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The Challenges of Implementing Project-Based Learning in Fostering Cross-Cultural Understanding

Fan Jiang [1]

[1] *UCSI University, Kuala Lumpur, Malaysia*

Abstract:- This study explored three main aspects: the implementation of Project-based Learning (PBL) to enhance cross-cultural understanding among foreign undergraduate students in China, the challenges perceived by teachers during implementation, and potential suggestions to facilitate PBL implementation in the face of challenges. Both questionnaires and semi-structured interviews were employed to gather the data. A total of 50 teachers from 30 colleges, who teach cross-cultural communication in the field of teaching Chinese as a second language, participated in this study during the autumn semester of 2023. The findings of the study revealed that more than four-fifths of the participants were unable to implement PBL with their students. The various challenges they encountered were also identified. These included: (i) project organization (e.g. time management); (ii) technical issues; (iii) resources; (iv) student-related challenges; and (v) collaboration. Finally, based on the results, suggestions and recommendations were provided to assist teachers, colleges, and decision-makers in implementing PBL effectively.

Keywords*: Project-based Learning, Cross-cultural Understanding, College Teachers, Teacher Education*.

1. Introduction

The significance of cross-cultural understanding cannot be overstated, as it directly impacts a nation's cultural, technological, economic, and political well-being (Bartell, 2003; Bernáld, Cajander, Daniels, & Laxer, 2011). Thus, nurturing cross-cultural understanding is indispensable for both individual success in an ever-evolving global landscape and societal advancement while ensuring inclusivity. Universities play a crucial role in this endeavor by adapting their educational methodologies to equip students with the analytical tools necessary to comprehend and address global and cross-cultural challenges (Ramos, 2018).

Research suggests that project-based learning (PBL) not only enhances overall learning but also fosters cross-cultural understanding (Shadiev, Hwang, & Huang, 2015). Indeed, evidence indicates the benefits of PBL for both educators and learners (Thomas, 2010). Previous studies underscore the pivotal role of teachers' comprehension of effective PBL criteria in shaping its implementation and subsequently impacting students' grasp of content and skill development (Han et al., 2015; Kokotsaki et al., 2016). In the realm of cross-cultural education, proficient PBL instruction positively influences student learning outcomes, whereas inadequate implementation by educators adversely affects student performance (Han et al., 2015). Nonetheless, the effective execution of PBL within authentic learning environments remains a multifaceted process influenced by various factors that warrant further exploration.

A considerable amount of literature has been published on theoretical arguments, yet little attention has been given to the challenges encountered by teachers as they strive to independently develop and implement authentic Project-based learning(PBL) with a genuine learning environment (Aksela, Haatainen, 2019). Therefore, teachers find themselves tasked with developing a distinctive instructional framework largely independently, lacking guidance, textbooks, resources, or assistance (Thomas, 2010). This study aims to examine the implementation process of applying PBL to foster cross-cultural understanding and to comprehend how teachers perceive the challenges

associated with PBL implementation. It also seeks to offer recommendations derived from the study's findings that could enhance the execution of PBL. The study is guided by the following research questions:

1. To what extent can PBL be implemented to enhance cross-cultural understanding?
2. What challenges do college teachers perceived when implementing PBL?
3. What are the suggestions that could facilitate the implementation of PBL if any challenges occurred?

2. Literature Review

A. Definition of PBL

Project-Based Learning (PBL) derives its foundation from Constructivism and Constructionism theories, posited by Gergen (1995), Piaget, and Inhelder (1969), as well as Vygotsky (1978). Central to Constructivism is the notion of cognitive development, emphasizing learners' active engagement with new information and the integration of prior knowledge (Pritchard & Woollard, 2010). Operating within this theoretical framework, PBL employs projects as vehicles to stimulate student motivation and facilitate the demonstration and articulation of acquired knowledge. As highlighted by Rakhmonkulova and Shadiev (2006), projects entail intricate tasks, challenging students to inquire, design, and investigate. Moreover, projects afford students the opportunity to work autonomously over extended durations, culminating in the development of tangible products or presentations (Shadiev, 2007).

Scholars such as Shadiev (2007) and the Oracle Education Foundation (2009) underscore PBL's potential in nurturing essential behaviors outlined by Yamazaki and Kayes (2004) conducive to fostering cross-cultural understanding. PBL empowers students to assume responsibility for their learning trajectory, exposing them to diverse perspectives. Engaging in PBL activities enables students from varying cultural backgrounds to deepen their understanding of cultural diversity through active participation and interpersonal communication. Bloom and Johnston (2010) assert that meaningful learning occurs within the context of dynamic relationships and interactions with others. Collaborating with peers from diverse backgrounds prompts students to navigate misunderstandings and surmount cultural barriers (Shadiev, Hwang, & Huang, 2015). Nevertheless, Brush and Saye (2008) contend that implementing PBL poses challenges for educators, necessitating support for effective planning and enactment. Additionally, students require assistance in initiating inquiries, managing time effectively, and integrating technology meaningfully into projects.

B. Implementation of PBL

As scholarly inquiry progressed into implementation methodologies (M. Fullan & Pomfret, 1977; M. Fullan, 1983; Hunkins & Ornstein, 1989; Leithwood & Montgomery, 1980; RobertsGray, 1985), various assessment tools were developed to probe the psychological ramifications of such initiatives. A significant advancement originating from the Research and Development Center for Teacher Education, initially pioneered by Fuller (1969) and subsequently refined by Hall, Wallace, & Dossett (1973), was the Concerns-Based Adoption Model (CBAM), which provides "a conceptual framework that describes, explains, and predicts probable behaviors throughout the change process…" (George et al., 2006, p. 5). A questionnaire was crafted based on this framework to assess the seven identified stages of concern within the model. This tool proved instrumental in aiding researchers and educators to comprehend the intricate dynamics involved when individuals are tasked with embracing innovation. The questionnaire outcomes could then inform the design of targeted professional development initiatives by scrutinizing teachers' levels of concern during the implementation of educational methodologies, strategies, or curricula (George et al., 2006, pp. 61-63). While the CBAM model is not singular in its depiction of the change process (Vrakking, 1995), it notably emphasizes the hurdles teachers encounter in the guise of "concerns" during innovation implementation. This model offers insights into the psychological impacts associated with adopting innovations across various stages, shedding light on how a teacher's stage of concern can foreshadow specific behaviors.

3. Methodology

A. Data Collection

The primary objective of this study is to investigate the applicability of PBL in fostering cross-cultural understanding among foreign undergraduate students in China, while also examining potential challenges associated with its implementation. To achieve this goal, a case study approach was adopted. Two primary methods were utilized for data collection: a questionnaire and semi-structured interviews. The questionnaire, consisting of open-ended questions, was distributed to a total of 50 instructors from 30 colleges who teach cross-cultural communication to foreign undergraduate students in China. Meanwhile, the interviews were conducted to elicit further insights and clarifications based on the questionnaire responses. Teachers are defined as active participants in this study because they voluntarily participated. All participants who applied to this study during the autumn semester of 2023 were given some open research questions in the reporting form. Notably, the participating teachers catered to students across four different levels of the HSK proficiency exam: Zero-based (10%), Elementary Chinese level: HSK 1-2 (60%), Intermediate Chinese level: HSK 3-4 (30%), and Advanced Chinese level: HSK 5-6 (10%).

B. Data Analysis

Data-driven qualitative content analysis (Cohen, Manion, & Morrison, 2013) was utilized for analysis, employing phrases and sentences as coding units. The dataset included written responses to three open-ended questions as well as in-depth interviews：

1. What is your experience as a participant in implementing PBL within a cross-cultural classroom setting?
2. From your perspective, what are the main challenges encountered during the implementation of PBL?
3. What support do you consider essential for adequately preparing for and executing PBL effectively?

The data were organized for analysis as a comprehensive set of each teacher's responses, as teachers frequently intertwined descriptions of both challenges and suggestions regarding PBL. Subsequently, the data underwent reduction through coding. A total of 86 codes were identified for challenges and 50 codes for suggestions. Two examples of subcategory names include:

"We gained more insights than anticipated initially, yet the time spent consistently exceeded our expectations. Additionally, managing the class proved to be challenging." (coded as "project organization")

"The curriculum wasn't initially structured for PBL instruction, making it difficult for me to determine which topics or units from the textbook would be best suited for PBL implementation." (coded as "resources")

The codes' final categorization was validated by two researchers who were not part of the study. Cohen's kappa demonstrated strong agreement, ensuring the reliability of the findings: k=0.82 for challenge codes and k=0.78 for suggestion codes.

4. Result and Discussion

Consequently, the implementation of PBL is anticipated to present numerous challenges, which can be categorized thematically and further organized into various specific categories, outlined as follows:

Challenges related to project organization: Facilitating PBL proved to be a common challenge among teachers, encompassing various aspects such as implementation skills, time management, and project organization. These challenges are closely linked to teachers' pedagogical abilities and their capacity to effectively facilitate PBL.

Challenges related to technical issues: Technical challenges encompass difficulties with Information and Communication Technology (ICT) skills necessary for the project. Participants expressed sentiments such as "Difficult and time-consuming," and faced obstacles such as "making videos with non-existent ICT skills." Although the absence of ICT equipment wasn't explicitly mentioned, these instances were classified under the resources category.

Challenges related to resources: Reports indicated a scarcity of resources, notably in terms of space, equipment, and time. Since various projects require distinct materials and facilities for execution, insufficient budgetary allocations in schools pose significant challenges for teachers in implementing PBL.

Challenges related to student-related challenges: Some students prioritized completing the project quickly over deriving learning from the process itself. This tendency may stem from the prevalent exam-oriented mindset among students, where the primary focus remains on achieving high grades rather than developing skills.

Challenges related to collaboration: The study findings uncovered instances where certain students monopolized the workload, depriving their groupmates of active involvement in the project. Conversely, other students, particularly high achievers, sought to steer the project based on their interests. Consequently, those marginalized from participation expressed dissatisfaction and reluctance to continue collaborating with the same group.

5. Conclusion

This study aimed to investigate the utilization of Project-based Learning (PBL) to foster cross-cultural understanding among foreign undergraduate students in China and to identify any challenges perceived by teachers during its implementation. Data analysis revealed that over four-fifths of the participants faced difficulties in implementing PBL with their students, while the remaining exhibited reluctance and lacked confidence in utilizing PBL. Many educators encountered challenges in managing classroom time effectively due to projects exceeding anticipated durations. Moreover, the contextual factors surrounding PBL implementation significantly impeded its efficacy. Developing assessment tools that are both valid and reliable, demanding students to showcase their comprehension, posed a notable challenge. This study presents evidence highlighting the difficulties students faced with PBL, particularly in collaborative skills, leading to certain students dominating group work and imposing their ideas on peers. Furthermore, certain schools lacked the necessary resources and readiness to transition to PBL due to constraints such as time, motivation, and insufficient financial support. Finally, the study's findings present an opportunity for the researcher to propose valuable suggestions aimed at facilitating the adoption of PBL, as detailed below.

6. Suggestions & Recommendations

Below are suggestions and recommendations aimed at aiding teachers, schools, and decision-makers in implementing PBL, recognized as an effective teaching method.

- In-service training（workshops, seminars, and training sessions） should be provided for teachers to effectively implement PBL.
- Schools ought to allocate a specific budget for PBL projects.
- Collaboration among teachers should be actively encouraged.
- PBL must be seamlessly integrated into the entire curriculum.
- Curricula should be authentically designed to support PBL implementation, integrating it with other methodologies like problem-based learning, inquiry-based learning, and task-based learning.
- Students should be provided access to display areas where they can showcase outstanding projects, fostering inspiration among their peers.
- Recognition and rewards should be granted for exceptional project achievements.
- A variety of effective assessment tools should be employed to evaluate both the process and the final outcomes.
- Parents should be informed about the significance of PBL.

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