

# Improving Language and Business Education: The Effectiveness of Project-Based Learning and Authentic Materials Integration in Enhancing Critical Thinking and 4Cs Skills

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**Absrtact:** *This thesis explores the effectiveness of project-based learning and authentic materials integration in enhancing critical thinking and 4Cs skills in language and business education. The study begins with a background and context of language and business education, followed by an overview of project-based learning and authentic materials integration. It also discusses the importance of enhancing critical thinking and 4Cs skills in language and business education.*

**Keywords:** *English curriculum, cohesion, secondary education, higher vocational education, questionnaire, JMI (JMI as an example), language education, curriculum evaluation, language proficiency, language learning, curriculum development, educational research*

## 1. Introduction

### 1.1 Background and context of language and business education

Language and business education are crucial for today's global workforce. They equip individuals with communication skills, cross-cultural understanding, and diverse expertise beyond technical knowledge. Language education teaches second or foreign languages, including reading, writing, listening, and speaking skills. Business education covers principles related to management, operations, and entrepreneurship.

Combining language and business education is essential for success in the globalized and dynamic economy. It enables individuals to grasp cultural differences, communicate effectively with diverse stakeholders, and develop critical thinking and problem-solving skills for the business world.

However, these education fields face challenges, like traditional rote learning methods and a lack of real-world integration. To address these issues, instructional approaches such as project-based learning and authentic materials integration have gained popularity. These approaches emphasize active and collaborative learning, enhancing critical thinking and 4Cs skills (communication, collaboration, creativity, and critical thinking) vital for the 21st-century workforce. The thesis will explore the theoretical background, empirical studies, advantages, and challenges of these instructional approaches in language and business education[1-2].

### 1.2 Overview of project-based learning and authentic materials integration

Project-based learning (PBL) emphasizes student-centered, active, and collaborative learning through completing real-world projects. It develops critical thinking, problem-solving, communication, collaboration, and creativity skills, along with content knowledge and language proficiency. Authentic materials integration uses real-world materials like texts, audio, and videos to enhance language skills and cultural understanding in language and business education. PBL and authentic materials integration create a powerful approach for enhancing critical thinking and 4Cs skills in language and business education. The thesis will delve into theoretical background and empirical studies supporting their effectiveness[3].

### ***1.3 Importance of enhancing critical thinking and 4Cs skills***

In today's rapidly changing global economy, students must develop critical thinking and 4Cs skills for workforce success. Critical thinking enables informed decision-making, while 4Cs skills (communication, collaboration, creativity, critical thinking) are crucial in the modern workplace. Enhancing these skills through project-based learning and authentic materials integration is vital in language and business education. It prepares students for real-world challenges and fosters language proficiency, problem-solving, and innovation[4-5]. This approach improves academic engagement and achievement, leading to better future career prospects. Overall, project-based learning and authentic materials integration are crucial for students' success and personal growth. The thesis will review relevant literature and explore the effectiveness of this approach in enhancing critical thinking and 4Cs skills[6].

## **2. Project-based learning in language and business education**

### ***2.1 Definition and characteristics of project-based learning***

Project-based learning (PBL) is a student-centered approach emphasizing inquiry-based learning through real-world projects that demand critical thinking, collaboration, and problem-solving. PBL is characterized by inquiry, student control, collaboration, critical thinking, and fostering 21st-century skills. The teacher acts as a facilitator, guiding and supporting students. PBL can take various forms and suit different learners and subjects. PBL enhances critical thinking and 4Cs skills in language and business education. The thesis will explore the theoretical framework and empirical studies supporting its effectiveness[7].

### ***2.2 Studies on the effectiveness of project-based learning in enhancing language and business education***

Research supports PBL's effectiveness in enhancing language and business education, promoting critical thinking and 4Cs skills. For instance, Kuo and Chen (2018)<sup>[1]</sup> found PBL improved English language proficiency and critical thinking among Taiwanese college students. Hosseini et al. (2017)<sup>[2]</sup> showed PBL developed entrepreneurship skills in Iranian university students. Trilling and Fadel (2009) confirmed PBL's role in fostering 21st-century skills. PBL also enhances business management skills, as shown by Wulan and Wahyuni (2018)<sup>[3]</sup> among Taiwanese hospitality management students. These studies provide evidence for PBL's effectiveness in language and business education. The thesis will explore authentic materials integration's role in enhancing PBL's effectiveness[8-9].

### ***2.3 Advantages and disadvantages of project-based learning***

There are pros and cons of project-based learning, including increasing student engagement; enhancing critical thinking; promoting teamwork and collaboration; providing authentic learning experience; encouraging creativity and innovation.

And As for the disadvantages of Project-Based Learning which include time-consuming; not covering all required material; requiring additional resources: and requiring strong student motivation; be challenging for some students.

## **3. Authentic materials integration in language and business education**

### ***3.1 Definition and characteristics of authentic materials***

Authentic materials are real-life materials for native language speakers, reflecting language and culture. They differ from materials for language learners, offering challenging yet realistic language usage. Characteristics include real-life context, natural language (idioms, slang), varied sources (news, shows, podcasts), cultural relevance, and engaging and motivating content. They provide an authentic and enjoyable language learning experience[10].

### ***3.2 Studies on the effectiveness of authentic materials in enhancing language and business education***

Studies support authentic materials' effectiveness in enhancing language and business education. Wang and Zhang (2018)<sup>[4]</sup> found authentic materials improved motivation, engagement, and language learning in business English. Gao (2016)<sup>[5]</sup> reported Japanese business communication skills improvement with authentic materials. Wang and Zou (2017)<sup>[6]</sup> found authentic materials enhanced communicative competence and critical thinking in ESP courses. Hambrock, C., & Fischer, F. (2018)<sup>[7]</sup> confirmed improved language skills and intercultural competence in tourism and hospitality courses. Overall, authentic materials engage students and enhance language skills, cultural awareness, and critical thinking in language and business education[11].

### ***3.3 Advantages and disadvantages of authentic materials integration***

Authentic materials integration in language and business education has several advantages and disadvantages, which are discussed below:

Advantages are relevance, motivation, cultural awareness, language skill, critical thinking. Disadvantages are authenticity, difficulty level, time-consuming, and availability. Overall, while authentic materials integration has its challenges, its advantages in improving language and business education make it a worthwhile approach to consider.

## **4. Enhancing critical thinking and 4Cs skills through project-based learning and authentic materials integration**

### ***4.1 Critical thinking and its role in language and business education***

Critical thinking is the ability to analyze and evaluate information in order to make sound decisions or judgments. It is a key skill required in both language and business education, as it enables learners to think critically about the content they are learning and to apply this knowledge in real-life situations[12].

In language education, critical thinking is essential for language learners to develop language proficiency beyond the simple memorization of vocabulary and grammar rules. It allows them to understand and analyze the nuances of language, and to use language creatively and effectively. In business education, critical thinking is essential for learners to understand complex business concepts, analyze data, and make informed decisions.

Furthermore, critical thinking skills are essential for learners to be successful in the 21st-century workforce. Employers are looking for employees who can think critically, communicate effectively, and collaborate with others. Therefore, integrating critical thinking skills into language and business education can help learners to be more successful in their future careers.

The development of critical thinking skills can be facilitated through project-based learning and the integration of authentic materials. By engaging in authentic projects, learners are given the opportunity to apply critical thinking skills in a real-life context. This can help to develop their analytical and problem-solving skills, as well as their ability to communicate effectively and collaborate with others.

Overall, the development of critical thinking skills is crucial for learners in both language and business education. By integrating critical thinking into their teaching practices, educators can help learners to develop the skills they need to be successful in their future careers[13].

### ***4.2 The 4Cs skills (communication, collaboration, creativity, and critical thinking) and their importance in language and business education***

The 4Cs skills, which include communication, collaboration, creativity, and critical thinking, have become increasingly important in today's workforce. These skills are essential for success in many industries, including business and language education.

Communication is a vital skill that involves the exchange of information between individuals or groups of people. In business and language education, effective communication is critical for building relationships with clients and customers, expressing ideas, and giving presentations. Collaboration is

another key skill that is essential in many industries. It involves working with others towards a common goal, sharing ideas, and being open to feedback. In business, collaboration is essential for building strong teams and achieving company objectives. In language education, collaboration helps students to develop their language skills through interaction with their peers and teachers.

Creativity is also an important skill in language and business education. It involves thinking outside the box, coming up with new and innovative ideas, and finding new solutions to problems. In business, creativity is essential for developing new products, marketing strategies, and business models. In language education, creativity helps students to develop their language skills through the use of imagination, storytelling, and other creative techniques.

Finally, critical thinking is a crucial skill that enables individuals to analyze information, evaluate ideas, and make informed decisions. In business and language education, critical thinking is essential for problem-solving, decision-making, and innovation. Students who develop strong critical thinking skills are better equipped to succeed in their careers and make a positive impact in their communities.

In conclusion, the 4Cs skills are essential for success in language and business education. These skills enable students to communicate effectively, collaborate with others, think creatively, and make informed decisions. As such, it is important for educators to incorporate these skills into their teaching and provide opportunities for students to develop them through project-based learning and the integration of authentic materials.

#### ***4.3 Studies on the effectiveness of project-based learning and authentic materials integration in enhancing critical thinking and 4Cs skills***

Studies explored project-based learning and authentic materials' effectiveness in enhancing critical thinking and 4Cs skills in language and business education. Alshehri, M., Alqarni, A., & Alghamdi, M. (2019)<sup>[8]</sup> found project-based learning with authentic materials improved critical thinking, communication, creativity, and collaboration. Nguyen, T. D., & Nguyen, T. T. (2019)<sup>[9]</sup> reported enhanced 4Cs skills and business English performance. Feryok, A. (2018)<sup>[10]</sup> showed improved critical thinking, communication, and language proficiency. Gao, X., & Liu, D. (2019)<sup>[11]</sup> found increased creativity and problem-solving abilities in business English. Overall, these studies support project-based learning with authentic materials as an effective approach to enhance critical thinking and 4Cs skills in language and business education.

### **5. Challenges and recommendations for implementing project-based learning and authentic materials integration**

#### ***5.1 Challenges in implementing project-based learning and authentic materials integration in language and business education***

While project-based learning and authentic materials integration have proven to be effective in enhancing critical thinking and 4Cs skills in language and business education, there are still some challenges in implementing these approaches.

One of the main challenges is the resistance to change from traditional teaching methods. Teachers may be hesitant to try new approaches and may require additional training to effectively implement project-based learning and authentic materials integration in their classrooms. Additionally, some teachers may not have the necessary resources, such as technology or access to authentic materials, to effectively implement these approaches.

Another challenge is the time and effort required to plan and implement project-based learning activities. These activities may require more time for preparation and implementation than traditional teaching methods, and teachers may need to collaborate with other teachers or outside professionals to create effective projects.

Assessing student learning in project-based learning can also be a challenge. Traditional assessment methods, such as tests and quizzes, may not effectively measure student learning in project-based learning activities. Teachers may need to develop new assessment methods that align with the learning outcomes of project-based learning.

Finally, there may be challenges in effectively integrating authentic materials into language and business education. Teachers may need to spend additional time searching for and evaluating

appropriate materials, and they may need to adapt these materials to meet the needs of their students.

Overall, while project-based learning and authentic materials integration have the potential to enhance critical thinking and 4Cs skills in language and business education, addressing these challenges will be necessary to effectively implement these approaches in the classroom.

### ***5.2 Recommendations for effective implementation of project-based learning and authentic materials integration***

Recommendations for Effective Implementation of Project-Based Learning and Authentic Materials Integration in Language and Business Education:

**Provide Adequate Training:** Teachers must be provided with adequate training to ensure that they understand the goals and objectives of project-based learning and authentic materials integration. They should be trained on how to design effective projects, select appropriate materials, and assess students' performance.

**Provide Adequate Resources:** To effectively implement project-based learning and authentic materials integration, it is essential to have adequate resources such as computers, projectors, and materials that are relevant to the learning objectives.

**Create a Supportive Learning Environment:** Creating a supportive learning environment is crucial in facilitating student learning. Teachers should create a positive and collaborative learning environment where students can feel comfortable to express their ideas and ask questions.

**Align Learning Objectives with Project Design:** Teachers should ensure that learning objectives are aligned with the project design to ensure that students achieve the intended outcomes. The project design should be developed in a way that allows students to apply the 4Cs skills.

**Provide Opportunities for Reflection:** Reflection is an essential component of project-based learning and authentic materials integration. Teachers should provide opportunities for students to reflect on what they have learned, how they have learned it, and what they can do better.

**Encourage Collaboration:** Collaboration is a key component of project-based learning and authentic materials integration. Teachers should encourage students to work collaboratively on projects to promote teamwork and problem-solving skills.

**Provide Feedback:** Teachers should provide feedback to students on their performance in project-based learning and authentic materials integration. This feedback should be timely, specific, and focused on improving students' skills.

**Assess Student Learning:** Assessing student learning is crucial in project-based learning and authentic materials integration. Teachers should use a variety of assessment tools to evaluate students' performance, including self-assessment, peer-assessment, and teacher assessment.

By implementing these recommendations, educators can effectively integrate project-based learning and authentic materials into language and business education, leading to improved critical thinking and 4Cs skills among students.

## **6. Conclusion**

In conclusion, project-based learning and authentic materials integration are effective methods to enhance critical thinking and 4Cs skills in language and business education. Studies have shown that both project-based learning and authentic materials integration positively impact students' language and business competencies. The advantages of project-based learning and authentic materials integration include fostering creativity, collaboration, and communication, which are essential 21st-century skills. However, the implementation of these methods can also pose challenges, such as resource constraints and lack of teacher training. To address these challenges, it is recommended that schools provide adequate training and support for teachers, allocate resources to support project-based learning, and use a variety of authentic materials to engage students in meaningful learning experiences. By effectively implementing project-based learning and authentic materials integration, language and business educators can equip students with the necessary critical thinking and 4Cs skills to succeed in today's rapidly changing world.

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