#### Engaging ESL Students Through a Project-Based Learning Activity

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#### Abstract

Due to the increased influence of multimedia and technology on contemporary students, one of the most difficult challenges facing many language teachers is to develop effective strategies to integrate online technology into the classroom. To help achieve greater integration, ESL teachers can employ the basic tenets of Project-Based Learning (PBL). This paper details the implementation of a web-based project undertaken by pre-university students at the Preparation Center for Languages and Mathematics of Mahidol University in Thailand. As websites are already a familiar medium among students, they can be utilized as a powerful tool to facilitate self-directed learning and enhance student achievement. Creating their own personalized website enables students to become active in their learning, develop critical research skills, and conceptualize a project from beginning to end. A practical approach to implementing the main principles of Project-Based Learning as well as the benefits and challenges of this type of classroom project are discussed in the following paper.

Keywords: Project-Based Learning, ESL, classroom technology, self-directed learning



## Context

Hallinger (2012) noted that Thailand invested in access to education in the 1990s, thereby raising the level of compulsory education from six, to nine, and finally 12 years (p. 3). Pennington has argued, however, that this increased access to education has not addressed endemic problems with the system but instead simply raised the number of students experiencing "the pedagogy of the worksheet" (as cited in Hallinger, 2012. p. 2). In response to these problems, Thailand passed the National Education Act (NEA) in 1999 with the ambitious goal of replacing rote teacher-centered learning with a more student-centered style focusing more on the quality rather than the quantity of graduates (Hallinger & Lee, 2011, p. 140). In spite of these reforms, some Thai students graduating from high school continue to lack the critical thinking and problem solving skills that a student-centered approach fosters.

These shortcomings become immediately apparent when students enter a liberal arts university like Mahidol University International College (MUIC), in which western critical thinking skills and logic are indispensable. Hence, one of the main goals of Preparation Center for Language and Mathematics is to address these deficiencies in preparing students for entrance to MUIC. The preparation center has an enrolment of between 300-500 students depending on the term. The center has four levels of students (PC1-4) with students from pre-intermediate to upper intermediate English language users. The students have a wide variety of educational backgrounds ranging from Thai to international schools. Some of them have even spent a year or two abroad in native English-speaking countries. Most of the students have been studying English for ten years or more. Students receive an average of thirty weeks of instruction in which they work on improving their language proficiency along with the aforementioned critical thinking skills.

However, while the National Education act of 1999 (NEA) and its attendant education reforms are a step in the right direction, imparting logic and critical thinking skills within the Thai context has proven problematic at times since Thai culture is often viewed as unique. As pointed out by Jungck & Kajornsin (2003), one goal of education reform in Thailand preceding the economic crisis of 1997 was to promote "Thai Wisdom" and local knowledge as a way of preserving the uniqueness of Thai culture (p. 31). This movement, they noted, had so much support that it was not only legislated as part of the Education Reform Act of 1999 (p. 31) but was also included in articles 46 and 81 of the 1997 Thai Constitution (Jungck & Kajornsin, 2007, p.33). Rung Kawdang, the Secretary General of Thailand's Office of the National Education Commission (ONEC) argued that Thailand had overlooked local wisdom (as cited in Jungck & Kajornsin, 2003):

[Educators] had pursued Western ways of development and entirely neglected indigenous or local knowledge, the splendid treasure that has played important roles in building the nation's unity and dignity. Now it is the time we should turn back to our own philosophy, our own culture, and our own indigenous knowledge. (p. 28) Hence, educators are challenged with preserving indigenous culture and wisdom while at the same time, imparting western logic and problem solving skills.

# Literature Review

Given the contested nature of the term "Project-based Learning" (PBL) coupled with its wide ranging set of defining features, Thomas (2000) posited that rather than providing a precise definition for PBL, a more pragmatic approach is to filter out what it is not by answering the question "what must a project have in order to be considered an instance of PBL" (p. 3)? In order to answer this question, he developed a framework consisting of the following five criteria: centrality, driving question, constructive investigations, autonomy, and realism (p. 3). First, projects must be a vital component of the curriculum. In other words, they are not outside of the curriculum but instead "are the curriculum" (p. 3). Secondly, projects must examine questions that push students to engage in and grapple with core ideas and components of a discipline. In addition, projects involve students in constructing knowledge through goal-oriented investigation in which they use problem solving to work towards resolutions. Furthermore, projects must be, for the most part, studentcentered rather than teacher-driven (p. 4). Finally, projects must be authentic and focused on real-life problems and solutions that students have the potential of implementing (p. 4). As Markham (2011, p. 38) noted, PBL consolidates knowledge and application in that students must apply what they have learned in order to solve real-world problems and, often, showcase their work to an adult audience. The researchers chose to use action research since it seeks to bring together action and reflection in order to address real-world problems (Wadsworth, 1993).

This shift to authentic learner-centered teaching is increasingly de-emphasizing the role of the teacher, while at the same time, stressing the learner's own experiences as a vital component of learning by focusing on completing tasks in the classroom (Brown, 2007, p. 242). Teachers are no longer considered to be purveyors of knowledge, but are instead seen as facilitators who guide students through the learning process as students actively develop solutions to problems they encounter during the course of their project.

This hands-on path to learning is not a nascent phenomenon, and was in fact supported by John Dewey prior to WWII. This is exemplified by his support of "learning by doing" (Dewey, 1938). This vocational approach to education is not only the foundation of the PBL but also underpins constructivist theory. According to Hernández-Ramos and Paz (2010), "A core assumption of constructivist-theory is that learners actively construct knowledge through activity, and the goal of the learning experiences designed by teachers is to promote a deep understanding rather than superficial (and short-lived) memorization" (p. 152).

Furthermore, learner's needs have changed considerably over the past few decades. Nowadays, the term "literate" encompasses more than just the ability to use language effectively. It also involves a range of skills including the ability to gather, process, and analyze information in order to make decisions and solve problems (Kasper, 2000, p. 105.) As pointed out by Kasper (2000), "Students today must acquire a battery of skills that will enable them to take advantage of the diverse modes of communication made possible by new technologies and to participate in the global

learning communities" (p. 105). Therefore, employing the use of website-based PBL can help address the information technology needs of modern Thai students.

#### Method

The core function of the Preparation Center for Languages and Mathematics at Mahidol University is to provide a strong foundation in academic English, which will allow students to matriculate into the main university. In the two lower levels, PC1 (elementary) and PC2 (pre-intermediate), English instruction entails more explicit division of skills, whereas the upper two levels, PC 3 (intermediate) and PC 4 (upper-intermediate), take a more integrated approach to the related skills. This particular project involved a total of 42 PC 1 (elementary) students divided into two groups.

The project was completely internet-based using Google Sites and had a duration of nine weeks as part of a ten week term. Students were given an advisor to monitor their progress throughout the project. Students participated in interactive advisory sessions, arranged in weeks two, six, and eight to ensure that they were following the predetermined schedule of tasks. The scheduled feedback sessions allowed students multiple opportunities to redesign and adapt their websites before final submissions were evaluated. The first advisory session involved an introduction to the process of creating a Google website. The advisors explained the various aspects of website design, including effective use of colors and fonts, pictures and graphics, complexity, usability, consistency, and clarity.

The website itself was composed of two main sections. The "Who I am" section required students to reflect on their personal lives. They created subpages about the people, activities, goals and values that were most important to them as young people. The "My Country" section involved students conducting research from newspapers, journals, magazines, and additional online news sources. Students were then asked to select and analyze at least four English publications that addressed key issues in Thailand. Students were autonomous in their selection of the recent publications; however, suggested topic areas included business, education, the environment, sports and entertainment news.

To share the results of their learning experience, students were asked to, in their website, write brief summaries of their selected publications as well as discuss their personal opinions about the articles they had selected. In order to enhance speaking competencies, students were also asked to film at least two discussions involving themselves and two other participants, again analyzing their chosen issues. The minimum time frame for each video was 2 minutes; although, most students went well beyond this time limit. The videos were subsequently uploaded to YouTube and integrated into their project websites. Throughout the entire process, students were expected to provide comments and suggestions for their classmates to collectively improve each other's projects in terms of accuracy and completeness.

The completed websites were evaluated based on their overall professional appearance, the quality of the written content, and the thoroughness of their recorded video discussions. Graphic design, creativity, organization, use of space, color, and ease of navigation were the key criteria used in the evaluation of the websites. Writing quality and oral components were measured based on the use of clearly

organized comparisons, cohesively linked language, grammatical accuracy as well as lexical range. Students were also evaluated on their collaborative effort as measured by the quantity and quality of comments on each other's websites. **Outcomes** 

In creating their own websites, students were able to reflect on self-management skills, creativity, and problem solving strategies. Through the multidisciplinary online project, students were actively challenged to achieve higher cognitive processing as demonstrated in their analysis of issues that affected them as citizens of Thailand. Students learned to organize the information and opinions they gathered into web pages that they had carefully designed. Students gained important knowledge of information technology and capitalized on online learning opportunities. By applying multiple skills, which included writing, reading, speaking, research and critical thinking skills, website design, and video editing, student autonomy and confidence grew. Through the online learning experience, students were able to take advantage of the dynamic and collaborative learning environment that is often created by merging project-based learning with Internet resources. Due to the requirement of commenting on each other's projects, learners were afforded numerous opportunities to build on their collaborative learning competencies. The students were also exposed to expeditionary learning as they completed a structured investigation of the most pertinent local issues and explained their impacts at a personal and regional level. The majority of students remained engaged and enthusiastic throughout the assignment.

## Discussion

It is possible to use Thomas's (2000) five-point framework to evaluate the level of adherence to PBL guiding principles achieved by this project. With the exception of Thomas's first criteria of centrality, this project was able to satisfy the main criteria necessary to be deemed Project Based Learning.

Despite being a major component of the pre-intermediate level, the final website is still considered "peripheral" as it is not the central passing criteria. At the Preparation Center, students also receive more traditional EFL instruction, in which core skills are explicitly emphasized to a greater degree. This conventional approach to teaching may be effective; however, it does place constraints on student autonomy and overall level of input in determining their educational goals.

The criterion of "driving question" was adequately met as the students were encouraged to draw personal conclusions about what they had read about. The analysis of the issues that students researched had a clear and purposeful intellectual aim. In designing the website and carefully analyzing information from their own research and the opinions of others, students were able to learn and practice problem solving skills. Students successfully converted the outcomes of their research into a topic-based website reflective of their learning experience, thereby fulfilling the criterion of constructive investigations.

Autonomy and realism were equally observed as advisory sessions served only to allow students opportunities to seek clarification and review their intended outcomes. As in typical PBL, the content, design and overall direction of the resulting websites were for the most part directly student-driven. The research that students engaged in involved texts that were authentic as were the participants in the filmed discussions.

#### **Conclusion and Suggestions**

The construction of a project-based website affords students encompassing practice in problem solving, communication, and self-management. The autonomy of creating a website engages students and motivates them by encouraging accountability and habits of mind that are associated with goal setting and self-motivated learning. Future practice in PBL should involve greater information technology as it is vital for modern students to possess a high level of technical literacy. Ellis (2006) argued that evaluating the effect of electronic networks on the quality of student writing is somewhat problematic (p. 372). He also pointed out, however, that there has been some research showing that electronic networks are beneficial since they can broaden the students' audience in three different ways: quantitatively, providing more readers for the student, rhetorically generating peer comments that create new tasks, and reciprocally linking writers who act as each others' audience (p. 372). Teachers should be encouraged to apply creativity to the design of project-based learning opportunities as they encourage enhanced research competence and fundamental skills of implementation and evaluation.

In reassessing traditional EFL instruction, it may be necessary to begin emphasizing the skills of creativity, problem-solving, and self-direction. The traditional Thai curriculum may be able to re-orient itself to place greater importance on the ability to think critically and express creativity in addition to the communicative use of English. Similar PBL projects involving web design can be used as a way of preserving indigenous knowledge while at the same time equipping Thai students with a more global perspective of education.

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