

International Journal of Learning, Teaching and Educational Research
Vol. 24, No. 3, pp. 586-609, March 2025
<https://doi.org/10.26803/ijlter.24.3.28>
Received Feb 12, 2025; Revised Mar 16, 2025; Accepted Mar 27, 2025

Factors Affecting the English Language Competency among Minority Nationality Junior High School Students: A Qualitative Inquiry

Panzhen Zhao 

Universiti Putra Malaysia, Malaysia
Baise University, China

Aminuddin Hassan , **Nur Aimi Nasuha Burhanuddin*** 

Universiti Putra Malaysia, Malaysia

Long Shi 

Youjiang Medical University for Nationalities, China

Abstract. In the context of globalization, competency in the English language is a key in securing educational attainment and social promotion. However, minority nationality junior high school students in remote areas in China still face challenges in learning the English language. This study explored the English learning experiences among Zhuang, Miao, Yi, and Gelao middle school students in Guangxi, focusing on the factors influencing their language development in light of Bronfenbrenner's (1979) Ecological Systems Theory. A qualitative case study design was employed, with data collected through semi-structured interviews with ten students, ten parents, and six teachers at a multi-nationality junior high school. Thematic analysis revealed that socioeconomic restrictions, limited English exposure, and the absence of culturally responsive pedagogy were the main obstacles in language development. Notably, home-school collaboration through WeChat was a main facilitator, supporting student motivation and language use outside the classroom. In addition, internal motivation and practical application of English by the students were crucial in their learning outcomes. These findings highlight the need for culturally responsive pedagogy, more educational resources, and digital technology in bridging linguistic and educational gaps. The study contributes to inclusive and quality education by demonstrating the interaction among sociocultural, economic, and educational factors in influencing minority nationality students' English language competency. Given that the study was conducted in a single school, future studies should be extended to

* Corresponding author: Nur Aimi Nasuha Burhanuddin, aiminasuha@upm.edu.my

various ethnic groups and areas in order to paint a more holistic picture of minority nationality students' English learning experiences.

Keywords: digital technology; home-school collaboration; minority nationality students; pedagogical methodology; qualitative study

1. Introduction

Both educational achievement and social integration in the global educational context require English language competency (Ma, 2022). However, among minority nationality junior middle school students in China, English learning is impacted by linguistic, socioeconomic, and educational disparities (Kuek & Sidhu, 2021). Minority nationality students refers to students belonging to China's officially recognized minority nationalities, such as the Zhuang, Miao, Yi, and Gelao, who reside in minority nationality regions. These students generally receive limited English exposure, insufficient learning resources, and inadequate culturally responsive teaching, which has a negative impact on their language learning. In spite of equal education-oriented policies, there are practical challenges, particularly in remote minority nationality regions. It is hence essential to understand the ecology factors that affect English learning in such regions in order to formulate effective pedagogic strategies and policies.

Previous studies of English learning for minority nationalities have focused primarily on higher education and urban schools, and have had less to focus on the middle school stage, which is so crucial in language acquisition (Zheng & Gao, 2019). Furthermore, earlier studies have employed quantitative approaches primarily, defining variables but not bringing students' lived experiences and sociocultural contexts into their analysis (Shao et al., 2019). And while digital tools and home-school integration are now commonly recognized as being at the heart of language learning, their role in ethnic minority education is less clear (Al Fraidan, 2025a). This study addresses the gaps through the employment of a qualitative case study to examine middle school pupils in one of China's minority nationality autonomous counties navigating English learning.

Guided by Bronfenbrenner's Ecological Systems Theory (EST), this study explores how individual (microsystem), family-school interactions (mesosystem), and broader policy and sociocultural influences (macrosystem) collectively shape students' English language development. Unlike previous studies that treat these factors in isolation, this research emphasizes their interconnections and dynamic influences within minority nationality contexts. To achieve this objective, two research questions were considered:

- RQ1. What are the factors that influence minority nationality junior high school students' development of English language competency?
- RQ2. How do educators help students improve their English language competency?

This study contributes to theoretical understanding by extending Bronfenbrenner's EST to minority nationality students' English learning, highlighting how micro-, meso-, and macro-systemic factors interact in shaping

language development. On a practical level, the findings provide empirical insights for policymakers and educators, emphasizing home-school collaboration, digital learning integration, and teacher training. The study offers actionable strategies to enhance English instruction in minority nationality schools, supporting more inclusive and effective language learning environments (Wardani et al., 2025).

2. Literature Review

In this literature review, the factors affecting language learning of students from minority nationality backgrounds were examined. Previous studies have identified that students in minority nationality areas face multiple challenges in learning English, including socioeconomic constraints, geographic isolation, insufficient educational resources, multilingual interference, and cultural adaptation difficulties. In response to such challenges, various strategies have been proposed by researchers including the inclusion of culturally responsive pedagogy, contextualized learning, enhancing motivation through goal-setting and feedback, and leveraging technology for English language acquisition. Through such researches, gaps in the current research were identified, notably in studying the dynamic interplay of such ecological factors.

There are many studies that show the challenges that English language learning in multi-nationality areas is experiencing. Both Coady (2020) and Ma (2022) showed that external environment, especially family economic status, geographic location, and uneven educational resource allocation is the primary constraint against English learning for the students. Economic backwardness and geographic location in remote minority nationality areas bring about the shortage of quality educational resources, especially the shortage of professional English teachers and school finance further worsen learning difficulties for the students (Feng & Yuan, 2020).

Secondly, the impact of a multilingual environment on learning English has been controversial, with both positive and negative implications. On the one hand, Bialystok and Barac (2012) found that multilingual and bilingual students were more problem-focused and cognitively controlled, with a positive impact on learning additional languages, such as English. Similarly, Garcia and Lin (2017) indicated that multilingual background students were able to transfer linguistic information from their first and second languages to English, enhancing vocabulary learning and comprehension. On the other hand, studies also reported language interference and acquisition difficulties as challenges in multilingual settings. Cheng (2023) reported that multilingual students suffer from cross-linguistic interference, in which structures from their first language negatively impact their English grammar and pronunciation.

Thirdly, cultural factors also play a role. Different cultures clash with each other in a multilingual environment, which increases complexity and learning difficulty in English (Pirhonen, 2024). In his study, Benzehaf (2021) emphasized that cultural identity in multilingual environments is either motivating or resistant. Some students consider English as a global means of communication, which can

enhance their career, but others think that learning English can threaten their ethnic identity, which leads to less motivation (Pham & Kim, 2022). Also, according to Jiao et al. (2022), lack of learning motivation is widely believed to be one of the main reasons that hinder the learning advancement of minority nationality students in learning the English language. Not only does it directly hinder the learning outcomes of the students, but also erodes their positive attitudes toward learning English (Fandiño et al., 2019).

For the teaching methods, scholars have responded to the challenge of teaching foreign languages in minority nationality areas by suggesting a variety of educational methods. To begin with, cultural sensitivity has been greatly emphasized in language teaching. Li and Xu (2025) state that incorporating cultural sensitivity into language teaching, for instance, in the use of communicative language teaching (CLT), can enhance the enthusiasm of the learners to learn, especially in culturally heterogeneous environments. This means that teachers should note the cultural background of the minority nationality learners and integrate cultural sensitivity into the whole stage of language teaching (Kong et al., 2022).

Secondly, contextualized learning (Ladson-Billings, 2023) can be utilized by teachers to promote linguistic awareness and cross-cultural competence of communication for the learners. Based on Jain (2024), it is possible to effectively utilize authentic materials such as news reports, interviews, and cross-cultural dialogues to promote the linguistic awareness of the learners and enable them to use the language more confidently in real cross-cultural contexts of communication. With such materials, language competence for the learners is built simultaneously with their awareness of cross-cultural pragmatic differences.

Thirdly, the advancement in artificial intelligence (AI) technology has had the effect of increasing the personalization and intelligence of language learning. Schmidt and Strasser (2022) highlighted how AI-driven tools such as intelligent tutoring systems and adaptive feedback can enhance the personalization and interactivity of foreign language learning. Kuddus (2022) highlighted the role of AI in improving pronunciation training, grammar correction, and conversational practice through deep learning models and virtual assistants. In addition, Al Fraidan (2025a) discovered that teaching English writing with AI-supported tools is capable of maximizing the skills in arguing among the students and enhancing the quality of their writing. In addition, Al Fraidan and Alsubaie (2025) explored the relationship between test anxiety and vocabulary learning, pointing out that digital assessment tools have a positive effect in alleviating test anxiety, especially in open and closed-book test environments.

Previous studies have examined the external environment, internal drivers, and cultural factors affecting minority nationality students' English language learning, but there are still some gaps. First, earlier research on minority nationality language learning was focused mostly at the university level, while studies among high school students, especially junior high school students, were scarce (Cabral-Gouveia et al., 2023). This imbalance resulted in a lack in the study

of the particular difficulties and experiences that minority nationality middle school students face in learning English. With insufficient studies in this context, it is difficult to design effective pedagogic methods that cater to their needs. In response, this study aims to investigate the English learning experiences among minority nationality junior high school students and provide evidence-based support for the improvement in English language teaching in junior high school stage.

Second, existing studies concentrate more on the individual impact of home, school, or social environments in isolation, but without examining the interactive dynamic among them. However, the variables at the ecosystem layers are not isolated, but interact with each other (Crawford, 2020). The lack of dynamic correlation between these factors makes it difficult to fully present the complexity of minority nationality students' English learning. It has been shown that minority nationality students' English learning are impacted by their multilingual settings and cultural contexts, which significantly differ from non-minority nationality communities (Pham & Kim, 2022). Therefore, it is necessary to explore how various factors interact in the learning process of minority nationality students and jointly shape their English learning path.

Third, although the English learning of minority nationalities in Xinjiang, Inner Mongolia and Tibet has received some attention (Kuek & Sidhu, 2021; Shao et al., 2019), but the research on language learning in Guangxi is still very limited (Chen & Wu, 2021). Guangxi is one of the provinces with the largest minority nationality populations in China, most of the minority nationalities live in remote mountainous areas, and multilingual environment and socioeconomic factors may pose unique challenges to language learning that receive fewer attention. Education policy formulation without understanding of this area may be difficult to meet its actual needs. Therefore, this study aims to provide empirical data based on the real learning experiences of minority nationality students in Guangxi.

Lastly, despite the growing application of AI technology in language learning and its great potential to optimize learning experiences, improve assessment fairness, and personalized feedback (Al Fraidan, 2024, 2025b), existing research has mainly focused on areas rich in technical resources, and pay fewer attention on remote mountainous areas of minority nationalities. Therefore, there is a need to study the accessibility and effectiveness of digital technology-driven language learning tools, the specific challenges in practical applications, and provide empirical data for teaching practice.

Briefly, this study focuses on minority nationality students at the stage of junior high school, in comparison with the level of higher education; secondly, examining the interaction among multiple environmental factors in accordance with the theory of the ecosystem, in comparison with the investigation of the impact of a single context on English language learning; thirdly, expanding the study scope in geography and ethnic groups by examining the English learning process among minority nationality students in Guangxi; and understand the

accessibility and effectiveness of digital technology-driven language learning tools, and the specific challenges in practical applications. In filling these gaps, this study is aimed at deepening the understanding about the English learning process among minority nationality junior high school students and providing empirical evidence for teaching practice.

3. Theoretical Framework

The theoretical framework employed in this study is Bronfenbrenner's EST (1979, 2005), which presumes that learning behaviors appear and interact in numerous environments, from internal to external: Microsystem, Mesosystem, Exosystem, Macrosystem, and Chronosystem. Factors in different ecological layers have important contributions in the construction of individual problems and behaviors. These levels include individuals, families, schools, communities, and the larger cultural and social environment (Bronfenbrenner & Morris, 2006). EST has been widely used to analyze the diverse environment on students' linguistic development (Tong & An, 2024; Tudge et al., 2009). Through this theory, this study explores how the learning environments in schools, families, communities and social and cultural contexts of learners interact with their cognition and behavior, thus affecting the development of learners' English language competency, and provides educators with suggestions to better meet students' English learning needs.

4. Methodology

This study is a qualitative study and used Bronfenbrenner's Ecosystem Theory (Bronfenbrenner, 1979) as a guiding framework in order to explore the factors affecting minority nationality junior high school students in the process of English language learning. EST emphasizes that an individual's development is influenced by a combination of environmental factors at multiple levels; therefore, this study designed its research methodology with a particular focus on the influence of different ecosystem levels. For data collection, the interview method was used to gain insights into how microsystems and external systems shape students' English learning experiences (Bronfenbrenner, 1994). At the same time, a framework was provided by the EST for data analysis that allowed the researchers to understand the dynamic interactions between individuals and their surroundings. Qualitative research methodology was chosen because it allowed for an in-depth investigation of an individual's subjective experiences and to understand those experiences in a specific socio-cultural context (Creswell, 2013). In addition, qualitative research helps to reveal students' learning environments, contexts, and learning challenges, enabling researchers to make more targeted educational recommendations based on contextualized data (Ngoc & Samad, 2020).

4.1 Sampling Strategy

This present study selected the only one junior high school for minority nationalities from a typical county in one of the two multi-nationalities autonomous counties, China. Firstly, the minority nationality population accounts for 72% with a total of 3213 students in this school, including Miao, Yi, Gelao, Zhuang, and other minority nationality groups, based on the data from the

Education Bureau of Baise City, Guangxi. For this study, participants were selected through purposive sampling to ensure representation across different ethnic backgrounds and educational experiences. The study included three key participant groups: students, teachers, and parents. The final sample consisted of 10 students, 10 parents, and six English teachers, determined through thematic saturation. For students, selection considered representation from different grades (Grades Seven, Eight, and Nine) and diverse English learning experiences. For teachers and parents, selection ensured insights from educators with substantial teaching experience and parents actively engaged in their children's English learning. The diverse perspectives from these three participant groups provided a holistic view of the factors influencing students' development of English language competency. The detailed selection criteria and comparability for students, parents, and English teachers are outlined in Table 1 below.

Table 1: Selection criteria and comparability

Participant group	Inclusion criteria	Exclusion criteria	Comparability factors
Students	<ul style="list-style-type: none"> - Enrolling in the study junior high school. - Belonging to Zhuang, Miao, Yi, or Gelao minority nationality. - Willing and able to articulate their English learning experiences, as assessed in a preliminary screening interview 	<ul style="list-style-type: none"> - Belong to minority nationalities other than Zhuang, Miao, Yi, or Gelao. - Receiving significant external language support (e.g., private tutoring). - Recently transferred from outside the autonomous county. 	<ul style="list-style-type: none"> - Shared cultural and linguistic background (Zhuang, Miao, Yi, or Gelao). - Common educational setting (same junior high school).
Parents	<ul style="list-style-type: none"> - Parent/guardian of a student enrolled in the study junior high school. - Actively involved in their child's education (school participation, supporting learning at home). - Willing to discuss family involvement in English education. 	<ul style="list-style-type: none"> - Not actively involved in the child's education. - Children enrolled in private or alternative education programs. 	<ul style="list-style-type: none"> - Shared cultural and linguistic background. - Common educational context (child's junior high school). - Active involvement in education.
Teachers	<ul style="list-style-type: none"> - Currently teaching English at the study junior high school. - Actively involved in teaching minority students. - At least three years of English teaching experience. 	<ul style="list-style-type: none"> - Non-minority nationality teachers or teachers with less than three years of experience. - Teachers in non-English subjects or temporary positions. 	<ul style="list-style-type: none"> - Shared cultural and linguistic background. - Common institutional setting (same junior high school). - Focus on English language instruction.

4.2 Data Collection

This study lasted for a period of 12 months, from September 2023 to August 2024. Data for this study were gathered using semi-structured interviews and observations in classrooms. The study was structured with semi-structured interviews so that flexibility was attained while key areas were covered (Creswell, 2013). Construction of interview questions was informed by a critical review of previous literature, previous studies in learning English, and traditional interview approaches (Ma, 2022). While drawing questions from previous studies, they were altered so that they suited the specific context of minority nationality junior high school students. For instance, general questions from previous studies about factors that explain the fluency of the English language among the students were made specific so that they captured the economic and sociocultural contexts of such students, such as the impact of their multilingual environment. In addition, questions that were open-ended were structured so that they encouraged the students to explain their thoughts about the factors that shape their learning of the English language in their own words.

4.3 Assessment of Respondents' English Language Competency

Prior to the formal interviews, preliminary screening was conducted with the aim of ensuring that all the participants possessed elementary language comprehension and expression skills, which would enable effective English learning topics' communication. A standardized quantitative measure of English language competency was not utilized in this research because exploring subjective experiences and affective factors was the purpose, not testing their language competency. Rather, emphasis was placed on participants being able to articulate their feelings concerning English learning in clear terms. Interview content was contextualized within participants' linguistic and cognitive capacities for the purpose of making things more tractable, and using open-ended questions so as to enable free expression so their lived experiences and learning difficulties could be probed more intensely.

4.4 Data Analysis

The thematic analysis of Braun and Clarke (2006) was used to analyze factors influencing the English language competency of the students. An inductive coding method was utilized where the theme emanated naturally from the data and was not predetermined. A coding structure was developed through manual coding. A start was made with open coding which was derived through close reading of interview transcripts and students' reflections and identification of dominant patterns and frequent concepts. This was followed by codes being grouped into overarching categories that created meaningful themes that portrayed the essence of the students' experiences of learning English. In order to ensure reliability, the process of coding was subjected to multiple cycles of refinement so that the emergent themes portrayed the data.

4.5 Credibility and Trustworthiness

Three ways were adopted to enhance credibility in this study. First, member checking ensured that the results of the study accurately reflect the views of the participants. During the study, respondents were invited to check the interview records and the interpretation of the researcher to reduce information bias.

Second, peer debriefing discussed the research process, thematic analysis, and interpretation of the results with external experts in the curriculum and teaching field to optimize the rigor of the data analysis and reduce researcher bias. In addition, the investigator triangulation used three external experts to independently encode part of the data and compare it with the analysis results of the research team to ensure the consistency of the encoding and the robustness of the research conclusions.

For the reliability of this study, first, detailing research design, data collection and analysis processes were adopted to ensure transparency in the research process. Second, research decisions records, coding adjustments and data interpretation through research logs and audit trails were used to reduce the subjective influence of researchers. Researchers also maintained reflexivity, constantly examining the potential impact of individual positions on research to ensure that conclusions were based on data rather than subjective speculation. Finally, description of the research context, the characteristics of participants and the school environment were adopted to provide reference value for similar educational backgrounds.

4.6 Ethical Considerations

The present study rigorously adhered to ethical principles, paying particular attention to safeguarding the rights and interests of the underage participants. Interviews were conducted only after obtaining approval from the Ethical Clearance Committee Board of Youjiang Medical University for Nationalities (Reference No: 2023091301) and securing written informed consent from both students and their guardians. The purpose, methodology, potential risks and benefits of the study were thoroughly elucidated to the participants and their guardians, and this study took measures to ensure their comprehensive comprehension and voluntary participation. To maintain confidentiality and data security, all interview recordings and transcripts were anonymized and stored in an encrypted format on a password-protected device. Access to the data was strictly limited to the researcher and the dissertation supervisor, ensuring that no unauthorized individuals could view or use the information. Additionally, participants were assured that their data would only be used for research purposes and would be securely deleted after the study's completion. To avoid bias, respondents were not compensated or incentivized. Unrestricted expression was encouraged and responses verified with follow-up inquiries; this investigation maintained an impartial stance throughout the interview process.

5. Results

Based on Bronfenbrenner's ecosystem theory, an in-depth analysis of the factors that affect minority nationality junior high school students in their English language learning process was explored in this study. The findings showed that the individual factors (e.g., interests) significantly affects students in learning English. family environment and teaching methods、school environment (including teaching resources, personnel, and methodologies)、community environment (e.g., English language learning resources)、social environment (e.g., socioeconomic conditions and diversity of language environments), which affected the development of students' English language competency at the micro-

level, meso-level, exosystemic level, and macrosystemic level, respectively. The themes are presented in Table 2.

Table 2: Themes of factors affecting students' English language competency

Code	Exemplary quote	Frequency (n/N) (students / parents / teachers)
Interest in Learning	<i>"When the teacher uses videos or games to teach, I find learning English interesting."</i> (S4)	7/10 / - / -
Teaching Methods	<i>"Interactive classes and multimedia teaching make learning more engaging."</i> (S4)	8/10 / 5/10 / 5/6
Learning Strategies	<i>"I use native language similarities to help memorize English words."</i> (S2)	8/10 / - / -
Language Transfer	<i>"The pronunciation of my native language is similar to English, which helps me learn new words faster."</i> (S2)	5/10 / 5/10 / 5/6
Home-School Cooperation	<i>"I hope teachers and my parents communicate with each other to ensure they can remain updated."</i> (S10)	8/10 / 7/10 / 5/6
Peer Influence	<i>"When I see my classmates focusing on English, I am motivated to study harder; on the contrary, I am greatly negatively affected if my classmates are not interested in studying."</i> (S5).	6/10 / - / 4/6
School Resources	<i>"The school has some English books, but most of them are exam-oriented and lack resources to practice listening and speaking."</i> (S1)	7/10 / 7/10 / 5/6
Socioeconomic Status	<i>"I started learning English early because my parents paid for extracurricular tutoring."</i> (S1)	5/10 / 5/10 / 3/6
Digital Technology	<i>"With intelligent translation software, students can understand English words faster."</i> (T4)	7/10 / 5/10 / 4/6
Educational System	<i>"The school has some English books, but most of them are exam-oriented and lack resources to practice listening and speaking."</i> (S10)	9/10 / 7/10 / 5/6
Economic Development	<i>"Limited educational funding in remote areas restricts access to quality English learning resources."</i> (T3)	1 / 4/10 / 5/6

5.1 Interest as a Factor in Language Learning

Learning interest is a central element in the microsystem in the process of students' English learning. The interview showed that students' interest in English learning is mainly affected by teaching methods, course load and time management. First of all, teaching methods play a key role in stimulating students' interest in English learning. Of the 12 students interviewed, seven mentioned that multimedia teaching, interactive classes, gamified learning and other teaching methods can increase their interest in learning. For example, S4 said: *"When the teacher uses videos or games to teach, I find learning English interesting, but if it's just memorizing words and doing test papers, I don't want to learn it very much."*

However, the heavy course load may weaken students' interest. Twelve students (71%) felt that the large number of words and grammar memorization tasks made them feel too stressed and affected their interest in English. Participant S1 said: *"We have to recite too many vocabulary and grammar, but we do not have enough time to memorize while studying other subjects."* Participant S12 reflected this view when she said: *"English study is filled with recitation, which caused difficulty to truly engage with the language."* Similarly, eight students (57%) mentioned that the heavy workload made it difficult for them to allocate their study time properly, causing them to gradually lose interest in English. Student S6 shared: *"There are too many subjects to learn in middle school, and I can't arrange the learning time of each subject reasonably, which may cause me to neglect English."* In addition, student S9 said: *"I don't always focus on learning English. As time went by, I fell behind in my English study and slowly lost my interest in learning English."*

The phenomenon is consistent with Bronfenbrenner's EST, indicating that students' learning interests are not only influenced by microsystems (such as individual learning strategies), but also by mesosystems (such as teachers' teaching methods and school curriculum arrangements). Therefore, optimizing the teaching methods, reasonably adjusting the course load and strengthening the management of learning time can enhance students' interest in English learning.

5.2 Home-School Cooperation and Support

Home-school cooperation and support was the key to the mesosystem in students' English learning process. This study found that encouragement, effective communication and mutual support from parents and teachers are key to enhancing students' motivation to learn English. Firstly, encouragement and rewards from parents and teachers can enhance students' motivation. Seven of the ten students surveyed said that positive encouragement from parents and teachers increased their confidence in learning, while eight mentioned that material rewards (such as small gifts or school supplies) directly increased their motivation to learn. For example, participants S1 and S5 stated: *"If parents and teachers encourage students more and give material rewards, it can stimulate students to learn English."* These responses showed that incentive strategies, like material awards and encouragement, can establish a connection between students' academic efforts and actual accomplishments, which motivate students directly.

In addition, effective home-school communication can help parents keep abreast of their children's learning and provide targeted support. Of the six teachers interviewed, five (75%) believed that there was a positive correlation between the level of parental support for their children's learning and their English learning performance. In addition, eight students (71%) believed that parent-teacher communication could help them better manage the pace of their learning and enhance their learning outcomes. For example, participant S10 said: *"I hope teachers and my parents communicate with each other through offline and online methods, which ensures that they can remain updated and connected."* Many teachers also emphasized that modern social media (e.g., WeChat, Tencent Conferences, etc.) can improve the ease of communication between home and school and enable parents to intervene and support accordingly more quickly.

According to Bronfenbrenner's EST, family-school cooperation is part of the mesosystem; it connects the home and school environments in a microsystem. Therefore, it is important to establish a regularized home-school communication mechanism, enhance the awareness of cooperation between teachers and parents, and promote a learning support system based on motivational strategies.

5.3 Socioeconomic Status and Access to Resources

Family economic status and parents' educational background were found to significantly affect students' access to English learning resources and learning support in minority nationality areas. First, families with better economic conditions can provide more learning resources. Seven students said their parents were able to buy extra English learning materials or provide after-school tutoring for them, which helped them to some extent. For example, S1 stated:

"I started learning English very early because my parents paid for me to enroll in an extracurricular English tutoring program in primary school. I have always persisted on learning English, even though I don't have time to enroll in an extracurricular English tutoring program in middle school. These resources laid the groundwork for my future passion for English language learning."

According to students' responses, having a secure financial condition helps them study English, and keep their interests. Feedback from teachers confirmed this. Among the six interviewed teachers, three believed that students from families with better economic conditions can often receive more systematic extra-curricular training and accumulate more abundant learning resources. *"Supportive families offer not only tangible materials, but also learning motivation input,"* said T2.

Furthermore, parents' educational background also has an impact on students' availability of English learning resources. Five students mentioned that families with parents with higher education levels are more likely to support their children in learning English and provide guidance accordingly. Student S8 also mentioned the help he received from his mother at home, saying: *"My mother teaches me in pronunciation at home, so I can pronounce very well."*

According to Bronfenbrenner's ecosystem theory (Bronfenbrenner, 1979), the family's economic and educational resources are part of the mesosystem, which

connects the family, school, and social resources in the microsystem, and affects students' learning development. Therefore, educational policies and teaching practices should pay attention to students from different socioeconomic backgrounds, optimize the distribution of resources, and narrow the educational divide in order to promote the equitable development of students in minority nationality areas.

5.4 School Environment and Support Systems

This study showed that unequal distribution of school resources constrains students' English language learning, especially affecting listening and speaking training and language input outside the classroom. However, despite the increase in the investment of educational resources in recent years, the problem of unequal distribution of resources in some remote schools is still prominent.

Of the 10 students interviewed, six mentioned that they have difficulty finding English learning materials suitable for them outside the classroom, especially resources for listening and speaking training. Student S10 said: *"The school has some English books, but most of them are exam-oriented and lack resources to practice listening and speaking."* The interviewed teachers (T2, T4) also pointed out that the English books in the school library were updated slowly, and the reading materials available to students were limited, which made it difficult for them to expand their language input outside of class. In addition, eight students said they would be more willing to devote themselves to learning English if their schools organized more English corners and reading clubs. However, current school support in these areas is still insufficient, resulting in some students relying on limited classroom learning. *"I hope the school can offer more speaking activities so I can use English outside the classroom, not just in exams,"* said S1, a student. Teacher T6 further stressed that the shortage of resources not only affects students' interest in learning, but also may exacerbate the learning gap between students - those from better-off families can make up for the lack of resources by purchasing additional online courses or attending tutorial classes, while students from poor families can only rely on the limited resources of the school, resulting in further limited learning effectiveness.

Based on Bronfenbrenner's EST (1979), this study found that educational resources, as external environmental factors (exosystem), indirectly shape learning outcomes by influencing the school (mesosystem) and students' learning experiences (microsystem). Limited resources not only affect individual learning strategies, but may also weaken students' motivation to learn, further reinforcing urban-rural educational inequalities. Therefore, increasing funding for specialist educational resources in remote mountainous areas, customizing learning materials and instructional infrastructure are especially important.

5.5 Linguistic Background

As the responses from the participants in this study showed, there were differences in the specific challenges and adaptations faced by students of different ethnic groups in the process of learning English, but all of them were influenced by the subtle influence of their mother tongue. Teachers (T1, T3) perceived that students' challenges in English phonology, grammar and

expressions differed as a result of the influence of their mother tongue. Four Teachers mentioned that Zhuang students tended to be influenced by the phonological system of their mother tongue in terms of English pronunciation, which resulted in inaccurate pronunciation of certain consonants, such as [θ] and [ð], which were more difficult to master.

Despite the potential for negative transfer from the mother tongue, seven students reported that they were able to utilize the similarities between their mother tongue and English to facilitate learning. Some students utilized native language pronunciation similarities for memorization, for example, S2 (Zhuang nationality) said: *“The pronunciation of the native language is often similar to English pronunciation, which helps me learn new words faster.”* Participant S7 stated: *“Part of the pronunciation of English words is similar to that of the minority nationality language I speak, I can memorize words through homophonic method, so that learning words is easier for me.”* These experiences suggested that students can promote vocabulary memorization and understanding of grammar by strategically using their mother tongue. Therefore, educators need to integrate the comparative analysis method in classroom teaching to help students make cross-linguistic connections and optimize learning strategies, and enhance the provision of multilingual resources at the school level to facilitate minority nationality students’ English language learning (Li et al., 2024).

5.6 Teacher Attitudes and Pedagogical Approaches

There were differences in the teaching methods of different teachers, mainly in terms of the way they interact in the classroom, the use of teaching resources and the extent to which personalized instruction is provided. More than half of the teachers still used the more traditional lecture-based teaching mode, which was based on mechanical exercises and attempted to improve students’ English language competency through extensive grammar and vocabulary training. Teacher T2 said that, since some students had a weak foundation in English, he preferred a systematic approach to ensure that students could master the basic knowledge. Some teachers tended to adopt interactive teaching strategies to increase students’ participation in class through group discussions and role-playing. Teacher T1 believed that interaction in the classroom can effectively stimulate students’ interest in learning and enable them to practice English in real contexts, thus improving their language use skills. In addition, in terms of technology-assisted teaching, the four teachers actively utilized multimedia technologies, such as online learning platforms and intelligent question-answering software, in order to improve classroom interaction and students’ motivation. Teacher T3 mentioned that he would use online testing software to ask random questions to enhance students’ attention and classroom engagement. This suggested that teachers employed technology in the classroom—for example, computers that are used to choose students to answer at random—to improve equity and stimulate learning interests (Giac et al., 2025). However, there were also teachers who were less likely to use modern teaching tools because of their lack of personal technological skills. For example, Teacher T5 reported that she had difficulty incorporating technology into her classroom because she was unfamiliar with the use of online teaching tools. For instructional support, eight students expressed that they favor and respect the teachers who are personable

and eager to answer inquiries even beyond the classroom, and their confidence and enthusiasm in English may grow further as a result of this effort. Participant S5 reported that their teacher consistently takes the initiative to address queries during their free time, which has led to a heightened sense of confidence and interest in the English language. Participant S6 stated that their instructor offers guidance and exhibits concern for them beyond the classroom. These responses aligned with Vygotsky's sociocultural theory (1978), which posits that learning is deeply influenced by social interactions and scaffolding provided by more knowledgeable others.

According to Bronfenbrenner's EST (1979), teachers' teaching methods are not only influenced by their own experience and competence (microsystems), but also by the allocation of school resources, educational policies and technological developments (intermediate and outer systems). Therefore, teachers use multiple interaction and layered teaching to enhance classroom participation, make full use of modern technology to optimize teaching, and pay attention to students' emotional support and personalized tutoring in order to promote the English language learning of students in minority nationality areas.

5.7 Digital Resources

In this study, most teachers believed that digital resources (such as online courses, English learning apps, artificial intelligence AIDS, etc.) can effectively complement classroom teaching and improve students' listening and vocabulary skills. For example, Teacher T4 mentioned: "*With intelligent translation software, students can understand the meaning of English words faster and are more willing to learn independently.*" Seven students also said they use their mobile phones to watch short English videos or use apps to practice listening when they get home, believing that these tools enhance their interest in learning. These findings showed that digital resources, as an extension of classroom instruction, can provide students with more opportunities for language input and practice.

However, in practical applications, access to digital resources is limited by family economic circumstances, school infrastructure, and teachers' digital literacy. Four out of five teachers mentioned that inadequate hardware and poor computer and network facilities in schools make it difficult to use digital resources for teaching in the classroom. "*Our school's Internet signal is not stable, and it is difficult to show English videos to students,*" said a teacher. In addition, some teachers lack training and experience in digital teaching, which makes it difficult for them to effectively integrate technology into their teaching. Therefore, despite the potential advantages of digital resources, the actual effectiveness of digital teaching will be limited and may even exacerbate the inequality of learning resources if there is insufficient infrastructure and teachers' technical skills.

From the perspective of ecosystem theory (Bronfenbrenner, 1979), the acquisition and use of digital resources is influenced by the interaction of microsystems (teachers, families), mesosystems (school resources), external systems (educational policies and social support), and macro systems (socioeconomic conditions). Therefore, policy support should be strengthened to enhance the digital teaching capacity of schools, while technical training for teachers should

be provided to ensure that digital resources can truly fulfill their role in facilitating learning.

The results of this study are consistent with Bronfenbrenner's EST, which suggests that students' English language learning is shaped by interactions at multiple system levels. Table 3 summarizes these challenges by microsystems, mesosystems, exosystems, and macrosystems. This summary highlights the interconnectedness of individual, family, school, and societal factors that influence the English language learning of ethnic minority students in remote areas. The microsystems, mesosystems, exosystems, and macrosystems factors interaction is showed in Table 3.

Table 3: Mapping factors to Bronfenbrenner's Ecological Systems Theory

Ecological Systems Theory (Bronfenbrenner, 1979)	Key factors	Challenges in English learning
Microsystem (Individual & Immediate Environment)	- Student interest & motivation -Teaching methods -Learning strategies -Language transfer	-Low motivation due to traditional, test-oriented teaching -Heavy coursework limiting engagement -Lack of structured learning strategies
Mesosystem (Interactions between Microsystems)	-Home-school collaboration (Family support) -Peers interaction	-Limited parental involvement in learning -Inconsistent teacher-parent communication
Exosystem (External Factors Affecting Schools & Families)	-School resources -Availability of English learning materials	-Limited access to extracurricular learning opportunities -Limited access to digital technology support
Macrosystem (Broader Socioeconomic & Cultural Context)	-Educational System -Economic development	-Limited integration of minority languages in English education -Regional disparities in education funding

6. Discussion

Based on Bronfenbrenner's EST, this study explored the factors that affect the English language competency development of minority nationality junior high school students, and analyzed how different factors interact with their language competency development. As shown in Table 3, challenges at the microsystem level arise mainly from individual learning strategies and classroom instruction, while problems at the mesosystem level relate to home-school collaboration and access to extracurricular resources. In addition, imbalances in educational resources at the exosystem level further exacerbate these challenges, especially for students from low-income families. And lastly, at the macrosystem level, general socioeconomic conditions and systems of public policy govern the overall learning environment.

Secondly, teachers' teaching strategy and attitude play a vital role in students' English learning process, and the effect is not only within the classroom but also regulated within the family context (Massri, 2020). It was revealed in this study that when teachers adopt interactive and culture-sensitive teaching strategies, students' learning enthusiasm and class engagement are significantly promoted (Yang et al., 2022). If the family context provides active learning assistance, such as inviting children to learn English at home or building up the home literacy context, teachers' active teaching strategies would be further encouraged (Niklas et al., 2020). However, some parents lack strong English competency or are under the influence of traditional educational ideology (for example, they think English study less valuable than math or Chinese). Even if teachers adopt effective teaching strategies, students' learning enthusiasm would be weakened by the family context and thus counteract the effect of teaching (der Nederlanden et al., 2023).

Secondly, school resources also function as the medium of bridging teachers' teaching and family support and have impacts on students' learning experience. This study finds that as educational resources are not distributed unevenly, some schools lack sufficient English textbooks, digital learning resources and extracurricular English activities for students to engage in, which affects students' language input and opportunity for practice. The lack of resources makes it difficult for teachers to implement innovative teaching methods, which further aggravates the difficulties in the learning process of students. If schools strengthen home-school collaboration through parent training, bilingual communication, and community engagement, even with limited resources, students can still receive additional support from their families to make up for the lack of classroom instruction (Pan et al., 2024).

Thirdly, the effective application of digital resources is the result of interaction of many factors. The digital literacy of teachers determines the depth of technology integration in the classroom. However, this study found that, due to the lack of systematic training, some teachers find it difficult to effectively use digital tools to assist teaching, which makes the potential advantages of digital resources fail to be given full play. At the same time, parents' technical ability and attitude directly affect students' access to and use of digital resources, but the parents surveyed generally lacked technical support and learning guidance, which limits students' further exploration of digital resources in the family environment. In addition, although some schools have been equipped with certain digital learning resources, due to the lack of students' awareness of independent learning, digital resources have not been fully utilized.

Finally, the phenomenon of language transfer may not only promote the learning of minority nationality students in the process of English learning, but also produce negative transfer effects, which are jointly affected by teachers' teaching methods, family support and school resources. If teachers can adopt effective contrastive teaching method, turn students' existing language knowledge into advantages in English learning, and provide targeted exercises to reduce negative transfer effect, students' language transfer effect will be more inclined to promote

learning (Ai, 2024). However, this study found that many parents mainly use their mother tongue or dialect in the family environment, and students' English knowledge learned in the classroom may be difficult to be effectively consolidated, resulting in a more significant negative impact on language transfer. Therefore, the teaching strategies adopted by teachers in the classroom need to be integrated with the language environment at home and school to maximize the positive effects of language transfer and reduce its negative effects. In addition, minority nationality students' foreign language learning is closely related to their identity. Educational policy and campus environment influence their dual identity and thus influence language learning motivation (Kende et al., 2021). Nationality and national identity tensions may also influence language acquisition (Arar & Ibrahim, 2016). The experience of transnational students shows that multilingual education contributes to integration and cultural transmission (Saefudin et al., 2024). This is essential for building educational strategies that balance language development with cultural respect. Therefore, factors in the microsystem, mesosystem, exosystem and macrosystem interact with each other to influence the development of students' English language competency. The thematic map is outlined in Figure 1 below.

In order to promote the actual improvement of students' English language competency, the government should fully implement the bilingual education policy at the level of education policy. The ability of teachers to teach in multilingual environments can be improved through government-funded teacher training programs and culturally responsive pedagogy can be provided (Yuan et al., 2019). In addition, education authorities should set up special funds to support schools in minority nationality areas to purchase multimedia teaching resources and encourage the development of online learning platforms to make up for the lack of traditional classroom teaching resources (Khan & Khan, 2024). For teaching practice, future research should explore the teacher training model based on the actual needs of the classroom. For example, action research can be applied to assess the particular application effect of culture-responsive pedagogy (CRT) and build more localized teaching models more specific to minority nationality students. Moreover, AI-driven assessments or adaptive learning tools should be incorporated in studies of minority nationality students, as Al Fraidan (2024) emphasized that AI-driven assessments can be ethically and effectively implemented to support personalized learning and equitable evaluation for diverse learners. AI-driven assessment and adaptive learning tools improve vocabulary retention (Al Fraidan, 2025b). Since AI-based formative assessments reduce learning anxiety and increase engagement (Shi, 2024), while intelligent tutoring systems using natural language processing (NLP) promote deep interaction with vocabulary (Oraif, 2023). In addition, home-school collaboration should be a primary focus and study should examine how parents' awareness and support for English learning can be increased through community support mechanisms, such as parent workshops and bilingual family education guides (Yu et al., 2024). Government and schools can establish policies in order to enable intensive collaboration between schools and families, so as to build an integral supporting ecosystem for minority nationality students' English learning (Cerna et al., 2021).

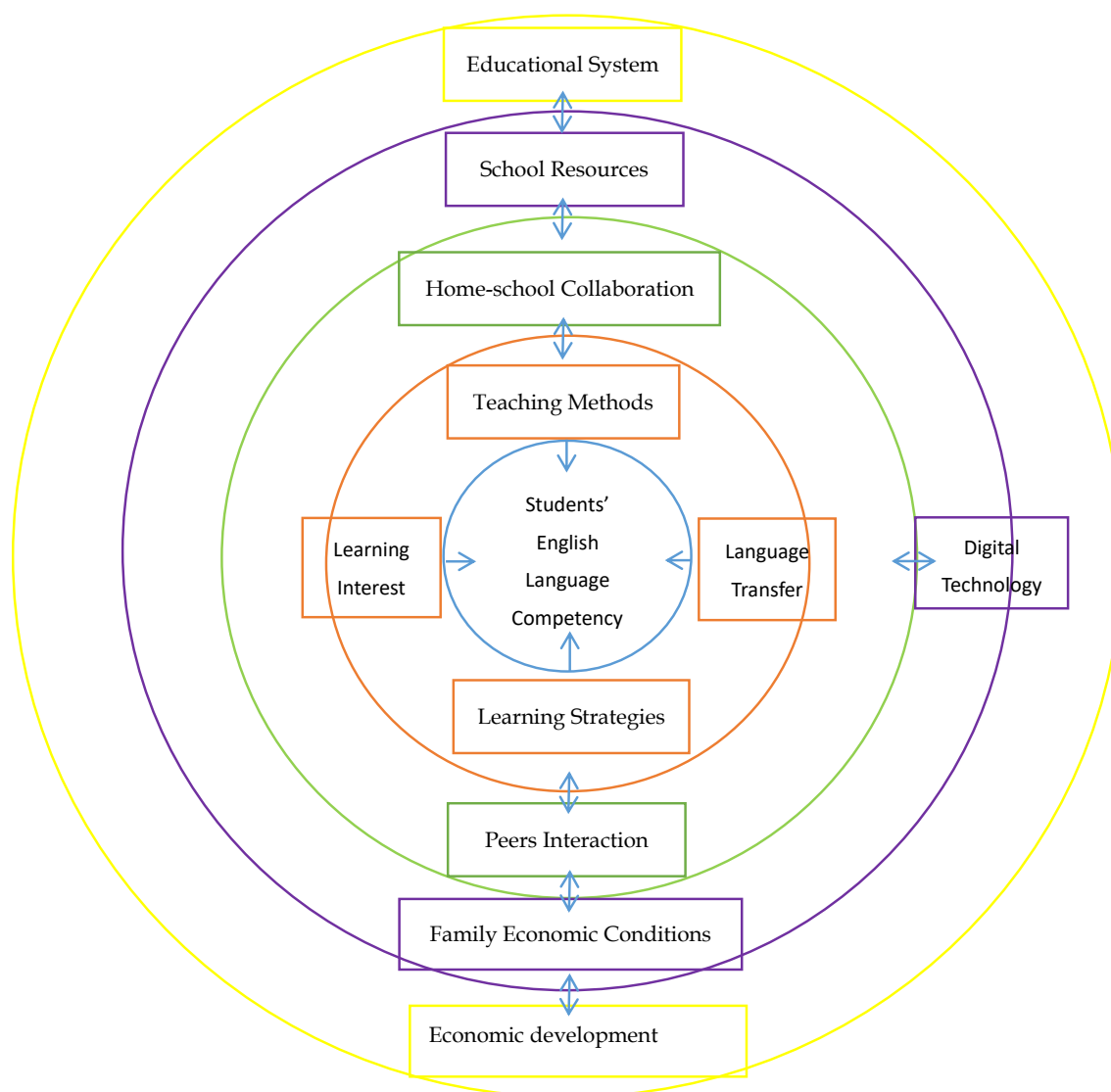


Figure 1: Different system layers interact to influence students' English language competency

Although this study revealed a number of key factors affecting the English learning of minority nationality students, there are still some limitations. First of all, the sample size of this study is relatively limited, covering only minority nationality junior high school students in a certain area, and the universality of the research results still needs to be further verified. In the future, the scope of research can be expanded to cover different regions, different ethnic groups, and even cross-cultural comparisons to more comprehensively explore the impact of sociocultural environment on English learning. Secondly, since this study mainly adopts qualitative research methods, future studies can be combined with quantitative research through questionnaire or experimental research to quantify the specific impact of personal interests, home-school collaboration, teachers' teaching methods and other factors on learning outcomes. In addition, longitudinal research can further reveal the dynamic development process of

minority nationality students' English learning, and long-term follow-up research can help understand the changes of learning motivation at different stages and its influencing factors, thus providing a more powerful theoretical basis for the formulation of educational intervention measures.

7. Conclusion

This study aimed to explore the factors affecting the development of English language competency of minority nationality junior high school students in a remote multi-nationality area of China. The findings indicated that students' personal interest and motivation play a central role in the language learning process, while the effectiveness of family support and home-school collaboration is limited by parents' educational background and English language competency. In addition, the school environment and lack of educational resources exacerbated the learning challenges, and teachers' attitudes and teaching methods became important factors in enhancing students' English language competency. Socioeconomic status and geographic isolation affect students' access to quality English language education, and the language transfer effect of multilingual backgrounds may either facilitate English language learning or pose additional challenges. The major conclusions of the study are linked with Bronfenbrenner's EST (1979) in that students' learning of English language is not only shaped by individual variables but also by interactions between individual and the surroundings. The findings of this study answer the research question of the main factors and their interactions that influence the development of English language competency among minority nationality junior high school students and further reveal specific ways in which teachers, parents and policymakers can promote English language learning. This study revealed the potential of digital resources in facilitating English language learning, and highlighted the need to optimize the digital learning environment for educational equity. Overall, this study emphasized the integrated role of social, cultural and educational factors, and provides theoretical support and practical insights for the future promotion of English language education in minority nationality areas.

8. Funding

This study was supported by Youjiang Medical University for Nationalities (grant number : yy2024rcsk019).

9. References

- Ai, Z. (2024). Challenges faced by English education in ethnic minority areas under the background of bilingual education policy for ethnic minority students: Taking Yunnan province as an example. *Transactions on Social Science, Education and Humanities Research*, 5, 319–324. <https://doi.org/10.62051/m83s2d29>
- Al Fraidan, A. (2025a). AI and uncertain motivation: Hidden allies that impact EFL argumentative essays using the Toulmin model. *Acta Psychologica*, 252, Article 104684. <https://doi.org/10.1016/j.actpsy.2024.104684>
- Al Fraidan, A. (2025b). Evaluating lexical competency in Saudi Arabia's hybridized EFL ecosystem: A taxonomic exploration of vocabulary assessment modalities. *International Journal of Distance Education Technologies (IJDET)*, 23(1), 1–36. <https://doi.org/10.4018/IJDET.368224>

- Al Fraidan, A., & Alsubaie, M. S. A. (2025). Exam anxiety and vocabulary challenges: Insights from postgraduate female students in open and closed book exams. *Educational Process: International Journal*, 14, e2025026. <https://doi.org/10.22521/edupij.2025.14.26>
- Al Fraidan, A. (2024). Anticipatory thinking and AI-driven assessments: A balanced approach to AI integration in education aligned with Saudi Vision 2030. *African Journal of Biomedical Research*, 27(3), 619–628. <https://doi.org/10.53555/AJBR.v27i3.2560>
- Arar, K., & Ibrahim, F. (2016). Education for national identity: Arab schools principals and teachers dilemmas and coping strategies. *Journal of Education Policy*, 31(6), 681–693. <https://doi.org/10.1080/02680939.2016.1182647>
- Benzehaf, B. (2021). Multilingualism and its role in identity construction: A study of English students' perceptions. *International Journal of Multilingualism*, 20(3), 1145–1163. <https://doi.org/10.1080/14790718.2021.2003369>
- Barac, R., & Bialystok, E. (2012). Bilingual effects on cognitive and linguistic development: Role of language, cultural background, and education. *Child development*, 83(2), 413–422. <https://doi.org/10.1111/j.1467-8624.2011.01707.x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature - nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568–586. <https://doi.org/10.1037/0033-295X.101.4.568>
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. SAGE.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Theoretical models of human development* (pp. 793–828). New York, NY: Wiley.
- Cabral-Gouveia, C., Menezes, I., & Neves, T. (2023). Educational strategies to reduce the achievement gap: A systematic review. *Frontiers in Education*, 8. <https://doi.org/10.3389/educ.2023.1155741>
- Cerna, L., Mezzanotte, C., Rutigliano, A., Brussino, O., Santiago, P., Borgonovi, F., & Guthrie, C. (2021). Promoting inclusive education for diverse societies: A conceptual framework [OECD Education Working Papers]. *OECD*. <https://doi.org/10.1787/94ab68c6-en>
- Chen, H., & Wu, X. (2021). The exploration into the planning of foreign language education in Guangxi ethnic areas in the context of “the Belt and Road Initiative” [Conference session]. *Proceedings of the 7th Annual International Conference on Social Science and Contemporary Humanity Development (SSCHD 2021)* (pp. 6–10). Atlantis Press. <https://doi.org/10.2991/assehr.k.211215.002>
- Cheng, J. (2023). Acquisition of English liaison among Chinese EFL learners from the perspective of language transfer. *Heliyon*, 9(10), e20418. <https://doi.org/10.1016/j.heliyon.2023.e20418>
- Coady, M. R. (2020). Rural English learner education: A review of research and call for a national agenda. *Educational Researcher*, 49(7), 524–532. <https://doi.org/10.3102/0013189X20931505>
- Crawford, M. (2020). Ecological Systems Theory: Exploring the development of the theoretical framework as conceived by Bronfenbrenner. *Journal of Public Health Issues and Practices*, 4(2), Article 170. <https://doi.org/10.33790/jphip1100170>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. SAGE Publications.

- der Nederlanden, S. J., Schaeffer, J. C., van Bakel, H. H. J. A., & Dirks, E. (2023). Socio-economic status and other potential risk factors for language development in the first year of life. *Journal of Child Language*, 52(1) 42–62.
<https://doi.org/10.1017/s0305000923000478>
- Fandiño, F. G. E., Muñoz, L. D., & Velandia, A. J. S. (2019). Motivation and e-learning English as a foreign language: A qualitative study. *Heliyon*, 5(9), e02394.
<https://doi.org/10.1016/j.heliyon.2019.e02394>
- Feng, Z., & Yuan, Y. (2020). A study of basic foreign language education in ethnic areas of Yunnan in the context of language-based poverty alleviation. *Journal of Yunnan University*, 5, 31–40. <https://doi.org/10.3969/j.issn.1000-5110.2020.05.005>
- García, O., & Lin, A. (2017). Extending understandings of bilingual and multilingual education. *Bilingual and multilingual education*, 1–20. https://doi.org/10.1007/978-3-319-02258-1_1
- Giac, C. C., Van Giang, C. T., Hoang, L. H., & Ngan, T. T. T. (2025). A study on teachers' acceptance of digital technology in Vietnamese secondary education: An assessment using the technology acceptance model. *International Journal of Learning, Teaching and Educational Research*, 24(2), 38–62.
<https://doi.org/10.26803/ijlter.24.2.3>
- Jain, N. P. (2024). Authentic materials for intercultural communication: Develop speaking materials that encourage learners to engage in authentic cross-cultural communication effectively in diverse global contexts. *Creative Saplings*, 3(4), 1–14.
<https://doi.org/10.56062/gtrs.2024.3.4.563>
- Jiao, S., Wang, J., Ma, X., You, Z., & Jiang, D. (2022). Motivation and its impact on language achievement: Sustainable development of ethnic minority students' second language learning. *Sustainability*, 14(13), Article 7898.
<https://doi.org/10.3390/su14137898>
- Kende, J., Baysu, G., Phalet, K., & Fleischmann, F. (2021). Dual identity in context: The role of minority peers and school discrimination. *Journal of Social Issues*, 77, 1087–1105.
<https://doi.org/10.1111/josi.12487>
- Khan, M. O., & Khan, S. (2024). Influence of online versus traditional learning on EFL listening skills: A blended mode classroom perspective. *Heliyon*, 10(7), e28510.
<https://doi.org/10.1016/j.heliyon.2024.e28510>
- Kong, D., Zou, M., & Chen, J. (2022). English as a foreign language teacher engagement with culturally responsive teaching in rural schools: Insights from China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.990363>
- Kuddus, K. (2022). Artificial intelligence in language learning: Practices and prospects. *Advanced analytics and deep learning models*, 1–17.
<https://doi.org/10.1002/9781119792437.ch1>
- Kuek, F., & Sidhu, G. K. (2021). A systematic review of studies on English learning for ethnic minority students in China: 2010–2019. *Platform: A Journal of Management and Humanities*, 4(1), 2. <https://scispace.com/papers/a-systematic-review-of-studies-on-english-learning-for-17loqc83no>
- Ladson-Billings, G. (2023). “Yes, but how do we do it?” Practicing culturally relevant pedagogy. In C.W. Lewis, & J. Landsman (Eds.), *White teachers/diverse classrooms* (pp. 33–46). Routledge.
- Li, B., & Xu, X. (2025). Examining the intersectionality of learners' professional background and cultural diversity in Chinese ESP learners and its impact on students' engagement: A study on the application of communicative language teaching. *Current Psychology*. <https://doi.org/10.1007/s12144-025-07479-7>
- Li, Z., Rubie-Davies, C., & Wu, Z. (2024). Stronger teacher expectation effects on foreign language learning: Student perceptions of the classroom environment as moderators. *Social Psychology of Education*, 27(3), 543–566.
<https://doi.org/10.1007/s11218-023-09849-0>

- Ma, W. (2022). Language education for ethnolinguistic minority students in China: A review. *Chinese Journal of Applied Linguistics*, 45(3), 394–397. <https://doi.org/10.1515/CJAL-2022-0305>
- Massri, R. A. (2020). Teachers' attitudes towards English as a foreign language and their influence on students' attitudes and English learning: A qualitative study. *International Journal of Humanities and Social Science*, 10(4), 58–69. <https://doi.org/10.30845/ijhss.v10n4a8>
- Ngoc, T. T. N., & Samad, A. A. (2020). A qualitative case study into exploring the learning styles and learning strategies of non English major Vietnamese college students. *Universal Journal of Educational Research*, 8(1A), 76–86. <https://doi.org/10.13189/ujer.2020.081311>
- Niklas, F., Wirth, A., Guffler, S., Drescher, N., & Ehmig, S. C. (2020). The home literacy environment as a mediator between parental attitudes toward shared reading and children's linguistic competencies. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01628>
- Oraif, I. (2023). Natural language processing (NLP) and EFL learning: A case study based on deep learning. *Journal of Language Teaching and Research*, 15(1), 201–208. <https://doi.org/10.17507/jltr.1501.22>
- Pan, J., McBride, C., Kwan, J. L. Y., & Shu, H. (2024). Longitudinal effects of socioeconomic status on first and second language reading development: Evidence from Chinese children learning English. *Reading & Writing*. <https://doi.org/10.1007/s11145-024-10542-7>
- Pham, T. T., & Kim, T. T. (2022). Khmer culture impacting students' English-speaking performance in ethnic minority boarding schools. *European Journal of Foreign Language Teaching*, 6(3), 1–13. <https://doi.org/10.46827/ejfl.v6i3.4413>
- Pirhonen, H. (2024). 'I don't feel like I'm studying languages anymore'. Exploring change in higher education students' learner beliefs during multilingual language studies. *Journal of Multilingual and Multicultural Development*, 45(7), 2718–2733. <https://doi.org/10.1080/01434632.2022.2063874>
- Saefudin, A., Jumintono, & Rejokirono. (2024). National identity in transnational life: The case of dual education of Indonesian migrant children in Sabah, East Malaysia. *Kajian Malaysia*, 42(1), 117–138. <https://doi.org/10.21315/km2024.42.1.6>
- Schmidt, T., & Strasser, T. (2022). Artificial intelligence in foreign language learning and teaching: a CALL for intelligent practice. *Anglistik: International Journal of English Studies*, 33(1), 165–184. <https://doi.org/10.33675/ANGL/2022/1/14>
- Shao, X., Wang, A., & Li, D. (2019). Current situation, problems and prospects of the research on English education for ethnic minorities in China--based on the econometric analysis of relevant literature since 2001. *Tianshui Normal University*, 33(10), 79–90. <https://doi.org/10.3969/j.issn.1674-5884.2019.10.016>
- Shi, L. (2024). The integration of advanced AI-enabled emotion detection and adaptive learning systems for improved emotional regulation. *Journal of Educational Computing Research*, 63(1), 173–201. <https://doi.org/10.1177/07356331241296890>
- Tong, P., & An, I. S. (2024). Review of studies applying Bronfenbrenner's bioecological theory in international and intercultural education research. *Frontiers in psychology*, 14, 1233925. <https://doi.org/10.3389/fpsyg.2023.1233925>
- Tudge, J. R., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of family theory & review*, 1(4), 198–210. <https://doi.org/10.1111/j.1756-2589.2009.00026.x>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher mental processes*. Harvard University Press.
- Wardani, W., Rosidin, U., & Yulianti, D. (2025). The 7C skills framework: A measurement tool to enhance global competence in multicultural learning based on engagement

- theory. *International Journal of Learning, Teaching and Educational Research*, 24(2), 1–20. <https://doi.org/10.26803/ijlter.24.2.1>
- Yang, S., Liu, L., & Hunt, N. (2022). Exploring the influence of perceived classroom environment on learner autonomy in a Chinese EFL learning context. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1063473>
- Yu, L., Zhou, H., Shao, J., & Djatmiko. (2024). The theory and practice of home-school-community collaborative education in the era of artificial intelligence. In R. Huang, D. Liu, M. A. Adarkwah, H. Wang, & B. Shehata (Eds.), *Envisioning the future of education through design* (pp. 339–363). Springer Nature Singapore. https://doi.org/10.1007/978-981-97-0076-9_15
- Yuan, Y.-C., He, J.-J., & Yuan, Y. (2019). An empirical study on the correlation among language attitude, ethnic identity, learning burnout, and English achievements of Achang ethnic minority students in a trilingual context. In G. Sun, J. Gan, S. Liu, F. Lang, & Z. Lu (Eds.), *e-Learning, e-Education, and Online Training* (Vol. 299, pp. 303–315). Springer International Publishing. https://doi.org/10.1007/978-3-030-35095-6_35
- Zheng, X., & Gao, Y. (2019). Promoting intercultural competence in English language teaching: A productive bilingualism perspective. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 199–219). Springer. https://doi.org/10.1007/978-3-030-02899-2_11