Exploring how English language education can support non-native English speaking students to access and communicate effectively in the global housing market

Fengyu Gu[1,*]

[1] School of Basic Education, Zhumadian Preschool Education College, Zhumadian, Henan, 463000, China

Corresponding authors: (e-mail: busenrui@126.com).

Abstract The accelerated process of globalization has contributed to the flourishing of international educational exchanges, with more and more non-native English-speaking students choosing to further their studies in English-speaking countries. However, these students commonly face housing access problems during their study abroad, and language communication barriers have become a key factor restricting their smooth integration into the local housing market. The lack of communication skills training in the traditional English education model has led to significant deficiencies in students' understanding of housing leasing, purchasing, and related legal provisions, which seriously affects the quality of their overseas study. This study explores the mechanism of the influence of English education on the ability of non-native English-speaking students to enter the global housing market through an experimental design. Using the questionnaire survey method, 60 first-year students majoring in Business English in College S were randomly divided into 30 students each in the experimental class and the control class to carry out a three-month English education practice on the theme of housing market. SPSS was used to analyze the data, and the research hypotheses were verified by reliability test, correlation analysis and regression analysis. The results show that the mean value of English listening and speaking ability of the experimental class after the experiment reaches 3.42, which is significantly higher than that of the control class (2.67), and the mean value of English reading and writing ability is 3.56, which is significantly higher than that of the control class (2.36).The correlation analysis reveals that all the dimensions of English education and the ability to enter the housing market have a significant positive correlation. Regression analysis showed that English education explained 58.6% of the non-native students' ability to enter the global housing market, with a significant positive predictive effect. The study confirms that English education can effectively improve the communication ability and adaptation level of non-native English speaking students in the global housing market, and provides empirical support for relevant educational policy making and teaching reform.

Index Terms English education, non-native English speaking students, global housing market, communication ability, correlation analysis, regression analysis

I. Introduction

In today's rapid economic development, the social requirements for foreign language ability of professional and technical personnel are getting higher and higher, and the rapid development of vocational education has made English proficiency one of the important indexes for enterprises and society to rate students [1]-[3]. Therefore, in order to better achieve these goals, higher vocational English teaching needs to be more vocationalized [4]. This means that educational institutions should work closely with relevant industries and enterprises to ensure that the teaching content closely matches actual vocational needs [5], [6]. At the same time, teachers need to have vocational backgrounds and practical experience to be able to teach English skills for practical application [7]. In addition, higher vocational English courses should emphasize the cultivation of vocational literacy, including communication skills, work ethics and teamwork, so that students can better adapt to the professional environment [8], [9]. Through these vocationalization measures, higher vocational English teaching can better meet students' vocational needs and improve their employment competitiveness [10], [11].

As far as the housing sector is concerned, although the year-on-year decline has a narrowing trend, it is still in the process of adjustment, and there are still uncertainties in the expectations of both supply and demand [12]. The adjustment of the market in some key cities is relatively in the late stage of the adjustment period, and in the future, as the effects of various policies to support housing demand become apparent, expectations may gradually change, creating a market recovery [13], [14]. Therefore, the global housing market has an important employment prospect,

summarizing the way to cultivate English talents for the residential and real estate market, which can be combined with the perspective of applied linguistics to carry out educational practice, so as to truly play the role of English as a bridge for cross-cultural communication.

Nowadays, the process of world economic integration is deepening, and the internationalization of education has become an important trend in the development of higher education. A large number of non-native English-speaking students have flocked to English-speaking countries to receive higher education, forming a large international student group. In the process of studying in a foreign country, housing is always one of the core elements affecting the quality of study and life of this group. Housing is not only related to the students' basic living security, but also directly affects their academic performance and mental health. However, the reality shows that language communication barriers have become a major bottleneck for non-native English-speaking students to successfully access quality housing resources.

The traditional process of obtaining housing involves complex interpretation of legal terms, negotiation of lease contracts, assessment of housing conditions, and multiple rounds of communication with landlords and agencies. For non-native English-speaking students, these processes require not only basic English communication skills, but also a mastery of specialized real estate terminology, legal language and business negotiation skills. Although the current English education system focuses on the cultivation of students' comprehensive language skills, there are still obvious deficiencies in specialized training for specific application scenarios, especially in the lack of systematic teaching of real estate-related vocabulary, communication strategies and cultural background knowledge.

In addition, the complexity and diversity of the global housing market pose additional challenges for non-native English speaking students. Housing policies, market rules, and cultural practices vary significantly from country to country and region to region, and students need to quickly adapt to the local housing ecosystem within a limited time frame. Lack of language proficiency often leads to problems such as limited access to information, passive negotiating position, and weak awareness of rights protection, which seriously affects the quality and efficiency of their housing choices.

Based on the above practical needs, it is particularly important to build a specialized English education model for the global housing market. This education model should integrate language skills training, professional knowledge teaching and practical ability cultivation to help students realize effective communication in the real housing market environment. Through systematic teaching design and practical training, students can skillfully use English to deal with all kinds of communication scenarios in the process of housing leasing and purchasing, so as to enhance their competitive advantage and adaptability in the global housing market.

The core idea of this study is to verify the facilitating effect of English education on the ability of non-native English speaking students to enter the global housing market through experimental design. The study adopts the method of comparative experiment, sets up experimental and control classes, implements specialized English education with the theme of global housing market in the experimental class, and quantitatively analyzes the actual effect of English education through pre- and post-test comparisons and between-group comparisons. At the same time, correlation analysis and regression analysis were used to explore the intrinsic relationship between the dimensions of English education and the ability to enter the housing market, so as to provide a scientific basis for optimizing the English education model.

II.   Content and design of the study

The rise of the study abroad boom in recent years has driven many non-native English speaking students to enter native English speaking countries to study abroad, where they are bound to encounter housing problems. How non-native English-speaking students can successfully enter the global housing market to solve the housing problem has become a hot topic in English language education. Based on this, this paper will explore how English education can support non-native English speaking students to enter the global housing market and communicate effectively.

II. A.Research methodology

The questionnaire method is one of the most commonly used quantitative research methods, and the quantitative part of this study also utilizes the questionnaire method to collect more objective data. This study refers to the CGSS household survey questionnaire, CEFR and EF EPI measurements of English proficiency self-administered questionnaire "the impact of English education on non-native English-speaking students' access to the global housing market", the survey questions are mainly derived from the literature, and combined with the research questions and the existing more mature surveys for confirmation. English education is divided into English listening and speaking ability and English reading and writing ability for measurement statistics, through the previous literature reading and accumulation, the measurement scale design of English education refers to the international authoritative CEFR and EF EPI scales. Since English proficiency is the embodiment of actual English proficiency, it

is difficult to measure it retrospectively at different points in time, and we learned from the pre-survey that most of the research participants indicated that they had received less systematic English learning in the university curriculum than in the junior and senior high school periods, the English proficiency in this study is the current level of English proficiency of the research participants, and it is used as a proxy variable for analysis.

II. B. Study Questionnaire Design and Distribution

According to the main research questions of this study, combined with the analysis of existing literature and studies, the questionnaire in this study is mainly divided into the following categories: basic information and family situation, the situation related to the learning of English education with the theme of global housing market, and the ability to deal with the global housing problem and other related situations.

This study mainly adopts the form of online questionnaire distribution. In this paper, 60 students in the first year of Business English majored in College S will be the research subjects to carry out a 3-month English education practice with the theme of global housing market, and the questionnaires will be distributed before and after the experiment to collect the research data respectively. The 60 students were randomly divided into an experimental class of 30 students and a control class of 30 students each, in which the experimental class would conduct English education on the theme of global housing market, while the control class would maintain the existing English education methods.

The main measures of invalid questionnaires in this study were:

(1) The scale was filled out by checking all the same boxes, e.g., all the choices were "completely conform" or "not conform at all".

(2) Common sense errors or contradictory information.

Questionnaires with the above conditions were regarded as invalid questionnaires and were eliminated in the subsequent review and processing.

In the formal survey, a total of 60 questionnaires were recovered in this study, of which 60 were valid questionnaires, and the validity rate of the questionnaires reached 100%.

II. C. Research model

In this study, the English education level was measured by a self-administered questionnaire, and the English education level was subdivided into English listening and speaking skills and English reading and writing skills. In the measurement scale of English proficiency in this study, there are six levels of specific indicators for each item of English listening and speaking and reading and writing proficiency from low level to high level, and each indicator has five levels of options: not at all, not at all, not at all, in general, relatively in line with and fully in line with. After that, each option is assigned a value according to the score from 1 to 5 in descending order.

The specific research model of this study is shown in (1) and (2), where Y_1 is the English listening and speaking skills of non-native English speakers, Y_2 is the English literacy skills of graduates, μ_i is other factors that cannot be estimated, and ε_i is a random error term:

$$Y_1 = \alpha + \beta L_i + \gamma Z + \delta E + \mu_i + \varepsilon_i \tag{1}$$

$$Y_2 = \alpha + \beta L_i + \gamma Z + \delta E + \mu_i + \varepsilon_i \tag{2}$$

English education for non-native English-speaking students to carry out quantitative research on the ability of the global housing market is mainly on the calculation of the efficiency of English proficiency in house-hunting, mainly based on the Mincer income equation to analyze the study, the research model is shown in (3), in which W is the economic level of the student, Y is the English language proficiency, B is the vector of personal characteristics as a control variable, and ε is the random error term :

$$\ln W = \alpha + \beta Y + \gamma B + \varepsilon \tag{3}$$

II. D. Results and analysis of data from the English language education experiment

This chapter will analyze the questionnaire data collected in the course of an experiment in English language education on the theme of the global housing market.

II. E. Analysis of the results of the reliability test of the questionnaire

II. E. 1)   Reliability analysis

The reliability coefficient Cronbach's alpha is a common measure of reliability [15]. The SPSS software can be used to analyze the reliability of the questionnaire for internal consistency, which helps to understand the reliability of the questionnaire or measurement tool. The results of the reliability analysis of the questionnaire in this paper are

specifically shown in Table 1. In the questionnaire of this study, the scale includes two dimensional variables: English listening and speaking ability, English reading and writing ability. According to the results of the reliability test, the Cronbach's alpha values of the variables of English listening and speaking skills and English reading and writing skills are both higher than 0.7, which indicates that the reliability is good. The Cronbach's alpha value of the total scale is 0.952, which is significantly more than 0.8, indicating high reliability. Therefore, the measures of the research variables have high internal consistency reliability and the survey data are reliable.

Table 1: Cronbach's Alpha

Dimensions	Cronbach's Alpha
English listening and speaking ability	0.871
English reading and writing ability	0.822
Total table	0.952

II. E. 2) Validity analysis

Validity analysis aims to assess the consistency of the results obtained from the measurement tool or method with the target content. The results of KMO and Bartlett's test for the questionnaire of this paper are specifically shown in Table 2 [16]. The data of this questionnaire survey possesses good validity and the sample data is suitable for factor analysis. The KMO value is 0.788, which shows that there is sufficient correlation between the variables. And the significance level of chi-square value of Bartlett's sphere Bartlett's test Sig =0.0001<0.001, this result shows that the correlation matrix is significantly different from the unit matrix, which further supports the suitability of the data.

Table 2: Validity test

Validity test		
KMO and Bartlett 's test	0.788	
Bartlett 's sphericity test	Approximate chi-square	1308.2
	Df	112
	Sig	0.0001

II. F. Analysis of pre-laboratory data results

The results of the sample t-test of the preexperimental findings are specifically shown in Table 3. It can be seen that the mean values of English listening and speaking skills of the experimental class and the control class before the experiment are 2.17 and 2.28 respectively, and the mean values of English reading and writing skills are 2.09 and 2.11, with p-values of 0.058 and 0.537 respectively, which are all greater than 0.05 and have not reached the level of significance. This indicates that the English listening, speaking, reading and writing skills of the students in the experimental and control classes were comparable before the experiment. The two classes had relatively the same foundation before the experiment started, which provided a good basis for comparison in the subsequent experiment.

Table 3: Analysis of sample T test results before the experiment

Dimensions	Class	Mean	Standard deviation	T	P
English Listening and Speaking Ability	Experimental class	2.17	0.69	-1.646	0.058
	Control class	2.28	0.491		
English reading and writing ability	Experimental class	2.09	1.201	0.502	0.537
	Control class	2.11	1.724		

II. G. Analysis of Post-experimental Data Results

The results of the sample t-test of the questionnaire results after the experiment for the experimental class and the control class are shown in Table 4. The mean score of English listening and speaking ability of the experimental class is 3.42, which is significantly higher than the mean score of the control class which is 2.67, and the corresponding t-test distribution value and p-value indicate that the difference is significant. This indicates that there is a significant difference between the experimental class and the control class in terms of English listening and speaking ability after the experiment, and that the reading interest of the students in the experimental class has increased significantly. In terms of English reading and writing ability, the mean score of 3.56 of the experimental class is also higher than the mean score of 2.36 of the control class, and the p-value is less than 0.05, showing

significant improvement. It indicates that the experimental class's English literacy improved significantly after the experiment, and there is a significant difference compared with the control class.

Table 4: Analysis of sample T test results after the experiment

Dimensions	Class	Mean	Standard deviation	T	P
English Listening and Speaking Ability	Experimental class	3.42	1.32	-5.535	0.006
	Control class	2.67	1.461		
English reading and writing ability	Experimental class	3.56	2.081	-6.603	0.001
	Control class	2.36	2.504		

II. H. Comparative analysis of data results before and after the experiment

The analysis of the changes in the two factors of English listening and speaking ability and English literacy between the experimental class and the control class before and after the experiment is shown in Table 5. The results show that the mean values of English listening and speaking ability and English reading and writing ability of the control class increased by 0.08 and 0.56 respectively after the experiment, but the p-values were 0.985 and 0.546 respectively, which did not show any significant difference. This indicates that there is no significant change in the control class's English listening and speaking skills and English reading and writing skills before and after the experiment. In contrast, the mean values of English listening and speaking ability and English reading and writing ability of the experimental class improved by 1.25 and 1.47 respectively after the experiment, and the p-value was less than 0.05, and the T-test results showed that the difference was highly significant, which means that the English listening and speaking ability and English reading and writing ability of the experimental class students were significantly improved after the experiment, and the proficiency level was significantly improved.

Table 5: Analysis of the results of sample T test

Class	Dimension	Time	Mean	Standard deviation	T	P
Control class	English Listening and Speaking Ability	Before experiment	2.28	0.628	-0.011	0.985
		After experiment	2.36	0.936		
	English reading and writing ability	Before experiment	2.11	0.646	-0.536	0.546
		After experiment	2.67	0.804		
Experimental class	English Listening and Speaking Ability	Before experiment	2.17	0.464	5.672	0.001
		After experiment	3.42	0.727		
	English reading and writing ability	Before experiment	2.09	0.803	7.351	0.006
		After experiment	3.56	0.821		

III. Analysis of the relationship between English language education and access to global housing markets

In the previous chapter, this paper completed the analysis of the experimental data on English education. In this chapter, correlation and regression analyses will be conducted to analyze the relationship between English language education and the ability of non-native speakers to enter the global housing market in conjunction with the experimental survey data [17].

III. A. Correlation analysis

In order to understand the correlation between English education and non-native students' ability to enter the global housing market, this paper analyzes the refined dimensions of English fluency, English accuracy, English comprehension, and English interaction ability (represented by A1~A4) under the first-level dimensions of English listening, speaking, and reading and writing ability of English education with the refined dimensions of non-native students' ability to enter the global housing market, such as linguistic communication support services, geographic location and Convenience, Cost and Contract Terms, and Cultural Adaptation and Community Environment (represented by B1~B4) were analyzed in a Pearson correlation analysis, and the results are shown in Table 6. It can be seen that there is a significant positive correlation between English language education and the ability of non-native speakers to enter the global housing market in all dimensions.

Table 6: Analysis of relationship

Variable	A1	A2	A3	A4	B1	B2	B3	B4
A1	1	-	-	-	-	-	-	-
A2	0.478**	1	-	-	-	-	-	-
A3	0.922**	0.815**	1	-	-	-	-	-
A4	0.641**	0.346**	0.601**	1	-	-	-	-
B1	0.644**	0.455**	0.655**	0.772**	1	-	-	-
B2	0.676**	0.411**	0.662**	0.782**	0.728**	1	-	-
B3	0.524**	0.472**	0.542**	0.451**	0.431**	0.463**	1	-
B4	0.742**	0.483**	0.755**	0.905**	0.862**	0.904**	0.465**	1

III. B. Regression analysis

In order to further understand the predictive validity between the variables, this paper conducts regression analyses for each of the two variables of the ability of English education on the ability of non-native speaking students to enter the global housing market. The results of the regression analysis are specifically shown in Table 7. The results of the regression analysis show that the prediction of English education on the ability of non-native students to enter the global housing market reaches a significant level, and the explanation rate of English education on the ability of non-native students to enter the global housing market is 58.6%, which indicates that English education has a very significant positive predictive effect on the ability of non-native students to enter the global housing market.

Table 7: Regression analysis showed

Dependent variable	Predictive variables	β	R²	T
Non-native students ' ability to enter the global housing market	English education	0.765	0.586	26.244**

IV. Strategies for Cultivating Effective Communication Skills in English for Non-Native English Speaking Students

Through the analysis of the results of the experimental data on English education and the analysis of the relationship between English education and entry into the global housing market, it is verified that English education has a positive and positive predictive effect on the entry of non-native English-speaking students into the global housing market, and it can better enhance the communication problems faced by the students when they enter the global housing market. In this chapter, we will propose strategies for the cultivation of non-native English-speaking students to enhance their effective communication skills in English from the perspective of English education.

IV. A. Standardized training of English vocabulary pronunciation

In the process of entering the global housing market for cross-cultural communication, effective language communication must be based on precise expression, which puts forward higher requirements for the speaker's English language expression ability, in the process of people's language communication, voice, tone, speed of speech will play a certain degree of regulation of the expression of information in the speech. The standardized training of English vocabulary pronunciation can be completely relied on the forms of imitation, recitation and article retelling to form a comprehensive knowledge and mastery of the correct methods and techniques of vocabulary pronunciation. To put it simply, a good and standard English vocabulary pronunciation requires a deep understanding of the pronunciation characteristics of vowels and consonants, and based on this, English vocabulary pronunciation skills such as alliteration and assimilation can be gradually mastered and fed back to the real world in the process of practical training, and standardization of basic English vocabulary pronunciation can be achieved by reciting and reading from vocabulary words, phrases, paragraphs, and entire articles from shallow to deep. It also facilitates smooth communication in the cross-cultural exchange process when people enter the global housing market.

IV. B. Deep mastery of the basic English language

In order to fully express the ideas that exist in abstract thinking in the process of entering the global housing market, people must have a solid foundation of English language input. Only on the premise of having a solid accumulation of basic knowledge of English can one effectively express and relay one's inner thoughts in the process of entering the global housing market by objectively utilizing the English language. In the process of fully mastering the basic knowledge system of English such as vocabulary, phrases, etc., people can completely grasp and deepen their memory of some common language expression habits in the English system through reading classic literature,

listening to English tapes or English songs repeatedly, etc., so as to ensure that they can precisely express their needs with their accumulated basic knowledge system of English in the process of cross-cultural communication in the process of entering into the global housing market. This will ensure that you can accurately convey the meaning of what you need to express in the process of intercultural communication in the global housing market with your accumulated basic knowledge of English.

V. Conclusion

Through a three-month experimental study, English language education demonstrated a significant effect in enhancing non-native English-speaking students' ability to participate in the global housing market. After receiving English education on the topic of housing market, the English listening and speaking skills of the experimental class increased from 2.17 to 3.42 before the experiment, an increase of 1.25, while the control class only increased by 0.08, a statistically significant difference between the two groups. In terms of English literacy, the experimental class improved from 2.09 to 3.56, with an increase of 1.47, far exceeding the 0.56 of the control class.

Correlation analysis reveals a close association between English education and the dimensions of housing market entry ability, with all correlation coefficients reaching the significant level, suggesting that improved language proficiency can directly contribute to students' performance in the housing market. Regression analysis further confirms the predictive validity of this relationship, with English education explaining 58.6% of the variance of housing market entry ability, which fully illustrates the important role of English education.

Based on the results of the empirical analysis, targeted English education can effectively address the communication barriers faced by non-native English speaking students in the global housing market. By strengthening the standardized training of English vocabulary pronunciation and the deep mastery of the basic English language, students can better cope with the complex communication scenarios in the process of renting and buying houses. Educational institutions should incorporate professional English content related to the housing market into their curricula, and design teaching modules that are closer to practical application scenarios, so as to help students better integrate into the local housing market in the context of globalization, and to improve the overall quality of their study and life abroad.

References

[1] Zubkov, A. D. (2020, May). Professional foreign language competence of technical students: Content, structure and formation. In Proceedings of the Conference "Integrating Engineering Education and Humanities for Global Intercultural Perspectives" (pp. 503-510). Cham: Springer International Publishing.

[2] Tong, M., & Gao, T. (2022). For sustainable career development: Framework and assessment of the employability of business English graduates. Frontiers in psychology, 13, 847247.

[3] KUMAR, P. P. (2020). English for career development. UGC Care Journal, 19(35), 292-299.

[4] Sun, G., & Wang, Y. (2024). The Role of College English in Promoting Students' Future Career Development. International Journal of Educational Teaching and Research, 1(2).

[5] Mendoza, C. (2019). Language Development Policies and Practices Impacting the College and Career Readiness of Long-Term English Learners (LTELs) in Secondary Schools. Educational Leadership and Administration: Teaching and Program Development, 30, 14-34.

[6] Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. Career development international, 23(5), 513-540.

[7] Drolet, C. A., & Anderson, C. D. (2024). Perception of Career Infusion Effectiveness in English-Language University Classes. Convergence, 9(3).

[8] Zainuddin, S. Z. B., Pillai, S., Dumanig, F. P., & Phillip, A. (2019). English language and graduate employability. Education+ Training, 61(1), 79-93.

[9] Akther, F. (2022). English for personal and career development and its importance for better employment opportunities. Journal of Languages, Linguistics and Literary Studies, 2(3), 95-100.

[10] Tibus, E., & Bendulo, H. (2018). Educational, economic, and employment influences to English language proficiency. Journal of Educational and Human Resource Development (JEHRD), 6, 274-279.

[11] Daqiq, B., Akramy, S. A., & Barati, A. M. (2024). The Impacts of English Language Proficiency on Employment Opportunities. American J Sci Edu Re: AJSER-183.

[12] Barkham, R., Bokhari, S., & Saiz, A. (2022). Urban big data: city management and real estate markets. Artificial intelligence, machine learning, and optimization tools for smart cities: Designing for sustainability, 177-209.

[13] Fernandez, R., & Aalbers, M. B. (2020). Housing financialization in the global south: In search of a comparative framework. Housing Policy Debate, 30(4), 680-701.

[14] Li, B., Li, R. Y. M., & Wareewanich, T. (2021). Factors influencing large real estate companies' competitiveness: a sustainable development perspective. Land, 10(11), 1239.

[15] Kalyana Chakravarthy Pentapati,Deepika Chenna,Vijay S. Kumar & Nanditha Kumar. (2025). Reliability generalization meta-analysis of Cronbach's alpha of the oral impacts on daily performance (OIDP) questionnaire. BMC Oral Health,25(1),220-220.

[16] Witkovský Viktor. (2020). Computing the exact distribution of the Bartlett's test statistic by numerical inversion of its characteristic function. Journal of Applied Statistics,47(13-15),2749-2764.

[17] Yanqin Feng,Shijiao Yin & Jieli Ding. (2025). Regression analysis of clustered current status data with informative cluster size under a transformed survival model. The international journal of biostatistics.