ASI Asia Social Issues
ASIA SOCIAL ISSUES 2026; 19(2): 281745
https://doi.org/10.48048/asi.2026.281745
DJMP Center for Digital Journal Management & Multidisciplinary Academic Platform
RESEARCH ARTICLE

Enhancing Students' Performance on the Test of English Communication in the Workplace (TEC-W) at Saengtham College, Thailand

Michael Bistis[1,*], Theresia Astanti Rorik Wahyudhanti[2] and Saranyu Pongprasertsin[2]

[1]*Faculty of Humanities, Saengtham College, Samphran, Nakhon Pathom73110, Thailand*
[2]*Faculty of Education, Saengtham College, Samphran, Nakhon Pathom 73110, Thailand*

([*]Corresponding author's email: bistiscj@gmail.com)

Received: 16 February 2025, Revised: 19 June 2025 Accepted: 27 June 2025, Published: 25 July 2025

Abstract

The study explored the factors influencing students' performance on the TEC-W, examined their perceptions of the factors, and recommended enhancement strategies. The research utilized a mixed-methods design involving 52 third- and fourth-year Philosophy students at Saengtham College. After synthesizing relevant literature, the study identified five factors affecting TEC-W performance: student motivation and attitude, teaching, learning materials and activities in class, outside-classroom preparation, and TEC-W testing. A survey questionnaire was administered to scrutinize the participants' perceptions regarding these factors, and the data was analyzed using descriptive statistics. The findings revealed high satisfaction with teaching ($\bar{x}$ = 3.72) and learning materials and activities in class ($\bar{x}$ = 3.60), while student motivation and attitude ($\bar{x}$ = 3.33), outside-classroom preparation ($\bar{x}$ = 3.25), and student familiarization with the TEC-W testing ($\bar{x}$ = 3.12) received moderate average scores. A focus group discussion (FGD) with 20 students was conducted to gain insights on improving TEC-W performance. The study recommends increasing student motivation and confidence in learning English, enhancing teaching quality to align with TEC-W requirements, improving learning materials and classroom resources, encouraging outside-classroom preparation by providing resources for independent study and familiarizing students with TEC-W testing through mock tests to reduce anxiety and improve testing skills.

Keywords: TEC-W, Saengtham College, NIETS, Student motivation, Standardized test

Introduction

The Thai government has implemented educational reforms aimed at improving university students' English communication skills in response to increasing demands for globally competent graduates. Among the initiatives is a national exit policy that requires undergraduate students to achieve a B2 level of English proficiency as defined by the Common European Framework of Reference for Languages (CEFR). This policy was fully enforced in 2020 (Sae-Ong & Mohamed Ismail, 2021). The B2 level, classified as independent user, emphasizes the ability to communicate fluently within one's field of specialization and present as well as critique arguments on current issues (Namfah, 2022). This policy signifies a shift in pedagogy from traditional grammar-based instruction to the development of communicative competence (Sae-Ong & Mohamed Ismail, 2021).

In response to the national mandate, Saengtham College, a multicultural religious institution of higher education, has proactively integrated CEFR-aligned assessments into its academic curriculum. Since 2023, third- and fourth-year Philosophy students have been required to take the Test of English Communication in the Workplace (TEC-W). TEC-W is Thailand's national English proficiency test, developed by the National Institute of Educational Testing Service (NIETS) and aligned with CEFR standards. This initiative was formalized through a Memorandum of Understanding (MOU) between NIETS and Saengtham College in 2023. The agreement outlines Saengtham College's commitment to enhancing English proficiency through

the administration of TEC-W, utilizing test results for continuous improvement, and actively promoting test participation among students and staff (NIETS, 2023). Through this initiative, the college not only responds to national education policy but also demonstrates its dedication to equipping students—some of whom are preparing for international mission work—with the communicative competence required in both academic and professional contexts.

However, the recent TEC-W results of the third- and fourth-year Philosophy students have highlighted a significant discrepancy between the anticipated B2 proficiency level and the students' actual performance. The results indicate significant challenges in areas such as curriculum implementation, student preparedness, and institutional capacity, all of which are necessary to achieve policy objectives (Saengtham College, 2024). One possible contributing factor is the limited awareness and understanding of the CEFR among students, as noted by Namfah (2022). This lack of familiarity may hinder students' ability to engage effectively with CEFR-based assessments. Such a gap certainly requires urgent attention, particularly given the high-stakes nature of the B2 exit requirement.

Success in standardized assessments is influenced by various factors. Recognizing and addressing these factors is essential for institutions aiming to promote equitable academic success and adequately prepare students for language proficiency tests and other academic challenges (Al-Tameemi, et al., 2023). This study, therefore, aims to investigate factors that impact students' performance on the TEC-W at Saengtham College. Specifically, it seeks to address the following research questions: (1) What factors promote students' success on the TEC-W? (2) How do students perceive the existing factors? (3) What interventions can be developed to improve test outcomes?

Addressing these questions is significant for several reasons. First, it will contribute to a deeper understanding of the systemic and individual factors to CEFR-aligned English language achievement in Thai higher education. This study will also inform the development of evidence-based strategies to enhance instructional quality, curriculum alignment, and student support mechanisms, thereby contributing to the broader goals of educational equity and effective language policy. Finally, while several studies have examined English language proficiency at the national level, there is a notable lack of empirical research investigating the specific factors that lead to students' underperformance on CEFR-aligned TEC-W tests in institutional contexts, such as Saengtham College.

Research objectives

This study aims to enhance the performance of Saengtham College students in the TEC-W by examining the factors that influence their outcomes and evaluating their related practices. The study has three main objectives. First, it aims to explore the factors that affect students' performance on the TEC-W. Second, it examines the students' perceptions of their practices regarding the identified factors. Third, it proposes recommendations for enhancing their performance on the TEC-W.

The research addresses the following research questions: What factors affect students' performance on the TEC-W? How do students perceive these factors? What recommendations can be made to improve their performance on the TEC-W?

Literature review

This study investigates the factors affecting Saengtham College students' performance on the TEC-W, situating the analysis within relevant theoretical frameworks. The literature review comprises two major parts: an overview of the TEC-W and theories pertinent to factors affecting achievement on standardized tests.

An overview of the Test of English Communication in the Workplace (TEC-W)

The overview contextualizes the TEC-W within the framework of national language policy and assessment standards. It provides a foundation for a comprehensive understanding of the test's purpose, significance, and design.

In 2014, Thailand's Ministry of Education (MOE) officially adopted the CEFR to reform learning and teaching English nationwide. Since then, there has been a rising need to recognize the level of English proficiency and the description of CEFR characteristics (Charttrakul & Damnet, 2021). All aspects of the English language curriculum reform proposed by the MOE were based on the CEFR Framework (Wataksorn, 2021).

In 2018, the NIETS developed the TEC-W, according to theoretical assumptions consistent with the context of Thailand. The TEC-W is designed to enhance English skills for work-related communication and to provide results that can inform guidelines and policies for improving English communication skills in professional contexts (Wudthayagorn & Sawaddikomon, 2023). The TEC-W test is based on the CEFR framework and includes a cut-off score to compare performance with CEFR levels. NIETS established this standard by conducting research to set passing criteria and ensure the test's reliability (Wudthayagorn & Sawaddikomon, 2023).

The TEC-W is considered equivalent to international English tests such as the Test of English for International Communication (TOEIC) but is offered at a lower cost, making it more accessible to students, employees, and individuals seeking to demonstrate their English proficiency. The test is particularly beneficial for job applications, further education, and career advancement. Studies on concurrent validity revealed a high correlation between TEC-W and TOEIC scores ($p = 0.938$), underscoring the test's reliability and alignment with international standards (NIETS, 2024).

Previous studies on CEFR and TOEIC served as primary references for developing the TEC-W since the test closely follows CEFR's structure while maintaining similarities with TOEIC in its focus on workplace communication (Wudthayagorn & Sawaddikomon, 2023). The equivalency of TEC-W scores with CEFR levels is summarized in the following table.

Table 1 CEFR and TEC-W equivalency

TEC-W score	CEFR levels	User category	Description
85-100	B2	A High Intermediate user	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization.
60-84	B1	An Intermediate User	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc.
<60	Below B1	Below Intermediate user	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment).

Source: Official website of NIETS, https://tecw.niets.or.th/

The official website of the NIETS states that if a test taker scores 100 or the highest level required, he or she is considered to have the C1 or C2 level (NIETS, 2024). It also points out that due to practicality, the TEC-W exam maintains an appropriate number of questions and sufficient time for testing and checking (Bachman & Palmer, 1996). It evaluates four essential English proficiency skills, grouped into two main categories: receptive skills (listening, reading) and communication skills (speaking, writing). It follows a four-choice format, ensuring an effective assessment for all test takers. Table 2 presents the details of the TEC-W exam format.

Theories related to factors affecting achievement on standardized tests

Satria and Zahraa (2018) identify two primary influences on TOEIC performance: internal and external factors. Internal factors encompass physiological health and psychological elements, including interest, attitude, intelligence, motivation, self-confidence, and self-esteem. External factors are categorized into social influences, such as support from family and peers, and non-social influences, which include institutional resources and test conditions. This classification emphasizes the complex interaction between a learner's internal characteristics and their external environment,

both of which play a significant role in influencing test performance.

Marginingsih and Makmun (2020) support this framework by identifying both intrinsic motivators, such as interest and motivation, and extrinsic factors, including school environment, as significant determinants of TOEIC outcomes. Their findings emphasize the multidimensional nature of language assessment performance.

To structure the discussion of key insights, this literature review draws on several theoretical frameworks. Attitude/Motivation Theory offers a lens through which to understand how learners' mindsets and motivations impact their language acquisition processes. Self-Efficacy Theory highlights the role of learners' beliefs in their own capabilities, emphasizing how confidence can influence performance outcomes. The Theory of Language Learning further expands this perspective by considering both internal cognitive processes and external environmental factors that affect language development. Finally, the Washback Effect Theory sheds light on the ways in which assessment practices can shape both teaching strategies and student learning behaviors.

Through synthesizing these theories, this literature review establishes a comprehensive conceptual framework. It serves as a basis for investigating the perceptions of Saengtham College students regarding how internal and external factors impact their TEC-W performance.

Table 2 TEC-W exam format

Skills	Number of questions	Examination time
Speaking	25 items (Questions 1-25)	30 minutes
Listening	25 items (Questions 26-50)	30 minutes
Reading	25 items (Questions 51-75)	30 minutes
Writing	25 items (Questions 76-100)	30 minutes

Source: Official website of NIETS, https://www.niets.or.th/en/catalog/view/4051

Motivation theory

Brown states that motivation is an internal state or condition characterized by needs, impulses, or desires that initiate, direct, and sustain a learner's behavior toward achieving a specific performance (Brown, 1994). Motivation can be viewed from both learner and language learning aspects. By utilizing motivation theories, the researcher has developed interventions aimed at enhancing student engagement, resilience, and ultimately, academic proficiency.

Intrinsic and extrinsic motivation

Concerning learner aspects, self-determination theory explains that motivation can be intrinsic or extrinsic. Intrinsic motivation refers to a learner's desire to learn a foreign language for deeply personal reasons, such as feelings of competence and self-determination. This personal connection to the learning process keeps learners engaged and committed to their language-learning journey. Intrinsic motivation is a key factor in developing English skills (listening, speaking, reading, and writing) and achieving intellectual growth and personal satisfaction. Extrinsic motivation refers to a learner's desire to learn a foreign language in expectation of external rewards such as money, prizes, grades, or positive feedback from parents, peers, or teachers (Deci et al., 1991). Extrinsic motivation also pertains to fulfilling academic requirements, and educational advancement. The research suggests a strong correlation between higher motivation levels in better-performing college students and their academic success. Additionally, intrinsic motivation plays a vital role in fostering personal satisfaction and engagement, both of which are essential for effective language acquisition and overall academic achievement (Satria & Zahraa, 2018).

Gardner's attitude/motivation test battery

According to Gardner (2004), achieving success in language learning requires students to have a positive

attitude and strong motivation. In this research, Gardner's Attitude/Motivation Test Battery (AMTB) is modified to formulate the survey questionnaire items concerning students' motivation and attitude. In line with this theory, the items are designed to measure the intensity of a student's motivation to learn the language in terms of teaching and classroom learning practices. A high score represents a student's self-report of a high degree of effort being spent in acquiring the language.

Self-efficacy theory

Academic self-efficacy is the ability of students to solve problems during learning, along with their predictions of their ability level and confidence in their learning capacity (Bandura, 1977). Schunk defines self-efficacy as the level of confidence a learner has in their ability to complete learning tasks (Schunk, 1991).

Research has consistently demonstrated that higher self-efficacy is associated with better academic performance, as it significantly influences students' motivation and persistence in self-regulated learning tasks. Self-regulated learning allows students to take control of their education. This includes setting goals, tracking their progress, and reflecting on their learning. This highlights the significance of self-efficacy in achieving academic success. By fostering self-efficacy, educational experiences can be enhanced, leading to better student learning outcomes (Kathryn, 2023).

Language learning theory

This theory emphasizes that understanding a student's attitude toward learning English requires attention to how a second language is acquired. External and internal factors also significantly influence language test performance (Leedy & Ormrod, 2020). To better understand the various levels of English proficiency among non-native English learners at college, factors related to English learning, such as attitudes and motivation, along with motivational variables pertinent to these proficiency levels, are studied. Language limitations affect understanding, self-expression, and academic success of the students.

Washback effect

Washback has been defined as an effect of assessment on teaching and learning which may be negative or positive (Green, 2007). As Cheng (1997) suggested, washback is a complex phenomenon resulting from the interaction of various intervening variables, including tests, test-related teaching, learning, and stakeholders' perspectives. Washback is an assessment that influences the curriculum and teaching methods. It emphasizes the bidirectional relationship between assessment and teaching.

Washback can be categorized into different dimensions. Positive washback occurs when a test encourages effective teaching practices and enhances student learning. For example, a well-designed test may motivate teachers to adopt innovative instructional strategies that align with the test objectives (Cheng, 1997). Negative washback happens when testing leads to detrimental teaching practices, such as "teaching to the test." In this scenario, educators focus narrowly on test content at the expense of broader learning objectives, resulting in a superficial understanding of the subject matter (Athiworakun & Adunyarittigun, 2022). Direct washback refers to the immediate effects of a test on classroom practices, while indirect washback encompasses broader influences, such as changes in curriculum or educational policy arising from test outcomes.

Methodology

This study employed a mixed-methods research design to address its objectives. It began with a qualitative phase, wherein academic literature was reviewed to investigate the factors influencing students' performance on the TEC-W. Thematic analysis was conducted following a systematic process that included data familiarization, identification of significant statements and keywords, code generation, theme development, and conceptual interpretation of the relationships among keywords, codes, and themes (Naeem et al., 2023).

Informed by the qualitative findings, the study then incorporated a quantitative phase. Descriptive statistics – including frequency percentage, mean ($\bar{x}$), and standard deviation (SD) – was used to examine students' practices concerning the factors identified in the qualitative analysis. A questionnaire, developed based on the results of the initial phase, served as the primary instrument for data collection in the quantitative component.

Subsequent to this quantitative method design, a qualitative approach was conducted through focus group discussions (FGD) to gather data from research participants. FGD helped to corroborate the quantitative findings and provided deeper insights into the students' perceptions of their practices regarding the factors affecting their performance on TEC-W.

Combining qualitative and quantitative methods provided a comprehensive understanding of the factors influencing students' performance on TEC-W. This helped the research offer insights and recommendations for meaningful enhancements in student success in TEC-W.

Research participants

The study used the purposive sampling method to select the research participants to examine students' perceptions of their practices regarding the factors affecting the TEC-W performance (Patton, 2002). The participants consisted of 52 students of the Faculty of Philosophy of Saengtham College, who agreed to respond to the survey questionnaire distributed to them. They were provided with enough time to answer questions in the questionnaire.

The participants consisted of two groups: Philosophy Year 3 and Philosophy Year 4. Philosophy Year 3 comprised 24 individuals, representing 46.2% of the sample, while Philosophy Year 4 included 28 individuals, accounting for 53.8%. The participants from Philosophy Year 3 took the TEC-W test organized by NIETS once in 2024, while the ones from Philosophy Year 4 took it twice in 2023 and 2024.

The participants belonged to two religious groups: the diocese and the congregation. The majority, 33 participants, belonged to 10 Catholic dioceses in Thailand, representing 63.5%. In contrast, 19 participants, accounting for 36.5%, were part of seven religious congregations.

To further understand participants' perceptions of their practices related to the identified factors, the study conducted FGD with 20 students selected through purposive sampling. This group included five top-performing and five average-performing students from both groups, Philosophy Year 3 and Year 4, based on their 2024 TEC-W test results.

Research instruments

In drafting the questionnaire, the researcher referenced the results of a literature review focused on the factors affecting students' performance on the TEC-W.

The survey questionnaire consisted of two parts. Part 1 gathered students' personal details, while Part 2 included a set of statements regarding TEC-W class preparation and testing. The TEC-W class preparation addressed factors such as student motivation and attitude, teaching methods, learning materials and activities in class, and outside-classroom preparation. Part 2 employed a five-point Likert rating scale, with the following classifications: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Respondents were instructed to select the point on the scale that best represented their level of agreement with each statement in the questionnaire. The responses to the five-point Likert scale questionnaire were interpreted based on Norman's (2010) interpretation of mean scores, as depicted in Table 3 below.

Table 3 Interpretation of mean

Likert Scale	Interval	Description	Interpretation
1	1.00-1.49	Strongly disagree	Very low
2	1.50-2.49	Disagree	Low
3	2.50-3.49	Neutral	Moderate
4	3.50-4.49	Agree	High
5	4.50-5.00	Strongly agree	Very high

Additionally, FGD was conducted as another research instrument. This discussion aimed to gain deeper insights and perceptions about improving TEC-W performance. The questions for the discussion were

based on the findings from the survey questionnaire, as well as participants' expectations and suggestions for enhancing performance on TEC-W tests.

Validity of the instrument

To ensure its validity, the researcher distributed the questionnaire to five experts having their expertise in English language teaching, curriculum and research methodology, or English language standardized testing. The experts held Master's or Doctoral degrees with more than ten years of experience in their relevant fields of study.

After reviewing the process of literature analysis and the list of statements in the questionnaire, the experts needed to evaluate the questionnaire's validity using the index of item-objective congruence (IOC). This process involved the experts rating each questionnaire statement, ranging from -1 to +1, aiming to provide valuable insights into the questionnaire's validity. The questionnaire was modified based on the feedback on the evaluation.

The validated questionnaire underwent a pilot study involving 30 students from the faculty of Theology and Christian Studies who had taken the TEC-W test in September 2024. The students had to complete the questionnaire, and the findings of the pilot study were used to validate the reliability of the research instrument.

Reliability of the instrument

Reliability refers to the internal consistency of a study. A construct is considered reliable if its Alpha (α) value equals or exceeds 0.70 (George & Mallery, 2003). The study evaluated internal consistency reliability using Cronbach's Alpha (α). The results of the reliability of the questionnaire used in the pilot study indicated that the student motivation and attitude scale, which consisted of 20 items, had an α value of 0.859. The teaching scale, with 14 items, showed an α value of 0.892. The learning materials and activities in class scale, containing 4 items, had an α value of 0.749. The outside-classroom preparation scale, with 4 items, resulted in an α value of 0.763. Lastly, the TEC-W testing scale, containing 19 items, showed an α value of 0.869. Thus, the reliability of the survey questionnaire was considered to be good and acceptable. A summary of the reliability results is presented in Table 4.

Table 4 Internal consistency reliability value (α)

Variables	No. of items	Alpha (α)
Student motivation and attitude	20	0.859
Teaching	14	0.892
Learning materials and activities in class	4	0.749
Outside-classroom preparation	4	0.763
TEC-W testing	19	0.869

Data collection and analysis

This study reviewed various published documents about standardized testing, student learning motivation, language teaching learning, language learning material development, and self-efficacy. The related literature was analyzed and synthesized to determine the factors affecting students' performance on the TEC-W.

Data collection from the survey questionnaire was conducted in early November 2024. Printed forms of the questionnaire were distributed to and completed by 52 respondents. They selected the point on the scale that best represented their level of agreement with each statement in the questionnaire. The data collected from this questionnaire were analyzed using IBM SPSS (Version 25) to determine descriptive statistics including percentage (%), mean ($\bar{x}$) values of the variables, and standard deviation (*SD*). The $\bar{x}$ values were used to calculate the average scores of participants' perceptions on the factors affecting TEC-W performance and the SD scores were identified to analyze the dispersion or variation of data points in a data series relative to the $\bar{x}$ values. The $\bar{x}$ values were interpreted using Norman's interpretation of $\bar{x}$ scores (Norman, 2010).

Subsequent to the questionnaire data collection and analysis, FGD with 20 participants was conducted in late November 2024. The responses to the questions were analyzed using content analysis.

Research findings and discussion

This section addresses three main aspects. First, it presents the findings on factors influencing students' performance on the TEC-W. Second, it reveals students' perceptions regarding these factors. Lastly, it discusses ways to enhance student performance on the TEC-W, offering recommendations to improve motivation, teaching quality, resource availability, self-study habits, and familiarity with the TEC-W test. These insights provide a comprehensive understanding of the elements contributing to student success in the TEC-W test.

Factors affecting students' performance on the TEC-W

The literature review affirms that students need a strong motivation and positive attitude to achieve language learning. Gardner defines motivation as "the combination of effort plus the desire to achieve the goal of learning the language plus favorable attitudes toward learning the language" (Gardner, 1985). Motivation positively influences students' study strategy and academic performance, including language testing and well-being in education domains (Kusurkar et al., 2013). In order to achieve the prescribed passing grade level, the students' competence and self-determination level have to be both intrinsic and extrinsic, supported by the other elements of learning (Marginingsih & Makmun, 2020).

The effectiveness of the standardized test must align with the curriculum and academic structure. Further research highlights the influence of teaching methods and classroom resources on test achievement. Teachers frequently modify their instructional methods and curriculum materials to align with the specific demands of standardized assessments, particularly when students are engaged in exam preparation (Alqahtani, 2021). The resources available in classroom learning strongly influence the students' language learning process and achievement. Teaching methods play a crucial role in student learning by providing adequate materials to master reading, writing, speaking, and listening skills and fostering a positive and supportive classroom environment. A sufficient quantity of relevant learning materials and exercises to practice will yield desirable results (Benzerroug, 2021).

Another study has also identified individual factors, such as test-takers' familiarity with the testing format and the nature of the test tasks, as well as the time spent studying both inside and outside the classroom, as important determinants of language test performance (Islam et al., 2025). In addition to these factors, recent research has highlighted the crucial role of students' in-class willingness to communicate in the target language. Students' aptitude and learning strategies, as well as their exposure to the target language, have also been shown to influence their language test performance (Islam et al., 2025; Marginingsih & Makmun, 2020).

In summary, various factors shape how students perform on standardized language tests. A key element is motivation—students need both internal motivation to achieve and external support and encouragement to succeed (Marginingsih & Makmun, 2020). Additionally, standardized tests designed to align with classroom learning are more effective. As noted by Benzerroug (2021), effective teaching methods and relevant resources in the classroom are essential for helping students master important language skills. On a personal level, individual factors such as familiarity with test formats, specific tasks they will encounter, the amount of time they dedicate to studying, and their willingness to communicate in the target language significantly impact their performance (Islam et al., 2025; Marginingsih & Makmun, 2020). Moreover, a student's learning strategies and exposure to the language also play important roles in determining their success on the tests (Marginingsih & Makmun, 2020).

Students' perceptions of the factors affecting students' performance on the TEC-W

In order to examine the students' practices regarding the five factors affecting their performance on the TEC-W, the participants completed the questionnaire distributed to them. The study investigated the perceptions of 52 students regarding their practices on the five factors: student motivation and attitude, teaching, learning materials and activities in class, outside-classroom preparation, and TEC-W testing.

Table 5 Students' perceptions of the factors affecting their performance on the TEC-W

Factors affecting performance on the TEC-W	N	$\bar{x}$	SD	Interpretation
Student motivation and attitude	52	3.3	0.41	Moderate
Teaching	52	3.7	0.50	High
Learning materials and activities in class	52	3.6	0.62	High
Outside-classroom preparation	52	3.3	0.60	Moderate
TEC-W testing	52	3.1	0.52	Moderate

Table 6 Results of student motivation and attitude

	N = 52	$\bar{x}$	SD	$\bar{x}$ Interpretation
Student motivation and attitude				
1	English language learning is an important part of your college studies	4.23	0.783	High
2	you enjoy learning English because it is interesting and essential for your future	3.81	0.864	High
3	you are well prepared to attend the TEC-W class	3.19	0.715	Low
4	you actively participate in English classes because you enjoy doing so, not because your teacher forces you	3.42	0.801	High
5	you can improve your TEC-W performance by learning English at this college	3.42	0.825	High
6	you feel confident when you communicate in English in class	3.19	0.930	Low
7	you can do your English assignments even though there is no encouragement from other people	3.44	0.826	High
8	you make your own plans and time management to study English regularly so as to attain English success by yourself rather than asking for help from other people	3.25	0.883	Low
9	you like to do English exercises to obtain more knowledge and skills that are not included in the lessons taught in the regular class	3.10	0.869	Low
10	preparing for TEC-W helps you improve your English proficiency	3.62	0.745	High
11	you have sufficient knowledge to understand the TEC-W lessons	2.96	0.907	Low
12	if you have doubts about TEC-W contents, you prefer to find out the answers without asking for help from other people	3.06	0.978	Low
13	you enjoy doing challenging TEC-W exercises assigned by your teacher	3.35	0.711	High
14	learning English in class helps you to pass TEC-W exam	3.27	0.795	Low
15	you are motivated to get the required level/grade (B2 or C1) of TEC-W	3.50	1.129	High
16	you can easily achieve the required level/grade (B2 or C1) of TEC-W	2.60	0.913	Low
17	you are eager to do the TEC-W-related exercises by yourself	2.94	0.639	Low
18	you make an effort to create your own TEC-W learning strategy	3.19	0.658	Low
19	you make an effort to understand TEC-W lessons to get better results in TEC-W	3.56	0.752	High
20	achievements, satisfaction, and appreciation gained from completing TEC-W assignments inspire you to study English more	3.48	0.727	High
Average score		**3.33**	**0.405**	**Moderate**

The purpose of examining students' perceptions in this study is to gain a deeper understanding of how learners engage with the key factors that may influence their performance on the TEC-W. Capturing students' perceptions provides valuable insights that extend beyond what can be inferred from test scores alone. This approach allows for a more nuanced interpretation of their learning behaviors and the challenges they encounter. In turn, such insights can inform the development of more effective pedagogical strategies and curriculum design by identifying areas where students may require additional guidance or support. Ultimately, the study considers student perception as a critical lens through which to refine instructional practices and address learner needs in preparation for high-stakes language assessments.

The $\bar{x}$ and *SD* scores of the perceptions are presented in Table 5 below. The $\bar{x}$ values were interpreted using Norman's interpretation of $\bar{x}$ scores (Norman, 2010).

Student motivation and attitude

The data analysis provided some valuable insights into how students perceived learning English and preparing for the TEC-W exam. Overall, students had a $\bar{x}$ score of 3.33 across the 20 survey items, with a *SD* score of 0.405, showing some variety in their responses. Scores above the average were seen as positive or high, while those below the average were indicated low and needed improvement. The detailed breakdown of the data is presented in Table 6 below.

Many students showed a strong positive attitude toward learning English and recognized its importance for the TEC-W exam. For example, they strongly agreed that learning English was a crucial part of their college education ($\bar{x}$ = 4.23, *SD* = 0.783). This suggests they really understood its value. They also enjoyed learning English because they found it interesting and believed it would be useful in the future ($\bar{x}$ = 3.81, *SD* = 0.864). Additionally, students felt that preparing for the TEC-W helped them get better at English ($\bar{x}$ = 3.62, *SD* = 0.745). Overall, the findings indicated that students recognized how important English learning was for their academic and future goals.

However, there were also areas where students felt less confident or prepared. For instance, some students reported feeling unsure about their ability to communicate in English during class ($\bar{x}$ = 3.19, *SD* = 0.930) and felt they did not have enough knowledge to fully grasp the TEC-W lessons ($\bar{x}$ = 2.96, *SD* = 0.907). Many students also indicated they were struggling to meet the required TEC-W level/grade ($\bar{x}$ = 2.60, *SD* = 0.913) and were not particularly eager to tackle TEC-W-related exercises on their own ($\bar{x}$ = 2.94, *SD* = 0.639). These lower scores suggest that some students were facing challenges with self-directed learning and confidence, which might affect their performance on the TEC-W exam. There were also scores below average for items related to self-regulation, such as planning their study time for English ($\bar{x}$ = 3.25, *SD* = 0.883) and developing personalized strategies for learning related to the TEC-W ($\bar{x}$ = 3.19, *SD* = 0.658), pointing to a need for better self-directed learning skills.

Teaching

The findings provided valuable insights into students' perceptions of teaching factors related to the TEC-W exam. The overall $\bar{x}$ score for the 14 items was 3.72, with a standard deviation of 0.500, indicating moderate variability in students' responses. This indicates that students generally viewed the teaching methods and approaches positively, and the moderate *SD* score suggests a consistent agreement among students regarding the quality of teaching. Items with $\bar{x}$ scores higher than the overall average were interpreted as high, while those below the average were considered low.

A detailed analysis, as shown in Table 7, revealed high $\bar{x}$ scores for students' positive perceptions of teacher preparedness and the learning environment. Students strongly agreed their teacher was well-prepared for TEC-W teaching ($\bar{x}$ = 4.12, *SD* = 0.832) and that English was the primary medium of instruction ($\bar{x}$ = 4.21, *SD* = 0.871). They also felt the teacher created a conducive learning environment ($\bar{x}$ = 3.92, *SD* = 0.682) and found teaching methods relevant to TEC-W goals ($\bar{x}$ = 3.73, *SD* = 0.866). Additionally, students acknowledged improved listening skills ($\bar{x}$ = 3.94, *SD* = 0.802) and viewed the teaching as exam-oriented ($\bar{x}$ = 3.87, *SD* = 0.841), highlighting effective, supportive strategies.

However, some areas scored below the mean, indicating lower satisfaction. Students found the syllabus less relevant to their academic life ($\bar{x}$ = 3.67, *SD* = 0.706), daily life ($\bar{x}$ = 3.52, *SD* = 0.779), and their understanding of other college subjects ($\bar{x}$ = 3.50, *SD* = 0.804). The lowest mean score was recorded for the item concerning whether the vocabulary and course curriculum of TEC-W aligned with other subjects taught in the college ($\bar{x}$ = 3.13, *SD* = 0.971). This indicates a significant gap in the perceived integration of TEC-W content with the broader academic curriculum.

Table 7 Results of factors related to teaching

	N = 52	$\bar{x}$	SD	$\bar{x}$ Interpretation
Teaching				
1	your teacher is well-prepared for the TEC-W teaching	4.12	0.832	High
2	the medium of instruction used in the TEC-W class by the teacher is mostly English	4.21	0.871	High
3	the method of teaching is interesting, motivating, and engaging	3.67	0.785	Low
4	teacher creates a conducive environment for improved language learning	3.92	0.682	High
5	the teaching methods and techniques are relevant to the TEC-W methodology and skill development	3.73	0.866	High
6	the teaching methods and techniques help you to improve your reading skills	3.71	0.696	High
7	the teaching methods and techniques help you to improve your writing skills	3.37	0.886	Low
8	the teaching methods and techniques help you to improve your speaking skills	3.67	0.760	Low
9	the teaching methods and techniques help you to improve your listening skills	3.94	0.802	High
10	the syllabus and course curriculum of TEC-W are relevant to your academic life	3.67	0.706	Low
11	the syllabus and course curriculum of TEC-W are relevant to your daily life	3.52	0.779	Low
12	the syllabus and course curriculum of TEC-W help you to understand other subjects taught in the college well	3.50	0.804	Low
13	the TEC-W teaching in the class is mostly exam-oriented	3.87	0.841	High
14	the vocabulary and course curriculum of TEC-W correspond with the other subjects taught in the college	3.13	0.971	Low
Average score		**3.72**	**0.500**	**High**

Learning materials and activities in class

The $\bar{x}$ score for learning materials and activities in class is 3.60 with an *SD* of 0.615, indicating a high level of satisfaction. Items with $\bar{x}$ scores higher than the overall average were interpreted as high, while those below the average were considered low.

The slightly higher *SD* compared to teaching indicates more varied opinions on the effectiveness of these resources and activities. Table 8 shows that students generally perceived the learning materials positively, particularly regarding their alignment with the TEC-W syllabus and their practicality for independent practice. For instance, students agreed that the learning materials covered the syllabus of the TEC-W test ($\bar{x}$ = 3.69, *SD* = 0.805) and provided sufficient exercises for self-practice ($\bar{x}$ = 3.62, *SD* = 0.771). These

results suggested that students found the materials helpful for their preparation and appreciated the opportunity to reinforce their learning through practice.

However, despite these positive perceptions, students felt that the contents of the learning materials were only moderately relevant and similar to the actual TEC-W test ($\bar{x}$ = 3.54, *SD* = 0.779). This indicated a gap between the materials provided and the specific demands of the TEC-W exam, which could hinder students' ability to fully align their preparation with the test requirements. Additionally, students expressed concerns about the adequacy of classroom facilities for TEC-W preparation ($\bar{x}$ = 3.54, *SD* = 0.828). While this score was close to the overall mean, it still fell below the average, suggesting that some students felt the learning environment lacked the necessary resources or infrastructure to support adequate preparation. This finding highlighted the importance of ensuring that classrooms are well-equipped to meet students' needs, as a conducive learning environment plays a critical role in enhancing academic performance.

Table 8 Results of factors related to learning materials and activities in class

	N = 52	x̄	SD	x̄ Interpretation
Learning materials and activities in class				
1	the contents of learning materials are relevant and similar to the TEC-W test	3.54	0.779	Low
2	the learning materials cover the syllabus of the TEC-W test	3.69	0.805	High
3	the learning materials provided have sufficient exercises to practice on your own	3.62	0.771	High
4	your classroom is equipped with the necessary facilities for TEC-W preparation	3.54	0.828	Low
Average score		**3.60**	**0.615**	**High**

Outside-classroom preparation

The overall $\bar{x}$ score for outside-classroom preparation was 3.25, with an *SD* of 0.603. This suggests that students engaged in preparation outside of class to different extents, reflecting variations in their personal study habits and levels of commitment. Items with $\bar{x}$ scores higher than the overall average were interpreted as high, while those below it were considered low.

As shown in Table 9, students generally recognized the value of self-revision for improving their TEC-W performance, as evidenced by the high $\bar{x}$ score for the statement that self-revision of TEC-W lessons outside of class would enhance their results ($\bar{x}$ = 3.56, *SD* = 0.802). However, despite this understanding, they reported lower engagement in specific self-study practices. For instance, they indicated that they rarely reviewed lessons after class or conducted self-assessments to improve their independent learning ($\bar{x}$ = 3.13, *SD* = 0.817). Additionally, they felt they did not dedicate enough study hours to self-study for TEC-W preparation ($\bar{x}$ = 3.13, *SD* = 0.817). These lower scores highlight a gap between students' awareness of the importance of self-study and their actual implementation of effective study habits. Furthermore, students expressed concerns about the availability of additional study materials beyond those provided in class. They reported having limited access to external resources, such as textbooks and test banks for TEC-W preparation ($\bar{x}$ = 3.19, *SD* = 0.817). This suggests that while students are willing to engage in self-study, they feel constrained by a lack of diverse and comprehensive resources to support their efforts. This limitation may hinder their ability to fully prepare for the TEC-W exam and achieve their desired performance.

TEC-W testing

The overall $\bar{x}$ score for the 19 items was 3.12, with a *SD* score of 0.520. This reflects a moderate level of familiarization and comfort with the testing process, although there was some variation in students' experiences and perceptions.

Table 9 Results of outside-classroom preparation

	N = 52	$\bar{x}$	SD	$\bar{x}$ Interpretation
Outside-classroom preparation				
1	self-revision of the TEC-W lessons outside class will enhance your TEC-W performance	3.56	0.802	High
2	you review lessons after class and do self-assessment to improve your independent learning	3.13	0.817	Low
3	you have sufficient study hours for self-study to prepare the TEC-W test	3.13	0.817	Low
4	in addition to the TEC-W study materials provided in class, you have enough sources such as texts and test banks of TEC-W for self-study	3.19	0.817	Low
Average score		**3.25**	**0.603**	**Moderate**

Table 10 Results of TEC-W testing

	N = 52	$\bar{x}$	SD	$\bar{x}$ Interpretation
TEC-W testing				
1	you are comfortable with taking a computer-based TEC-W test	3.60	0.995	High
2	you are confident in taking the multiple-choice test	3.46	0.828	High
3	you are familiar with the structure and format of TEC-W testing	3.37	0.991	High
4	the contents and topics given in the test are relevant to the field of your study	3.13	0.864	High
5	you can easily comprehend the technical terms (business jargon, academic English) used in the TEC-W test	2.67	0.944	Low
6	you are familiar with the business terms, vocabulary, and phrases used in the TEC-W test	2.62	0.932	Low
7	you can extract the main idea, purpose, and context of the test materials even though you can't fully understand the content	3.29	0.848	High
8	you can effectively scan and skim through texts in the TEC-W test to locate specific information	3.12	0.878	High
9	you can understand the instructions and directions given in the test	3.54	0.851	High
10	you can understand the grammatical structures in the reading and writing section	2.88	0.922	Low
11	you can infer the main purpose and idea of the passage in the reading and writing section	3.25	0.764	High
12	you can easily choose the correct answer when similar words are present and easily do the error finding in the text	2.69	0.981	Low
13	you can understand long passages in the reading and writing sections	3.00	1.010	Low
14	you can manage the time to answer all the reading and writing test questions	3.60	0.934	High
15	you can manage the time to answer all the speaking and listening test questions	3.31	0.981	High

	N = 52	x̄	SD	x̄ Interpretation
16	you can understand the different accents, and pronunciations used in the speaking and listening part of the test	2.81	0.864	Low
17	you can extract key information from the listening and speaking sections of the test	3.02	0.828	Low
18	you can infer the main purpose and idea of the passage in the listening and speaking section	3.10	0.799	Low
19	you can follow the conversational speed of the speaking and listening part of the TEC-W test	2.81	0.951	Low
Average score		**3.12**	**0.520**	**Moderate**

Table 10 shows that students demonstrated significant confidence and comfort in several aspects of the TEC-W test. For instance, they felt comfortable taking a computer-based TEC-W test ($\bar{x} = 3.60$, $SD = 0.995$) and were confident in tackling multiple-choice questions ($\bar{x} = 3.46$, $SD = 0.828$). Additionally, they reported familiarity with the structure and format of the TEC-W test ($\bar{x} = 3.37$, $SD = 0.991$) and found the test instructions and directions easy to understand ($\bar{x} = 3.54$, $SD = 0.851$). These high scores suggested that students were well-acquainted with the logistical and procedural aspects of the test, which likely contributed to their overall confidence. Furthermore, students felt capable of managing their time effectively during both the reading and writing sections ($\bar{x} = 3.60$, $SD = 0.934$) and the speaking and listening sections ($\bar{x} = 3.31$, $SD = 0.981$), indicating strong time-management skills that are crucial for test success.

However, students faced significant challenges in areas requiring deeper comprehension and familiarity with specialized language. They struggled with technical terms, business jargon, and academic English ($\bar{x} = 2.67$, $SD = 0.944$), and reported limited familiarity with business vocabulary ($\bar{x} = 2.62$, $SD = 0.932$). Grammatical structures ($\bar{x} = 2.88$, $SD = 0.922$) and tasks like error-finding ($\bar{x} = 2.69$, $SD = 0.981$) also posed difficulties, highlighting a need for focused grammar and vocabulary instruction. In listening and speaking, challenges included understanding accents ($\bar{x} = 2.81$, $SD = 0.864$), following conversational speed ($\bar{x} = 2.81$, $SD = 0.951$), and extracting key information ($\bar{x} = 3.02$, $SD = 0.828$). These results suggest students need more practice with diverse materials to improve comprehension and analytical skills.

In summary, the findings revealed students' strong motivation and positive attitudes toward English learning and TEC-W preparation but highlighted challenges in self-confidence, self-regulation, and comprehension of technical language. While they valued teacher preparedness and exam-oriented teaching, gaps in syllabus relevance, classroom facilities, and independent study habits need addressing to enhance TEC-W performance.

Enhancing students' performance on the TEC-W Test

The findings of this study indicate that students' perceptions across all five examined factors influencing TEC-W performance were generally low, as reflected in both the statistical results and qualitative feedback from the FGD. These results carry implications not only for the specific instructional context but also for broader pedagogical practices.

Increasing student motivation and confidence

Many students reported feeling uncertain about their ability to communicate in English and struggled with self-directed learning. Teachers should implement strategies that foster intrinsic and extrinsic motivation to address these challenges, particularly in areas such as speaking English ($\bar{x} = 3.19$) and achieving higher proficiency levels ($\bar{x} = 2.60$). Providing structured guidance on time management, study planning, and personalized learning strategies can help students develop better self-regulation skills and build confidence in their abilities (Kathryn, 2023).

" I struggle with low self-esteem and lack motivation for English because I find it difficult to

understand and communicate." (Student 4, Philosophy year 3, FGD data).

This suggests that motivational deficits are not simply isolated to the test environment but may stem from deeper issues of language anxiety and limited self-efficacy. Therefore, interventions should prioritize building students' belief in their capacity to succeed, such as incorporating goal-setting frameworks and formative feedback (Benzerroug, 2021).

Incorporating engaging activities such as group discussions, debates, and role-playing, as well as online learning strategies like flipped learning and gamification, can significantly enhance students' motivation to learn English. These methods not only increase engagement and enjoyment but also create a more dynamic and interactive learning environment, which can positively influence performance on standardized language tests and improve proficiency (Waluyo, 2024). Furthermore, providing individualized feedback and recognizing students' achievements can promote self-determination and intrinsic motivation. Motivation is critical in enhancing academic performance and well-being, making it a key factor in achieving language learning goals (Kusurkar et al., 2013). By combining these strategies, educators can create a supportive learning environment that empowers students to overcome challenges and succeed in their English language studies.

Enhancing teaching quality

Although students rated the quality of teaching relatively high ($\bar{x} = 3.72$), their feedback suggests that this overall satisfaction does not necessarily reflect preparedness for the specific demands of the TEC-W.

"I need intensive training in business terms and vocabulary from my teacher to help me prepare myself for the TEC-W" (Student 1, Philosophy, Year 3, FGD).

This comment shows a clear gap between general instructional effectiveness and the specialized support students need—particularly in acquiring the technical language demanded by the TEC-W. The relatively low mean score for comprehension of business terminology ($\bar{x} = 2.67$) further substantiates this concern, suggesting that while teaching quality may be perceived positively overall, it remains insufficient in addressing the test's specific linguistic and contextual requirements. This aligns with the findings of a study conducted by Athiworakun and Adunyarittigun (2022), which emphasize the importance of integrating curriculum, teaching methods, learning processes, and assessment criteria into a cohesive instructional approach.

This gap suggests that current classroom approaches may benefit from a shift toward more practical and targeted strategies. Although students may find the teaching environment supportive, the current approach appears to lack the depth and practical relevance needed for effective test preparation. Instruction should therefore incorporate greater exposure to business-related vocabulary and communicative tasks that reflect real-world workplace scenarios. Techniques such as project-based learning, case study discussions, and role-play simulations can provide meaningful opportunities to practice professional English in context (Chen, 2024). These strategies not only enhance language acquisition but also foster critical thinking, adaptability, and communication skills essential for workplace success.

Importantly, these instructional adjustments go beyond test readiness. They reflect a broader educational commitment to preparing students for authentic language use in professional settings. By embedding more applied, TEC-W-aligned content into the curriculum, teachers can better support students in meeting both academic assessment goals and the communicative demands of their future careers.

Improving learning materials and classroom resources

While students expressed high satisfaction with learning materials and classroom resources ($\bar{x} = 3.60$), enhancements can increase their effectiveness. Students encountered significant difficulties with technical and business-related vocabulary, grammatical structures, and listening comprehension – skills crucial to success in the TEC-W. These challenges indicate that while materials may be adequate in structure or presentation, they may not be sufficiently aligned with the linguistic and cognitive demands of the test. For instance, comprehension of similar words and error detection scored low ($\bar{x} = 2.69$), and understanding long reading passages also received a modest rating ($\bar{x} = 3.00$). These scores highlight particular challenges in processing complex text and recognizing subtle language cues in the test.

One student captured a difficulty in listening comprehension during the FGD, stating, *"The listening skills test practice is very challenging for me. I need to practice a lot of listening skills"* (Student 7, Philosophy, Year 4, FGD). This observation aligns with the survey finding that students struggled to follow the speed and pronunciation in spoken sections ($\bar{x}$ = 2.81). Understanding spoken English— especially when it involves different accents and fast speech—is often a major challenge in English learning, particularly when students have little experience with real-life listening situations.

According to Tomlinson and Masuhara (2018), good learning materials should not only be informative but also capture students' interest and enable them to think. Such engagement helps learners remember what they learn, feel more confident, and develop the skills they need to succeed in language tests.

To improve outcomes, instructional materials must be more directly aligned with TEC-W content and test formats. This includes the integration of explicit instruction in technical and business-related vocabulary, targeted grammar practice, and intensive listening exercises that mirror the structure and pacing of actual test items. Incorporating TEC-W-style practice materials, which particularly include tasks involving error detection, inference, and discourse comprehension, can provide students with both the familiarity and the skill-building necessary for success.

Furthermore, the use of technology-enhanced resources such as mobile learning apps, interactive videos, and audio-visual input can expand students' exposure to diverse linguistic forms and improve their ability to manage varied accents, pronunciation patterns, and intonation. These findings are supported by Yusmei et al. (2022), who emphasize the role of targeted, learner-centered resources in addressing the specific gaps students encounter in language proficiency. Strengthening these materials through purposeful design and the integration of technology can meaningfully enhance students' language competence and overall test preparedness.

Encouraging outside-classroom preparation

Students showed moderate engagement in self-study ($\bar{x}$ = 3.25), indicating a need for more significant support in this area. Students expressed concerns about the inadequacy of classroom resources and the lack of diverse study materials for self-study. Ensuring that classrooms are well-equipped with necessary tools and providing access to additional resources, such as textbooks, test banks, and online platforms, could support students' independent preparation.

"*I could hardly find TEC-W study materials on any websites compared with other language tests*" (Student 5, Philosophy year 4, FGD data).

The above FGD of the student indicates that providing comprehensive test banks and additional study resources tailored for independent TEC-W preparation can help students build confidence and skills. By setting criteria for self-evaluation and hours dedicated to self-study, learners can improve their metacognitive awareness and concentrate on the specific skills and strategies needed for success in standardized language tests (Wolsey, 2024).

"*To be honest, I don't give sufficient time for self-study after the TEC-W class*" (Student 2, Philosophy year 3, FGD data).

These findings suggest that simply offering materials in class is insufficient; learners must be equipped with strategies and resources that promote sustained, independent engagement. This echoes broader findings in language learning literature emphasizing the role of self-regulation and access to open educational resources (Marginingsih & Makmun, 2020). Independent study habits and effective time management are critical for success in language tests, highlighting the importance of outside-classroom preparation (Islam et al., 2025). Encouraging structured self-study routines and offering guidance on the effective use of these resources would further enhance their readiness for the TEC-W test.

Familiarizing students with TEC-W testing

Familiarity with standardized test formats plays a crucial role in student performance, especially in high-stakes contexts like the TEC-W. While language proficiency remains important, students' ability to manage test demands— timing, structure, and task types—is equally vital. As Heni (2024) notes, regular exposure to reading, writing, speaking, and listening tasks within a test-like format can significantly improve outcomes. In this study, however, students reported feeling overwhelmed by the structure and pace of the

TEC-W. One participant shared, *"I was so nervous during the test. I didn't know how things worked. The listening section's speed was too fast and the reading content was too lengthy. That put me under a lot of pressure"* (Student 2, Philosophy, Year 4, FGD). Such a statement indicates that anxiety is caused not only by language difficulty but also by unfamiliarity with the test environment.

The quantitative data from the survey supports this concern. Students reported low confidence in dealing with business terms, vocabulary, and phrases used in the TEC-W due to their unfamiliarity with the terms ($\bar{x}$ = 2.62) and difficulty in handling the error recognition in sentences ($\bar{x}$ = 2.69). These findings highlight the need for more focused test preparation, not just content instruction. As Namfah (2022) emphasizes, integrating test-taking strategies and simulated practice into the curriculum can reduce anxiety and improve performance. Regular mock exams, time-controlled practice, and reflective feedback help students build familiarity and confidence (Alqahtani, 2021). These practices enhance learners' ability to plan, monitor, and adapt during the test. Furthermore, Alqahtani (2021) found that such preparation strengthens not only task performance but also psychological readiness. Therefore, combining language instruction with structured exposure to TEC-W conditions can better equip students to perform effectively, turning test familiarity into a tool for confidence rather than a source of anxiety.

The recommendations to enhance students' performance on the TEC-W test is illustrated in Figure 1 below.

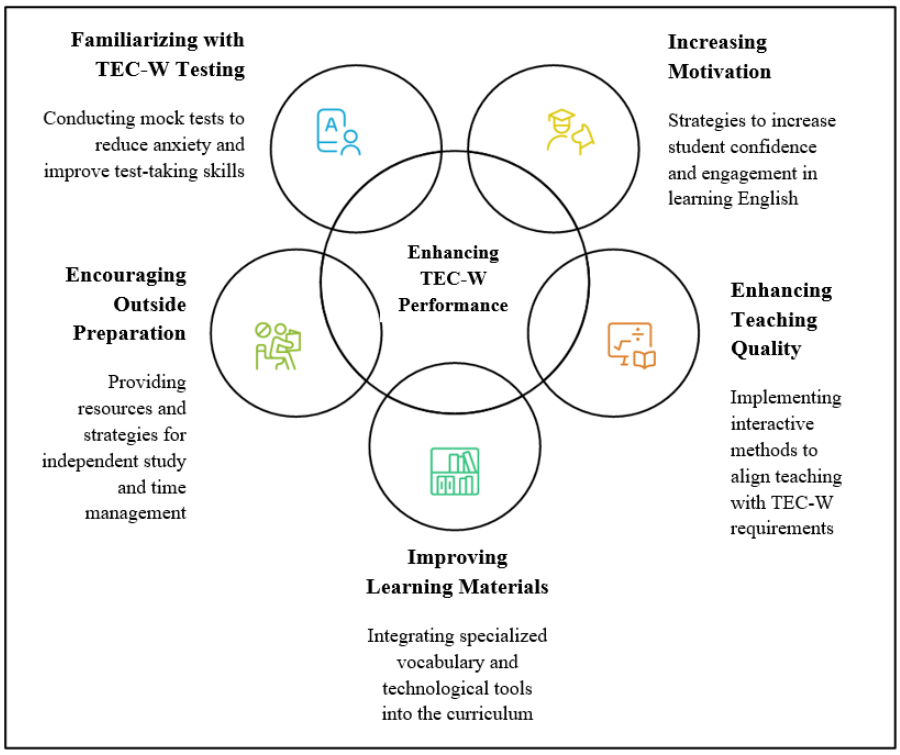

Figure 1 Recommendations to enhance students' TEC-W performance

Conclusion

The study highlights factors influencing student performance on the TEC-W, emphasizing the importance of student motivation and attitude, effective teaching, quality learning materials and in-class activities, outside-classroom preparation, and familiarity with testing formats.

Both intrinsic and extrinsic motivation and positive attitudes were identified as crucial for student success. While the overall quality of teaching received favorable feedback, there is a clear need for greater alignment with the specific requirements of TEC-W testing, particularly concerning business vocabulary and technical terminology. The effectiveness of learning

materials and in-class activities was rated moderate, indicating gaps in addressing challenging areas such as error detection, understanding long passages, and advanced listening skills. Engagement levels in self-study and outside-classroom preparation suggested a need for additional resources and improved guidance on independent learning strategies. Students also expressed a desire for more training that focuses on understanding the components of the TEC-W test, managing test anxiety, and improving time management during exams.

Addressing the areas above through innovative teaching strategies, enhanced relevant resources, and more practice opportunities will better prepare students for the TEC-W exams. These efforts will improve their language proficiency and build their confidence, leading to greater academic success in the long run.

As far as the limitations of this study are concerned, it was conducted with a specific group from a single institution, limiting the generalizability of the findings. Additionally, the reliance on self-reported data may introduce bias, as participants could respond in socially acceptable ways or inaccurately represent their true behaviors. The data collected at one point in time also prevents conclusions about cause and effect or long-term trends.

The findings of this study indicate that future research should include a more diverse group of participants from various regions and cultures to enhance applicability. Comparing students across different educational systems could reveal contextual influences and explore causal relationships. Additionally, examining how teaching strategies, such as test-specific writing techniques and scaffolded learning, impact student performance on the TEC-W could help identify effective instructional methods. Finally, future studies should investigate how factors like student anxiety, self-awareness, and motivation affect the relationship between instruction and performance, leading to improved teaching methods and preparation programs for the TEC-W.

Declaration of generative AI in scientific writing

Grammarly AI was used to improve clarity, grammar, verb tense, and APA 6th edition formatting. It was also used to rephrase text and create concise summaries. All AI-assisted changes were reviewed and approved by the authors to ensure accuracy and originality. No other AI tools were used for data collection, coding, or statistical analysis.

CRediT author statement

Michael Bistis: Conceptualization, Writing-original draft, Validation, Resources, Supervision. **Theresia Astanti Rorik Wahyudhanti**: Methodology, Formal analysis, Data curation, Writing-review and editing, Visualization. **Saranyu Pongprasertsin:** Software, Investigation.

References

Alqahtani, F. (2021). The impact of language testing washback in promoting teaching and learning processes: A theoretical review. *English Language Teaching, 14*(7), 21-26.

Al-Tameemi, R., Johnson, C., Gitay, R., Abdel-Salam, A.S., Al Hazaa, K., Ben Said, A., & Romanowski, M. (2023). Determinants of poor academic performance among undergraduate students—A systematic literature review. *International Journal of Educational Research Open, 4*, 1-13.

Athiworakun, C., & Adunyarittigun, D. (2022). Investigating washback effects on teaching: A case study of an exit examination at the higher education level. *LEARN Journal: Language Education and Acquisition Research Network, 15*(2), 776-801.

Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford, England: Oxford University Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behaviour change. *Psychological Review, 84*(2), 192-215.

Benzerroug, S. (2021). Effective language teaching and learning process in EFL classroom situation: A case study. *International Journal of Linguistics, Literature and Translation, 4*(8), 54-64.

Brown, D. H. (1994). *Principles of language learning and teaching* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall Regents.

Charttrakul, K., & Damnet, A. (2021). Role of the CEFR and English teaching in Thailand: A case study of Rajabhat University. *Advances in Language and Literary Studies, 12*(2), 82-89.

Chen, H. (2024). Innovative approaches in English language teaching: Integrating communicative methods and technology for enhanced proficiency. *In Proceedings of the 3rd International Conference on Literature, Language, and Culture Development* (pp. 214–220). New York, NY: New York University.

Cheng, L. (1997). How does washback influence teaching? Implications for Hong Kong. *Language and Education, 11*(1), 38-54.

Deci, E., Vallerand, R., & Ryan, R. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist, 26*(3-4), 326-346.

Gardner, R. (1985). *Social psychology and second language learning: The role of attitude and motivation*. London, England: British Library Cataloguing in Public Data.

Gardner, R. C. (2004). *Attitude/motivation test battery: International AMTB research project*. Retrieved from https://publish.uwo.ca/~gardner/docs/AMTBmanual.pdf

George, D., & Mallery, P. (2003). *SPSS for windows step by step: A simple guide and reference, 11.0 update* (4th eds.). Boston, MA: Allyn & Bacon.

Green, A. (2007). *IELTS washback in context: Preparation for academic writing in higher education*. Cambridge, England: Cambridge University Press.

Hanushek, A. E. (1997). Assessing the effects school resources on student performance: An update. *Educational Evaluation and Policy Analysis, 19*(2), 141-164.

Heni, H. (2024). Factors affect in IELTS test for students of STIKOM Uyelindo Kupang. *Jurnal Onoma: Pendidikan, Bahasa, Dan Sastra, 10*(4), 4578-4584.

Islam, F., Krishna, A., & Kumar, D. (2025). Factors influencing academic performance: An empirical study using predictive analytics. *Multidisciplinar (Montevideo), 3*(51), 1-7.

Kathryn, H. (2023). Self-efficacy for self-regulated learning mediates association between implicit theories of willpower and learning strategies. *Journal of Experimental Education*, 92(3), 502-512.

Kusurkar, R., Cate, T., Vos, C., Westers, P., & Croiset, G. (2013). How motivation affects academic performance: A structural equation modelling analysis. *Advances in Health Sciences Education: Theory and Practice, 18*(1), 57-69.

Leedy, P. D., & Ormrod, J. E. (2020). *Practical research: Planning and design* (12th eds.). Boston, MA: Pearson.

Marginingsih, M., & Makmun, S. (2020). Factors affecting TOEIC achievement of the first semester students of informatics engeneering. *Syntax Literate Jurnal Ilmiah Indonesia*, 5(7), 354-364.

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods, 22*, 1-18.

Namfah, N. (2022). Perception towards the CEFR-based English proficiency test: A case of the student-teacher in the teacher for local development project at one university in Thailand. *Journal of Education Burapha University, 33*(3), 16-38.

NIETS. (2023). *Test of English Communication in the Workplace*. Retrieved from https://www.niets.or.th/en/content/view/25557

NIETS. (2024). *Test of English Communication in the Workplace*. Retrieved from https://www.niets.or.th/th/content/view/26317

Norman, G. (2010). Likert scales, levels of measurement, and the "laws" of statistics. *Advances in Health Sciences Education, 15*(5), 625-632.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (4th eds.). Thousand Oaks, CA: Sage Publications.

Saengtham College. (2024). *Report on the TEC-W results for third- and fourth-year students in the Philosophy Study Program 2023–2024 at Saengtham College [Unpublished report]*. Nakhon Pathom, Thailand: Saengtham College.

Sae-Ong, U., & Mohamed Ismail, S. (2021). Mind your gap between entry English proficiency and graduation expectation. *Asean TESOL Journal, 1*(1), 1-9.

Satria, A., & Zahraa, S. A. (2018). The factors affecting TOEIC passing grades in TOEIC intensive course for third year students. *Inovish Journal, 3*(2), 221-229.

Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*(3-4), 207-231.

Tomlinson, B., & Masuhara, H. (2018). *The complete guide to the theory and practice of materials development for language teaching*. Hoboken, NJ: Wiley Blackwell.

Waluyo, B. (2024). Technology-fused English teaching and learning in higher education: From individual differences to being different individuals. *LEARN Journal: Language Education and Acquisition, 17*(2), 42-47.

Wat-aksorn, P. (2021). CEFR and English proficiency development of the Royal Thai Navy. *Royal Thai Navy Medical Journal, 48*(1), 241-248.

Wolsey, T. D. (2024). *Self-assessment in reading*. Retrieved from https://doi.org/10.1002/9781118784235.eelt0497.pub2

Wutthayakorn, J., & Sawatdigomon, K. (2023). *Development of English language Tests for Workplace Communication (TEC-W)*. Retrieved from https://tecw.niets.or.th/

Yusmei, N., Sesmiarni, Z., Maimori , R., & Albert, A. (2022). Developing English learning materials for specific purposes with culture perspective. *Jurnal Penelitian Ilmu Pendidikan Indonesia, 1*(2), 141-148.