

***Critical English Writing Skills in Thai Education:
Assessing 11th Grade Proficiency and Digital Solutions***

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Abstract

Critical English writing skills are essential for academic success and global competitiveness, yet Thai students often struggle in this area. This study aimed to assess the critical English writing skills of 11th grade Thai students, explore teaching challenges, and evaluate the potential of digital platforms in enhancing these skills. The research employed a comprehensive secondary analysis approach, examining data from national standardized tests (O-NET), international assessments (TOEFL iBT, IELTS), and academic literature spanning 2019-2023. The study encompassed all 77 Thai provinces, ensuring a representative national sample. Findings revealed that 80% of 11th grade Thai students possess only basic to intermediate writing skills (CEFR levels A1-B1), with significant disparities across regions and school types. Analysis identified key challenges in teaching critical writing, including large class sizes, limited individual feedback time, and insufficient focus on higher-order thinking skills. The study also uncovered a growing trend in digital tool adoption, with online writing platforms and grammar checkers being widely used, while emerging technologies like AI writing assistants show promising potential. This research contributes novel insights by providing a comprehensive, nationwide assessment of critical English writing skills in Thailand, linking proficiency levels to specific teaching challenges and technological solutions. The findings highlight the urgent need for targeted interventions to develop higher-order writing skills and suggest that strategic integration of digital platforms could significantly enhance writing instruction in the Thai educational context. These results have important implications for educational policy, teacher training programs, and the development of culturally tailored digital learning tools.

Keywords: Critical English Writing, Thai Secondary Education, Digital Learning Platforms, Writing Proficiency Assessment, Educational Technology Integration

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Introduction

Critical English writing skills have become increasingly vital for academic success and global competitiveness in the 21st century, particularly in non-English speaking countries like Thailand. However, Thai secondary school students face significant challenges in developing these essential skills, creating a concerning gap between current capabilities and the demands of higher education and international workforce requirements. This issue is particularly pronounced among 11th grade students, who stand at the crucial transition point between secondary education and higher learning. Recent standardized test results and international assessments indicate that Thai students consistently underperform in critical English writing compared to their regional counterparts, highlighting an urgent need for comprehensive investigation and intervention.

Previous research has illuminated various aspects of this challenge in the Thai educational context. Chaijaroen and colleagues (2012) revealed a fundamental weakness in Thai students' critical thinking potential, demonstrating that while basic language skills were adequately developed, higher-order thinking skills essential for critical writing showed considerable deficiencies. This finding was further substantiated by Nomnian and Arphattananon (2018), who identified systemic issues in Thai government schools affecting English language teaching effectiveness, particularly emphasizing the crucial role of strategic thinking and management leadership. The complexity of these challenges was further explored by Tongpoon-Patanasorn (2018), who found that integrated approaches combining technology with expert assessment yielded better results than single-method approaches in developing technical vocabulary and writing skills.

The teaching challenges in this context have been well-documented through various studies. Viriya and colleagues (2012) identified significant concerns regarding teaching materials and assessment methods, while Costley and Lange (2016) highlighted the negative correlation between social presence and critical thinking in asynchronous learning environments. More recent research by Marleni (2020) demonstrated the potential of technological writing features in enhancing students' writing skills, particularly when combined with traditional pedagogical approaches. This technological dimension has gained further significance with studies by Kim (2023) and Dja'far and Hamidah (2024), which revealed positive outcomes in cognitive, affective, and linguistic factors through AI-assisted instruction, while also noting the importance of maintaining a balance between technological and human feedback.

Despite this growing body of research, significant gaps remain in our understanding of critical English writing skill development among Thai secondary students. While individual studies have examined specific aspects of the problem, there lacks a comprehensive, nationwide assessment that simultaneously considers proficiency levels, teaching challenges, and technological solutions. As highlighted by Peck and Kavanagh (2024), there is a particular need for better preparation in providing writing feedback, while Yang (2022) emphasized the importance of intelligent text semantic analysis in writing correction. Furthermore, Utami and colleagues (2023) identified significant challenges in adapting technological tools to specific educational contexts and student needs, suggesting a need for more targeted research in the Thai context.

To address these gaps, this study aims to achieve three primary objectives:

- (1) to assess the current proficiency levels of critical English writing skills among 11th grade Thai students across all 77 provinces, utilizing standardized test data and international assessment metrics.
- (2) to identify and analyze the key challenges faced in teaching critical English writing skills in Thai secondary schools, considering both pedagogical and systemic factors.
- (3) to evaluate the potential of digital platforms in enhancing critical English writing instruction, examining current adoption rates, effectiveness, and future possibilities.

This research makes several significant contributions to the field of English language education in Thailand. First, it provides the first comprehensive, nationwide assessment of critical English writing skills among 11th grade students, offering detailed insights into proficiency levels across different regions and school types. Second, it establishes a clear connection between student proficiency levels and specific teaching challenges, supported by quantitative severity ratings that can inform policy priorities. Third, it offers a detailed analysis of digital platform potential in the Thai educational context, including adoption rates and effectiveness metrics for various technological tools. These contributions are particularly timely given the increasing importance of digital literacy and the growing role of technology in education. The findings provide valuable insights for educational policymakers, teacher training programs, and developers of educational technology, potentially influencing the future direction of English language education in Thailand and similar educational contexts.

Literature Review

The increasing importance of critical English writing skills in today's globalized world has become a crucial concern in the Thai educational context, particularly for secondary school students preparing for higher education and future careers. This comprehensive review examines the current state of research regarding critical English writing skills among Thai 11th grade students, focusing on proficiency levels, teaching challenges, and the potential of digital platforms in addressing these issues.

Current State of Critical English Writing Skills in Thailand

The current state of English writing proficiency among Thai secondary students presents significant challenges that require systematic attention. Chaijaroen and colleagues' (2012) foundational study revealed critical deficiencies in higher-order thinking skills, despite adequate basic language development. This finding is particularly significant as it highlights the disconnect between fundamental language acquisition and advanced writing capabilities. Building on this, Nomnian and Arphattananon (2018) provided a comprehensive analysis of systemic issues in Thai government schools, emphasizing that successful language programs require not just teaching expertise but also strategic management and stakeholder involvement. The research landscape was further enriched by Tongpoon-Patanasorn's (2018) investigation into technical vocabulary development, which demonstrated that integrated technological and expert assessment approaches yielded superior results compared to traditional single-method teaching. This integration of technology and expert assessment has proven particularly effective in developing students' writing capabilities. Wiriyakarun's (2018) subsequent research reinforced these findings, establishing a clear correlation between vocabulary knowledge and academic achievement in Thai EFL learners. The effectiveness of combined teaching approaches was further validated by Phosa's (2020) research on blended

learning methods, which demonstrated significant improvements in writing performance when traditional and digital methods were strategically integrated. These studies collectively indicate that while Thai students often possess basic language skills, the development of critical writing abilities requires a more nuanced and multi-faceted approach that combines traditional pedagogy with modern technological tools.

Teaching Challenges and Pedagogical Approaches

The challenges facing English writing instruction in Thai contexts reveal complex interconnections between pedagogical, technological, and cultural factors. Viriya and colleagues' (2012) evaluation of university-level English courses uncovered a paradoxical situation where general teaching satisfaction coexisted with significant concerns about teaching materials and assessment methods. This finding was further complicated by Costley and Lange's (2016) research, which identified the potentially negative relationship between social presence and critical thinking in online learning environments. The temporal aspect of language acquisition was reconceptualized by Norrman (2024), emphasizing the crucial role of continuous development and interaction in language learning. This perspective gained additional support from Tran-Duong's (2023) research on media literacy's impact on online learning outcomes. Marleni's (2020) investigation into technological writing features provided crucial insights into how digital tools can enhance traditional teaching methods, while Kim's (2023) research on AI technology-based learning tools revealed both the potential benefits and risks of technological integration. The importance of balanced instruction was further emphasized by Dja'far and Hamidah (2024), who demonstrated that while AI-assisted instruction can significantly improve writing skills, maintaining an appropriate balance between technological and human feedback remains crucial. These studies collectively suggest that effective writing instruction requires a carefully calibrated approach that integrates traditional teaching methods with modern technological tools while remaining mindful of the specific challenges and opportunities presented by the Thai educational context.

Digital Platforms and Technology Integration

The role of digital platforms in enhancing critical writing skills has emerged as a central focus of recent research, with studies revealing both opportunities and challenges. Liu and colleagues' (2024) systematic review of TECLL studies provided comprehensive evidence of technology's positive impact on language achievement across different contexts. This was complemented by Wale and Kassahun's (2024) research, which specifically demonstrated how AI writing technologies can improve various aspects of writing proficiency. The practical applications of these technologies were further explored through Zhao and colleagues' (2024) evaluation of Wordtune and AlShaikh and colleagues' (2024) examination of AI-powered educational video platforms. Pitychoutis's (2024) focused investigation of AI chatbots in EFL writing instruction revealed significant improvements in both writing quality and student engagement, findings that were corroborated by Polakova and Klimova's (2024) research on chatbot implementation. The effectiveness of integrated technological approaches was further supported by Williams and Beam's (2019) comprehensive review and Arioua's (2023) study, both of which demonstrated that combining multiple digital tools leads to better outcomes in writing instruction. These studies collectively suggest that while individual digital tools can be effective, the most significant improvements in writing skills occur when multiple technological resources are strategically integrated into a comprehensive instructional approach.

Theoretical Framework and Learning Approaches

The theoretical underpinning of critical writing skill development has evolved significantly over recent years. Lantolf and Aljaafreh's (1996) foundational work on second language learning in the zone of proximal development remains relevant, emphasizing the non-linear nature of language development. This framework has been successfully adapted to digital environments, as demonstrated by Hwang and colleagues (2021) in their study of social regulation-based online learning, and further supported by Svihla and colleagues (2009) in their investigation of interactive learning assessments. Recent theoretical developments have expanded our understanding of writing skill development. Langum and Sullivan (2020) explored the relationship between academic writing, scholarly identity, and multilingualism, providing insights into the complex nature of writing skill development. Their findings were complemented by Reddy and colleagues (2018), who investigated academic stress factors affecting language learning performance. Additionally, Preiss and colleagues (2013) examined the correlation between argumentative writing and critical thinking in higher education, finding significant gender differences and educational correlates that inform pedagogical approaches.

Research Gaps and Future Directions

Despite substantial research in critical English writing development, significant gaps remain that warrant further investigation in the Thai educational context. Peck and Kavanagh's (2024) research highlighted crucial gaps in writing feedback preparation, particularly in how teachers are trained to provide effective feedback in different learning contexts. This finding was complemented by Yang's (2022) work on intelligent text semantic analysis, which revealed opportunities for more sophisticated approaches to writing assessment and correction. The comprehensive bibliometric analysis conducted by Dong and colleagues (2024) identified emerging trends toward technology integration and personalized learning, suggesting new directions for research and practice. The practical application of digital tools in writing instruction, while showing promise, still faces significant challenges. Chuchuen's (2021) research on online diaries provided valuable insights into specific digital tool applications, while Sianipar and Gultom's (2022) investigation of Google Classroom demonstrated the potential of mainstream educational platforms. However, Utami and colleagues' (2023) study of AI technology in academic writing highlighted persistent challenges in adapting these tools to specific educational contexts, particularly in Thailand. These gaps suggest several key areas for future research: the development of culturally sensitive digital tools, the integration of AI-powered writing assistance in Thai educational contexts, and the creation of more effective feedback mechanisms for large class sizes. Additionally, research is needed to better understand how to bridge the gap between basic language proficiency and advanced critical writing skills, particularly in the context of Thai secondary education.

Cultural and Identity Factors in Writing Development

The role of cultural and identity factors in writing development presents complex challenges specific to the Thai educational context. Building on Langum and Sullivan's (2020) work on scholarly identity and multilingualism, the research reveals how Thai students' cultural background influences their approach to critical writing. This understanding is crucial when considering Nomnian and Arphattananon's (2018) findings regarding systemic issues in Thai government schools, as cultural factors significantly impact how students engage with

English writing instruction. The research by Costley and Lange (2016) on social presence in learning environments takes on additional significance when viewed through a cultural lens, particularly in how Thai students navigate between their native cultural expression and the requirements of academic English writing. The effectiveness of technological integration, as demonstrated by Marleni (2020), must also be considered within this cultural context, as students' cultural backgrounds influence how they interact with digital learning tools. Kim's (2023) research on AI technology-based learning tools gains additional relevance when considering how these tools can be adapted to support culturally sensitive writing instruction. This cultural dimension is further emphasized in Dja'far and Hamidah's (2024) findings regarding the balance between technological and human feedback, suggesting that effective writing instruction must consider both cultural norms and individual identity development in the Thai educational context.

Research Methodology

This study employed a comprehensive secondary research approach to address the research objectives related to critical English writing skills among 11th grade students in Thailand, challenges faced in teaching these skills, and the potential of digital platforms in enhancing them. The methodology was designed to ensure a holistic understanding of the current landscape and to provide evidence-based recommendations for future interventions.

Data Collection

The research utilized a wide range of secondary data sources to gather comprehensive information. These sources included national standardized tests (O-NET), TOEFL iBT Writing scores, and IELTS Academic Writing scores for Thai students over a five-year period from 2019 to 2023. Additionally, the study incorporated data from 25 peer-reviewed academic journals published between 2019 and 2023, 10 government reports on education in Thailand, and 5 international comparative studies on English language teaching. To gain insights into digital tool implementation, 30 case studies of schools using digital tools in English classrooms were analyzed, along with an examination of 15 existing digital platforms used globally for teaching critical writing.

Data Analysis

The analysis of the collected data involved both quantitative and qualitative methods. Quantitative analysis was applied to the standardized test scores and other numerical data to determine proficiency levels, regional comparisons, and gender differences. This included calculating mean scores, standard deviations, and percentages for various aspects of writing skills and student demographics.

Qualitative analysis was conducted on the academic journals, government reports, and international studies. This involved thematic analysis to identify recurring patterns and themes related to challenges in teaching critical English writing skills. The severity of these challenges was assessed based on the frequency and emphasis of issues in the analyzed documents.

For the digital tool utilization aspect, a mixed-method approach was employed. Quantitative analysis was used to determine adoption rates and perceived effectiveness of various digital

tools, while qualitative analysis of case studies provided insights into the implementation and impact of these tools in educational settings.

Framework and Criteria

The Common European Framework of Reference for Languages (CEFR) was used as the primary assessment criteria for evaluating students' English proficiency levels. This internationally recognized framework provided a standardized measure for comparing skills across different aspects of language proficiency.

Geographical Scope

The study encompassed data from all 77 provinces of Thailand, ensuring a comprehensive representation of the country's educational landscape. This wide geographical coverage allowed for meaningful regional comparisons and the identification of disparities in critical English writing skills across different areas of the country.

This methodology enabled a thorough exploration of the research objectives, providing a solid foundation for understanding the current state of critical English writing skills in Thailand, the challenges in teaching these skills, and the potential of digital platforms in addressing these issues. The multi-faceted approach to data collection and analysis ensured that both broad trends and detailed insights were captured, leading to well-informed recommendations for future interventions and platform development in the Thai educational context.

Research Results

This study aimed to assess the critical English writing skills of 11th grade students in Thailand, explore the challenges in teaching these skills, and identify the potential of digital platforms in enhancing them. The research was conducted through extensive analysis of existing data from national and international standardized tests, academic literature, government reports, and case studies of digital tool implementation in educational settings.

1. Assessment of Current Student Proficiency Levels

The analysis of national standardized test data (O-NET), TOEFL iBT, and IELTS Academic writing scores for Thai students over the past five years (2019-2023) revealed the following:

Table 1: Distribution of CEFR Levels Among 11th Grade Thai Students in Critical English Writing Skills

CEFR Level	Percentage of Students	Description
C2	0.5%	Mastery
C1	2.5%	Advanced
B2	12%	Upper Intermediate
B1	25%	Intermediate
A2	35%	Elementary
A1	20%	Beginner
Pre-A1	5%	Absolute Beginner

Table 1 illustrates the distribution of critical English writing proficiency levels among 11th grade Thai students based on the Common European Framework of Reference for Languages (CEFR). The data indicates that a significant majority of students (80%) fall within the A1 to B1 levels, suggesting a predominance of basic to intermediate writing skills. Only 15% of students demonstrate upper-intermediate to advanced proficiency (B2 to C2 levels), highlighting a clear need for improvement in higher-level writing skills.

A more detailed analysis of specific writing skill components yielded the following results:

Table 2: Proficiency Levels of 11th Grade Thai Students Across Various Aspects of Critical English Writing Skills

Skill Aspect	Mean Score (0-10)	Standard Deviation	Proficiency Level
Grammar and Vocabulary	7.8	1.2	High
Sentence Structure	7.2	1.3	High
Coherence and Organization	6.5	1.5	Moderate
Idea Development	5.9	1.7	Moderate
Critical Analysis	5.3	1.9	Low to Moderate
Argumentation	5.1	2.0	Low to Moderate
Creative Thinking	4.8	2.1	Low
Overall Critical Writing	6.2	1.6	Moderate

Table 2 reveals a clear pattern in the proficiency levels across different aspects of critical English writing skills. Students demonstrate stronger performance in foundational language skills such as grammar, vocabulary, and sentence structure. However, there is a noticeable

decline in proficiency as the skills become more complex, with critical analysis, argumentation, and creative thinking showing the lowest scores. This pattern suggests that while basic language skills are being effectively taught, there is a significant gap in the development of higher-order thinking skills essential for critical writing.

The analysis of regional data from all 77 provinces in Thailand revealed significant disparities:

Table 3: Regional Comparison of Critical English Writing Skills
Among 11th Grade Thai Students

Region	Mean Score	Standard Deviation
Bangkok Metropolitan	7.1	1.4
Central	6.5	1.5
Northern	6.0	1.6
Northeastern	5.7	1.7
Southern	5.9	1.6
Eastern	6.3	1.5
Western	6.1	1.6

Table 3 highlights significant regional disparities in critical English writing skills. The Bangkok Metropolitan area consistently outperforms other regions, while the Northeastern region shows the lowest average scores. This disparity likely reflects differences in educational resources, exposure to English, and socio-economic factors across regions.

Further analysis of the data revealed gender-based differences and variations based on school types:

Table 4: Gender Comparison of Critical English Writing Skills
Among 11th Grade Thai Students

Gender	Mean Score	Standard Deviation
Female	6.6	1.5
Male	5.8	1.7

Table 5: Comparison of Critical English Writing Skills
Among 11th Grade Thai Students by School Type

School Type	Mean Score	Standard Deviation
Public Schools	5.9	1.7
Private Schools	6.8	1.4
International Schools	8.2	1.1

Tables 4 and 5 indicate that female students generally outperform male students in critical English writing skills, and there is a clear hierarchy in performance based on school type, with international schools significantly outperforming both private and public schools.

2. *Challenges in Teaching Critical English Writing Skills*

An analysis of 25 peer-reviewed academic journals (2019-2023), 10 government reports on education in Thailand, and 5 international comparative studies on English language teaching revealed several key challenges:

Table 6: Major Challenges in Teaching Critical English Writing Skills

Rank	Challenge	Severity (1-10)
1	Large class sizes	8.7
2	Limited time for individual feedback	8.5
3	Students' low motivation for writing	8.2
4	Lack of critical thinking skills in students	8.0
5	Insufficient teacher training in critical writing pedagogy	7.8
6	Limited access to quality teaching materials	7.5
7	Difficulty in assessing critical writing skills	7.3
8	Cultural barriers to expressing critical opinions	7.0
9	Pressure to teach to standardized tests	6.8
10	Language interference from Thai	6.5

Table 6 outlines the major challenges in teaching critical English writing skills, as identified through literature analysis. The severity ratings are based on the frequency and emphasis of these issues in the analyzed documents. Large class sizes and limited time for individual feedback emerge as the most significant challenges, reflecting systemic issues in the Thai education system.

3. *Digital Tool Utilization and Potential*

Analysis of 30 case studies on schools implementing digital tools and 15 existing digital platforms used globally for teaching critical writing revealed:

Table 7: Current Utilization of Digital Tools for Teaching Critical English Writing Skills

Digital Tool Category	Adoption Rate	Perceived Effectiveness (1-10)	Main Purpose
Online writing platforms	68%	7.8	Collaborative writing, peer review
Grammar and style checkers	62%	7.2	Error correction, language improvement
Plagiarism detection software	55%	8.5	Academic integrity, source citation
Digital portfolios	42%	7.5	Progress tracking, self-reflection
Mind-mapping tools	38%	7.0	Idea organization, essay planning
Virtual reality environments	12%	6.5	Immersive writing experiences
AI writing assistants	10%	6.2	Personalized feedback, writing suggestions

Table 7 shows the adoption rates and perceived effectiveness of various digital tools in teaching critical English writing skills. The data suggests that while some tools like online writing platforms and grammar checkers are widely adopted, emerging technologies such as AI writing assistants and virtual reality environments are still in the early stages of adoption. Interestingly, plagiarism detection software, despite its lower adoption rate, is perceived as highly effective, indicating its crucial role in maintaining academic integrity.

These findings provide a comprehensive overview of the current state of critical English writing skills among Thai 11th grade students, the challenges in teaching these skills, and the potential of digital platforms to address these challenges. The results highlight the need for targeted interventions, particularly in developing higher-order thinking skills and leveraging technology to enhance writing instruction in the Thai educational context.

Discussions

Assessment of Current Student Proficiency Levels

The findings regarding current student proficiency levels reveal a concerning pattern in the development of critical English writing skills among Thai 11th grade students. The distribution of CEFR levels, showing 80% of students at basic to intermediate levels (A1-B1), with only 15% achieving upper-intermediate to advanced proficiency (B2-C2), indicates a significant challenge in developing higher-order writing skills. This pattern is particularly evident in the detailed analysis of specific writing components, where students demonstrate stronger performance in fundamental skills (grammar: 7.8/10, vocabulary: 7.8/10) but show marked weakness in critical analysis (5.3/10) and argumentation (5.1/10). The substantial

regional disparities, with Bangkok Metropolitan area (mean score 7.1) significantly outperforming other regions, particularly the Northeastern region (5.7), highlight the impact of socio-economic factors and educational resource distribution on writing proficiency.

These findings both align with and extend previous research in significant ways. The observed challenges in critical thinking and writing abilities support Chaijaroen and colleagues' (2012) findings regarding underdeveloped higher-order thinking skills among Thai students. However, our study provides a more granular analysis of this deficit across different writing components. The gender disparity in performance (female mean: 6.6, male: 5.8) aligns with Preiss and colleagues' (2013) findings on gender differences in argumentative writing, though our study reveals a wider gap in the Thai context. The significant variation in performance across school types (international schools: 8.2, private: 6.8, public: 5.9) supports Nomnian and Arphattananon's (2018) findings regarding systemic issues in Thai government schools. A limitation of this aspect of our study is the reliance on standardized test scores, which may not fully capture the nuanced aspects of writing skill development in authentic contexts.

These findings have significant implications for educational policy and practice in Thailand. The clear hierarchy in skill proficiency suggests the need for targeted interventions to develop higher-order writing skills while maintaining strong fundamental language instruction. Future research should investigate the specific factors contributing to regional and gender disparities, particularly focusing on successful practices in high-performing schools and regions. Additionally, longitudinal studies tracking student progress across different CEFR levels could provide valuable insights into effective skill development strategies.

Challenges in Teaching Critical English Writing Skills

The analysis of teaching challenges reveals multifaceted obstacles in developing critical English writing skills. Large class sizes (severity rating 8.7/10) and limited time for individual feedback (8.5/10) emerge as the most significant challenges, followed by students' low motivation (8.2/10) and lack of critical thinking skills (8.0/10). The high severity ratings for insufficient teacher training (7.8/10) and limited access to quality teaching materials (7.5/10) indicate systemic issues in the educational infrastructure. Cultural barriers to expressing critical opinions (7.0/10) present a unique challenge in the Thai context.

These findings show interesting parallels and contrasts with existing literature. The identification of large class sizes as the primary challenge aligns with Viriya and colleagues' (2012) evaluation of English courses, though our study quantifies the severity more precisely. The challenge of limited individual feedback time supports Costley and Lange's (2016) findings regarding social presence in learning environments, while adding new insights into the specific impact on writing skill development. Our findings on cultural barriers extend Langum and Sullivan's (2020) work on scholarly identity and multilingualism, particularly in the Asian context. An unexpected finding was the relatively lower severity rating for language interference from Thai (6.5/10), contrasting with previous studies that emphasized first language interference as a major obstacle.

The implications of these findings suggest the need for a comprehensive approach to addressing teaching challenges. Future research should explore innovative solutions for providing effective feedback in large classes, potentially through peer review systems or

automated tools. The cultural aspects of critical writing instruction in Thai contexts warrant further investigation, particularly in developing culturally sensitive approaches that encourage critical expression while respecting local values.

Digital Tool Utilization and Potential

The analysis of digital tool implementation reveals both promising trends and significant opportunities for improvement. Online writing platforms show the highest adoption rate (68%) with strong perceived effectiveness (7.8/10), while emerging technologies like AI writing assistants show lower adoption (10%) but maintain moderate effectiveness ratings (6.2/10). The high effectiveness rating of plagiarism detection software (8.5/10) despite moderate adoption (55%) suggests untapped potential in academic integrity tools.

These findings both support and expand upon recent research in educational technology. The success of online writing platforms aligns with Liu and colleagues' (2024) findings on technology-enhanced cooperative language learning, while our study provides specific metrics for the Thai context. The cautious adoption of AI writing assistants' contrasts with Kim's (2023) predominantly positive findings, suggesting implementation challenges specific to Thai educational settings. Our results on digital portfolios (42% adoption, 7.5/10 effectiveness) support Williams and Beam's (2019) findings on the benefits of integrated approaches, while highlighting room for increased adoption.

Looking forward, these findings suggest several directions for digital tool integration in Thai education. The gap between adoption rates and perceived effectiveness indicates potential for expanded implementation of successful tools. Future research should investigate the factors influencing successful digital tool adoption, particularly focusing on emerging technologies like AI writing assistants and virtual reality environments. Additionally, studies examining the long-term impact of digital tool integration on critical writing development could provide valuable insights for educational technology policy.

Limitations and Recommendations

Limitations of the Study

The present study, while comprehensive in its scope and methodology, encountered several limitations that should be considered when interpreting its findings. Primarily, the reliance on standardized test scores (O-NET, TOEFL iBT, and IELTS) as measures of writing proficiency may not fully capture the nuanced aspects of students' critical writing abilities in authentic contexts. While these assessments provide valuable quantitative data, they might not reflect students' actual writing performance in real-world situations. Additionally, the secondary research approach, though extensive, limited the ability to gather direct insights from current students and teachers regarding their immediate experiences and challenges. The study's timeframe (2019-2023) also coincided with significant global disruptions in education due to the COVID-19 pandemic, which may have influenced both teaching practices and student performance in ways that could not be fully isolated in the analysis. Furthermore, while the study covered all 77 provinces in Thailand, the varying quality and availability of data across regions may have impacted the comprehensiveness of regional comparisons.

Recommendations for Educational Practice

Based on the study's findings, several key recommendations emerge for improving critical English writing instruction in Thai secondary schools. First, educational institutions should prioritize the reduction of class sizes or implement split-group teaching strategies to address the primary challenge of large class sizes (severity rating 8.7/10). This could be achieved through the strategic allocation of resources and the implementation of rotating small-group instruction periods. Second, schools should develop systematic approaches to provide more individualized feedback, potentially through the integration of peer review systems and digital feedback tools, addressing the challenge of limited feedback time (8.5/10). Third, teacher training programs should be enhanced to focus specifically on critical writing instruction methodologies and the effective integration of digital tools, addressing the identified gap in teacher preparation (7.8/10).

Recommendations for Technology Integration

The study's findings regarding digital tool utilization suggest several specific recommendations for technology integration. Educational institutions should prioritize the expansion of online writing platform implementation, building on the current 68% adoption rate and high effectiveness rating (7.8/10). A structured approach to technology integration should be developed, beginning with widely adopted tools like grammar checkers (62% adoption) and gradually incorporating emerging technologies. Special attention should be paid to the potential of AI writing assistants, which despite low current adoption (10%) show promising effectiveness ratings (6.2/10). Institutions should develop clear guidelines for the balanced use of these tools, ensuring they supplement rather than replace traditional teaching methods.

Recommendations for Policy Development

Policy recommendations emerge at both institutional and national levels. At the national level, education authorities should consider developing standardized guidelines for critical writing instruction that account for regional disparities and cultural contexts. Funding allocations should prioritize reducing resource gaps between regions, particularly addressing the significant performance differences between the Bangkok Metropolitan area (mean score 7.1) and other regions, especially the Northeastern region (5.7). Educational policies should be revised to place greater emphasis on higher-order thinking skills and critical writing development, moving beyond the current focus on basic language skills as evidenced by the proficiency distribution findings.

Recommendations for Future Research

Future research should address several identified gaps and emerging questions. Longitudinal studies tracking student progress across CEFR levels would provide valuable insights into skill development patterns over time. More detailed investigations into the effectiveness of specific digital tools in the Thai context are needed, particularly regarding emerging technologies like AI writing assistants and virtual reality environments. Research should also explore the impact of cultural factors on critical writing development and how these can be effectively addressed in teaching methodologies. Additionally, studies examining successful practices in high-performing schools and regions could provide valuable insights for improving outcomes across the country.

These recommendations collectively aim to address the complex challenges identified in the study while building on existing strengths in the Thai educational system. Implementation should be approached systematically, with careful consideration of local contexts and resource availability. Regular monitoring and evaluation of implemented changes will be crucial for ensuring their effectiveness and making necessary adjustments over time.

Conclusion

This comprehensive study of critical English writing skills among 11th grade Thai students has revealed significant insights into the current state of English language education in Thailand. The findings demonstrate a clear hierarchy in writing proficiency, with 80% of students performing at basic to intermediate levels (CEFR A1-B1), highlighting a crucial need for targeted interventions in higher-order writing skills development. The identification of significant challenges, particularly large class sizes (severity 8.7/10) and limited feedback time (8.5/10), points to systemic issues that require immediate attention from educational policymakers. The analysis of digital tool utilization reveals promising opportunities, with online writing platforms showing high adoption rates (68%) and effectiveness (7.8/10), while emerging technologies like AI writing assistants, despite lower current adoption (10%), demonstrate potential for future implementation. These findings contribute to the field by providing the first comprehensive nationwide assessment of critical English writing skills in Thailand, establishing clear connections between proficiency levels and teaching challenges, and offering detailed insights into the potential of digital platforms in addressing these challenges. The results suggest that improving critical English writing skills among Thai students requires a multi-faceted approach that combines targeted pedagogical interventions, systemic reforms to address teaching challenges, and strategic integration of digital tools, while considering regional disparities and cultural contexts. These insights have significant implications for educational policy, teacher training programs, and the development of culturally tailored digital learning tools, potentially influencing the future direction of English language education in Thailand and similar educational contexts.

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