THE DEVELOPMENT AND EFFECTIVENESS OF A PJBL SPEAKING MODULE IN ENHANCING ENGLISH SPEAKING PROFICIENCY AND LEARNER AUTONOMY AMONG EFL UNDERGRADUATES IN CHINA

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by

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LIST OF ABBREVIATIONS

ACTFL	American Council on the Teaching of Foreign Languages
ADDIE	Analysis, Design, Development, Implementation, and Evaluation
ALM	Autonomous Learner Model
ARCS	Attention, Relevance, Confidence and Satisfaction
CAI	Computer-Assisted Instruction
CEFRL	Common European Framework of Reference for Languages
CES	China's Standard of English Language Ability
CET	College English Test
CETG 2020	College English Teaching Requirements 2020
CLT	Communicative Language Teaching
CNKI	Chinese National Knowledge Infrastructure
DLAM	Dynamic LA Model
EFL	English as a foreign language
EMI	English-medium instruction
ES	English-speaking
ESP	English for Special Purpose
FLA	Foreign Language Acquisition
GOAL	Goal, Objectives, Act, And Look
GSPjBL	Gold Standard Project-Based Learning
GTM	Grammar-Translation Method
HED	Higher Education Department
ICC	Intraclass corelation coefficient
ICT	Information and Computer Technology
IELTS	International English Language Testing System
ILR	Interagency Language Roundtable

ILSUA	Important Learning Strategy Using Ability
IPA	International Pronunciation Alphabet
ISD	Instructional design
КМО	Kaiser–Meyer–Olkin
LA	LA
LAAD	Languages & Applied Administration Department
MOOC	English massive open online courses
PjBL	Project-Based Learning
QUAL	Qualitative
QUAN	Quantitative
ROT	Role of Teacher
SET	Speaking English Test
SLA	Second Language Acquisition
SLAC	State Language Affairs Commission
TBLT	Task-Based Language Teaching
ZPD	Zone of Proximal Development Theory

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PEMBANGUNAN DAN KEBERKESANAN MODUL BERTUTUR PJBL DALAM MENGUKUHKAN KEMAHIRAN BERBAHASA INGGERIS DAN AUTONOMI PELAJAR DALAM KALANGAN PRASISWAZAH EFL DI CHINA

ABSTRAK

Kajian ini mengkaji keberkesanan modul pertuturan PjBL terhadap kemahiran berbahasa Inggeris (ES) dan autonomi pelajar (LA). Berpandukan modul "analisis, reka bentuk, membangun, melaksana dan menilai" (ADDIE) yang diasaskan oleh Branch (2009), modul pertuturan pembelajaran berasaskan projek (PjBL) menyepadukan piawaian emas untuk PjBL (GSPjBL) seperti yang dicadangkan oleh Larmer et al . (2015) ke dalam bahasa Inggeris sebagai bahan pembelajaran bahasa asing (EFL). Kajian ini menggunakan kuasi-eksperimen dengan memilih 35 pelajar tahun kedua untuk menyertai kumpulan eksperimen yang pernah menjalani modul pertuturan PjBL. Sebagai perbandingan, kumpulan kawalan terdiri daripada 35 pelajar tahun kedua yang menerima modul pertuturan secara tradisional. Kumpulan eksperimen dan kawalan masing-masing berada di dua kampus universiti di China. Kaedah campuran digunakan untuk mengumpul data melalui ujian pra dan pasca ES, soal selidik pra dan pasca LA, dan temu bual separa berstruktur. Keputusan ANCOVA menunjukkan bahawa penguasaan kosa kata dan tatabahasa pelajar dalam kumpulan eksperimen adalah lebih tinggi secara signifikan berbanding kumpulan kawalan. Pada masa yang sama, tidak terdapat perbezaan yang signifikan secara statistik antara kumpulan eksperimen dan kawalan dalam skor min pascasebutan (postpronunciation). Untuk Autonomi pelajar (LA), analisis bukan parametrik mendedahkan bahawa pelajar dalam kumpulan eksperimen menunjukkan peningkatan yang ketara dalam keyakinan dan strategi pembelajaran penting menggunakan kebolehan (ILSUA), manakala rakan mereka dalam kumpulan kawalan tidak menunjukkan peningkatan sedemikian. Walau bagaimanapun, kumpulan eksperimen mahupun kawalan tidak menunjukkan perbezaan yang ketara dalam keputusan pasca soal selidik berkaitan peranan guru (ROT) dan maklum balas. Analisis tematik data daripada temu bual separa berstruktur dengan 15 pelajar kumpulan eksperimen menunjukkan dua tema utama berkenaan pengalaman pelajar, termasuk pengalaman positif dan cabaran pelajar menggunakan modul pertuturan PjBL, dengan sembilan sub tema sepadan yang memberikan pandangan tambahan terhadap keputusan eksperimen. Oleh itu, pembangun modul, pendidik, pembuat dasar dan pelajar harus mengenal pasti kepentingan PjBL dalam meningkatkan penguasaan ES dan PBT pelajar. Oleh itu, pengamal pendidikan dan sarjana harus meneroka tentang keberkesanan integrasi PjBL dan pemerolehan bahasa untuk meningkatkan lagi penguasaan ES dan LA pelajar.

THE DEVELOPMENT AND EFFECTIVENESS OF A PjBL SPEAKING MODULE IN ENHANCING ENGLISH SPEAKING PROFICIENCY AND LEARNER AUTONOMY AMONG EFL UNDERGRADUATES IN CHINA

ABSTRACT

The study examined the effectiveness of a PjBL speaking module on Englishspeaking proficiency (ES) and learner autonomy (LA). Following the "analysis, design, develop, implement, and evaluate" (ADDIE) module outlined by Branch (2009), the project-based learning (PjBL) speaking module integrated the gold standards for PjBL (GSPjBL) as proposed by Larmer et al. (2015) into the English as a foreign language (EFL) learning material. The study employed a quasi-experiment by purposively selecting 35 second-year undergraduates for the experimental group who had experienced the PjBL speaking module. In comparison, the control group comprised 35 second-year undergraduates who received traditional speaking module. The experimental and the control groups were on two campuses of a university respectively in China. Mixed methods were used to collect data through ES pre and post-test, LA pre- and post-questionnaire, and semi-structured interviews. The ANCOVA results showed that students' vocabulary and grammar proficiency in the experimental group were significantly higher than those in the control group. At the same time, there was no significant difference between the experimental and control groups in postpronunciation mean scores. Regarding LA, the non-parametric analysis revealed that the students in the experimental group showed significant improvements in confidence and important learning strategy using ability (ILSUA), while their counterparts in the control group did not. However, neither the experimental nor control groups exhibited significant differences in the post-questionnaire results concerning the role of teachers (ROT) and feedback. The thematical analysis of the data from the semi-structured interviews with 15 students of the experimental group showed two main themes concerning students' experiences, including students' positive experiences and challenges using the PjBL speaking module, with nine corresponding sub-themes providing additional insights into the experimental results. Therefore, module developers, educators, policy makers and students must recognize the importance of PjBL in enhancing students' ES proficiency and LA. Consequently, educational practitioners and scholars should explore the effective integration of PjBL and language acquisition to enhance learners' ES proficiency and LA further.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The English language has evolved into an important tool for international communication, adopted by approximately 30% of international organizations and utilized in up to 85% of academic publications across the world (Rao, 2019). It serves as a global lingua franca, facilitating cross-cultural interactions and collaborations in various fields such as business, science, technology, and education. The widespread use of English in global media, the internet, and popular culture further underscores its significance(Ou et al., 2023). Mastery of English opens up vast opportunities for individuals and nations, enabling access to a wealth of knowledge, enhancing career prospects, and fostering international understanding and cooperation.

In China, there is a growing emphasis on English language proficiency among the population, driven by a desire to keep pace with the rapid currents of globalization and strengthen international relations, despite Chinese being the exclusive official language. English proficiency at college-level is regarded as beneficial for fostering professional, academic, and personal communication amid the internationalization in the country (Li & Fang, 2017). The current role of College English in China is to prepare students for the cultivation of versatile international professionals who can meet both the nation's needs and individual growth aspirations (Shu, 2020). Consequently, EFL at the college level is attracting increasing attention from the government, researchers, and students, simultaneously giving rise to new demands in alignment with the swift social developments occurring both within China and internationally. Among the four language skills—reading, writing, listening, and speaking— ES proficiency is becoming increasingly crucial for Chinese undergraduates not only during their academic years but also post-graduation, as it facilitates real-time international communication between Chinese individuals and foreigners across various contexts(Amoah & Yeboah, 2021). For Chinese EFL undergraduates, ES proficiency is deemed a crucial aspect of their overall language proficiency, due to the proposition that ES proficiency is the signal of a high level of English competence (Bygate 1987; Aizawa et al., 2023; Gultom & Oktaviani, 2022).

Furthermore, ES proficiency is intricately linked to job opportunities and economic benefits, motivating Chinese undergraduates to acquire it for their personal and professional lives. It is worth noting that over half of the respondents believed that ES proficiency was essential for their jobs, particularly when they engaged in activities like the online international meetings or international real-time communications (Wang et al., 2017; Malikussaleh et al., 2021). Also, ES proficiency holds a significant role in various sectors, including corporate, government, and public service (McPherron, 2016;Li et al., 2020). There are also studies indicating that a high level of ES proficiency is positively correlated with individuals' salaries and competitiveness in the job market (Lee et al., 2022; Nam et al., 2020; Zan et al., 2023).

Apart from ES, the concept of LA in the context of EFL learning is paramount for the undergraduates as emphasized in China's educational landscape since 1998, owing to its pivotal role in fostering lifelong learning(Huang & Shi, 2008). This enduring emphasis on LA can be attributed to its recognized significance as a key factor influencing various aspects of the EFL learning for students in China(Tseng et al., 2020; Wang & Ryan, 2023; Xin & Ibrahim, 2021). The importance of LA cannot be overstated, as it exerts a substantial influence on students' EFL learning experience both before and after graduation.

Prior to graduation, LA has been found to yield significant benefits in terms of students' EFL learning performance. When students actively engage in EFL learning, take responsibility for their language acquisition, and exercise LA over their study routines, they tend to exhibit improved language proficiency and a deeper understanding of English language principles(Borg & Alshumaimeri, 2019; Hafizuddin et al., 2019). After graduation, their LA to acquire new language skills and adapt to different communicative contexts positions them as valuable assets in various professional settings(Barakos, 2022; Hendriarto et al., 2021).

Given the importance of ES proficiency and LA in today's world, there is a growing need to enhance ES proficiency and LA of Chinese EFL undergraduates to prepare them for their future endeavor. This enhancement is pivotal in preparing them to fulfil academic requirements and meet post-graduation employment expectations in the field of EFL learning, thereby enabling effective execution of tasks related to work and study within their respective professional fields.

One of the measures to enhance ES proficiency and LA is the PjBL approach. Introducing a PjBL speaking module under PjBL approach shows an attempt to align with the aspirations of Chinese EFL undergraduates and achieve this objective, as PjBL approach encourages students to actively acquire ES knowledge and skills by inquiring and thinking about the problems critically, designing and experimenting plans, collecting and analyzing the data, communicating and collaborating with others when faced with authentic challenges or problems, which also solidate their LA (Ferry, 2021; McCann, 2022; Pambuko et al., 2021; Xie et al., 2020).

1.2 Research background

As English is a widely used international communication tool in the field of economy, science, and technology, it is of great importance for the EFL undergraduates in China to be proficient English speakers. There is also a need for the Chinese EFL undergraduates to have LA which has become a heatedly discussed topic along with the advocation of lifelong learning. In response to these needs, Chinese EFL undergraduates' ES proficiency has been highlighted as a central focus in the College English Teaching Guide 2020 (CETG 2020). CETG 2020 mandates English as a compulsory subject for first- and second-year Chinese EFL undergraduates and the requirements of ES proficiency can be seen in Table 1.1:

Table 1.1

Level	Communicative activities	Language knowledge and skills
General	 Be able to simply make rounds of comments or communicate with others on daily and familiar social hot topics. Be able to narrate general issues or describe items after preparation. Be able to make brief speaking on topics related to study or future. 	 Be able to make the language structure basically clear. Be able to make the phonetic, intonation and grammar relatively correct.
Junior	 Be able to carry out conversation fluently on general topics. Be able to express personal opinions and feelings, Be able to narrate facts, reasons, and describe objects. Be able to explain, compare, and summarize on familiar opinions, concepts, and theories; 	 Be able to make the language structure clear. Be able to make the phonetic and intonation are basically correct.

ES proficiency level requirements in CETG 2020 from (CMOE, 2020)

	 Be able to carry out conversation or discussion accurately and fluently on common topics in general or specialized discipline.
Higher	2. Be able to summarize long and difficult text or speech in concise language
	3. Be able to read the paper and engage in discussion in international conference.
	 Be able to participate in business negotiations and product publicity.

Table 1.1 outlines the expectations of ES proficiency for college students at three levels of ES proficiency- General, Junior, and Higher, which is taken as the guide for the English curriculum and syllabus in all the universities in China. The three levels escalate developmentally. According to CMOE (2020), the foundation of the requirements for language proficiency are pronunciation, vocabulary, and grammar for coherence, fluency, accuracy, and complexity. As the least requirements of ES proficiency in CETG 2020, the general level is for the first year and second-year students. While the junior requirements are for the undergraduates with relatively higher ES proficiency when entering colleges or universities. As for the senior requirements, undergraduates are encouraged to study ES depending on their own needs. Besides, Chinese universities and colleges mandate that the EFL syllabus should be tailored to the specific requirements of each institution based on CETG 2020 and it is crucial to prioritize varying levels of language proficiency, addressing diverse academic needs.

Meanwhile, CETG 2020 underscores the significance of LA, emphasizing that the selection of teaching approaches should prioritize the development of Chinese EFL students' LA. It should aim to guide and assist students in acquiring effective learning strategies, fostering the ability to become autonomous learners and encouraging reflective practices. Additionally, it should promote active student engagement through group activities, systematic alignment with learning objectives, and empowering students to make choices in accordance with their individual learning characteristics and habits. Furthermore, it should encourage students to remain attuned to contemporary social issues within the context of EFL learning(CMOE, 2020).

In China, empirical studies on LA in EFL learning are under exploration. Lin & Reinders (2019) have contributed significantly to this field by identifying and dissecting the intricate technological and behavioral challenges that emerge within the pedagogical context, exerting a notable influence on students' capacity to develop their LA. These challenges often revolve around the seamless integration of technology and the effective implementation of teaching approaches in EFL learning, highlighting the critical role of modern tools and pedagogical innovations. In a parallel vein, Wang & Ryan (2020) embarked on a thought-provoking investigation that centered on the dynamic interplay between teachers' instructional behaviors and their perception of control transfer concerning LA in China. Their research findings shed light on a complex and intertwined relationship, where the actions of educators played a pivotal role in shaping the development of LA among the students. This intricate interplay underscores the vital importance of effective pedagogical practices and highlights the significant impact that teachers have in nurturing and fostering LA.

The shift from "passive learning" and "teaching objective-oriented" to "active learning "and "learning needs-oriented" (CMOE, 2020) promoted the practice of LA and ES proficiency. The implementation of various approaches improved students' ES proficiency significantly. Communicative language teaching(CLT) approach popular in the 1980s and 1990s have been demonstrated effective for ES proficiency (Wang, 1999, 2006). Task-based language teaching (TBLT) is also verified in improving Chinese EFL undergraduates' ES proficiency and is taking the predominant position in EFL learning nowadays (Kessler et al., 2020; Littlewood, 2007; Liu et al., 2018; Qin & Zhang, 2019). Both CLT and TBLT are implemented in the popular ES materials. Apart from CLT and TBLT, some other new approaches are introduced into the field of Chinese EFL education for the setup of native language context. For instance, findings of the study by Rao & Chen (2020) showed that cooperative learning was an effective way to improve Chinese EFL undergraduates' ES proficiency. Min et al. (2019) proposed a blended learning module, which reduced students' anxiety, enriched the learning resources, increased the student's access to learning resources and provided sufficient support for ES learning.

Of all the approaches recommended by CETG2020, PjBL approach in language learning has attracted increasing attention of the Chinese researchers to develop the EFL undergraduates' ES proficiency and LA(Lin et al., 2023). The review by Wang (2020) showed that most of the empirical studies (from 2002-2017) on PjBL in the field of EFL learning in China focused in improving students ES proficiency and LA through learning strategies. Jun et al. (2017) built a new PjBL model and stated that there should be a localization of the PjBL to cater for the improvement of students' ES proficiency and LA. The study by Li & Wang (2018) from the ethnographic perspective explored the way to stimulate the student's LA, and develop their ES proficiency using PjBL. Grant (2017) proved that PjBL was effective in improving the Chinese students' ES proficiency and LA through the projects in which the students were empowered.

Apart from the studies on ES proficiency, LA, and PjBL approach, ES materials are also under exploration in China. Currently, it can be generally divided into two types: (1) materials of ES only; (2) materials incorporated with English

listening and speaking, or the accompanying tutorial materials of listening and speaking for comprehensive English reading and writing courses(Bi & Li, 2008; Chen & Sun, 2015; Chen et al., 2019; Zheng, 2020; Li, 1979; Liu, 2016). The two types of ES materials are based on the language learning approaches such as content-based approach, situation-based approach, communicative learning approach, TBL approach, computer-assisted approach, or some others, focusing on communication. Among all the available versions, the textbook series "New Horizon College English: Viewing, Listening, and Speaking" by (Zheng, 2002, 2015) enjoys the highest popularity among college students in China. The entire textbook series is categorized into three levels - foundational, moderate, and advanced - corresponding to the students' ES proficiency levels. It is based on TBL, in which the traditional classroom teaching and learning activities are the main framework supplemented with the webbased education for more resources, individual communication, and group cooperation after classes. Materials in the textbook include two parts: input-listening practice and output -conversational skills practices (retelling and discussion), listening and practice (notetaking, retelling, role play and so on), and after class practices (e.g., oral reports).

Henceforth, refined curriculum requirements in CETG 2020, innovative pedagogical approaches, and practical experiences in EFL learning have jointly established a basis for the present research, which aims to develop and examine the effectiveness of a speaking module using the PjBL approach in enhancing the ES proficiency and LA among EFL undergraduates in China.

1.3 Problem statement

Despite the improvements in CETG 2020 in the aspects of ES proficiency, LA and learning materials made in the two decades since the implementation of EFL

education starting from primary school, a majority of Chinese undergraduates still demonstrate weaknesses in ES proficiency (Liu et al., 2016; Chang, 2021). The report by Wei and Su (2015) revealed that the average level of ES proficiency of all the surveyed aging from 15 to 69 were low with only 3.53% speaking fluently(including students of high schools and colleges). Additionally, the mean academic scores for ES proficiency among Chinese candidates in the International English Language Testing System (IELTS) were the lowest at 5.6, compared to the mean scores for listening (6.1), reading (6.4), and writing (5.8) (British Council, 2023). Xing et al. (2020) pointed out that Chinese international students' ES proficiency was lower compared with other international student groups, which negatively influenced the student's academic acculturation. Amoah and Yeboah (2021) pointed out that the Chinese EFL learners still needed to focus on the development of their pronunciation, vocabulary and grammar for the purpose of improving their ES proficiency.

The study by Hua (2023) and Li (2019) indicated that a multitude of Chinese college EFL students grappled with difficulties in pronunciation, which could be traced back to their under developed English learning, posing hurdles for students when attempting to master accurate English pronunciation independently. Zhang (2020) reported in their empirical study that the majority of respondents expressed a great need for pronunciation knowledge, but their teachers did not teach pronunciation in class. The finding of the survey by Pan et al. (2021) indicated that most participants were critical of their own English pronunciation, with more than half expressing dissatisfaction with their current level. According to Li & Woore (2021), Chinese EFL learners have problems in pronouncing the vowels and the consonants: /I, æ, əu, au, f, v, s, z, θ , δ , n, η /.

Apart from the problems of in pronouncing vowels and consonants, Chinese EFL undergraduates also have problems in the aspects of stress and intonation (Wu, 2019). Bu & Zhou (2021) found students had problems of stress in terms of syllabus, words, compounds, and pitches in sentences. While Guo (2022) pointed that Chinese EFL students' problems in pronunciation stress was correlated to the acoustic characteristics such as fundamental frequency (F0), duration, and intensity. Cheng and Luo (2020) found that Chinese EFL undergraduates' English pronunciation issues were primarily due to incorrect intonation and insufficient emphasis on both stress and intonation skills.

Many students found it difficult to express themselves on a concrete topic in ES due to vocabulary problems. Being unable to express their ideas with appropriate vocabulary in ES impede the learners' ES proficiency(Amoah & Yeboah, 2021). Jin and Jie (2017), as designers of China's Standard of English Language Ability (CES) in China, stated that Chinese EFL undergraduates were lack of vocabulary in ES proficiency development. Chinese undergraduates are also lack of vocabulary which hinders the improvement of their ES proficiency (Meng et al., 2021; Meng & Reed, 2020). Lin (2018) uncovered that students' low ES proficiency attributed to a low level of vocabulary storage.

Though the students have learned English grammar for more than 10 years ever since the primary school, the Chinese EFL undergraduates still have grammatical problems in ES. The investigation of Xie (2020) showed that grammar was still a barrier for the improvement of Chinese EFL undergraduates' ES proficiency. Li (2021) in their corpus-based study found that Chinese EFL learners tended to make mistakes in tense, concord and "there be" constructions in speaking. The qualitative study by Amoah and Yeboah (2021) also showed that Chinese EFL undergraduates' grammatical problems mainly fell into the aspects of tenses and consistency.

Besides ES proficiency, Chinese EFL undergraduates have problems in LA. According to Cotterall (1999), LA is reflected in the aspects of ROT, role of feedback, confidence, and important learning strategy using ability (nature of language was not the focus of this study). The findings from an interview conducted by Du (2020) revealed that the students had low LA, showing noticeable decrease in EFL learning efficiency. Li (2023) found that one problem of the students' low level of LA was the heavy dependence on their teachers, both within and outside the classroom(Wang & Guan, 2020; Wu et al., 2021). This dependence on teacher guidance and instruction contrasts sharply with the prevailing learning approaches that emphasize the importance of fostering students' LA. Furthermore, The study by Zhang and Zhang, 2021 underscored the students' dissatisfaction with the limited autonomy granted to them by the Chinese EFL teachers when it came to engaging in English learning activities within the classroom, which further underscored the importance of addressing the issue of low LA among Chinese EFL undergraduates and the need for a more balanced approach that encouraged greater student autonomy in language learning. Though the situation has greatly improved, Zhang et al. (2020) stated that students had problems in insufficient implementation of LA-supportive approaches.

Moreover, the comprehensive study conducted by Han and Xu (2021) embarked on an in-depth exploration of the intricate factors that played a pivotal role in shaping the low LA exhibited by Chinese EFL undergraduates, and found that the students had problems in feedback literacy. In their investigation, the Chinese EFL undergraduates faced considerable challenges when it came to effectively processing and harnessing feedback provided by their instructors and peers. This deficiency in feedback literacy emerged as a substantial obstacle, impeding their progress towards achieving greater LA. The students' struggle to comprehend and leverage constructive feedback hindered their LA and their ES proficiency (Wang & Troia, 2023).

Ding & Shen (2022) suggested lack of confidence within and out the classroom was another problem of the Chinese EFL students' low LA. Within the classroom, the students' hesitancy and self-doubt when it came to participating in English discussions or speaking activities hindered their ES proficiency development. This lack of confidence in ES limited their willingness to engage in ES interactions and thus impeded their LA development(Yu, 2020).

Chinese EFL students also had problems in making using of the learning strategies in ES learning. The study by Ding and Yu, (2021) found that the students struggled with effectively utilizing various learning strategies. Within the scope of Ding and Yu's investigation, it became evident that the students faced challenges in employing diverse and effective learning strategies to facilitate their language acquisition and autonomy though they had known the learning strategies(Tang & Chow, 2020). The implications of this finding suggested that in order to enhance LA among students, efforts should not only be directed towards fostering self-reliance but also towards equipping them with the skills and knowledge needed to employ an array of learning strategies effectively.

Despite the development in the study of ES learning and LA, ES learning materials also have certain shortcomings. As educational technologies and learning approaches continue to evolve, there is a pressing need for innovation in ES learning materials as many of the existing materials are deemed inauthentic, outdated,

examination-oriented, impractical, and lacking in communicative value(Shi & Fan, 2021).

Besides, to meet the requirements of the assessment, some ES materials edited the real language materials, replacing the ES with English writing. Chen (2020)in their studies mentioned that the outdated ES materials. Many current materials mandate students to complete a plethora of multiple-choice questions, seemingly placing a disproportionate emphasis on edited language content and test preparation, rather than on practicing the use of ES knowledge and skills (Zheng et al., 2020; Liu et al., 2021). In their investigation, Wang and Guan (2020) uncovered sophomores' complaints regarding the current ES materials, citing a lack of practicality. Data collected by Liu and Ren (2021) revealed some teachers' opinions, indicating a need for modifications to the ES materials. Furthermore, research by Shen (2020) and Fan (2019) suggested that the monotonous and mechanical activities in the speaking materials contributed to students' low ES proficiency.

Consequently, after deliberating on these problems, there is a need to overcome the above issues on ES proficiency, LA and learning materials. PjBL is a potential solution as proven in the previous studies. Pham (2021) in their action study proved that PjBL benefited the EFL students significantly on English learning and LA. Meanwhile, the review by Wang (2020) pointed out the promising potential of PjBL for EFL learning and LA development in China. However, the studies on PjBL need further exploration as the majority of the previous studies focus on the theoretical exploration and topic discussion and practical case studies in China, it lacks studies on specific skills particularly on ES proficiency (Wang, 2020). Meanwhile, there is no speaking learning materials based on project-based learning in China. Thus, the current study aims to design and develop a PjBL speaking module to enhance ES proficiency and LA among Chinese EFL undergraduates.

1.4 Research objectives (RO)

The research objectives of this study are:

- To design and develop a PjBL speaking module in enhancing ES proficiency and LA among EFL undergraduates in China.
- 2. To examine whether there is a significant difference in the mean scores of ES post-test between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. pronunciation
 - b. vocabulary
 - c. grammar
- 3. To examine whether there is a significant difference in the mean scores of LA post-questionnaire between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. role of teacher.
 - b. role of feedback
 - c. confidence
 - d. important learning strategy using ability
- 4. To explore the experimental group students' experience using the PjBL speaking module in terms of

- a. ES proficiency.
- b. LA.

1.5 Research questions (RQ)

Based on the problem statement and research objectives, the following are the research questions for this study.

- 1. Is there a significant difference in the mean scores of ES post-test between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. pronunciation?
 - b. vocabulary?
 - c. grammar?
- 2. Is there a significant difference in the mean scores of LA postquestionnaire between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. role of teacher?
 - b. role of feedback?
 - c. confidence?
 - d. important learning strategy using ability?
- What are the experimental group students' experiences using the PjBL speaking module in terms of
 - a. ES proficiency?
 - b. LA?

1.6 Hypothesis

The research hypotheses based on the RQs are as follows:

Null hypothesis

- H₀1: There is no significant difference in the mean scores of ES post-test between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. pronunciation.
 - b. vocabulary.
 - c. grammar.
- H₀2: There is no significant difference in the mean scores of LA postquestionnaire between the experimental group using the PjBL speaking module and the control group using the traditional textbook, in terms of:
 - a. role of teacher
 - b. role of feedback
 - c. confidence
 - d. important learning strategy using ability

1.7 Significance of the study

This study attempts to develop and examine the effectiveness of a PjBL speaking module to enhance ES proficiency and LA among EFL undergraduates in China. It provides reference to the policy makers that the PjBL speaking module might be a possible solution to promote the Chinese EFL undergraduates' ES proficiency and LA. The findings also might be beneficial to all the stakeholders such as the students, the educators, the module designers, and so on.

First, using the PjBL speaking module, Chinese EFL undergraduates might improve ES proficiency in the aspects of vocabulary, pronunciation, and grammar. Moreover, in the pedagogical aspect, the module could provide methods for the Chinese EFL undergraduates to get away from "spoon-feeding" and develop LA. They might have higher LA in ES learning and become more competent in solving real problems in ES practices even after graduation. In this way, lifelong EFL education would be possible for many undergraduates after graduation. They may consider more about the optimization of the effectiveness LA for the development of ES proficiency within the module, which might arise a reform in the field of content, instructional strategies, media and materials, platform/technology, and assessment strategies.

Second, using the PjBL speaking module, the student-centered learning might be reinforced. The teachers might change their role in class instructions and management in ES learning. The students may take on the central role, acquiring new skills and knowledge, solving learning problems, completing projects, and presenting learning products autonomously, with teachers acting as scaffolding. This approach offers a valuable opportunity for teachers to empower students, providing them with the freedom and responsibility to direct their own learning processes and outcomes.

The current study may also contribute to EFL learning and development in China, particularly by integrating the PjBL approach with ES proficiency and LA at the tertiary level. This innovative study has the potential to serve as a reference for developing English PjBL speaking module aimed at enhancing students' ES proficiency and LA. It exhibits versatility and adaptability for ES learning across diverse educational settings, encompassing middle and high school students, as well as college students.

1.8 Limitations of the study

In a research study, a limitation refers to any factor or aspect of the study that may restrict the scope, validity, generalizability, or reliability of the research findings(Akanle et al., 2020; Theofanidis & Fountouki, 2018). Quasi-experiment used in the present study might have some limitations. First, the target population was the students of two campuses of X University. Thus, the result of the study might not be totally the same if the target population becomes larger in some other studies. Second, the less control over independent variables compared to true experiments made it difficult to establish an absolute cause-and-effect relationship between the independent variable and the observed outcomes. Third, considering the timetable of the target university, the study spanned a duration of 8 weeks, and extending this duration could potentially yield different results. Fourthly, the students had unrestricted access to various learning resources and facilities, potentially introducing variables that could impact the research outcomes.

1.9 Delimitation of the study

Delimitation set boundaries or constraints on the study and specify what aspects are not within the scope of the research(Theofanidis & Fountouki, 2018; Akanle et al., 2020). First, the study is conducted within the confines of X University, delimiting the generalizability of the research, as the findings may not necessarily apply to other universities or academic disciplines. Second, the study focuses on fulltime undergraduates who were enrolled during the academic year 2020-2023, which narrows the scope of the research to a specific group of students during a particular period. Third, the sample size is limited to 70 students of two intact classes, selected through purposive sampling, delimiting the generalizability of the findings to a larger population, as the sample is relatively small and not randomly selected. Forth, the research specifically examines the effectiveness of the PjBL speaking module. Other language skills (writing, listening, and reading) or abilities are explicitly excluded from the scope. Fifth, the study concentrates on enhancing ES proficiency in vocabulary, pronunciation, and grammar, as well as LA in the role of the teacher, feedback, student confidence, and important learning strategy using ability. Other factors like anxiety, motivation, personality, gender, and background are not explicitly considered.

These delimitations help clarify the scope and boundaries of the research, ensuring that readers and researchers understand the context and limitations of the study. They also identify potential areas for future research to explore additional dimensions of the topic.

1.10 Operational definitions

Project-based learning. PjBL is an instructional approach that engages students in authentic, real-world projects to develop their knowledge, skills, and competencies(Markham et al., 2003). In PjBL, students actively explore and investigate complex problems or challenges, working collaboratively to design and implement solutions. This approach promotes students' autonomy, critical thinking, problem-solving, and communication skills, as well as providing opportunities for creativity and self-reflection. Various PjBL models were constructed, among which is the gold standard PjBL model. Gold Standard PjBL model proposed by Larmer et al. (2015) was used in this study. It composes of two parts: the learning goals- key knowledge, understanding and success skills, and project design elements-the

challenging problem or question, sustained inquiry, authenticity, students' voice and choice, reflection, critique and revision, and public products.

English-Speaking proficiency (ES proficiency). English-speaking proficiency refer to the visible language proficiency-vocabulary, pronunciation, and grammar according to Shuy (1978). In this study, vocabulary pertains to the entirety of words that a student learns and employs, encompassing both their definitions and how they are used. The dimensions of vocabulary are based on the study by Ren & Liu (2011), including lexical resources, lexical variety, and proportions of common words in ES learning. The pronunciation is defined as the way in which a language or a particular word or sound is pronounced (Hornby, 2009). In this study, the sound pronunciation, stress, and intonation are focused. Grammar includes not only the rules in English for changing the form of a words and joining them into sentences (Hornby, 2009), but also the grammar with speaking features-ellipsis, heads, tails, fillers, backchannels, and phrasal chunks as concluded by Hilliard (2014).

Learner Autonomy. The term "LA" pertains to the "extent" of control that the learners have over their learning (Cotterall 1995). In other words, it is a measurement of how much control students have over their learning, and it is based on the strategies they use to manage and direct their own learning experiences. LA in the present study is based on the normal classes with both the teacher and the students, indicating that totally autonomy without teacher is not the focus. Thus, Cotterall's definition was taken in this study, suggesting that LA refers to the varying degrees of students' controlling ability over their learning. The study focuses on the role of teacher and feedback, the student's confidence and students' important learning strategy using ability based on Cotterall, (1995,1999).

1.11 Summary

In this chapter, detailed descriptions of the research background and identified problems underscored the need for a PjBL speaking module aiming at improving Chinese undergraduates' ES proficiency and LA. These descriptions emphasized the necessity of such a module, elaborated on the research background and rationale, and meticulously outlined the research objectives, the research questions, and the hypothesis. Furthermore, the chapter highlighted the significance of the research, emphasizing its potential contributions to the academic field and practical applications in English language education for Chinese undergraduates. The chapter also addressed the study's limitations and delimitations, ensuring transparency and focusing on specific aspects to maintain research objectives. Finally, operational definitions were provided to ensure clarity and prevent misconceptions, laying a solid foundation for the subsequent exploration and analysis in the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides a systematic literature review. The focus is on theoretical and conceptual foundations that are related to the research. It first introduces the requirements of ES learning materials in China and the feasibility of a new module design. Then it elaborates on the ES proficiency, depicting its characteristics, components and the assessments. Thirdly, it reviews the studies on LA and clarifying the reasons for the selection Cotteral's definition of LA. Fourthly, it discusses the studies on the relationship between language proficiency and LA. Then, it reviews on the studies of PjBL approach and highlighted the GSPjBL model. Furthermore, it discussed on the reasons of choosing ADDIE model as the instructional design model. Meanwhile, it features a detailed depiction of the theoretical framework, outlining the integration of the identified theories into the study. Finally, it provides a comprehensive representation of the conceptual framework, illustrating the interrelation among independent variable and the dependent variables.

2.2 Requirements of ES learning materials in China

2.2.1 Humanity and instrumentality

The CETG 2020 underscores the importance of integrating instrumentality and humanity as the cornerstone of college EFL education in China. The instrumental aspect of the English language is apparent when it is employed by individuals as a tool for communication and expression across various domains, including public, occupational, educational, and personal contexts, as delineated by the Common European Framework of Reference for Languages (CEFRL) (Council of Europe, 2018). This utilitarian perspective emphasizes the functional applications of English, facilitating its use as a medium for achieving practical goals and engaging effectively in diverse settings. Consequently, ES learning materials must be designed to enhance students' communicative competencies, equipping them with the necessary language skills to navigate and perform in these different domains proficiently.

Conversely, the humanistic dimension of EFL education, as advocated by Chinese scholars and educators, places a strong emphasis on the pedagogical importance of fostering human values and respect for individuals (Fang, 2018). This approach underscores the significance of cultivating students' intercultural awareness and their capability to interpret and convey Chinese culture to an international audience (CMOE, 2020). In practical terms, the humanistic aspect is integrated into the curriculum, textbook development, and instructional methods, subtly promoting positive values and contributing to the holistic development of students (Zhang, 2018). Therefore, it is crucial for EFL educators in China to maintain a balanced approach, ensuring that neither instrumentality nor humanity is overlooked. The instrumental function of English should serve as the foundation for the humanistic goals of education, with the latter enriching and elevating the former. This integrated approach ensures that ES learning materials not only prepare students for practical communication tasks but also contribute to their overall personal and cultural development.

2.2.2 Feasibility of a new module design in CETG2020

The feasibility of a new module developed to improve Chinese EFL undergraduates' ES proficiency and LA is ensured in the instructional objectives and the content categories of CETG 2020 in the following:

Table 2.1

Instructional objectives and content standards adapted from CETG (CMOE, 2020)

	Guidelines in 2020
Instructional Objectives	to enhance students' English application ability, increase their intercultural communication awareness and ability, improve their LA ability and comprehensive cultural awareness through cultivating students' humanistic and critical thinking abilities, so that they can use English appropriately and effectively to meet national, social and personal needs.
Content categories	The content of College English consists of three categories: General English, English for Special Purpose and intercultural communication, while the procedures of College English consist of the fundamental level, improvement level and development level arranged by each university according to the actual situation

It can be seen from Table 2.1 that ES proficiency and LA were among the instructional objectives. Of all the English language skills, students' ES proficiency is taken seriously by the Chinese EFL researchers and educators as it is becoming increasingly required (Tsang, 2022). College English content in CETG2020 is divided into three categories-general English, English for special purpose and English for intercultural communication consisting of three hierarchical levels-the fundamental level, improvement level and development level. In this way, each university have the freedom to make the most appropriate curriculum according to their concrete conditions, which enables the design of a new module to improve the student's ES proficiency and LA to be feasible.