

HUCE Engineering Students in Learning a New Language: Challenges and Suggestions

Nguyen Kim Oanh, Hanoi University of Civil Engineering, Vietnam

The Southeast Asian Conference on Education 2025
Official Conference Proceedings

Abstract

This case study explores the challenges and offers suggestions for Hanoi University of Civil Engineering (HUCE) students who are learning English as a foreign language. While English proficiency is increasingly critical in Vietnam, where international communication is considered essential, especially for engineering students, the current curriculum utilizing “New Headway” at the elementary level - 5th edition, combining partially traditional teaching methods, often fail to engage the students or meet the Ministry of Education’s proficiency requirements. This study, based on 215 student responses, investigates their language skills acquisition, preparation for industry challenges, confidence in classroom discussions, and satisfaction with the training. Findings indicate that most students struggle with vocabulary, grammar, and pronunciation, and lack motivation and effective orientation. Additionally, the study also highlights the need for innovative teaching methods which might later hamper the progress of enhancing their own language proficiency and ultimately improving their employability and success in the engineering profession. At the end, recommendations and suggestions for further studies are mentioned with the aim of fostering a motivating learning environment.

Keywords: language proficiency, language factors, human factors

iafor

The International Academic Forum
www.iafor.org

Introduction

English has been widely recognized as the global language of communication and the dominant language in the fields of technology, engineering, innovation, and academic and scientific research. Its status means to surpass geographical boundaries and enables individuals to connect, collaborate and then thrive in today's increasingly interconnected world, which leads the language to be integrated into educational curricula in Vietnam at various levels, from primary to higher education.

Once Bodewig et al. (2014) mentioned in their Vietnam Development Report – Main Report that Vietnam has been not only undergoing significant changes and development in its infrastructure but also making substantial local and foreign investments in various infrastructure projects to enhance its transportation networks, urban development, energy facilities, and more. Therefore, high proficiency in English has never been so urgent when it comes to the desire of accessing to a broader range of employment opportunities, especially in multi-national companies or fields which requires international interaction.

According to the report on economic investment of foreign enterprises from the General Statistics Office, Ministry of Planning and Investment of Vietnam (2021, 2022, 2023), international construction enterprises into Vietnam have not only increased in numbers but also enhanced their quality using advanced technologies. These cover a board spectrum, ranging from subterrestrial structures to high-rise buildings by applying diverse materials, modern machinery and equipment, which leads to the industry's growth rate at an impressive 8.7% annually. It was additionally reported that over the past 3 years the number of foreign countries and territories investing in Vietnam increased from 106 countries in 2021, 108 countries in 2022 and 111 countries in 2023. Accordingly, the total investment capital increased from 19.74 billion USD in 2021 to 22.4 billion USD in 2022, and 23.2 billion USD in 2023. Therefore, knowing and using English fluently will help students admit to diverse knowledge and information from global sources and achieve success in their future career.

At Hanoi University of Civil Engineering, the students have distinctive profiles, with almost 70% of students hailing from rural areas where English is not prioritized (statistical data from the student affairs office, university board's monthly oral meeting report, 8/2023). Moreover, English is not one of the subjects used for admission to the university, so students' proficiency in English remains entirely restricted. As a response to this, the curriculum employed in the university is New Headway at the elementary level – 5th edition. During their four years of studying at the university, they need to accomplish two semesters of general English (100 hours) to archieve A2 and another two semesters of TOEIC – Listening and Reading (100 hours) and have to achieve 450 in internal TOEIC – Listening and Reading Test as shown in the university regulation in 2022 before being allowed to carry out the graduation thesis. This is considered “*the key reform*” initiated by the government in general and the university itself, and such subsequent accomplishments, as well as the current challenges, might be realized during the journey to “*a new knowledge-based economy*” (Kataoka et al., 2020).

As a matter of fact, during the teaching and learning process, the majority of the English teachers (all M.A. in English Teaching Methodology or English Linguistics) at the university continue to adhere to conventional teaching approaches. Frequently, they face time constraints and difficulties in organizing the activities due to a big number of students (40-50 students) in one class, aiming to cover the recommended syllabus within three months.

Assessments predominantly occur through written exams (reading, writing and listening skills) at each semester's conclusion. However, this assessment method diminishes the enthusiasm for language learning and renders the sessions monotonous and unproductive. Consequently, numerous engineering students fail to make substantial progress in acquiring the new skills which are necessary for employability in their future careers. The following questions are generated to help find out what challenges the students are facing and some suggestions might be recommended.

- i) Have the students acquired language skills through the English course?
- ii) Are the students being prepared by English professors to tackle industry challenges?
- iii) To what extent do engineering students feel confident in handling job interviews and participating in classroom discussions?
- iv) Do the students express satisfaction in being adequately trained for their future employability?

Literature Review

As English becomes a global lingua franca, the demand for proficiency in non-English speaking countries like Vietnam has surged, especially among students in technical fields such as engineering. Despite this, many HUCE students struggle with language acquisition. This literature review identifies a range of factors contributing to these difficulties, including several aspects such as poor grammar, vocabulary and pronunciation, lack of motivation, and ineffective teaching methods which all later helps to explore how these challenges hinder the development of English skills among them.

In the field of second language acquisition, various scholars have examined the challenges and factors that influence English language learning, particularly in non-native contexts like Vietnam. Chomsky (1965) asserted in his book of *Aspects of the Theory of Syntax* that language learning is not only governed by "*innate linguistic capabilities*" but also is shaped by "*external social factors*". This interplay created a clear view on the back-and-forth relationship between complex linguistic structures that the children acquire effortlessly and rapidly during their early developmental years and their exposure to the language and "*cultural and environmental contexts*" during their growing-up journey.

From different angles, Brown (2000) explored how "*intrinsic motivation*", as well as "*cognitive*" and "*affective strategies*", impact language learning success while Ryan and Deci (2000) thoroughly emphasized the importance of "*self-determination*" and motivation in the learning process, highlighting the need for students to be engaged "*both intrinsically and extrinsically*". Supportively, Elgamal (2019) explored the role of "*cognitive elements*", such as memory and attention, in the acquisition of language skills for both native and non-native speakers.

From a pedagogical perspective, vocabulary and grammar acquisition are widely recognized as essential. Vocabulary enables clear communication of ideas, while grammar provides the structure for coherent sentences. Laufer (2003) demonstrated effective vocabulary acquisition through reading, and later Simon and Taverniers (2011) and Khasinah (2014) identified grammar as a key factor in second language acquisition. Additionally, pronunciation remains "*a critical barrier*" due to English's complex phonetics as Gilakjani and Ahmadi (2011) and Deterding (2010) noted about the challenges Southeast Asian students face in mastering pronunciation norms, meanwhile Shah et al. (2017) and Vu (2016) argued that teachers' beliefs regarding pronunciation significantly affect learners' progress.

Finally, the broader context of education and employability was discussed by Bodewig et al. (2014) and Kataoka et al. (2020) who accentuated the need for language skills in preparing students for the workforce. This aligns with the practical need to equip students with language proficiency to enhance their employability, as well as their ability to engage in international professional environments.

Methodology

Participants, Location, and Instruments

This research was conducted at Hanoi University of Civil Engineering, Vietnam, involving participants from various engineering faculties and classes. The survey was voluntary; amongst 250 questionnaires handed out, 215 completed responses were selected for analysis. The survey aimed to explore students' learning experiences, the methodologies used in English language learning, and their confidence levels in developing language skills for future interviews.

Participants, hailing from different regions of the country, primarily from the north with diverse cultural backgrounds, spent approximately 15 minutes on the survey questionnaire. Additionally, they were encouraged to share their thoughts about the English course in their own words, hopefully providing valuable insights for the study.

Table 1: Participants' Demographic Information
(Total number of participants: 215, nationality: Vietnamese)

<i>Gender</i>	<i>Age</i>	<i>Faculty</i>	<i>Number of Participants</i>	<i>Percentage</i>
Male (87%)	18-22	Faculty of Construction	48	22.4 %
		Faculty of Bridge and Road Engineering	41	19 %
Female (13%)		Faculty of Architecture and Planning	52	24 %
		Faculty of Environmental Science and Engineering	26	12 %
		Faculty of Economics and Construction Management	28	13 %
		Faculty of Information Technology	10	5 %
		Faculty of Mechanical Engineering	5	2.3 %
		Faculty of Marine and Petroleum Engineering	5	2.3 %

Data Analysis

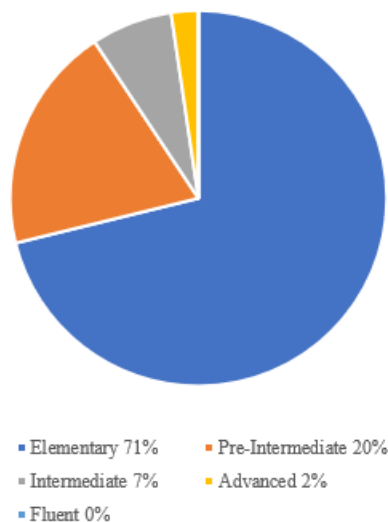
The collected data were analyzed through both quantitative and qualitative methods. The quantitative analysis involves statistical measures and analysis, while the qualitative analysis involved a detailed examination and interpretation of the narrative responses provided in the questionnaires and interviews, which both later help present the findings.

Results and Discussion

Students' English Proficiency

This result provided insights into the current distribution of English proficiency among the student population, allowing informed decisions on language education strategies and interventions.

Figure 1: Students' Language Proficiency (4 skills)



It can be shown from the chart that the majority of students are at the elementary and pre-intermediate levels, which accounts for 91 percent of the total. That highlights a considerable portion of the population in need of foundational and targeted language support. The characteristics of these levels include limited vocabulary, basic grammar knowledge, and elementary communication skills. They may struggle with understanding and forming sentences, and their language usage is often characterized by simplicity.

Having progressed beyond the beginner and pre-intermediate stages, there is a smaller percentage of students, 7% at the intermediate level, 2% at the advanced level, and 0% classified as fluent, which may benefit from more advanced language courses focusing on complex language structures and vocabulary and demonstrate a moderate proficiency in English.

Students' Awareness of Learning the English Language

It can be withdrawn from the questionnaire that while all students acknowledge English's academic importance, 47.3% believe it is unnecessary for their future careers, indicating a disconnect between immediate academic needs and long-term professional relevance. The students appear to view English merely as a tool for passing courses or conducting research, rather than as a critical skill for international collaboration, technical documentation, and effective communication within diverse teams. This perception likely results from limited exposure to real-world applications of English during their education. Thus, the results suggest that the educators should emphasize English's broader career benefits to bridge the gap between academic and professional applications.

Challenges

The study reveals that HUCE engineering students encounter significant language learning challenges due to the specialized demands of their academic field and the inherent complexities of mastering English. It recommends implementing specialized language programs tailored for engineering students, practical real-life language applications, and a supportive curriculum environment to overcome these obstacles. Data from questionnaires and interviews highlighted factors affecting learning experiences, including language-specific and human elements. Overall, the study underscores the need for targeted strategies to enhance language proficiency among engineering students at HUCE and other institutions as well.

Language Factors

Brown (2000) once discussed how the interrelated aspects of language, including grammar, vocabulary, pronunciation, and its significance, need to be addressed in the language learning process. Following this theory, the researcher investigated and confirmed those factors serve as the foundational pillars of language acquisition during the HUCE engineering students' language learning journey even when each presents its own set of challenges.

Table 2: Language Factors Affecting the Students' Language Learning Journey

	Very easy	Easy	Not Easy - Not Complex	Complex	Very complex
Vocabulary & topics	2 0.9%	9 4.2%	28 13%	136 63.3%	40 18.6%
Grammar & structure	15 7%	19 8.8%	22 10.2%	136 63.3%	23 10.7%
Pronunciation	43 20%	32 15%	31 14%	86 40%	23 11%

Examination of the figure reveals that many struggling students are aware of key linguistic factors influencing their learning process. Given their elementary proficiency, the coursebook "New Headway - 5th Edition" is widely regarded as a highly suitable and advantageous strategy for significantly enhancing overall language acquisition.

Throughout this 100-hour learning journey, the textbook introduces everyday vocabulary—covering family, home, daily life, time, and travel—integrated into listening and speaking exercises for practical application. Yet, 81.9% of students find these topics overly complex, highlighting significant retention challenges. Many struggle due to ineffective learning methods: some write words down, others use sticky notes, but these approaches prove insufficient. The numbers above underscore the need for tailored vocabulary strategies that accommodate individual learning styles and improve long-term retention. Overall, a critical gap in current methods calls for innovative, adaptable approaches that effectively engage diverse student preferences.

Next, grammar and structure posed significant challenges, with 159 students (74%) finding them complex. Although the coursebook covers basic grammar (e.g., Present Simple, Present Continuous, and past tenses), many encounter difficulties in applying these rules into real-life communication. Despite years of study, students frequently forget key concepts, hindering

their ability to understand interlocutors and convey ideas effectively. The gap between theoretical learning and practical application underscores the need for targeted instruction and ongoing practice to enhance conversational fluency. Overall, the study highlights the importance of improved pedagogical strategies in communication.

Last but not least, pronunciation seems to be the least challenging aspect compared to vocabulary and grammar, with 75 students (35%) finding it very easy or easy. However, a significant number of students (109 students, which is 51%) still find it complex or very complex.

This insight obviously means that while they recognize the importance of improving pronunciation alongside mastering grammar and vocabulary, 109 of them (51%) clearly report failing to bridge the gap between expressing and understanding the language. Their poor pronunciation creates significant barriers to effective communication by impeding both comprehension and expression, and it fosters a deep reluctance to engage in conversation. This highlights the critical need for focused pronunciation training.

Meanwhile, 35% of students confidently feel that pronunciation is easy or very easy and that they can be understood by others. However, many of these students are unsure about the correctness of their pronunciation, which can undermine the effectiveness of their vocabulary and lead to misunderstandings, potentially resulting in awkward situations. This issue is evident not only among students in Southeast Asia (Deterding, 2010; Gilakjani & Ahmadi, 2011; Shah et al., 2017) but also among students in Vietnam (Vu, 2016). The reason for this is although these students display confidence in pronouncing individual words, this confidence often fails to translate to accurate pronunciation in full sentences, where connected speech, intonation, and stress patterns come into play.

After all, pronunciation still appears as a less complex aspect for the majority of students, in a comparison to vocabulary or grammar and structure which pose more significant difficulties. The data also suggests a need for targeted interventions to simplify and enhance learning in these areas, potentially through more interactive and engaging teaching methods that address these specific difficulties.

Human Factors

Being intertwined with the language factors mentioned previously, the study additionally shows that human factors objectively and subjectively shape, challenge and drive the students' willingness to engage with the language during the learning journey. These factors encompass aspects related to learners, educators, and the learning environment and "give a more dominant contribution in their second language acquisition" (Khasinah, 2014).

In this study involving students' perspectives, the collected data provides an insight into the predominant challenges faced by the students, as represented by the following statistics.

Table 3: Objective Factors That Influence Second Language Acquisition Among the Students

Objective factors	Never	Seldom	Sometimes	Frequent	Always
Orientation	64 (30%)	112 (52%)	18 (8%)	15 (7%)	6 (3%)
Teacher-Motivation	56 (26%)	32 (15%)	86 (40%)	26 (12%)	15 (7%)
New teaching medthod (tasks, games, role plays, flashcards, presentations, ...)	22 (10.2%)	54 (25.1%)	98 (45.6%)	35 (16.3%)	6 (2.8%)

Objective Factors

The data presents an insightful overview of various objective factors that influence second language acquisition among the students. The frequencies are categorized into five groups: Never, Seldom, Sometimes, Frequent, and Always, for each factor.

First, a large majority of students (176, or 82%) fall into the “Never” and “Seldom” categories for proper language learning orientation, while only 18% receive consistent guidance. This highlights a critical need for improved orientation during their language learning journey. In this scenario, many students are unclear about their current proficiency and do not understand which language skills they have mastered or which require further development in grammar and vocabulary. Without this essential self-awareness, they struggle to identify starting points for their learning and are unable to build on their existing knowledge effectively. This shortage of adequate orientation later leads to unexpected confusion and considerable challenges when it comes to setting effective goals and employing strategic approaches throughout their language acquisition journey.

In the meantime, although the remaining 18% of students appear to have a clearer understanding of their language proficiencies and recognize the importance of orientation in their language learning journey, they still encounter significant obstacles. These students may affirm that orientation is crucial, yet they often fail in setting a clear roadmap of what is expected. They might understand their current abilities but lack the foresight to map out a structured plan for future learning. This absence of a detailed, step-by-step plan can significantly impact their ability to acquire and retain the new language.

Second, motivation is recognized as a crucial factor in second language acquisition. Richards et al. (1985, p. 185) and Ellis (1989) clearly stated that motivation drives an individual’s desire to engage in an activity, categorizing it into “*integrative*” and “*instrumental*” types. This is particularly relevant in language learning, where a student’s success depends significantly on their level of motivation.

Through the results conveyed from the questionnaires, teacher-motivation is recognized inconsistent. While 86 students (40%) report experiencing it “Sometimes”, 88 students (41%) fall into the “Never” and “Seldom” categories. Only a small fraction of students (41, or 19%) experience frequent and consistent teacher motivation. This disparity highlights the critical role of “*instrumental motivation*”—defined by Ellis (1989) as the “*learner’s overall goal or orientation*” - which involves practical reasons for learning a language, such as enhancing career prospects, gaining access to educational resources, or improving academic performance.

Students with strong instrumental motivation understand how language skills will directly impact their future opportunities, making them more likely to maintain a positive attitude, adopt a growth mindset, and engage actively in language learning. These findings clearly indicate that enhanced teacher support and structured motivational strategies are essential for sustaining student engagement and success.

Thirdly, the data regarding the use of new teaching methods reveals a mixed landscape of student experiences in the classroom. Approximately 45.6% of students (98) report that they sometimes engage in innovative tasks such as games, role plays, flashcards, and presentations, while 19% (41) experience these methods frequently or always. This engagement appears to boost motivation and to enhance skill development, fostering positive attitudes toward language learning. However, 35.3% of students rarely or never encounter these innovative strategies, indicating a significant gap in learning experiences. The inconsistent application of modern teaching techniques among lecturers may hinder overall progress and deprive many students of the benefits of varied instructional approaches. Consistent and engaging methods could bridge the gap between theoretical learning and practical application by fostering greater participation and improved language proficiency. Addressing this inconsistency is essential to ensure that all students have access to effective, interactive teaching strategies that support academic growth and prepare them for real-world language challenges.

Finally, utilizing engaging and diverse teaching methods can significantly enhance language learning by making it interactive and enjoyable. These techniques cater to various learning styles, sustaining student interest and motivation. Role plays and games offer practical, low-stress opportunities for language practice, while flashcards and presentations support vocabulary memorization and use. Regular access to such methods creates a balanced and effective learning experience. This approach not only boosts engagement but also reinforces practical communication skills, equipping students to achieve immediate academic success and proficiency.

Subjective Factors

Hence, understanding that these above objective human factors such as orientation, teacher-motivation, and teaching methods are crucial, the researcher firmly realized how the subjective factors like cognitive abilities, self-motivation are equally important and significantly impact the effectiveness of language learning.

Firstly, the researcher indentified cognition as “the mental capacities involved in the processes of acquiring knowledge and understanding through thought, experience, and the senses” on Cambridgecognition.com. These abilities also include “*memory, attention, problem-solving, and language skills*”, cited by Chomsky (1965) and Mayer (1992). After collecting and analysing the data, the percentage below helps shed light on how HUCE students rate their own cognitive abilities, specifically in remembering words, structures, and grammar.

Table 4: Cognitive Abilities Affecting the Students’ Language Learning Journey

Cognitive Abilities	Very bad	Bad	Medium	Good	Very good
Ability in remembering words, structures and grammar	38 (17.7%)	124 (57.7%)	25 (11.6%)	28 (13%)	0 (0%)

According to the responses, the data on students' self-assessment of their cognitive skills reveal a clear picture of low confidence. A significant portion, 38 students (17.7%), believe their skills are very poor, while an even larger group, 124 students (57.7%), rate their abilities as bad. Together, these two categories comprise over 75% of the respondents, indicating that the majority hold a negative view of their cognitive skills. This widespread lack of confidence may point to deeper issues, including ineffective learning strategies, inadequate support, or an environment that fails to reinforce positive self-perception.

In contrast, only 11.6% of students rate their skills as medium and 13% describe them as good, showing that only a minority feel they have an adequate grasp of their cognitive abilities. Notably, no student rate their skills as very good, underscoring a complete absence of self-confidence. This pattern may reflect an overall climate of underachievement, uncertainty, or insufficient opportunities to experience success and receive positive feedback, all critical for building confidence in academic abilities.

Secondly, self-motivation is a key factor in students' language learning journey, which was analyzed as "*integrative motivation*" as Richards et al. (1985) and Ellis (1989). This involves engaging in an activity for its inherent satisfaction and it helps to drive students to immerse themselves in the learning process out of genuine interest and enjoyment. That engagement is strictly conveyed from the questionnaire and the equations are carefully analyzed.

Table 5: Self-Motivation Affecting the Students' Language Learning Journey

Self Motivation	Never	Seldom	Sometimes	Frequent	Always
Actively spend time studying the language from the coursebook at home	37 (17.2%)	67 (31.2%)	70 (32.6%)	25 (11.6%)	16 (7.4%)
Actively join in the class activities	22 (10.2%)	55 (25.6%)	73 (34%)	33 (15.3%)	32 (14.9%)
Actively join in the language activities outside the class	164 (76.3%)	24 (11.2%)	25 (11.6%)	2 (0.9%)	0 (0%)

The above distribution reveals the self-motivation levels of HUCE students in different language learning activities. Looking at the numbers, there is a significant portion which shows low engagement with coursebook material outside the classroom: 37 students (17.2%) never study at home and 67 (31.2%) seldom do, indicating nearly half engage minimally in independent study. In contrast, 70 students (32.6%) sometimes study at home, while only 25 (11.6%) frequently and 16 (7.4%) always do. These numbers suggest that although the majority recognize the importance of home study, they do not prioritize it, which may adversely affect their overall language acquisition, academic success, and sustained long-term academic growth.

Additionally, in terms of actively joining in-class activities, the participation data implies varying levels of engagement in in-class activities. This reveals varying levels of in-class engagement among HUCE students. Notably, 22 students (10.2%) never participate, and 55 students (25.6%) seldom do, meaning over one-third show minimal involvement during lessons. This lack of active participation can hinder language progress, as in-class activities are essential for practicing and reinforcing new concepts. On the positive side, 73 students (34%) sometimes participate, while 65 students (30.2%) frequently or always engage,

benefiting from more interactive, immersive learning experiences. However, the high percentage of non-participants and infrequent participants suggests that many students are not utilizing class time to enhance their language proficiency.

In terms of extracurricular English activities, the data shows a significant lack of student participation. A large majority (164 students, 76.3%) never engage, while 24 (11.2%) seldom do. Nearly 90% are missing opportunities to practice English outside formal instruction, potentially harming their language development. Only 25 students (11.6%) sometimes participate, and just 2 (0.9%) frequently engage, with no student reporting constant involvement. This overall lack of participation results in missed chances for real-world application and critical practice needed to achieve fluency. This clearly underscores the need for improved engagement.

To finally address these above matters, HUCE could implement interactive teaching methods, support self-study, and encourage extracurricular language activities. Creating a more motivating learning environment would boost class participation and independent study, ultimately improving students' language proficiency and readiness for the global engineering field.

Students' Study Results

After this 100-hour learning course, these students were contacted once again which allowed the researcher gather and generate their scores.

Table 6: The Students' Study Result					
Scores	F	D	C	B	A
Number of students	36 (16.7%)	42 (19.5%)	64 (29.8%)	58 (27%)	15 (7%)

It can be easily seen that an analysis of student grades reveals significant challenges in academic performance. Thirty-six students (16.7%) received an F, indicating they are struggling with the course material and will need to retake the course. This highlights the urgent need for improved support and more effective teaching methods.

Among the remaining cohort, 19.5% earned a D, suggesting that while they are close to passing, they lack a solid grasp of essential concepts. Nearly 30% of students scored a C, reflecting only a basic understanding of the subject, which prevents them from reaching their full potential.

In contrast, 27% achieved a B, indicating a good comprehension of the material, whereas only 7% received an A, showing that very few excel at the highest level. This disparity in performance calls for teachers to rethink and enhance their instructional strategies to better meet diverse learning needs.

By incorporating varied teaching methods, such as active learning, group projects, and personalized support, educators can create a more inclusive and engaging environment that promotes deeper understanding and academic success. This performance distribution emphasizes the need for strategic reforms.

Findings

After analyzing the data on the factors which influence the HUCE students' language learning journey, it can be easily seen that only a few have acquired basic language skills, largely due to limited learning duration and insufficient in-class practice. Many students struggle with vocabulary, grammar, and pronunciation; notably, 36 students (16.7%) must retake the course, underscoring their difficulties in mastering the material.

Traditional teaching methods and a lack of emphasis on communication further hinder students' preparation for industry-specific challenges. The curriculum appears misaligned with the practical language demands of the engineering profession, leaving students underprepared for professional communication, technical vocabulary, and real-world application.

Additionally, low self-confidence significantly impacts their progress. Many students are reluctant to engage in interactive language practice—inside or outside the classroom—due to a fear of making mistakes. This hesitancy leads them to avoid in-class activities, group discussions, and role-plays, which are critical for developing fluency. Prioritizing grammatical accuracy over communicative practice only increases self-consciousness, depriving them of essential real-world experience.

Collectively, these issues indicate that students are dissatisfied with their training and feel unprepared for future employability. Their limited language practice, and low confidence contribute to insufficient practical English proficiency needed for job interviews and workplace interactions. Consequently, students are likely to be under-equipped for the language demands of their engineering careers.

As a result, it is reasonable to conclude that students are dissatisfied with their training, as it does not fully equip them with the language abilities which are necessary for enhancing their employability and success in their engineering profession.

Conclusion

Recommendations

After thoroughly analysing all those variables, the researcher confidently suggests several ways to improve the English proficiency of students at Hanoi University of Civil Engineering (HUCE), focusing on curriculum enhancements, teaching methods, and student support.

First, the curriculum needs revision. The current elementary-level materials should be upgraded to more advanced content, including real-life, industry-specific scenarios. This will better prepare students for job interviews and workplace communication in the engineering field.

Second, modern teaching methods such as task-based learning, group discussions, and problem-solving activities should be applied to increase practice opportunities and to make classes more interactive, helping students practice speaking and build confidence, both in-class and extracurricular activities.

Teacher training is another key recommendation. Instructors should deeply understand those considerably effective modern and communication-focused techniques that move beyond grammar accuracy, making the learning process more engaging and efficient for students.

Additionally, creating a judgment-free environment and delivering extra support essential as they help encouraging students to practice without fear of making mistakes.

Last but not least, reducing class sizes is significantly seen as a key recommendation. Smaller class sizes will allow more individual attention, increased participation, and better feedback from instructors.

As a result, the overall outlook suggests that when endorsing those suggested recommendations, each personalized approach from HUCE's lectures can significantly equip students with the skills necessary for their future careers in engineering.

Suggestions for Further Research

To build on the findings of this study and address its identified limitations, future research should aim to take a more expansive and holistic approach.

One primary recommendation is to increase the sample size to include students from different academic levels, departments, and backgrounds. This will yield more representative findings of the HUCE student body and allow exploration of unique language learning challenges among various subgroups.

In addition to a larger sample, future research should supplement self-reported questionnaires with objective language proficiency measures, such as standardized tests, classroom participation, and performance evaluations, to reduce subjectivity.

Moreover, studies should broaden their scope to include external factors like the learning environment, quality of instructional materials, classroom dynamics, and access to language resources.

Exploring the role of peer influence and support systems—such as family, academic advisors, and institutional resources—would also provide insights into how these elements affect language acquisition. By integrating these aspects, future research can offer comprehensive recommendations for improving language education for engineering students at HUCE and similar institutions.

Acknowledgements

I would like to express my sincere gratitude to all those who contributed to the completion of this study. First and foremost, I extend my appreciation to the students of Hanoi University of Civil Engineering (HUCE) who participated in the survey, providing invaluable insights into their experiences and challenges in learning English as a foreign language.

I am also grateful to my colleagues and mentors for their constructive feedback and support throughout this research. Their guidance has been instrumental in refining my ideas and

shaping the final manuscript. Special thanks to the faculty members whose discussions and perspectives have greatly enriched this study.

References

- Bodewig, C., Badiani-Magnusson, R., Macdonald, K., Newhouse, D., & Rutkowski, J. (2014). *Skilling up Vietnam: Preparing the workforce for a modern market economy*. World Bank Publications.
<https://documents1.worldbank.org/curated/en/610301468176937722/txt/829400AR0P13040Box0379879B00PUBLIC0.txt>
- Brown, H. D. (2000). *Principles of Language Learning and Teaching*. Pearson Education.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. MIT Press.
- Deterding, D. (2010). Norms for pronunciation in Southeast Asia. *World Englishes*, 29(3), 364-377. <https://doi.org/10.1111/j.1467-971x.2010.01660.x>
- Elgamal, A. M. A. (2019). Cognitive Factors Affecting Language Learning and Acquisition of Native and Non-Native Speakers. *Journal of Research in Curriculum Instruction and Educational Technology*, 4(4), 135-152.
<https://doi.org/10.21608/JRCIET.2019.31960>
- Ellis, R. (1989). *Understanding second language acquisition* (Vol. 31). Oxford University Press.
- Gilakjani, A. P., & Ahmadi, M. R. (2011). Why Is Pronunciation So Difficult to Learn?. *English language teaching*, 4(3), 74-83. <https://doi.org/10.5539/elt.v4n3p74>
- Hanoi University of Civil Engineering. (2018, January 8). Quyết định chuẩn đầu ra trình độ ngoại ngữ đối với sinh viên đại học hệ chính quy. Sinh viên HUCE [Decision on foreign language proficiency standards for full-time university students. HUCE students]. *Hanoi University of Civil Engineering*. Retrieved from <https://sinhvien.huce.edu.vn/sinh-vien/tin-tuc/quyet-dinh-chuan-dau-ra-trinh-do-ngoai-ngu-doi-voi-sinh-vien-dai-hoc-he-chinh-quy.html>
- Kataoka, S., Vinh, L. A., Kitchlu, S., & Inoue, K. (2020). Vietnam's human capital: Education success and future challenges (Vietnamese). World Bank Group.
<http://documents.worldbank.org/curated/en/487991596433786023>
- Khasinah, S. (2014). Factors influencing second language acquisition. *Englisia: Journal of Language, Education, and Humanities*, 1(2), 256-269.
<https://doi.org/10.22373/ej.v1i2.187>
- Laufer, B. (2003). Vocabulary acquisition in a second language: Do learners really acquire most vocabulary by reading? Some empirical evidence. *Canadian modern language review*, 59(4), 567-587. <https://doi.org/10.3138/cmlr.59.4.567>
- Mayer, R. E. (1992). *Thinking, problem solving, cognition*. WH Freeman/Times Books/Henry Holt & Co.

- Ministry of Planning and Investment of Vietnam. (2021, December 28). Báo cáo tình hình đầu tư trực tiếp nước ngoài năm 2021 [Report on foreign direct investment situation in 2021]. *Ministry of Planning and Investment of Vietnam*. Retrieved from <https://www.mpi.gov.vn/portal/Pages/2021/Bao-cao-tinh-hinh-dau-tu-truc-tiep-nuoc-ngoai-nam--022108.aspx>
- Ministry of Planning and Investment of Vietnam. (2022, December 26). Báo cáo tình hình đầu tư trực tiếp nước ngoài năm 2022 [Report on foreign direct investment situation in 2022]. *Ministry of Planning and Investment of Vietnam*. Retrieved from <https://www.mpi.gov.vn/portal/Pages/2022/Bao-cao-tinh-hinh-thu-hut-dau-tu-nuoc-ngoai-nam-20-130022.aspx>
- Ministry of Planning and Investment of Vietnam. (2023, December 25). Tình hình thu hút đầu tư nước ngoài tại Việt Nam và đầu tư của Việt Nam ra nước ngoài năm 2023 [Report on foreign direct investment situation in 2023]. *Ministry of Planning and Investment of Vietnam*. Retrieved from <https://www.mpi.gov.vn/portal/Pages/2023-12-26/Tinh-hinh-thu-hut-dau-tu-nuoc-ngoai-tai-Viet-Nam-vc170b6.aspx>
- Richards, J., Platt, J., & Weber, H. (1985). *Longman Dictionary of Applied Linguistics*. Longman World Publishing Corp.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68. <https://www.researchgate.net/publication/11946306>
- Shah, S. S. A., Othman, J., & Senom, F. (2017). The pronunciation component in ESL lessons: Teachers' beliefs and practices. *Indonesian Journal of Applied Linguistics*, 6(2), 193-203. <https://doi.org/10.17509/ijal.v6i2.4844>
- Simon, E., & Taverniers, M. (2011). Advanced EFL learners' beliefs about language learning and teaching: a comparison between grammar, pronunciation, and vocabulary. *English Studies*, 92(8), 896-922. <https://doi.org/10.1080/0013838x.2011.604578>
- Vu, H. Y. (2016). *Exploring English pronunciation teaching in Vietnam: Time for a new approach?* (Doctoral dissertation, Macquarie University, Faculty of Human Sciences, Department of Linguistics).

Contact email: Oanhnk@huce.edu.vn

Appendix

SURVEY QUESTIONNAIRE					
Name:					
Age: Gender:					
Faculty:					
Phone number:					
1. What course book are you using? What unit now?					
2. How you rate your English proficiencies:	Beginner	Pre-Intermediate	Intermediate	Advanced	Fluent
3. How important do you think language proficiency is for your future career as an engineer? (Scale: 1-5)					
4. In the course book, what do you think of ...?					
	Very easy	Easy	Not Easy - Not Complex	Complex	Very complex
Vocabulary & topics					
Grammar & structure					
Pronunciation					
5. How often do you experience ...?					
	Never	Seldom	Sometimes	Frequent	Always
Orientation					
Teacher-Motivation					
New teaching method (tasks, games, role plays, flashcards, presentations, ...)					
6. What other games/ activities does your teacher use during the lessons?					
7. How do you rate your ...?					
	Very bad	Bad	Medium	Good	Very good
Ability in remembering words, structures and grammar					
8. How often do you ...?					
	Never	Seldom	Sometimes	Frequent	Always
Actively spend time studying the language from the coursebook at home					
Actively join in the class activities					

Actively join in the language activities outside the class					
9. Would you be interested in additional language learning opportunities outside regular classes, such as workshops or language clubs? (Scale 1->5)					

Questions for further interviews

1. What additional learning resources or materials would you find helpful in improving your language skills?
2. In your opinion, what teaching methodologies could be more effective in helping engineering students learn a new language?
3. Do you think incorporating more technology into language learning would be beneficial? Why or why not?