

# Exploring Project-Based Learning in English Teaching for the Development of Core Literacy in Primary and Secondary Education: Effective Strategies to Enhance Students' Comprehensive Skills

Yunyun Guo<sup>1,a,\*</sup>, Hao Yu<sup>2,b</sup>

<sup>1</sup>School of Foreign Languages, Northwest University, Xi'an, Shaanxi, China

<sup>2</sup>Faculty of Education, Shaanxi Normal University, Xi'an, Shaanxi, China

<sup>a</sup>yy8852760@163.com, <sup>b</sup>yh13213986381@163.com

\*Corresponding author

**Abstract:** This paper aims to investigate the feasibility and advantages of implementing project-based learning in English teaching in primary and secondary schools to promote the development of students' core literacy. Firstly, an analysis of the current status of primary and secondary education is conducted, focusing on the attention given to subject areas, teacher awareness and professional competence, as well as teaching goals, methods, and models. Subsequently, the distinctive advantages of project-based learning as a novel open learning approach are introduced, including innovativeness, contextualization, interdisciplinary integration, and collaboration. Furthermore, the challenges encountered in promoting project-based learning are explored, and corresponding strategies are proposed, such as cultivating a student-centered teaching mindset and fostering interdisciplinary integration. Lastly, emphasis is placed on cultivating students' independent thinking abilities, practical skills, and innovative mindset through project-based learning to enhance their learning capabilities and core literacy.

**Keywords:** project-based learning, English teaching in primary and secondary schools, core literacy, teaching context, teacher awareness, teaching methods, interdisciplinary integration

## 1. Introduction

By delving into the specifications of subject practices and academic quality in different subject curriculum standards, core literacy can be regarded as the comprehensive manifestation of students' psychological traits, behavioral skills, and other integrated abilities acquired during the learning process. In English language teaching, fostering core literacy involves developing students' abilities to analyze, evaluate, and solve complex real-world problems, as well as cultivating independent thinking and deep exploration skills. Therefore, in educational practice, to enhance subject core literacy, it is crucial to focus on key issues within learning topics and content and address them through authentic contexts [1]. In English language teaching, teachers should emphasize cultivating students' problem-solving abilities and transform the teaching process into a problem-solving process.

In the advancement of English language teaching in primary and secondary schools, project-based learning offers an ideal instructional approach. Project-based learning, based on constructivist principles, places students at the center of learning. Through the completion of concrete projects, students can develop their abilities for self-directed learning, spontaneous exploration, and problem-solving, while acquiring integrated knowledge across multiple disciplines and enhancing their overall competence. This aligns perfectly with the aim of fostering core literacy [2].

However, there are existing challenges in current English language teaching in primary and secondary schools that necessitate innovation and improvement. To promote the implementation of project-based learning in English language teaching, this paper aims to explore the difficulties faced in the practical application of project-based learning and provide strategies and reflections to address these issues.

## **2. Analysis Of Teaching Context**

### ***2.1. Teacher Awareness and Professional Competence***

With the rapid development of information technology, teachers play a crucial role as key implementers and pillars of educational reforms, and their teaching awareness and professional competence directly impact teaching effectiveness. Currently, some issues exist among teachers in primary and secondary schools:

Firstly, traditional classroom teaching methods are monotonous and dull, leading to a lack of student interest and motivation. Especially among older teachers, there is a resistance to accepting new teaching models, resulting in extremely low teaching efficiency.

Secondly, rural areas often face a shortage of teaching staff with low professional competence. The lack of teacher training and opportunities for professional development hinder their growth [3].

Additionally, the level of teachers' research and collaborative activities varies. Some schools have higher requirements for major subjects such as Chinese and mathematics and are reluctant to allow teachers to try new teaching models for fear of affecting teaching effectiveness. For subjects with lower emphasis, due to limited class hours and insufficient teacher numbers, the attention given to research and collaboration is also low.

### ***2.2. Teaching Goals, Methods, and Models***

Currently, some teachers have issues in the design of teaching goals, which are disconnected from students' developmental needs. Vague teaching objectives that lack reference to core curriculum requirements restrict students' comprehensive development.

Teaching methods lack flexibility, diversity, and effectiveness. Some teachers are accustomed to instructive, demonstrative, or rote learning approaches, neglecting student-centered teaching principles that are essential for fostering students' autonomous learning abilities and comprehensive skills.

Teaching models are often monotonous, lacking in self-exploration, group collaboration, and interactive communication in an open classroom [4].

In conclusion, primary and secondary education currently faces numerous challenges, requiring urgent reforms and innovations. To address these issues, educational authorities and schools should increase investment in teaching, prioritize teacher awareness, professional competence, and capacity building, and transform the traditional teaching mindset of some teachers. Simultaneously, researchers should conduct school-based studies to promptly adjust inappropriate teaching goals, methods, and models, as well as develop open teaching strategies that align with school needs and respect student autonomy. In the context of English teaching, project-based learning, as an open teaching model, allows students to explore and communicate in authentic projects, aligns with the requirements of the new curriculum standards, and serves as an effective strategy to improve the current state of teaching in primary and secondary schools.

Teaching goals should consider students' comprehensive skills. Specific and actionable learning objectives should be set, aligned with core curriculum requirements, enabling students to achieve holistic development in subject learning.

## **3. Project-Based Learning: A New Open Learning Model**

Project-Based Learning (PBL) is a teaching model based on constructivist theory, where students engage in autonomous cooperative exploration and output of work through the design of driving questions and tasks in authentic contexts. PBL emphasizes the integration of learning and practical application to enhance students' learning abilities and thinking skills, particularly higher-order thinking skills [5]. In today's education, core competencies have become a hot topic, and project-based learning precisely meets the needs of competency-oriented classrooms in primary and secondary schools. The advantages of project-based learning are explained as follows:

### ***3.1. Characteristic Advantages***

Project-based learning possesses characteristics of innovation, contextualization, interdisciplinary

integration, and collaboration [6]. Through project-based learning, students can apply innovative thinking to solve problems in authentic contexts, requiring them to flexibly utilize knowledge from different subjects and collaborate, explore, and share within learning groups to accomplish project tasks. By achieving tasks at each stage, students gain a sense of accomplishment and recognize the importance of innovative thinking, leading to a greater acceptance of this problem-solving approach and its continuous application in future learning.

### ***3.2. Facilitating the Development of Innovative Thinking and Awareness***

In primary and secondary school classrooms, teachers aim to cultivate students' core competencies and adopt a holistic design approach, using project frameworks as guidance to help students form comprehensive knowledge systems within their cognitive structures. Based on project requirements, students select interdisciplinary knowledge to solve problems, thereby stimulating their innovative thinking, establishing a solid foundation in various subjects, and facilitating the development and enhancement of core competencies. Moreover, through guided authentic project contexts, students can effectively integrate practical situations into their thinking process and construct innovative awareness.

### ***3.3. Fostering Students' Sense of Social Responsibility***

Each student possesses independent thinking. In project-based learning, when teachers select driving projects and contexts, they not only consider teaching objectives but also emphasize the cultivation of students' sense of social responsibility. Through project participation, students gradually clarify their responsibilities in social development, helping them actively regulate their behaviors and raise their moral awareness.

In English teaching, project-based learning also plays a crucial role. Through project-based learning, students can apply English to solve problems in authentic language contexts, fostering innovative thinking in language application. For example, designing an English speech project allows students to choose a topic of interest for research and preparation, collect materials through group collaboration, draft speeches, and deliver them in the classroom. Such projects help enhance students' oral communication skills in English, critical thinking, and presentation abilities [7].

Furthermore, project-based learning cultivates students' teamwork and communication skills. In projects, students need to collaborate with team members, allocate tasks, and jointly solve problems. Through teamwork, students learn to listen to others' perspectives, negotiate decisions, and collectively achieve project goals. These collaboration and communication skills are not only beneficial to academic achievements but also significant for students' interpersonal interactions and career development.

In conclusion, project-based learning, as a new open learning model, holds significant significance in English teaching in primary and secondary schools. Through project-based learning, students can achieve more comprehensive subject development, cultivate innovative thinking and awareness, and enhance their sense of social responsibility. Teachers should actively explore and apply project-based learning, providing students with meaningful and challenging learning experiences to promote their overall development in English learning.

## **4. Challenges In Promoting Project-Based Learning In English Teaching**

Project-Based Learning (PBL) has been proposed and implemented in China for some time, but currently, only a few primary and secondary schools have adopted this teaching model in English education. In the field of English teaching, the promotion of project-based learning still faces the following challenges:

### ***4.1. Unfamiliarity with Project-Based Learning among Teachers***

Teachers are key implementers of project-based learning. However, many English teachers still feel unfamiliar with project-based learning. Due to the lack of relevant training and awareness, teachers' level of understanding and professional development in project-based learning are affected. Current research and training primarily rely on online learning, which may not sufficiently help teachers deepen their understanding and mastery of new concepts and methods. Without a deep understanding of project-based learning, teachers find it challenging to effectively apply project-based learning in their actual teaching and leverage its advantages.

#### **4.2. Objective Issues in Teaching Practice**

According to adult learning theory, adults prefer learning through practice. However, English teachers who have implemented project-based learning have encountered challenges, including limited time for learning and lesson preparation, limited reference materials, lack of awareness of supportive tools, and absence of appropriate evaluation methods. These objective issues either prevent primary and secondary school teachers from implementing project-based learning in their teaching or hinder their ability to receive timely feedback and evaluation. These problems impede the improvement and development of project-based teaching.

#### **4.3. Difficulty in Demonstrating the Advantages of Project-Based Learning**

Even after implementing project-based learning, some students still prefer the traditional teacher-centered approach and lack an active and participatory attitude. Many students lack preparation and awareness of project-based learning, which hinders their ability to effectively transition roles and collaborate with group members to complete tasks, thereby affecting their classroom performance. Students often face difficulties in teamwork and individual independent learning tasks, finding information gathering and project-based learning challenging, resulting in significant differences in efficiency for post-task assignments. These issues lead to project-based learning not being significantly more effective than traditional classroom teaching and, at times, being perceived as a waste of time. Teachers' lack of experience in project-based learning implementation leads to improper arrangement of teaching methods and stage activities, further affecting teaching effectiveness [8].

To address the aforementioned challenges, educational authorities and primary and secondary schools should take the following measures to promote project-based learning in English teaching:

Firstly, provide more appropriate training. Teachers need to receive training specifically tailored to project-based learning to develop their understanding and application skills. Training formats should be diversified, combining online and offline approaches, allowing teachers to fully experience the advantages of project-based learning compared to traditional teaching methods.

Secondly, conduct research and showcase events for project-based learning courses. Education authorities and schools should regularly organize teachers to conduct research and exchange activities on project-based learning, share successful experiences, and learn from each other. Through practice and exchange, teachers gradually understand and internalize the essence of project-based learning, and innovate and develop subject-based project-based learning in their actual teaching.

Furthermore, optimize the effectiveness of training and motivation mechanisms. After receiving training, schools should encourage and guide teachers to apply the project-based learning concepts and methods they have learned in actual teaching, and regularly evaluate and provide feedback on teachers' teaching outcomes. This can motivate teachers to actively apply project-based learning, continually improve and enhance teaching effectiveness.

In conclusion, promoting project-based learning in English teaching faces certain challenges. However, with appropriate training and communication mechanisms, these challenges can gradually be overcome, allowing project-based learning to play a greater role in English education. Teachers should continue to pay attention to and learn the concepts and methods of project-based learning, strive to enhance their teaching abilities, and provide students with meaningful and high-quality English learning experiences.

### **5. Advancing Project-Based Learning In English Teaching**

#### **5.1. Cultivating a Student-Centered Teaching Approach**

Promoting project-based learning in English teaching requires the cultivation of a student-centered teaching approach. Teachers should place students at the core of instruction, advocate for student autonomy, and nurture their innovative thinking abilities. Project-based learning requires a shift from "teaching" to "learning," stimulating students' interest and initiative in learning, and allowing them to enhance their English knowledge and skills through inquiry, practice, and other activities[9].

In project-based learning, teachers should create authentic language environments, guide students to think about driving questions relevant to real-life situations, and organize students to work in small

groups to explore and complete project tasks independently. Students can solve problems independently through methods such as information retrieval, investigation and analysis, interviews, and field visits, and eventually synthesize their findings into group projects. Teachers play the role of authentic "facilitators" in the process, providing guidance and evaluating student outcomes. Through self-assessment, peer assessment, and teacher evaluation, the outcomes of students' work are quantitatively assessed, and the English knowledge involved is summarized and reinforced.

Throughout the entire process of project-based learning, the student-centered teaching philosophy is emphasized to cultivate students' autonomy and innovative thinking abilities. Placing students at the forefront of instruction is crucial for effectively applying project-based learning methods and strategies.

### ***5.2. Promoting Interdisciplinary Integration***

Advancing project-based learning in English teaching requires promoting interdisciplinary integration. Curriculum reform in China emphasizes problem-solving, fostering students' innovation and comprehensive practical abilities. However, in actual teaching, there is still a lack of interdisciplinary teaching practices, and most often, only instrumental competencies are emphasized, neglecting interdisciplinary competencies related to personal development and social interaction. Therefore, addressing the lack of interdisciplinary competencies is crucial in promoting project-based learning.

To achieve interdisciplinary integration in primary and secondary school curricula, on the one hand, teachers and students need to have a solid foundation of subject knowledge, teaching skills, and learning abilities to maximize their potential and achieve optimal learning outcomes. Teachers can cultivate interdisciplinary cognition, abilities, thinking, and awareness through methods such as peer learning, training projects, and contextual design, helping students better grasp knowledge, expand thinking, and improve problem-solving and learning abilities.

On the other hand, in the instructional design of interdisciplinary project-based learning, the principle of "goal-question-task-process-evaluation" should be followed to promote cross-disciplinary integration. Teachers can design a series of interdisciplinary questions and tasks that combine theories and practices from different disciplines, helping students achieve knowledge transfer and integration. Through interdisciplinary instructional design, students' core competencies in different subjects can be effectively developed, enhancing their higher-order thinking skills[10].

To achieve these goals, several strategies can be implemented:

1) Cultivate teachers' and students' interdisciplinary cognition, abilities, thinking, and awareness. Teachers should establish a sense of interdisciplinary identity and create an interactive learning atmosphere in the classroom, promoting interdisciplinary communication and collaboration between teachers and students. By cultivating interdisciplinary competencies, students can better grasp knowledge, expand thinking, and improve problem-solving and learning abilities.

2) Utilize overarching concepts to integrate knowledge from different disciplines. Traditional teaching often focuses on memorizing theoretical knowledge, while neglecting practical applications and interdisciplinary thinking. Overarching concepts serve as bridges that connect knowledge within a subject, helping students better understand and master subject knowledge. Teachers can design instruction around overarching concepts, integrating theories and practices from multiple disciplines, and designing interdisciplinary questions and tasks to facilitate knowledge integration.

3) Guide the exploration of authentic chained questions. Authentic chained questions possess characteristics such as authenticity, openness, complexity, and diversity. In project-based learning, students need to explore and think critically to solve problems. The solution to one problem leads to a more complex, interdisciplinary question without a standard answer. Students need to mobilize knowledge and abilities from different disciplines, even collaborating within small groups to address these questions. By solving a series of problems, students can construct a chain of knowledge, deepening their understanding of the relationships between disciplines.

### ***5.3. Utilizing Technology to Support Project-Based Learning***

In the process of promoting project-based learning, leveraging technology can enhance instructional effectiveness and student engagement. Project-based learning in English teaching can leverage technological tools such as multimedia, the internet, and online resources to provide students with broader learning spaces and resources [11].

1) Application of multimedia resources: Teachers can utilize multimedia technologies such as projectors, electronic whiteboards, and educational software to display relevant images, videos, and audio materials, enriching classroom content and stimulating students' interest and curiosity. By watching authentic videos and listening to authentic English audio, students can better understand the real-life application of English, improving their listening and speaking abilities.

2) Utilization of internet resources: Teachers can guide students to utilize the internet to search for, collect, and organize relevant English learning materials, including extracurricular readings, online courses, teaching videos, and learning communities. Students can access more language input and learning resources through the internet, broaden their knowledge, and enhance their self-directed learning abilities.

3) Application of online collaboration tools: Teachers can guide students in using online collaboration tools such as Google Docs, online whiteboards, and team collaboration platforms for group collaboration and communication. Students can collaboratively edit documents, create presentations, and achieve real-time collaboration and information sharing on virtual platforms, promoting the development of teamwork and communication skills.

4) Utilization of intelligent tutoring systems and adaptive learning technologies: Intelligent tutoring systems and adaptive learning technologies can provide personalized guidance and feedback to students, adapting to their individual learning needs and progress. These technologies can support students' independent learning, monitor their learning outcomes, and provide timely feedback and recommendations for improvement.

By leveraging technology effectively, project-based learning in English teaching can be enhanced, providing students with interactive and engaging learning experiences while facilitating the attainment of learning objectives.

In summary, advancing project-based learning in English teaching requires cultivating a student-centered teaching approach, promoting interdisciplinary integration, and utilizing technology effectively. By placing students at the core of instruction, fostering their autonomy and innovative thinking abilities, incorporating interdisciplinary perspectives and approaches, and leveraging technology tools, project-based learning can be effectively promoted in English education. Teachers should continuously focus on and learn the concepts and methods of project-based learning, striving to enhance their teaching abilities and provide students with meaningful and high-quality English learning experiences.

## 6. Conclusion

Project-based learning holds significant importance in primary and secondary English education. Through project-based learning, students can apply English knowledge in authentic contexts, fostering their language communication skills and innovative thinking. Additionally, project-based learning promotes interdisciplinary integration, cultivating students' comprehensive literacy and problem-solving abilities. However, the advancement of project-based learning faces challenges such as teachers' unfamiliarity, practical issues in teaching, and students' difficulty in adapting to project-based learning. Therefore, educational authorities and schools should provide teacher training and support. Teachers should adopt a student-centered approach, promote interdisciplinary integration, and guide students in exploring authentic chained questions. Only through collective efforts can effective implementation of project-based learning in English teaching be achieved, facilitating the comprehensive development of students' core competencies. Project-based learning is a powerful instructional strategy that can bring new opportunities for the development of primary and secondary English education.

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