

TEACHING FOUR LANGUAGE SKILLS USING PROJECT-BASED LEARNING (PBL)

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ABSTRACT

The article argues that project-based learning (PBL) has important implications to EFL/ESL instruction. Learning the English language needs not only focus on syntax accuracy and competence in communicative performance. More so, higher cognitive processing is equally important as reflected in problem-solving skills, creativity, and selfmanagement. Developing the aforementioned skills can be undertaken through the integration of project-based learning with EFL/ESL instruction. Hence, corresponding teaching and learning strategies need to be institutionalized in determining the extent to which students are able to exhibit the said skills that are not commonly associated to traditional English pedagogy. Drawing from experiences in ESL instruction, the article argues that educational institutions that provide EFL/ESL instruction can benefit by redirecting the curriculum from the traditional emphasis on standardized language to approaches that attempt to teach fur language skills such as creativity, problem-solving, self-management, and teamwork.

Project-based learning is centered on the learner and affords learners the opportunity for in-depth investigations of worthy topics. The learners are more autonomous as they construct personally-meaningful artifacts that are representations of their learning. This article examines the theoretical foundations of project-based learning, particularly constructivism and constructionism. Practical advice and recommendations for project-based learning are discussed, including beginning slowly with the implementation, teaching students to negotiate cooperative/collaborative groups and establishing multiple forms of performance assessments.

Introduction

As the English fever is definitely evident (see Krashen, 2003), the effort to study English within the country is not free from lingering problems such as in the areas of curriculum development, instruction, and teacher competency (Oladejo, 2003), and issues in relation to the effects of English learning to self-identity (Tiango, 2005). The article argues that learning the English language needs not only focus on syntax accuracy and competence in communicative performance. More so, higher cognitive processing is equally important as reflected in problem-solving skills, creativity, and self-management. Developing these skills can be achieved through the integration of Project-based Learning (PBL) as institutionalized in the EFL/ESL curriculum and actualized through teaching.

Project-based learning is an instructional method centered on the learner. Instead of using a rigid lesson plan that directs a learner down a specific path of learning outcomes or objectives, project-based learning allows in-depth investigation of a topic worth learning more about (Harris & Katz, 2001). Through the construction of a personally-meaningful artifact, which may be a play, a multimedia presentation or a poem, learners represent what they've learned (Harel & Papert, 1991; Kafai & Resnick, 1996). In addition, learners typically have more autonomy over what they learn, maintaining interest and motivating learners to take more responsibility for their learning (Tassinari, 1996; Wolk, 1994; Worthy, 2000). With more autonomy, learners "shape their projects to fit their own interests and abilities" (Moursund, 1998, p. 4). So, project-based learning and the construction of artifacts enable the expression of diversity in learners, such as interests, abilities and learning styles. This article will explore the theoretical foundations of project-based learning and examine cases from the literature to note variations and similarities of how project-based learning has been implemented. Next, the anatomy of a model case will be considered. Finally, some practical advice and recommendations for trying project-based learning in the classroom will be provided.

Theoretical Foundations

Project-based learning has a long history. As far back as the early 1900s, John Dewey supported "learning by doing." This sentiment is also reflected in constructivism and constructionism. Constructivism (Perkins, 1991; Piaget, 1969; Vygotsky, 1978) explains that individuals construct knowledge through interactions with their environment, and each individual's knowledge construction is different. So, through conducting investigations, conversations or activities, an individual is learning by constructing new knowledge by building on their current knowledge. Constructionism takes the notion of individuals constructing knowledge one step further. Constructionism (Harel & Papert,

1991; Kafai & Resnick, 1996) posits that individuals learn best when they are constructing an artifact that can be shared with others and reflected upon, such as plays, poems, pie charts or toothpick bridges. Another important element to constructionism is that the artifacts must be personally meaningful, where individuals are most likely to become engaged in learning. By focusing on the individual learner, project based learning strives for "considerable individualization of curriculum, instruction and assessment-in other words, the project is learner centered" (Moursund, 1998, p.4).

In the literature, examples of project-based learning vary in both context and implementation. In project-based science, for example, emphasis is placed on a driving question to guide an investigation (Blumenfeld et al., 1991; Marx, Blumenfeld, Krajcik, & Soloway, 1997). In teams, the class performs similar experiments and collects data to help answer the driving question, and the students help determine how the data is analyzed, what it means and how the results will be presented. This inquiry process takes considerable amounts of time and requires students to work well with each other (see e.g. Scott, 1994), but the process is representative of authentic scientific investigations.

Authentic and purposeful investigations are also the hallmark of disciplined inquiry (Levstik & Barton, 2001). In the social sciences, many students roll their eyes as they memorize names, dates and places. But, by encouraging students to "do history," Levstik and Barton underscore the contexts for studying the past: history is interpretive and history is often explained through narratives. "Doing history" involves in-depth understanding through inquiry, building on prior knowledge, scaffolding learners and providing multiple forms of assessment (e.g. Hoover & Taylor, 1998).

Though similar in structure to the project-based science example, disciplined inquiry seems to allow more flexibility for learners to make the learning more personally relevant by situating themselves into the content. For example, learners are able to ask themselves "What does this mean for us today?" or "How does this affect my family and friends?"

A Review of Related Literature

What is Project-based Learning?

PBL is *an approach to instruction that shifts from traditional teaching practices characterized by short, isolated, and teacher-centered lessons*. Instead, it emphasizes learning that can be derived from long-term activities, which are interdisciplinary, student-centered, and integrated with real world issues and practices (Solomon, 2003; Staff, 2001; Willie, 2001). Many of the skills learned through PBL are those desired by today's students,

including the ability to work in group well with others and handle interpersonal conflicts, make thoughtful decisions, practice initiative, and solve complex problems (Kloppenborg & Baucus, 2004). Students are provided an interdisciplinary approach to learning and in the process made to develop several language skills successively or at the same time as they work together on a challenging project (Solomon, 2003).

A Conceptual Model for PBL

	Self-Motivation
	Initiative
	Teamwork
Project-based Learning (PBL)	Conflict
	Resolution
	Awareness of Real World Problems
	Problem Solving
	Creativity

Those who advocate for PBL do not necessarily assert that it is exclusively the most effective educational approach there is but Staff (2001) observes that it is a way to make students engaged in school work, cut absenteeism, boost cooperative learning skills, and improve test scores. The students were able to develop self-motivation, initiative, and teamwork. In the study of Brunetti, Petrell, and Sawada (2003), higher achievement awareness was evident among students, PBL compared to those heavily entrenched in the practice of traditional teaching. The ability to exhibit creativity and analytical skills in solving problems were displayed by the students. The research of Kloppenborg and Baucus (2004) reports on the learning outcomes of students as manifested in their successful experiences gained in planning, managing, and accomplishing projects. Successful experiences include the ability to resolve conflicts through creative problemsolving approaches and the accomplishment of a project that made them more aware of real life problems and issues.

PBL and English Language Learning

Project Based Learning (PBL) has always been an integral component of the curriculum among educational institutions. Even as early as elementary, PBL is already

consistently integrated across the curriculum namely thematic materials. Therefore, the educational system at the very least aims to equip with skills meant to prepare them for addressing real world concerns and even perhaps in making them desirable workers. As far as English learning is concerned, projects have always had a significant role in the development of English as a second language. Even in the early stages of schooling, students learning English are already exposed to creative projects such as performing a skit, classroom/stage drama production, group reading presentation, song writing and performance, academic debate, writing a comic book, participation in a school newspaper club, teaching English to peers from less fortunate schools, etc. English teachers have an array of projects that students have grown accustomed to through the years.

Project-based learning (PBL) seems to match this English teaching and learning need. PBL is simply defined as —an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop (Moss & Van Duzer, 1998, p.1). PBL is different from traditional instruction because it emphasizes learning through student-centered, interdisciplinary, and integrated activities in real world situations (Solomon, 2003; Willie, 2001). In particular, PBL activities can be characterized as follows (Fried-Booth, 1997; Simpson, 2011; Srikrai, 2008; Stoller, 1997):

1. focuses on content learning rather than on specific language patterns,
2. is student-centered so the teacher becomes a facilitator or coach,
3. encourage collaboration among students,
4. leads to the authentic integration of language skills and processing information from multiple sources,
5. allows learners to demonstrate their understanding of content knowledge through an end product (e.g., an oral presentation, a poster session, a bulletin board display, or a stage performance), and
6. bridges using English in class and using English in real life contexts.

More importantly, PBL is both process- and product-orientated (Stoller, 1997). Students have opportunities to use several language skills (e.g., problem-solving, creativity, teamwork, as well as language) at different work stages, so the work and language skills are developed (Brunetti, Petrell, Sawada, 2003; Solomon, 2003). Since PBL is potentially motivating, empowering and challenging to language learners, it usually results in building learners' confidence, self-esteem, and autonomy as well as improving students' language skills, content learning, and cognitive abilities (FriedBooth, 1997; Simpson, 2011; Solomon, 2003; Srikrai, 2008; Stoller, 1997; Willie, 2001). Learning becomes fruitful for

learners because they exhibit their abilities to plan, manage, and accomplish projects through their content knowledge and language skills (Kloppenborg & Baucus, 2004).

Within this context is how the use of the English language is applied with accomplishing challenging projects meant to simulate real life/world issues and problems.

Creativity.

Such acts can involve the ability to spontaneously express one's ideas without reliance on rote memorization. It can also be an act of self-expression. This involves the free flow of ideas as evident in creative speeches, poetry writing, story-telling, developing a home movie storyline, and the preparation of artistic materials for drama production sets, costume design, props, etc.

Problem-solving.

Such acts involve the ability to exert patience and self-constraint when faced with a difficult or challenging experience. It can also reflect the ability to look and weigh options. It also involves making decisions and comparing scenarios or situations. Acts of resourcefulness are also good indicators of problem-solving skills and the ability to actually resolve the problem at hand.

Self-management.

Such acts involve the ability to manage time and to always be appealing to one's self and others. It also involves the ability to manage stress by finding outlets for frustrations. Another good indicator of self-management is the ability to maintain grace under pressure.

Teamwork.

Such acts involve the ability to work with a group. It involves being able to shift from leadership to follower roles with ease. It also involves the ability to handle group frustration and resolve interpersonal conflicts. The best indicator is the ability to motivate group members and feel comfortable in spite of individual differences.

Practicing Project-based Learning

Implementing project-based learning in the classroom may be daunting for experienced teachers and even more overwhelming for novices. The following are some of the barriers to implementing project-based learning with helpful hints and practical advice for making project-based learning work in the classroom.

First, because project-based learning focuses on in -depth investigations while constructing personally -meaningful artifacts, the tone of a classroom may change. This may be uncomfortable for the students and the teacher. Different students will be researching different topics, so the role of the teacher, as well as the role of the student, may

change. It's important to begin slowly. By beginning slowly, teachers can design projects that reflect state or national objectives and continue to meet standards.

Next, almost all the examples of project-based learning attempt to capitalize on the successes of cooperative or collaborative learning in some manner (e.g. Land & Greene, 2000; Marx et al., 1997). Students that are inexperienced with working in groups may have difficulties negotiating compromise (Johnson & Johnson, 1989; Socha & Socha, 1994). If these methods have not been used before, then it may be necessary to teach learners how to interact within groups and manage conflict within groups. Also, sometimes groups are used for other more practical reasons, such as insufficient copies of books, manipulatives and even computers. Making sure all learners have opportunities to interact and develop language skills with resources may be necessary. However, if access to resources is not an issue, then teachers may want to be more creative with the incorporation of cooperative or collaborative learning, such as peer reviews and external expert interviews (Marx et al., 1997).

Finally, assessment of project-based learning can also be a challenge. Because learners are constructing artifacts that represent their learning, it is important to provide feedback that is constructive and authentic to the objectives of the assignment. Multiplechoice and true-false tests may be inappropriate to judge the quality of learning that has occurred. Two suggested options include portfolios and rubrics. Portfolios offer the opportunity to employ multiple forms of assessment through different types of works and allows the learner some choice over which items will be included (Levstik & Barton, 2001). In addition, portfolios for extended periods demonstrate progress to learners, parents and teachers. However, the disadvantages to using portfolios are that they can be time consuming to grade (Zvacek, 1999) and can be somewhat subjective.

Rubrics, on the other hand, allow assessment to be more objective and reliable across learners. When created prior to the project, teachers can communicate their expectations for the project in the rubric, and the students are more aware of how their work will be evaluated (Pickett & Dodge, 2001). Frederick Drake and Lawrence McBride (1997) offer one option for evaluating history and other social science projects. The rubric includes three constructs- knowledge, reasoning and communication-with levels of proficiency for each. This assessment tool is based on national history standards but could easily be adapted to fit another domain such as literature.

Reading about project-based learning is an important step in the implementation process. However, there are other steps you can take to become even better prepared. It may

be helpful to review some examples of project-based learning in action. *Doing History* (Levstik & Barton, 2001) is an excellent primer for social science and interdisciplinary studies. Directed at elementary and middle school students, numerous examples are included and margin notes specify references and synopses. In addition, the article by Drake and McBride (Drake & McBride, 1997) cited above includes a few examples of project ideas for secondary social science students along with the suggested rubric.

Discussion

In the current study, PBL in the form of the interdisciplinary-based project was implemented in the English to encourage the students to link their language skills to their content knowledge. The most interesting finding regarding the implementation of the project-based activity was that the students found a balanced use of their language skills and knowledge about Information of project. PBL activities allow students to integrate language skills and content knowledge to complete the projects (Fried-Booth, 1997; Simpson, 2011; Solomon, 2003; Srikrai, 2008; Stoller, 1997; Willie, 2001).

With respect to enhancement of students' language skills, the findings of the study are consistent with those of Srikrai (2008) and Simpson (2011) who found that students' language skills were enhanced through project-based activities. In the present study, the students perceived that their reading, writing, and speaking skills, as well as vocabulary knowledge and translation skill, were improved because they used these skills to acquire, analyze, and synthesize information as they worked on their project. These findings indicate that authentic integration of language skills and processing information from a variety of sources can enhance language skills, and this mirrors real-life tasks (Stoller, 1997).

Project-based learning offers an engaging instructional method to make learners active constructors of knowledge. Rooted in constructivism, constructionism and cooperative/collaborative learning, project-based learning has strong theoretical support for successful achievement. Suggestions for implementing these examples as well as other examples of project-based learning include: begin slowly, prepare learners for using cooperative learning and use constructive assessments.

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