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## PROJECT-BASED LEARNING IN AN EFL SETTING – A CASE STUDY AT A UNIVERSITY IN VIETNAM

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#### Abstract:

Teaching for enhanced learning experience has well-received great interest from many teachers and educators around the world. In the EFL setting, tremendous efforts have been recognized in taking students out of a conventional classroom to experience a new way of learning which stimulates interest and creative thinking, which improves communication and collaborative skills, and which exposes students to more meaningful real-life situations. Project-based learning (PBL) is an answer to this, and it has developed as an alternative to teaching a foreign language with a focus on enhanced learning experience and increased creative teambuilding and group skills through meaningful projects. This paper presents how PBL has been adopted at the University of Foreign Language Studies - the University of Danang (UFLS-UD). It revisits the significance of PBL, the structure of a PBL activity, and reports how PBL has been situated in the local context of teaching English to students majoring in English in Vietnam. The reflections reported here showcase the gains through the path of action research enacted by individual teachers who act as change agents or enablers of this innovative teaching and learning approach and whose efforts have been recognized by means of several adaptations made to bring real life and a sense of community into language instruction.

#### **Keywords:**

Project-Based Learning (PBL); Active Learning; Learning Experience; Action Research; Language Instruction



## **Rationale for Project-Based Learning**

The past decades have seen a growth in the use of project-based learning (or PBL) in many educational settings. While attempts have been made towards assimilating the natural learning environment of a child into the language classroom, making language learning occurs naturally in the way rich experiences could be gained for learners of varying levels of language proficiency is no easy tasks. For students majoring in English, what is expected through years at college is more than a mastery of language competence. With increasing demands for preparing students to be competent users of English in a professional work setting, the ability to work in a team together with critical and creative thinking is deemed as important as these are considered essential 21<sup>st</sup> century skills for future professionals.

With this enhanced reconceptualization of teaching for better learning experience, it is important that learning should go beyond the conventional practice of the chalk and board with the teacher being the sole transmitter of knowledge and students being passive recipients. In fact, in a traditional classroom, the time allocated for the development of the natural curiosity of the learner can be limited, especially when the focus remains on the subject being taught rather than on how students learn. Such a teacher-based approach tends to embrace a more structured form of learning, delivering content rather than new learning. A more learner-centered and holistic approach to learning is thus needed because it favors efforts that arouse the students' interest, that ignite their eagerness to learn, that engage them in meaningful learning environment, and that give them a sense of societal miniatures where they can function with real objects and real people where learning is shaped by direct contact with, or direct exposure to, more real-life situations.

To meet these requirements, problem-based learning was introduced. Under this approach, the teachers are expected to present course material in a way that their students "not only gain knowledge of the discipline but also become self-directed learners who develop problem-solving skills that they could apply in future courses and in their careers" (CTL, 2001). Also, in problem-based learning, students work with classmates to solve complex and authentic problems that help develop content knowledge as well as problem-solving, reasoning, communication, and self-assessment skills (Campbell, 2014). By tackling problems that might occur while learning, students can sustain their interest in course material because they realize that they learn the skills needed to be successful as language teachers and language professionals.

As an early alternative to teacher-centred approach and a precursor to project-based approaches, problem-based learning has seen a trend towards coupling it with other experiential aspects and twenty-first century skills. Project-based learning has thus been advocated, and in recent years it has gained momentum in education (Thomas, 2000), including language teaching. In the light of PBL, students work in groups on a project which involves the use of the target language, or put another way, hands-on projects that involve them in the entire process of learning. This approach to learning, according to Sawamura (2010, p. 44), can motivate students and create positive communication and collaboration as they develop language, content, and thinking skills. In what follows, the concept of PBL will be revisited and its characteristics being considered before an account will be given on how PBL has been enacted for the language instruction at UFLS-UD.



## An Overview of Project-Based Learning

## Defining Project-based Learning

As an alternative approach to learning, Project-based learning (PBL) is defined by Buck Institute of Education as

a systematic teaching method that engages students in learning essential knowledge and life-enhancing skills through an extended, student-influenced inquiry process structured around complex, authentic questions and carefully designed products and tasks.

or by ACTFL (2002) as

an effective model for creating curriculum units and authentic assessments that engage students while supporting development of language/culture proficiency, global competency and 21st century skills. Through participation in ... PBL, the value of language learning in an interconnected world becomes immediately apparent to students of all ages.

These definitions suggest that PBL is an instructional strategy whereby students work cooperatively over a period of time to create a product, a presentation, or a performance. It stresses the necessity of students learning by investigating a complex question, problem or challenge while promoting active learning, engaging students, and allowing for higher order thinking (Savery, 2006). Besides the need for inquiry into new knowledge, life-enhancing or success skills are also the key gains expected out of students once they are engaged in PBL.

## Identifying Project-based Learning

There are several components which can be characteristic of PBL. Boss and Krauss (2007), for example, suggest the following considerations:

- Students can shape the project to fit their own interests and abilities.
- Students collect and analyze information, make discoveries, and report their results.
- Students conduct research using multiple sources of information.
- Students must draw on a broad range of knowledge and skills.
- The project cuts across a number of disciplines.
- The project extends over a significant period of time.
- The project involves the design and development of a product, presentation, or performance that can be used or viewed by others.
- The context for the subject matter is larger than the immediate lesson.
- The instruction and facilitation are guided by a broad range of teaching goals.

Building on these fundamentals, Larmer and Mergendoller (2010) have proposed seven essentials of PBL, which can be elaborated as follows: (i) *a need to know* – which can be argued as inquiry to content knowledge and innovation; (ii) *a driving question* – which can be seen as identification of the problem that needs a focus of attention; (iii) *student voice and choice* - which signifies the role students play in selecting, designing, developing the project; (iv) *twenty-first century skills* - which can be said to refer to how students learn and work together in completing that project, embracing such skills as collaboration, team building or teamwork, presentation, time management, critical thinking problem solving and decision making; (v) *inquiry and innovation* – which develops from a driving question and involves horizons for new learning and discoveries and associations with other disciplines; (vi) *feedback and revision* – which enables students to learn to monitor their progress and to improve their product; and



Volume 6 Issue 38 (March 2021) PP. 223-236 DOI 10.35631/IJEPC.6380018 (vii) *a publicly presented product* – which allows students to show the results of their learning through the use of language skills.

There seems to be a philosophy that underlies this approach. That is, PBL requires a new epistemology that puts students at the center of the learning process. To enable PBL, there is a need for less of the structure often found in a traditional educational setting typified by classrooms with rows of desks and a teacher in the front, and a strict lesson plan needed to accomplish the established educational goals. For language instruction, the PBL approach call for designs to be followed, with students working together over a time period and setting a plan for achieving the intended learning outcomes - mastery of not only content knowledge but also communicative language competence plus other important life skills needed for a language graduate. Such an integrative and holistic approach requires more than a standardized test format; instead, it calls for alternative ways of assessing students' progress and achievement which enable them to know what they have learned and guide them in the process that they can take control of their own learning. As regards PBL classrooms, Boss and Krauss (2007, p. 1) suggest integrating technological tools so that it can become "an accessible guide for maximizing the benefits of PBL in today's technology-rich learning environment".

## Methodology

For any change to take place in an education setting, it is essential that the teacher have a key role to play. As part of the continuing professional learning, the teacher is expected to engage in the process of continuous inquiry of their own teaching to identify problems, or rather, areas of change. Action research was thus adopted, using the four-step model (i.e., Plan-Act-Observe-Reflect) introduced by O'Leary (2004) or Kemmis and McTaggert (2008). According to Sagor (2005), the primary reason for engaging in action research is to assist the actor in improving and/or refining his or her actions. On understanding the problems that students face with communicating effectively in social and professional environment, and with fully integrating into the challenging world of work, some teachers of English at UFLS-UD embarked on innovative instruction and assessment plans that engaged projects in their language curriculum. With a desire to enhance language learning experience, our starting point was a couple of courses, namely British Culture and English Literature, whereby roleplay or theatrical performances were integrated. For this type of drama project, students were assigned to research a particular historical period with its representative authors and typical works of literature. They were asked to work in a team and this four-week theatrical performance project would count towards 50% of their overall score. Their performances were recorded and videotaped for assessment purposes, and for reference to the future cohort. With encouraging success from initial attempts, success stories have been well communicated among other teachers via informal exchanges in the staffroom, and reflections on learning were shared in several workshops or seminars for teacher professional development. This shared learning has initiated further actions from the part of other teachers with additional courses integrating PBL in the delivery and practice of course content. Chief among those are Translation Theory, Translation and Interpretation, Business Communication, Professional Development, English Language Methodology, to name only a few. In what follows, an account of PBL activities is introduced with attention being given to how they have been localized to fit in the EFL setting at UFLS-UD.



# **Project-Based Learning at University of Foreign Language Studies - University of Danang (UFLS-UD)**

At UFLS-UD, Project-based learning (PBL) has been adopted in several courses with varying classroom contexts and learning purposes. Because the University has encouraged a more learner-centered approach to teaching and learning, students have been engaged in many meaningful learning experiences with realistic tasks, and realistic goals. In the sections that follow are a representative sampling of the many UFLS-UD courses in which PBL has been incorporated.

## PBL in the Course of Translation Theory



**The Translation Theory Project** Term 5 Mid-term group project

In this project, students are engaged in the process of inquiry about the theory and practice of translation. As a theory course, it provides students with fundamentals of translation from principles, equivalence, loss and gain to methods and strategies of translation. To enable students to

translate theory into practice while putting their conceptual knowledge into practical use, students team up to explore the real-world language. They are expected to use the theoretical knowledge to illuminate what is hidden unexplained in the nature and practice of translation.

After three to four weeks, student groups prepare a presentation intertwined with interactive stories, or posters, role play simulations, talk shows, to name a few. By engaging in this type of PBL, students are empowered in the identification of a translation problem that ignites their inquiry into understanding what it is, and how it can be explained using the theory compounded with translation practices. Interestingly, to achieve their project goals, many groups of students have come up with ideas to take field trips to historic museums, cultural galleries, international

airports, and other places frequented by many English-speaking visitors (e.g., to roval mausoleums and tombs in Hue Imperial City, or even Hoian Ancient town). At these locales, students researched the translated version on statues or artifacts and analyse problems arisen via translation. One outcome is their enhanced understanding of real issues in the practice of translation represented in these real-life works. Presentations were then made, products displayed, and artifacts chosen to illuminate an area of new learning. By working in a group on



a chosen project, students can discover how language works in the real world, discovering their inner strengths, practicing critical thinking and problem-solving skills. They also learn communication, presentation, public speaking, and even Q &A techniques when it comes to making presentations in front of an audience with comments from both their teacher and their



peers. The role of the teacher as facilitator can be seen in the way that clear instructions and constant feedback is given to students throughout the process – before, during, and after the performance or presentation. When it comes to assessment, students are assessed based on task accomplishment, creativity or originality of their work, collaboration, and presentation.

## PBL in the Translation and Interpreting Course

## The Translation Journal / Portfolio and Interpreting Logbook



**Translation Journal/Portfolio Project** Terms 3-5-7 Individual/Group Project (30-50%)

The Translation Vocab Book Project is assigned in the course of Translation and/or Interpreting whereby individual students are asked to keep a translation journal or an

interpreting logbook, that is a vocabulary handbook for translation or interpretation over a term. By noting down their favored theme-related noun phrases (NPs) or verb phrases (VPs), students can accumulate a wealth of theme-based knowledge which is specific and relevant to the content areas covered in the course. For this project, students are asked to keep a record of topic-related NPs and VPs which they have learnt or come across during the process of learning and practicing translation and interpreting. They are also asked to read authentic materials and documents from the Internet and other resources to make sure they learn new vocabulary each week and jot them down in their vocab book. Sources of the reading materials (websites, documents names, etc.) should be inserted in footnotes help the teacher to keep track of whereabouts the students have learned new theme-related words and phrases and technical terms, and to recommend the sources to other students. These vocabulary books are displayed every two weeks for classmates to view, and students vote for the best vocabulary of the week, showing the results of their reading news, bulletins, reports, or documents in English and of how they jot down the phrases they think useful to be included in their vocab bank. And then chances are open for students to exchange their journals with their peers'. By so doing they can learn from each other's work, gaining a lot more technical terms or phrases while cutting down the time.

## Live Broadcast or the Talk Show

Students work in groups to simulate live broadcasts or talk shows, using authentic materials from the Internet and elsewhere in the real world. They write news which is then broadcast live in groups for their peers to practice interpretation. Simulated talk shows, mock conferences are also conducted in the classroom for enhanced practice of language in use for the purpose of interpretation practice. Feedback is then given by the presenters themselves, by their peers, and by the teacher, and thus other groups can learn and benefit from it. This type of learning centres around role play and simulation, while at the same time helping students to build up their confidence and competence in communication, public speaking, presentation, problem-solving and teamwork.

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## PBL in English and American Literature Course

The Theatrical or Drama Project



**The Theatrical or Drama Project** Semester 7 Group Project (50%)

The course of English and American Literature is an integral part of the English-major undergraduate program delivered at UFLS-UD as a core course in the seventh term of the program. Every term week, students have around three periods of 50 minutes each of class time. These teaching hours are designed to improve students' literary acquisition and

language proficiency. Additionally, students are expected to develop their analytical skills, forming personal judgment and artistic appreciation by means of language.

Incorporating PBL in the literature class means engaging students with some theatre work. In fact, students are asked to form groups, working over a period of time, extending from 2-5 weeks, during which they need to choose an excerpt from a play to act, or to devise their own skit or performance based on the learning materials, and additional materials they can gather from other resources. Students have to spend hours studying the author and his typical work chosen as a theme for their



performance. Preparation for the performance in front of class to be observed and commented on by the teacher and other peers, and to be assessed for mid-term score would be enough for them to work hard on the project, to make a lot of discussions and negotiations, to involve critical thinking and problem-solving, and of course a number of rehearsals so that their theatrical performances will be highly valued and highly entertaining as well. Incorporating PBL in teaching literature is a perfect way to inspire students to learn literature and to appreciate the culture, the people, and the society where the target language is spoken.





Besides this so-called content knowledge, PBL is an effective way for students to show their interest in, and their love of literature in general and the beauty of the English language in particular. This type of learning enables students, as Cutshall (2012, p. 32) comments, "to apply knowledge of the perspectives, … and practices of a culture, to connect to other discipline areas, and [develop] insight into one's own language and culture (Cutshall, 2012, p. 32).



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## PBL in Business Communication Course

**The Business Communication Project** Semester 8 Group Project (50%)

At UFLS-UD, PBL has been the best possible way to enhance student experience in the course of Business Communication offered in the final term of their undergraduate program. The course covers a number of topic areas including the elements and characteristics of communication, psychology of communication, hierarchy of needs, the principles of voluntary



exchanges, marketing mix, aspects of international trade and the flow of goods and services, together with other aspects of interpersonal communication like negotiating, communicating for a job and job interviews. These are considered necessary fundamentals in business communication, which helps enhance student knowledge skills needed to fully integrate in the future job market where English language is used as a medium of communication. As different modules are offered to students in the most interactive ways, very often PBL is incorporated as some form of informal assessment to support learning, and as formal assessment when the project outcomes count as the mid-term assessment for the course.

In a more conventional course delivery, students can learn some important facts about entrepreneurship, and he will have an academic rigor of the subject. However, if they are asked to work on a project in which they find the need to start a business, and then to manage their own business, they then develop real life skills that accompany them in their integration into the adult life later on. While standardized tests only assess students' knowledge about specific content, PBL can be used to assess students" 21st century skills as "productive members of a global society'. By giving and receiving feedback from and negotiating with peers, students learn the importance of collaboration in groups, using rubrics and self-evaluation and reflection (ACTFL).





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Student projects towards a gallery walk with posters, product display or sales exhibition involve students working in groups to develop a new product or a new service. The development of this type of product or service requires students to make inquiry into current market demands or market trend forecasts while exploring potentials for their new products or services. In doing this, students need to gather a lot of information about possible product lines and services, to analyse the market segments, to identify a niche market, to understand their target customers with diverse needs and diverse expectations, to discuss the price and delivery options, and so forth. Having all of these well prepared for a 20-minute presentation on the promotion of a new product or service embraces other forms of skill-building as well. Without any shadow of a doubt, students can practice communication, problem-solving, critical thinking, decision-making, time management, and others, which are important twenty-first century skills enabling our graduates to be, in Candy's terms (2000: 1), 'knowledge navigators and life-long learners'.

The presentations made by students make the classrooms become a real miniature of the workplace, for example, a trade fair, a sales exhibition, a poster gallery, a promotional campaign, a showroom, a sponsored event, and so on. These PBL projects implemented in a more authenticated learning environments can bring students a kind of learning experience that they can rarely, if even, in a conventional classroom. That is the reason why PBL is now implemented very often in foreign language classes because they provide opportunities for students to engage with the language authentically. It is also a chance for students to use their language skills while researching and presenting the final product.





## **Reflections and Learning**

What has been in reflection so far shows a journey that unfolds an innovative way of doing things when the academia has decided to move away from a conventional type of teaching towards a new vision of instructional design. It is a learning journey – the teacher and student alike. For instance, we have taken advantage of digital tools for inquiry, collaboration, and communication to connect learners to one another even to the world beyond the classroom. This endeavor requires learning about emerging technologies as well because we can see gains in how students make good use of technological tools to produce a well-designed presentation with trailers, music, sound recording, videos with dubbing and subtitles, and other types of information gathering and analysis. Such elements of computer-assisted learning and inquiry have added to the maximized benefits that PBL could bring to our language classrooms, and the PBL teachers have seen their role shifting from a content expert to an active learner who ceaselessly seek new ways to engage with students. The processes of PBL and the product outcomes, as experienced by UFLS-UD students can be said to be representative of PBL approach because they embed important elements characteristic of PBL. The mapping below elaborates on this.

Characteristics of PBL	<b>Reflections on student learning at UFLS-UD</b>
a concrete <b>timeline</b> that helps students	group projects taking 3-4 weeks to be completed
learn how to manage projects	
an engaging <b>presentation</b> of the product that grabs student interest	students being excited with the trade fair, poster gallery, sales exhibition, or product launch campaign.
an essential <b>question</b> that is based on the appropriate skill and age level of students,	students making logbooks, keeping journals and portfolios, designing roleplay performances, promoting a new product/service.

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a focus on <b>content</b> and <b>skill mastery</b>	students mastering language skills while integrating content knowledge with cultural input, translation theory principles, understanding of business terms and communication principles.
a <b>product</b> that demonstrates knowledge and skill showing students mastering the standards and the objectives of the project	students incorporating their knowledge of the 4Ps and communication theory in presenting about the new product/service.
<i>applied learning</i> so that students think and do something new with their knowledge and skills	students applying knowledge of business communication and entrepreneurship in developing a product or service.
an authentic <b>audience</b> that helps to keep the process and product focused on authenticity	Students engaging with several types of talk or game show, product display and exhibitions with real audience - students and teachers
high-quality <b>products</b> or <b>performance</b> at the end of the project that demonstrates the results through applied knowledge and skills	Project outputs with products, posters, leaflets, brochures, pictures, videos, photo albums, product samples, promotional gifts showing the highest level of high order thinking

The journey towards this innovative teaching and learning approach reflects a cycle of learning through action. In this whole process, teachers as agents of change have engaged in the process of inquiry about their teaching, finding gaps in the teaching practices and exert changes in the design of learning activities, and also in the assessment of student work (Burns, 2010). Class observation, videotaping, and student direct feedback gathered are to further inform renewed action and changes in the design and also in the execution of student projects. With only one teacher engaging in this innovative teaching from the very beginning and with evidence gained through executing these PBL activities, the experience has been shared through colleagues with success stories and problems needed to be overcome. These reflections have become the rich input for another action research cycle where more teachers become devoted and committed to these PBL initiatives. And this process of learning in a way that can facilitate their critical and creative learning by means of teambuilding and teamwork. The initiative has now become part of the teaching and learning approach at the university, and inter-disciplinary project courses have now been planned and integrated in our language curriculum.

## Conclusion

Without any shadow of a doubt, the PBL approach has made learning become more vivid and real with hands-on and real-world experience. With PBL practices, it is evident that students are empowered to be active partners in their learning, sharing learning goals and intentions. Therefore, PBL can be said to bring new lens of experience to students at all levels and from all disciplines. Through the multitude of PBL experiments conducted with students in the English language program at UFLS-UD in the light of an action research, we can come to better insight into the multiple benefits that PBL brings about - enriching student learning through retained information, building teamwork, sharpening success skills, encouraging reflection and giving feedback. In other words, PBL engages learners in an active process of learning.



However, there seems to be no limit to this instructional approach. Any subject in the curriculum would offer opportunities that allow students to be in control of their learning and to take it to new levels of understanding. In this sense, there seems to be no such thing as one-size-fits-all for any educational context. This means that PBL should be situated in a way that is relevant to its audience, with its resources, and for its communities. But above all, it is the sheer willingness from teachers plus strong support from school that enables PBL to be in place for improved student learning. As David (2008) aptly puts it,

... embracing this practice ... [requires] the conditions for success [to be] in place, including strong school support, access to well-developed projects, and a collaborative culture for teachers and students. Yet, teachers can use the key ideas underlying project-based learning in some measure in any classroom. Using real-life problems to motivate students, challenging them to think deeply about meaningful content, and enabling them to work collaboratively are practices that yield benefits for all students. (pp. 80-82)



## References

- Boss, S., & Krauss, J. (2007). Reinventing Project-based Learning. *International Society for Technology in Education*. Retrieved from www.iste.org/docs/excerpts/reinvtexcerpt.pdf.
- Buck Institute of Education. *Project Based Learning (PBL)*. Retrieved from http://bie.org/about/what\_pbl.
- Burns, A. (2010) Doing Action Research in English Language Teaching. New York: Routledge.
- Campbell, C. (2014). *Problem-based Learning and Project-based Learning*. Retrieved from https://www.teachermagazine.com/au\_en/articles/problem-based-learning-and-project-based-learning
- Candy, P. C. (2000). Knowledge navigators and lifelong learners: Producing graduates for the information society. *Higher Education Research & Development*, 19 (3), 261-277.
- Centre for Teaching and Learning (CTL) (2001). Problem-based Learning. Speaking of Teaching- Stanford University Newsletter on Teaching, 11 (1), pp. 1-7.
- Cutshall, S. (2012). More a Decade of Standards: Integrating 'Communities' into Your Language Instruction. *The Language Educator*, 32-37.
- David, J. L (2008) What Research Says About ... / Project-Based Learning. *Teaching Students* to Think, Vol. 65, No. 5, pp. 80-82.



- *Global- Project-Based Learning (G-PBL) in World Languages Program.* Retrieved from http://community.actfl.org/co.mmunities/resources/viewdocument/?DocumentKey=c7 886824-286f-4694-b522-2cf99775d6c7
- Kemmis, S. & McTaggert, R. (2008). Participatory Action Research: Communicative Action and the Public Sphere. In Denzin and Lincoln (Eds.), *Strategies of Qualitative Inquiry*. Los Angeles: Sage.
- Larmer, J. & Mergendoller, J. R. (2010). Seven Essentials for Project-Based Learning. *Giving Students Meaningful Work*, Vol. 68, No. 1, pp. 34-7.
- O'Leary, Z. (2004). The Essential Guide to Doing Research. London: Sage.
- Sagor, R. (2005). The Action Research Guidebook: A Four-Step Process for Educators and School Teams. Corwin Press.
- Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-based Learning*, 1(1). Retrieved from http://dx.doi.org/10.7771/1541-5015.1002
- Sawamura, S. (2010). Assessment in Project-based Learning. *Hawaii Pacific University TESOL. Working Paper Series*, 8 (1-2), 44-49.
- Thomas, J., W. (2000). A Review of Research on Project-Based Learning. Retrieved from www.bobpearlman.org/BestPractices/PBL\_Research.
- Whitehead, J. (1988). Action Research, Principles and Practice. McNiff.