During this activity, students talked to each other in English, the condition that I expected to emerge in this PBL situation.

At the presentation stage of the following week, each group informed the class about the profile of their selected university. Firstly, they let the class watch and listen to the video and after that they provided some information about the university. One of the groups approached a different way in presenting the information where they asked questions to the class about the video they had just watched. The questions asked include ‘what is the video about? ; where is the university located; what do you think about the university size?; etc.’ The following were the five universities chosen by the groups for this project.

1. University of Melbourne at <https://www.youtube.com/watch?v=kvulHO5ggeQ>.
2. University of Harvard at <https://www.youtube.com/watch?v=omAwAjcUdbY>.
3. National University of Singapore at <https://www.youtube.com/watch?v=EzGh8a8v4SY>
4. University of Sydney at https://www.youtube.com/watch?v=M_kb8lhb974.
5. University of Oxford at <https://www.youtube.com/watch?gl=ID&hl=id&v=o3rejzIqRn8>.

University watching and discussion was considered a unique learning experience for the students involved in this project. It was good for them as they could get new information about overseas universities and as they asserted they could become much more motivated with their English learning and their university education after seeing excellent campus and learning facilities available in these western educational institutions.

Then, another good learning activity was viewed when these students, through their groups, talking about the course brochure downloaded from their selected university websites. They presented the information using some of the questions (e.g. what type of Master course does the brochure contain?; what is the entry requirement?; what is the course structure like?) which I provided in the previous meeting or week. When doing this, they were not aware if I was trying to help them practice their skimming and scanning reading skill along with their speaking through this activity. Skimming is a rapid reading in search for the main points of a reading text while

scanning is a rapid reading in search for a particular information (Vaezi, 2005). But, they soon realized once I informed them after the conclusion of their project presentations. As expected, this project was viewed by students as a challenging but rewarding learning experience. They also felt lucky to be living in this digital age since their learning especially English could be well supported with technology.

DISCUSSION

In this part of the paper, findings of this research are discussed in light of the literature. The discussion also provides the answers to the research questions, namely how well the learning of English with PBL approach using ICT is and how learners perceive their English learning experience with PBL using ICT.

ICT, as previously argued, is only a means to facilitate teaching and learning but its presence does not automatically enhance learning (Lawless & Pellegrino, 2007; Lim & Chai, 2007). It is teachers who possess pedagogical and technological beliefs and understanding who can make students' learning with ICT a meaningful and rewarding one (Lim & Chai, 2007; Marwan & Sweeney, 2010; Tearle, 2004). The findings of this study have proven this where students can undergo a more meaningful English learning after exposed to a PBL approach with ICT. With this innovation, they can practice their English skills more intensively and effectively. ICT in a PBL class does make their English learning an interesting one. This positive learning atmosphere has been highlighted in the literature which says PBL facilitates the creation of a rewarding learning experience for learners (Kloppenborg & Baucus, 2004). Through this research, I could figure out the strengths of my action teaching with PBL using ICT are due to my PBL and ICT understanding (therefore affects my pedagogical and technological beliefs and practices) and on the careful monitoring performed during teaching and learning activities. The latter one helps me so much in assuring that all learners can engage actively in knowledge construction and skills gain. This is, for instance, evident in the research data where I could identify students still speaking in Indonesian language during their project activities mainly due to their words unfamiliarity. Because of my pedagogical understanding which believes that using languages other than English in an English classroom may slow down students' English acquisition, I then stop them from doing so and help them with the English words or expressions that they are unfamiliar with. This way of language teaching has gained supports from language experts who claim that students will acquire English much faster and better if they are only allowed to speak in English in their English classes (Evans, 2000; Lucas & Katz, 1994; Wong, 2010). In contrast, "allowing bilingualism in English classroom will generally only deprive students of an excellent opportunity to use and learn English" (Wong, 2010, p. 128).

Due to my pedagogical understanding too, I encourage students to undertake peer learning activity, for example, through peer questioning and correction. I believe that this way of learning will create a collegial atmosphere where students can learn from each other. This teaching approach, according to Christudason (2003), will result in a positive relationship among learners and produce more effective learning outcomes.

This pedagogical understanding has also inspired me to keep motivating students with regard to the importance of using English intensively and utilizing ICT, especially the internet based applications, for fostering their English mastery. Researchers argue that highly motivated learners determine the success of PBL (with ICT) teaching (Barge, 2010; Stoller, 2006). The findings of this research reveal that students can undertake and complete their project tasks with enthusiasm. This is partly due to the fact that I, as the teacher, bring into the class the materials that are of the interest of the learners as well as interesting learning aids (i.e., various ICT applications). In a PBL class, learners are the center of teaching and learning. Thus, their active involvement including in the decision making process, particularly, regarding what they will learn and how they will learn it, is crucial. By doing so, they can then be more responsible, motivated and confident with their own learning (Maleki, 2005). This type of learners, in Barge's (2010) view, can act positively towards their learning due to the presence of collegial atmosphere where teachers can act as their learning and decision making partner. Obviously, PBL is not just a set of teaching approach which comprises planning, developing, reporting and assessing. In other words, its application needs to consider other influential factors such as learners' motivation, language background and confidence level.

CONCLUSION

This research aims to examine the wellness of students' English learning using PBL with ICT. It employed an action research study carried out for a six-week teaching period involving a class of 25 students as the sample. Observation and interview were used to collect the information.

This research concludes that the application of PBL with ICT in the current context can generate positive learning atmosphere where students can participate actively in the process of knowledge construction and skill

gain activities. This study believes that this success is underpinned by teacher's pedagogical and technological understanding as well as by highly motivated learners.

The results of implementation of PBL with ICT in this study ought to be viewed within the characteristic of this research in which it is carried out and facilitated with a teacher demonstrating good understanding of pedagogy and ICT use and highly motivated students. In other words, different research may generate different outcomes if guided by teachers with lower or higher pedagogical and technological belief and understanding.

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