ANALYZING STUDENTS' PERFORMANCE PATTERNS ACROSS ATTENDANCE, MIDTERM, FINAL EXAM AND FINAL COURSE SCORES: A CASE STUDY IN A VIETNAMESE ENGLISH AS A FOREIGN LANGUAGE CLASSROOM

Nong Thi Hien Huong
TNU - University of Agriculture and Forestry

ARTICLE INFO		ABSTRACT
		This study investigates student performance patterns across four key assessment components: attendance, midterm exam, final exam, and overall course scores in an English as a foreign language classroom at a Vietnamese university. The participants included 45 first-year students, most of whom come from rural and mountainous areas with limited access to English learning resources. Using both quantitative and qualitative methods, the study explored the relationship among attendance, continuous assessment, and exam performance. The findings revealed a significant gap between high attendance rates and low final exam results, suggesting that attendance alone did not predict academic success. The final exam was identified as the most challenging component, strongly influencing the overall course scores. These results highlight potential misalignments among teaching methods, assessment design, and student learning processes. Based on these findings, the study recommends revising exam formats, adopting interactive teaching strategies, and providing additional academic support to enhance student learning outcomes and assessment fairness.

PHÂN TÍCH KẾT QUẢ HỌC TẬP CỦA SINH VIÊN QUA ĐIỂM CHUYÊN CẦN, GIỮA KỲ, ĐIỂM THI VÀ TỔNG KẾT CUỐI KỲ: NGHIÊN CỨU TRƯỜNG HỢP LỚP HỌC TIẾNG ANH TẠI VIỆT NAM

Nông Thị Hiền Hương
Trường Đại học Nông Lâm - ĐH Thái Nguyên

THÔNG TIN BÀI BÁO		TÓM TẮT
		Nghiên cứu này nhằm phân tích mô hình kết quả học tập của sinh viên qua bốn thành phần đánh giá chính của các điểm: chuyên cần, kiểm tra giữa kỳ, kiểm tra cuối kỳ và tổng kết học phần trong lớp học tiếng Anh như một ngoại ngữ tại một trường đại học ở Việt Nam. Đối tượng nghiên cứu gồm 45 sinh viên năm nhất, phần lớn đến từ các khu vực nông thôn và miền núi, nơi có điều kiện tiếp cận nguồn học liệu tiếng Anh còn hạn chế. Bằng cách kết hợp cả phương pháp định lượng và định tính, nghiên cứu tìm hiểu mối quan hệ giữa chuyên cần, đánh giá liên tục và kết quả kiểm tra của sinh viên. Kết quả cho thấy có sự chênh lệch đáng kể giữa tỷ lệ chuyên cần cao và kết quả kiểm tra cuối kỳ thấp, cho thấy rằng chuyên cần không phải là yếu tố dự báo chắc chắn cho thành công học tập. Kiểm tra cuối kỳ được xác định là yếu tố có ảnh hưởng lớn nhất đến điểm tổng kết học phần và cũng là phần thi mà sinh viên gặp nhiều khó khăn nhất. Những phát hiện này chỉ ra sự thiếu đồng bộ giữa phương pháp giảng dạy, thiết kế đánh giá và quá trình học tập của sinh viên. Từ đó, nghiên cứu đề xuất cần điều chỉnh hình thức kiểm tra, áp dụng các phương pháp giảng dạy tích cực nhằm nâng cao hiệu quả giảng dạy và học tập.

Email: nongthihienhuong@tuaf.edu.vn

1. Introduction

Assessment plays a crucial role in higher education, serving as both a measurement of students' academic achievement and a tool for improving teaching and learning practices [1]. In English as a foreign language (EFL) courses, various assessment components such as attendance, midterm tests, and final exams are typically used to evaluate student participation, progress, and mastery of the course content. However, research suggests that high attendance or continuous assessment scores may not always translate into strong performance in summative exams, especially among students with limited language proficiency or ineffective study strategies [2].

Attendance has long been recognized as a predictor of academic success. Studies by several researchers confirm that regular attendance can positively influence learning outcomes by increasing exposure to instructional content and classroom interactions [3], [4]. Nevertheless, passive participation without active engagement may limit the benefits of attendance, leading to a mismatch between participation and exam performance [5], [6]. This issue is particularly relevant for students from rural or underprivileged backgrounds, where access to quality educational resources remains limited.

Midterm assessments, often employed as formative evaluation tools, help monitor student progress throughout the course and offer timely feedback for improvement [7], [8]. Recent research by Le et al. [9] emphasizes the value of formative assessments in promoting self-regulated learning and reducing exam anxiety. However, the effectiveness of midterms depends on their alignment with course objectives and the extent to which students engage with feedback provided.

Final exams, representing the summative component of assessment, are designed to evaluate students' cumulative knowledge and skills at the end of a learning period. Yet, numerous studies highlight that final exams may not accurately reflect students' actual learning if they face language barriers, suffer from test anxiety, or are unfamiliar with exam formats [10], [11]. In EFL settings, limited vocabulary, weak grammatical competence, and poor exam preparation are common factors contributing to low exam scores [12], [13]. In the Vietnamese context, Nguyen et al. [13] argued that students from mountainous or rural areas often struggle with English learning due to minimal exposure to authentic language use and insufficient academic support. These challenges can create significant gaps between attendance, continuous assessment, and final exam performance, raising concerns about the fairness and effectiveness of current evaluation methods.

Given these issues, this study seeks to examine the patterns of students' performance across different assessment components: attendance, midterm exam, final exam, and final course scores to identify gaps and suggest improvements in teaching and assessment practices. The study is guided by the following research question: *"What are the patterns of students' performance across attendance, midterm, final exam, and overall course scores?"*

By addressing this question, the research aims to contribute to a better understanding of the relationship between assessment elements and student achievement, providing valuable insights for enhancing English language teaching and evaluation strategies at the university level.

2. Methodology

2.1. Participants

The participants in this study consisted of first-year students enrolled in the English 1 course at Thai Nguyen University. A total of 45 students participated in the final exam and subsequent survey. These students are 18 years old on average and come predominantly from mountainous areas, where access to quality educational resources may be limited. Due to their background, many students face challenges in English proficiency, as it is not their primary language. Their language skills are generally at a beginner to lower-intermediate level, which can impact their ability to understand and respond effectively to exam questions. Given these circumstances, their performance in the final exam may be influenced by both linguistic difficulties and limited

exposure to English learning environments, making it essential to assess how well the exam format, content, and evaluation process support their learning needs.

2.2. Instrument

This study employed a combination of quantitative and qualitative instruments to collect and analyze data on students' academic performance across different assessment components. The primary instruments included score records from four key areas: attendance (CC), midterm exam (GK), final exam (THI), and final course scores (KTHP).

More specifically, attendance scores were calculated based on the number of class sessions attended, typically using the ratio of sessions attended to the total number of sessions. The grading scale ranges from 0 to 10, with students who are absent fewer than three times generally receiving the maximum score of 10. Attendance contributed approximately 20% to the overall course grade. However, this component did not capture students' level of active participation or comprehension, which likely explained the weak correlation observed between high attendance scores and low final exam performance.

Furthermore, the midterm exam was administered in either a multiple-choice format and lasts approximately 45 minutes. It focused on the material covered during the first half of the semester and was typically structured to support students' revision efforts. This component contributed around 30% to the overall course grade. As a formative assessment, the midterm offered students an opportunity to improve and may provide insight into their learning progress; however, it did not serve as a comprehensive measure of their overall achievement in the course.

Ultimately, the final exam combined multiple-choice and written-response questions and was conducted over a duration of 90 minutes. It encompassed the entire course content, aiming to assess students' ability to apply vocabulary, grammar, and reading comprehension skills in an integrated manner. This exam typically accounted for 50% of the total course grade, making it the most heavily weighted assessment component. As a summative assessment, it provided a comprehensive evaluation of students' learning. However, those who were unfamiliar with the exam format, have not revised effectively, or face language-related challenges were more likely to perform poorly. These three different kinds of scores were obtained from the official grade reports of 45 students enrolled in the course.

To evaluate the distribution and consistency of the data, descriptive statistics such as mean, median, minimum, maximum, standard deviation, skewness, and kurtosis were calculated. In addition, the Jarque-Bera test was used to assess the normality of score distributions for each assessment component.

The data were further analyzed using density plots (Kernel and Normal curves) and histograms to visually represent the distribution patterns and identify any deviations from normality. These tools provided a comprehensive view of students' performance and allowed for an in-depth interpretation of the relationship between attendance, continuous assessment, and final exam results.

To complement the quantitative findings and gain a deeper understanding of students' learning experiences and challenges, semi-structured interviews were conducted with 8 students, selected through purposive sampling. It is evident that 8 out of 45 participants were interviewed, which is an acceptable sample size for qualitative research aimed at in-depth understanding rather than statistical generalization [14], [15].

These participants represented a range of performance profiles (e.g., high attendance but low final exam scores) to explore potential factors contributing to score discrepancies. The interview questions focused on three main areas: classroom participation, exam preparation, and perceived challenges during the final exam. Thematic analysis of these responses revealed key challenges that help explain the gap between scores.

The use of these instruments ensured the accuracy and reliability of the data analysis, supporting the study's objective of identifying performance trends and potential challenges in the learning and assessment process.

3. Results and Discussion

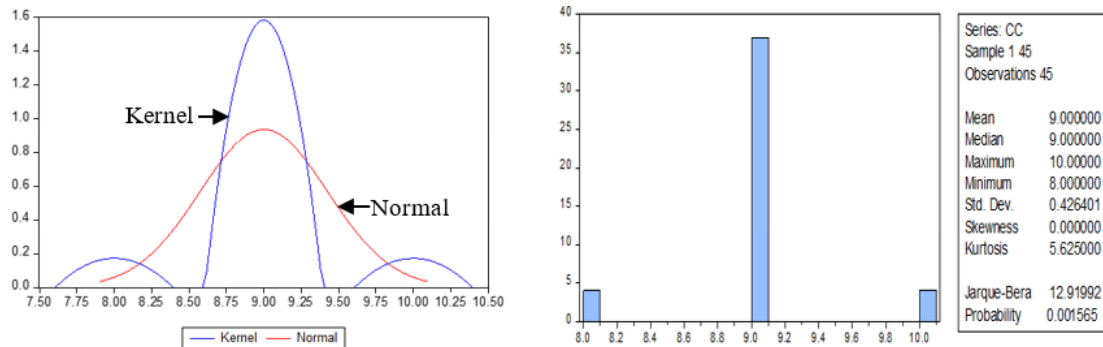### 3.1. Analysis of attendance scores

Figure 1. *Results of attendance scores*

Figure 1 shows that most students achieved high and consistent attendance scores, with the mean and median both at 9.0. The score range is relatively narrow, from 8.0 to 10.0, and the standard deviation is low (0.426), indicating little variation among students.

The Kernel density curve (blue) reveals a sharp peak at 9.0, confirming the clustering of scores around this value. The distribution deviates from the normal curve (red), with a Jarque-Bera test statistic of 12.92 and a probability of 0.0016, suggesting that the data do not follow a normal distribution.

Overall, attendance performance was strong, with the majority of students consistently attending classes, though the distribution is slightly skewed and not perfectly normal.
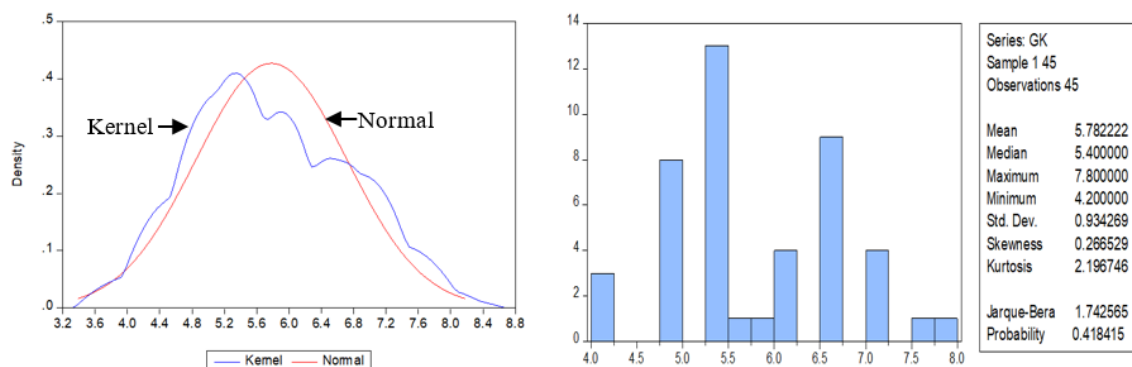
3.2. Analysis of midterm scores

Figure 2. *Results of midterm scores*

Figure 2 shows a moderate performance level with a mean score of 5.78 and a median of 5.4. Scores range from 4.2 to 7.8, with a standard deviation of 0.93, indicating a wider spread compared to attendance scores.

The Kernel density curve (blue) and the normal curve (red) are relatively close, and the Jarque-Bera test (1.74, p = 0.418) suggests that the midterm scores do not significantly deviate from a normal distribution.

The histogram shows that most students scored between 5.0 and 6.5, reflecting an average level of achievement with a few higher and lower scores.

Overall, the midterm results suggest a balanced distribution with acceptable variability among students.

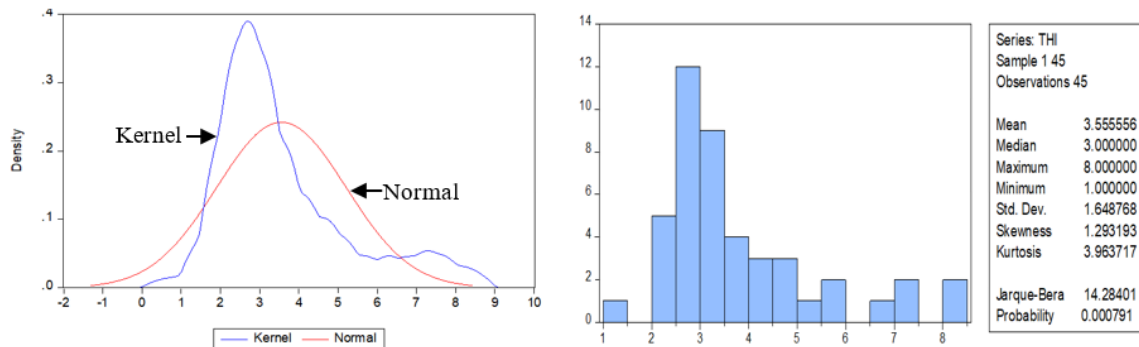### 3.3. Analysis of final exam scores

Figure 3. *Results of final exam scores*

Figure 3 shows low overall performance, with a mean of 3.56 and median of 3.0, indicating that most students scored in the lower range. The scores vary between 1.0 and 8.0, with a relatively high standard deviation of 1.65, reflecting large variability.

The Kernel density curve (blue) is right-skewed, showing a peak around 3, which aligns with the histogram where most scores cluster between 2 and 4. The normality test (Jarque-Bera = 14.28, $p = 0.0008$) confirms that the score distribution significantly deviates from normality.

In short, these results highlight that many students struggled with the final exam, suggesting potential issues in exam difficulty, preparation, or teaching methods that may require review and adjustment.
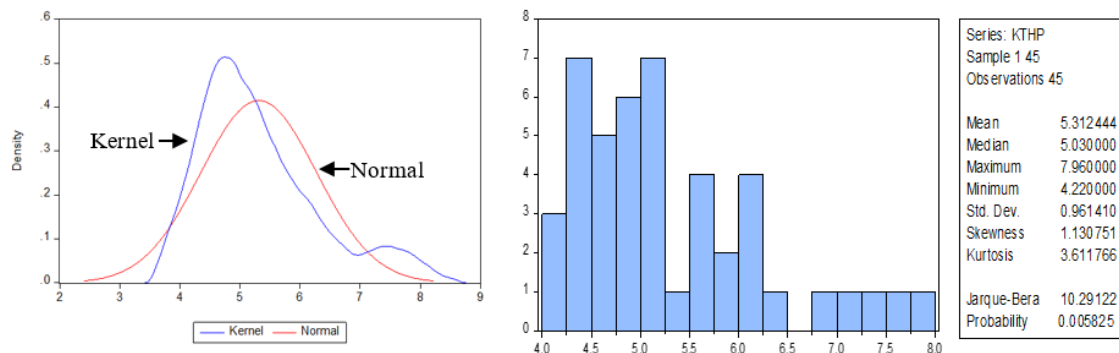
3.4. Analysis of final course scores

Figure 4. *Results of final course scores*

As can be seen from Figure 4, the distribution of the final course scores for 45 students shows a mean of 5.31 and a median of 5.03, indicating that most students performed at an average level. Scores ranged from 4.22 to 7.96, with a standard deviation of 0.96, reflecting moderate variability.

The Kernel density curve (blue) is slightly right-skewed, showing a peak around 5. The normality test (Jarque-Bera = 10.29, $p = 0.0058$) indicates that the data deviate significantly from a normal distribution. The histogram suggests that a large proportion of students scored between 4.5 and 5.5, with fewer students achieving higher scores.

These results confirm that while most students reached the average level, there is still a lack of high achievers, highlighting the need to enhance teaching strategies and provide more support for improving learning outcomes.

3.5. Correlation between scores

Figure 5 shows the correlation between scores of attendance, midterm and final course.
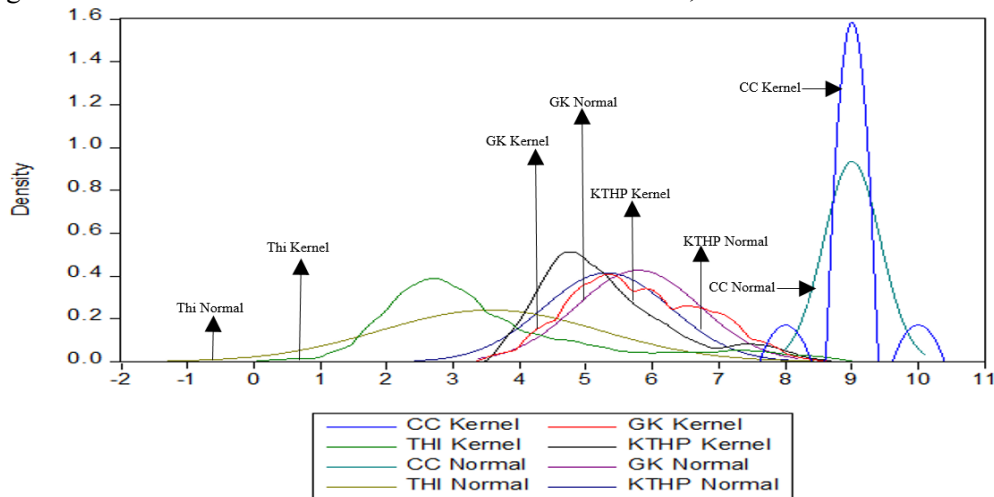

Figure 5. *Correlation between scores*

The combined density plot and histograms illustrate the relationship between various score components: attendance (CC), midterm (GK), final exam (THI), and final course score (KTHP).

The attendance scores are highly concentrated at the higher end, with a mean of 9.0 and very low variation (standard deviation = 0.43), indicating consistently good attendance among students. In contrast, the final exam scores show the lowest mean (3.56) with a wide spread (standard deviation = 1.65) and significant deviation from normality (p = 0.0008), suggesting poor exam performance overall.

Midterm scores and final course scores show moderate means (5.78 and 5.31, respectively) with standard deviations around 0.93 and 0.96, indicating average performance with acceptable variation. Among these, final course scores show slight right skewness (1.13) and also deviate from normal distribution (p = 0.0058).

The histogram confirms that while attendance is uniformly high, academic performance in exams, especially in the final test, remains a challenge. This indicates that regular attendance alone is not sufficient to ensure students have mastered the course content or can effectively apply their knowledge in comprehensive assessments. High attendance may reflect students' physical presence in class, but it does not necessarily equate to active engagement or deep understanding of the material. As a result, even students who attend regularly may still struggle with linguistic demands, time pressure, or unfamiliar exam formats, which can lead to poor test performance. The visual comparison suggests that poor final exam results significantly affect the overall course scores.

The findings highlight a clear gap between students' attendance and their actual academic performance, especially in the final exam. While high attendance typically correlates with better learning outcomes [2], [3], this was not reflected in the exam results. The poor performance in final exam suggests issues related to exam difficulty, teaching effectiveness, or students' learning strategies, which is consistent with previous studies emphasizing that attendance alone does not guarantee academic success without active engagement and effective learning approaches [6], [9]. The deviation from normal distribution in both final exam and final course scores further emphasizes the uneven distribution of achievement, where a significant portion of students struggled to meet the expected learning outcomes [13].

The moderate results in the midterm assessment imply that while some understanding of the course content was achieved, it was not sustained or effectively applied in the final assessment, confirming the importance of continuous feedback and formative assessment [7], [9]. The weak performance in the final exam directly influenced the overall course scores, confirming its critical role in determining academic success [11].

The qualitative findings obtained from students' semi-structured interview session after the final exam help clarify the gap between attendance scores and actual academic performance. Although instructors maintained consistent teaching schedules and provided sufficient learning materials, 7 out of 8 students admitted they did not make effective use of learning opportunities in class. One student shared: *"I attended every class, but I usually just listened and rarely took notes or asked questions when I didn't understand."* This indicates that mere physical attendance does not guarantee active engagement or autonomous participation in the learning process.

Additionally, 5 students reported that they had not adequately prepared for the final exam. One student stated: *"I thought the final would be similar to the midterm, so I didn't review the right content. When I saw the long test, I panicked and couldn't finish it in time."* This reflects limitations in students' exam preparation strategies and time management skills, rather than any shortcomings in test design or exam guidance provided by the instructor.

Moreover, more than half of the interviewees faced difficulties in retaining and applying vocabulary - an essential skill in reading and writing tasks. A typical response was: *"I studied vocabulary but didn't really understand how to use it, so during the test I forgot everything."* These limitations point to a lack of investment in self-study and weak independent learning skills, especially in a course that requires regular accumulation and application of language knowledge.

These reflections suggest that while the teaching method and exam format were generally appropriate, certain students may have underperformed due to limited engagement, suboptimal study strategies, or overestimation of their preparedness. As such, academic support programs could benefit from placing greater emphasis on fostering learner autonomy and improving individual study skills, alongside continued instructional support.

In short, these results point to potential misalignment between teaching methods, assessment design, and student learning processes. The significant skewness and kurtosis in exam scores and final course scores suggest that teaching interventions and assessment adjustments are necessary to support lower-performing students and enhance learning outcomes [13], [16].

4. Conclusion

This study concludes that despite high attendance rates, student performance in key assessments, particularly the final exam, remains low. The findings indicate that attendance alone is not a sufficient predictor of academic success. The final exam, being the most challenging component, significantly impacts the overall course scores. Therefore, it is essential to review the assessment design, improve instructional approaches, and provide additional academic support to students.

Based on the findings, several recommendations are proposed to improve students' learning outcomes, particularly in vocabulary acquisition and exam performance. Firstly, it is essential to review and adjust the exam design to ensure that the content and difficulty level align with the learning objectives and students' capabilities. Secondly, lecturers should adopt more interactive and student-centered teaching methods, such as active learning, problem-solving tasks, and formative assessments, to enhance engagement and understanding. Additionally, providing extra academic support through tutorials, review sessions, or remedial classes before the final exam can help students consolidate their knowledge and improve performance. It is also recommended to integrate cognitive-based strategies, including mind mapping, categorization, and metaphorical thinking, into teaching practices to support vocabulary retention and deeper comprehension. Finally, further research should be conducted to evaluate the effectiveness of these interventions over time and across different student groups, ensuring continuous improvement in teaching and assessment practices.

REFERENCES

[1] W. Zou, X. Kong, and J. Lee, "Assessment for learning in higher education: A systematic review," *Assessment & Evaluation in Higher Education*, vol. 46, no. 3, pp. 398-418, 2021, doi: 10.1080/02602938.2020.1799703.

[2] T. H. Nguyen and Q. N. Pham, "Revisiting the relationship between class attendance and academic achievement in Vietnamese higher education," *Journal of Language and Education*, vol. 7, no. 3, pp. 56-67, 2021, doi: 10.17323/jle.2021.11392.

[3] N. Al-Shammari, "The impact of attendance on academic performance in higher education," *Education and Training*, vol. 63, no. 4, pp. 567-580, 2021, doi: 10.1108/ET-01-2020-0021.

[4] M. Credé, S. G. Roch, and U. M. Kieszczynka, "Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics," *Review of Educational Research*, vol. 80, no. 2, pp. 272-295, 2010, doi: 10.3102/0034654310362998.

[5] E. Hovdhaugen, "Do dropout students continue to progress after leaving university?" *Research in Post-Compulsory Education*, vol. 14, no. 1, pp. 71-85, 2009, doi: 10.1080/13596740902736513.

[6] L. H. Tran and M. T. Duong, "Engagement and learning outcomes: The mediating role of active participation in Vietnamese EFL classrooms," *Journal of Asia TEFL*, vol. 20, no. 1, pp. 123-140, 2023, doi: 10.18823/asiatefl.2023.20.1.9.123.

[7] P. Black and D. Wiliam, "Assessment and classroom learning," *Assessment in Education: Principles, Policy & Practice*, vol. 5, no. 1, pp. 7-74, 1998, doi: 10.1080/0969595980050102.

[8] D. Nicol and D. Macfarlane-Dick, "Formative assessment and self-regulated learning: A model and seven principles of good feedback practice," *Studies in Higher Education*, vol. 31, no. 2, pp. 199-218, 2006, doi: 10.1080/03075070600572090.

[9] T. T. Le and H. T. Nguyen, "The role of formative assessment in promoting self-regulated learning among Vietnamese EFL learners," *Asia-Pacific Education Researcher*, vol. 31, no. 2, pp. 215-228, 2022, doi: 10.1007/s40299-021-00610-4.

[10] D. Putwain, "Test anxiety and GCSE performance: The effect of gender and socio-economic background," *Educational Psychology in Practice*, vol. 24, no. 4, pp. 319-334, 2008, doi: 10.1080/02667360802488765.

[11] T. H. Phan, "Factors affecting Vietnamese EFL students' performance in final examinations: A study at a public university," *VNU Journal of Foreign Studies*, vol. 37, no. 2, pp. 156-169, 2021, doi: 10.25073/2525-2445/vnufs.4676.

[12] I. S. P. Nation, *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press, 2001.

[13] T. M. Nguyen and P. T. Vu, "Challenges of English language learning for rural students in Vietnam: A case study," *International Journal of Educational Research*, vol. 108, 2021, Art. no. 101772, doi: 10.1016/j.ijer.2021.101772.

[14] G. Guest, A. Bunce, and L. Johnson, "How many interviews are enough? An experiment with data saturation and variability," *Field Methods*, vol. 18, no. 1, pp. 59-82, 2006, doi: 10.1177/1525822X05279903.

[15] B. Marshall, P. Cardon, A. Poddar, and R. Fontenot, "Does sample size matter in qualitative research?: A review of qualitative interviews in IS research," *Journal of Computer Information Systems*, vol. 54, no. 1, pp. 11-22, 2013, doi: 10.1080/08874417.2013.11645667.

[16] L. H. Tran, P. T. Nguyen, and M. T. Duong, "Factors influencing English language test performance in Vietnamese tertiary education," *Vietnam Journal of Education*, vol. 5, no. 2, pp. 45-56, 2020.