

A PARTICIPATORY CASE STUDY INTO LEARNERS' DIFFICULTIES AND PEDAGOGICAL IMPLICATIONS OF DOING PROJECT-BASED LEARNING ESP COURSE

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SUMMARY

This participatory case study explores learners' difficulties and proposes some recommendations for more effectively doing project-based learning of English for Economics and Business Study II, a 15-week ESP course at the School of Foreign Languages, Hanoi University of Science and Technology, Vietnam. Data were collected through a focus-group interview with six veteran course participants with varying grade range. As a result of theme-based coding and analysis, major findings reveal that learners hardly could achieve the approach's learning outcomes of key content knowledge and real-life skills because of some difficulties including learners' poor success skills, lack of prior knowledge, limitation of references, and unauthentic assessment. Furthermore, from the participants' perspectives, some suggestions for learners, teachers and policy makers are made; pedagogical implications are also discussed.

Keywords: *Project-based learning, ESP course; Learners' difficulties; Participatory case study; Success skills*

INTRODUCTION

On globalization, to enhance occupation opportunities and competitiveness for graduates, educational institutions and universities in non-English speaking countries have incorporated foreign language courses, especially those of English for Specific Purposes (shortly, ESP) into their curriculum. Therefore, the graduates can improve the language use in their typical working environment. Besides that, to practicalize ESP courses for real-life employment demands, practitioners worldwide have applied many innovative teaching methodologies and approaches including project-based learning (hereafter named PBL) into classroom. Thus, learners can develop such soft skills as critical thinking, flexible problem solving, innovative and collaboration skills through engaging them in real-life situations [24]. Apart from some of the advantages that PBL brings to both teachers and students, it challenges these two main stakeholders, requiring necessary considerations to resolve for most effective outcomes. This case study reports on several salient difficulties PBL students have in

taking ESP courses and possible recommendations made for related stakeholders to overcome those difficulties and to take full advantage of the PBL approach in ESP teaching.

RESEARCH CONTENTS

Literature review

PBL is named by Greeno (2006) as a form of situated learning (as cited in [13]) which engages students in real-world scientific problems, or the integration of "knowing and doing" [17] in which the key knowledge gained from the core curriculum would help students solve authentic problems. Considered to be learner-centred and integrate all language skills and content learning [19], PBL can be characterized by those typical features such as driving question and integration of key knowledge and success skills, together with active roles of teacher-learner and authentic assessment [19].

First, if a driving question is workable, valuable, contextualized, meaningful and ethical, it drives learners to learn, explore and address problems. Generated by individuals or project teams, it may focus on topics, nature and scope of a project [4] or other

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larger-scale factors. Second, learning of key academic knowledge and success skills is a must to a well-implemented project and a good standard of PBL approach [7]. The standard would enable learners to gain significant content standards, concepts, and deeper understanding which are essential for school subjects and academic areas [3], [20], and "21st century skills" or "college and career readiness skills" [14].

Third, teachers and learners become dynamic and active in PBL courses, with the former's having voice and choice [14]. Likewise, teachers change the way they instruct, plan, direct learners in doing, facilitate learners' knowledge acquisition, and assess the learning [11], [23]. Obviously, teachers encourage and support learners to become self-directed.

Lastly, authentic assessment is one of the greatest potentials for PBL with on-going evaluating criteria acknowledged by both learners and teachers. The criteria evaluate such barometers of project implementation process as meeting minutes, notes, and a range of benchmarks to measure different learning outcomes [12]; the rubric is pertaining to the curriculum objectives [5] and transparently stated at the beginning of courses for learners to self-regulate their learning.

In essence, PBL is implemented in a 6-step process [2] as follows: developing a topic, outlining the project, connecting the academic project with the real world, identifying and organizing the main available learning resources, making schedules and preparing the final product.

Research background

The study was done at Hanoi University of Science and Technology, School of Foreign Languages (hereafter named HUST-SOFL). The participants are students completing the course of English for Economics and Business II (EEB II) using PBL approach. This four-credit optional ESP subject requires the learners with English for Economics and Business I (EEB I) background knowledge. It

is aimed to bolster the learners' four basic English-language skills for Business and Economics, reinforce their understanding of economic laws, international business operations, and sharpen career-related skills.

EEBS II students work in groups of three or four and individually throughout the 15-week course to do a project with various tasks: choosing a topic; critically reading references to make general and detailed project outlines; presenting three times and designing post-up activities; submitting a final report. The course assessment is the sum-up of each component score below:

On-going score (50%): with general outline, references, detailed plan and group presentations

- Final score (50%): with response to peer feedback during presentations.

Research methodology

This research is a participatory case study, also the major qualitative strategy based on its features and benefits [10], [18]. Defined as a mode of case study research that engages local groups or community in all stages of the research process, from formulating research questions to writing up and announcing the findings, participatory research is popular in social science and change-oriented studies. Furthermore, the aim of this practice is to reconstruct the knowledge and ability of practitioners who normally have seldom sought views, rarely heard voices and little opportunity to enunciate and assert their interests. In fact, the participants in this case study are veteran students of EEB II course at HUST-SOFL who provide rich and profound data of their own difficulties in taking the PBL approach, as suggested to be relevant data sources in doing a qualitative research [6].

Following the six basic steps to do a participatory case study [22], this research is implemented with two most important steps: determine and define the following two research questions through carefully reading literature review on features and procedure to apply PBL in language classes and select

the cases, determine data collection and analysis techniques.

Data collection

To find out the participants' difficulties and suggested solutions to overcoming those difficulties on the learners' perspectives of PBL application in EEB II course at HUST-SOFL, one focus group of participants selected from the veteran students of the EEB II course was interviewed.

Such a purposive sampling of six participants in the focus group helps the researchers with deep insights into problems and research questions [16], [10]. In practice, considering all the factors including participant background, research convenience, information accuracy, sense of willingness and participant typicality, the six representatives were selected from three grade-ranged groups of twenty-three students in EEBS II class. These six cases are typical enough in a case study as suggested by [10] with mixed genders, first-hand experience with solutions.

This face-to-face focus group interview was conducted in a natural setting within nearly two hours, audio-recorded and notes of key ideas taken after being piloted for adaptation. It is in Vietnamese and conducted on the protocol such as reminder of the participants' experience and reflections of using PBL in learning EEBS II course through a brief questionnaire, brief introduction of research and interview procedure, and interview implementation.

Discussion and Findings

The interview data were coded on the theme-based principle. The two main themes, also the answers to the two research questions, are listed: (i) difficulties facing PBL-using EEBS II students; (ii) recommended solutions to those difficulties.

Code-based analysis of the focus group interview data reveals that the following four major difficulties are identified to challenge the EEBS II students in using PBL: poor success skills, limited references, lack of

background content knowledge, and improper learning assessment.

Finding 1 - Poor success skills such as collaboration, problem-solving skills, communication were the major obstacles to the success of PBL students at HUST-SOFL due to the lack of experience and grasp of collaborative work philosophy [21]. Indeed, they could not solve group conflicts caused by stagnant members and inequitable work contribution. Students find it challenging to accept anything new, to proactively practice their partial project ownership [9] or to maintain group communication.

Finding 2 The limitation of references substantially encounters the students' project implementation. First, all of the participants agreed that they relied on online sources such as e-books, e-journals and websites however untrustworthy the sources are. In addition, the subjects could not receive enough consultation from content specialists. Meanwhile, real inquiries can make students find project work more meaningful [15], [2].

Finding 3 - The lack of prior knowledge is another obstacle to the interviewees' gain of key knowledge and success skills. Hence, they could not evaluate available online sources and build key academic knowledge and understanding for the project work. Furthermore, this also causes difficulties in their honing success skills [7].

Finding 4 - The students' achievement of success skills was improperly evaluated. In practice, the participants thought that the product-based course learning rubric enables the instructor to assess learners' content knowledge rather than success skills, regardless of unfair grouping on the basis of students' partner choice to do group projects. This seems not relevant to such structured group work described by [25] to be based on multi-skill members, interdependent roles and individual reliability.

(ii) To solve the aforementioned problems, the participants proposed some feasible solutions, which were also the answers to the second research question. The subjects

recommended three main stakeholders-learners, teachers and policy makers, take actions in their positions to deal with the four stated challenges. First, PBL students should self-direct their learning, mobilizing all of the available and potential resources creatively in their specific situations. They need to be more active in information gathering, be adaptive in communication, and be flexible in self-studying necessary success skills. Second, as a key stakeholder of successful PBL application, teachers should prepare a toolbox of assessment rubrics and solutions. As a result, they can offer solutions to anticipated and emerging problems, assess both multi-faceted process and products of project implementation. More notably, teachers should facilitate learners' establishment of success skills for lifelong benefits. Lastly, policy makers should set a forum for all instructors and students to share their experience of learning PBL and construct best practices with focus on building reliable resources, strengthening prior knowledge, completing authentic assessment, and increasing group work and other skills.

Pedagogical implications

Based on the interview data analysis, discussion and findings, some implications of applying PBL into teaching ESP to English-major students have been made to help them learn at their efficacy.

Firstly, PBL should be used flexibly in teaching contexts with the following principles:

- Be relevant to learners' levels of language proficiency and background knowledge and motivate them to solve for realistic results with clearly defined content and skill requirements.
- Develop learners' deep and active learning by rubrics, toolbox, scaffolding, and emotional devices.
- Maximize learners' PBL experience [7] with seven issues to consider: developing a PBL-based ESP course and planning lessons; matching the course to PBL gold standards; establishing the learning culture to reinforce

learner autonomy and intellectual democracy; pedagogically managing activities through relevant deadlines, checkpoints, balanced routine-creativity to make learning happen at any time and situations; facilitating student learning through toolbox; assessing student learning by standard-aligned rubrics of students' project implementation process and product; engaging and coaching learners by personalizing learning.

Secondly, learners should be provided with relevant toolbox such as groupwork skills [25], know-how guidelines, basic language skills, project-management tools (group calendar, learning log, contract) and background content knowledge. Learners also should be facilitated with library skills of how to use library directories, databases, and other resources [1]. In addition, project-based learners should have more opportunities to widen their prior content knowledge and understanding before they do project work as stated by [7]. As a result, they can improve success skills by completing project tasks and working with comprehensible content input. Besides that, learners will have their learning attitudes improved in supportive and constructive environment where learner autonomy, innovative teaching approaches, and updated library resources are the keys to success. Finally, authentic PBL assessment practices should be multi-faceted and conducted to boost the effectiveness of PBL approach with more opportunities revise work, reflect learnt knowledge, facilitate 21st-century skills, and enhance social understanding.

CONCLUSION

This participatory case study showcases the application of PBL into the learning and teaching of an ESP course to English-major students whose prior content knowledge has remarkable gaps to acquiring key knowledge and achieving success skills, from the course attendants' viewpoints. Obviously, the study reinforces the findings of the previous literature on the use of PBL in language education. Furthermore, with the awareness

of obstacles facing PBL learners of English for Specific Purposes and suggested resolutions, project-based teaching practitioners should apply the approach on a larger scale and applied to a wider range of subjects at appropriate levels of education, especially tertiary levels for its merits and benefits for all the key stakeholders. Moreover, project-based learning is workable across grade levels, academic subjects, gender, ethnicity, and achievement level under the circumstances of incorporating with other innovative teaching approaches including cooperative learning, flipped learning, and inquiry-based learning.

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TÓM TẮT

NGHIÊN CỨU TÌNH HUỐNG VỀ NHỮNG KHÓ KHĂN VỚI NGƯỜI HỌC VÀ ĐIỀU CẦN LƯU Ý KHI GIẢNG DẠY MÔN TIẾNG ANH CHUYÊN NGÀNH ÁP DỤNG PHƯƠNG PHÁP HỌC QUA DỰ ÁN

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Đề tài nghiên cứu tình huống của chúng tôi tìm hiểu những khó khăn của người học và đưa ra một số đề xuất để việc học môn tiếng Anh Kinh tế Kinh doanh II áp dụng phương pháp học theo dự án hiệu quả hơn. Đây là khóa học tiếng Anh chuyên ngành kéo dài 15 tuần tại Viện Ngoại ngữ, Trường Đại học Bách Khoa Hà Nội, Việt Nam. Dữ liệu được thu thập qua việc phỏng vấn tập trung một nhóm gồm sáu sinh viên đã hoàn thành môn học với kết quả học tập khác nhau. Theo kết quả phân tích, những phát hiện quan trọng cho thấy người học khó đạt được mục tiêu học tập của phương pháp này về kiến thức chuyên ngành và kỹ năng mềm. Nguyên nhân bao gồm người học chưa có đủ kỹ năng mềm, thiếu kiến thức chuyên ngành nền tảng, tài liệu tham khảo bị hạn chế và khung đánh giá quá trình học tập chưa phù hợp. Bên cạnh đó, sáu sinh viên được phỏng vấn cũng đưa ra một số gợi ý cho người học, giáo viên và nhà quản lý giáo dục để nâng cao hiệu quả việc áp dụng phương pháp dạy học theo dự án. Ngoài ra, một vài đề xuất sơ phạm cũng được thảo luận trong nghiên cứu này.

Từ khóa: *Dạy học dự án; tiếng Anh chuyên ngành; khó khăn của người học; nghiên cứu tình huống; kỹ năng mềm.*

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