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EXPERT REVIEW OF THE WeCWI-ENABLED TENCENT APPLICATIONS: INSIGHTS ON ENHANCING IELTS WRITING TASK 2 PERFORMANCE

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Abstract:

In the era of globalisation, English proficiency, especially in IELTS, is crucial for the academic and professional growth of non-native speakers. However, Chinese EFL learners often struggle with IELTS Writing Task 2, where their scores tend to be lower than those in other components. Traditional EFL teaching, especially in IELTS writing, lacks solid theoretical and pedagogical support, and the integration of technological products, such as Tencent apps and WeChat, in IELTS writing teaching and learning, remains unexplored. This study aims to comprehensively assess WETA (WeCWI-enabled Tencent Applications) as a solution to enhance the IELTS Writing Task 2 performance of Chinese English as a Foreign Language (EFL) undergraduates. Four experienced EFL instructors from Chinese tertiary institutions evaluated WETA using a mixed-item checklist, with the data analysed thematically and validity and reliability verified. The results show high praise for WETA in multiple aspects. Its implications lie in potentially revolutionising IELTS Writing Task 2 instruction and learning in China, guiding future technology integration in language teaching and learning. Notably, it fills the research gap in evaluating such pedagogical innovation from instructors' perspectives and can enhance global language learning outcomes.

Keywords:

WeCWI, EFL, IELTS Writing Task 2, WeCWI-enabled Tencent Applications



Introduction

In the era of globalisation and international mobility, English proficiency has become one of the essential requirements for academic and professional development. Non-native English speakers are required to obtain a high score on international English proficiency tests, such as IELTS, which was founded by the University of Cambridge Testing Centre, the British Council, and IDP Education Australia in 1989 (Peltekov, 2021) to enhance their career opportunities and pursue global education. However, among the four components of IELTS (listening, reading, writing, and speaking), writing is the most challenging skill for IELTS applicants (Nushi & Razdar, 2021), particularly in the Chinese context.

Globally, EFL learners in diverse contexts—from Thailand (Capacio & Datugan, 2024) to Saudi Arabia (Al-Mohanna, 2024)—report similar struggles with writing proficiency, underscoring the universality of this challenge. EFL learners often find writing challenging as it requires complex cognitive strategies to communicate ideas effectively to readers (Senel, 2018). Writing proficiency, particularly in IELTS Writing Task 2, emphasises not merely language accuracy but also critical thinking, coherent structure and argument development, which are not focused on in traditional EFL classrooms. IELTS writing scores in China and Vietnam are notably lower than the other components of the test - listening, reading, and speaking (Nguyen & Nguyen, 2022). Recent studies in Vietnam (Dao & Dan, 2024) and Saudi Arabia (Al-Mohanna, 2024) corroborate these findings, identifying systemic issues such as limited feedback and L1 interference as key contributors to underperformance.

Universities and colleges worldwide are adapting to the changing nature of higher education and the needs of current learners by investing in the integration of technology and applying new pedagogical approaches, including web-based instruction. Teaching IELTS, a global English proficiency assessment, requires further improvement fueled by contemporary instructional technology. Papadakis (2023) highlights the transformative potential of MOOCs in democratising access to language education, while Lampropoulos and Papadakis (2025) emphasise the role of AI-driven social robots in personalising learning experience – advancements that could revolutionise IELTS preparation. Additionally, Lavidas et al. (2024) argue that AI applications, such as ChatGPT, could address these gaps by providing real-time feedback on writing tasks; however, their efficacy in high-stakes contexts, like the IELTS, remains underexplored.

In China, Chinese people widely use Tencent applications, such as WeChat and Tencent Meeting, for communication, learning, and professional purposes. These platforms, integrated with appropriate theories and pedagogies such as WeCWI, transform traditional EFL classrooms and enhance IELTS writing instruction. However, it remains unclear how the tools, integrated with WeCWI—the theoretical and pedagogical framework for designing and developing web-based instruction—assist EFL educators in improving learners' IELTS Writing Task 2 outcomes. It has been a gap that researchers have been trying to bridge. Thus, this study addresses this question by evaluating a proposed technological innovation: WETA—WeCWI-enabled Tencent Applications by EFL instructors.

Problem Statement

Despite extensive research on EFL teaching and learning in China, the issue of IELTS writing performance, particularly Writing Task 2, remains underexplored in the context of technology-integrated pedagogical frameworks. While studies such as Xie, Che, and Huang (2022)



demonstrate the efficacy of Tencent Meeting for feedback delivery, and Yan (2019) highlights WeChat's role in collaborative writing, these tools have not been systematically aligned with IELTS-specific instructional design or grounded in cognitive writing theories, like WeCWI. Existing literature predominantly focuses on general English writing or isolated technological interventions, leaving a critical gap in structured, theory-driven approaches tailored to IELTS Writing Task 2. Lampropoulos and Papadakis (2025) emphasise the need for Ed-Tech tools, such as AI-enhanced ones, in high-stakes language assessments; however, no studies have evaluated such innovations from instructors' perspectives in the Chinese context. This gap highlights the need for WETA—a WeCWI-enabled Tencent Applications framework—to bridge the gap between theory, pedagogy, and technology in IELTS preparation.

IELTS data reveal that Chinese IELTS test takers have performed poorly compared to test takers from other selected countries. Their average writing score is relatively low, especially in Writing Task 2. The average IELTS Writing Task 2 score is 5.8 out of 9.0, which is relatively low (IELTS, n.d.). The weak writing performance highlights a significant gap between instructional effectiveness and learner outcomes. In EFL teaching, teachers often require students to memorise and repeat new language inputs instead of using them in realistic situations, as is common in China (Alghamdi, Alghamdi, & Alsolami, 2019). They still rely on teacher-centred instruction to impart knowledge to students (Chen & Tsai, 2021). The traditional teacher-centred approach to teaching is often perceived as enforcing a hierarchy and being authoritarian, which can limit learners' ability to take an active role in their learning (Плавуцька & Закордонець, 2020).

To a great extent, conventional teaching practices fall short of meeting the needs of students in this digital era. As a result, it is seen as an outdated teaching methodology. The traditional approach to teaching IELTS writing, which lacks theoretical and pedagogical support, needs to be revamped by incorporating technology, theories, and effective pedagogical practices. Although technological products have been integrated into education, their use in IELTS writing is still underexplored. Tencent applications, such as WeChat and Tencent Meeting, are ubiquitous among Chinese educators and students. However, there is a lack of literature on the use of Tencent applications in IELTS writing, particularly among undergraduate students in China. One of the most relevant studies in this regard is the one conducted by Wang and Jiang (2023).

Students consider Tweet-based writing and multimodal writing through the WeChat official account to be effective and enjoyable for vocabulary acquisition (Zhang, Liu, & Liu, 2021). Tencent Meeting-based screencast feedback has positively improved students' IELTS writing performance and perceptions of the screencast feedback in secondary school settings (Xie, Che, & Huang, 2022). WeChat discussions and Tencent Meeting can be utilised to enhance the teaching of EFL writing, thereby improving the writing performance and critical thinking of Chinese undergraduates in College English writing (Yan, 2019). Nonetheless, these studies focused on general English writing and were not aligned with IELTS instructional design and specific tasks such as Writing Task 2.

Technological devices can be integrated with theories and pedagogies, such as WeCWI, and are suitable for use as a theoretical and pedagogical framework for designing and developing web-based instruction. This framework is beneficial for transforming traditional EFL classrooms and enhancing IELTS writing instruction, as it is based on several selected tasks produced by WeCWI-enhanced 21CLD, being a synergy between WeCWI (know what) and



21CLD (know-why) to transform learning into an enriched teaching and learning experience (know-how) to enhance learners' language and cognitive development. When paired with the 21st Century Learning Design (21CLD) framework and the ADDIE instructional design model, WeCWI can support the creation of learner-centred, cognitively engaging writing activities that promote real-world communication skills. This combination, known as WETA (WeCWI-enabled Tencent Applications), represents a novel approach that supports widely used platforms within a theoretically grounded and pedagogically coherent framework.

However, no data can be found, even when using keywords such as "WeCWI", "WeCWI-enabled 21CLD", "Tencent applications", and "IELTS writing task 2 performance" on search engines like Google Scholar, Web of Science (WOS), and Scopus. Plus, when using keywords such as "IELTS writing" and "China" in both English and Chinese on Scopus, WoS, and Google Scholar search engines, there are not many relevant articles found in English and Chinese that focus on the learner perspective based on SIL domain (Mah, 2023) on the low performance in IELTS Writing Task 2. Moreover, no studies have comprehensively evaluated a technology-integrated pedagogical innovation from the instructors' perspective in the context of IELTS writing instruction. Hence, the potential of integrating technological tools with established instructional frameworks remains theoretical. There is a need to bridge the gap between the use of digital tools in everyday life and formal language instruction by designing, implementing, and evaluating structured innovations.

This study aims to fill this gap by comprehensively evaluating WETA (WeCWI-enabled Tencent Applications) as a technological and pedagogical solution to improve IELTS Writing Task 2 performance among Chinese EFL undergraduates. The findings will provide insights into the practicality and instructional value of this approach from the perspectives of IELTS instructors and EFL educators, thereby helping learners improve their IELTS Writing Task 2 performance.

Research Purpose and Ouestions

WeCWI-enabled Tencent Applications (WETA) is developed and guided by the WeCWI-enhanced 21st-century Competency-Based Learning and Development (CLD) and ADDIE model to improve IELTS Writing Task 2 performance. The study aims to evaluate the proposed technological innovation by the IELTS instructors by seeking the answers to the following questions:

- 1. How do instructors perceive the content quality of WETA?
- 2. How do instructors evaluate the design and usability of WETA?
- 3. How do instructors perceive WETA's technological features in supporting the learning of IELTS Writing Task 2?
- 4. How do instructors perceive WETA's pedagogical approach?
- 5. How do instructors view WETA's assessment features and instructional activities?

Literature Review

English as a Foreign Language (EFL)

Learning English as a Foreign Language (EFL) presents notable challenges. Over time, evolving pedagogy, instructional roles, and learning activities have been designed to improve outcomes (Namaziandost, Abedi, & Nasri, 2019). Promoting learner autonomy is key to



fostering independent language acquisition (Tran & Phan, 2021). Despite these changes, the goal remains to enable learners to communicate effectively and meet real-world demands (Nasri, Biria, & Karimi, 2018).

The Internet has transformed education by removing the limits of time and distance (Namaziandost, Abedi, & Nasri, 2019). Its growth has led to the widespread use of digital tools in learning environments (Smith, Kahlke, & Judd, 2020). Web-based innovations such as blogs and social media support a shift from teacher-centred to learner-centred instruction (Namaziandost & Shafiee, 2018). Blogs enhance motivation and self-regulation (Fathi, Ahmadnejad, & Yousofi, 2019), improving IELTS writing among Chinese EFL learners (Han, 2023). Tools like WeChat and Telegram promote collaborative writing and engagement (Imamyartha et al., 2021; Yan, 2019).

The International English Language Testing System (IELTS), launched in 1989 by the British Council, Cambridge Assessment English, and IDP Australia, is globally recognised for academic and migration purposes (Peltekov, 2021). With nearly three million test-takers annually (Sultana, 2021), the IELTS assesses listening, reading, writing, and speaking (Pearson, 2021). A Band 6.0 is typically required for university admission (IELTS, n.d.; Thorpe, Snell, Davey-Evans, & Talman, 2017). Web-based tools have enhanced IELTS preparation, for example, web folio assessments for reading (Khanahmadi & Sajadirad, 2019), SPIACIE for planning (Senevirathne et al., 2020), and mobile apps for writing (Sabzian, Bakhshizadeh, & Saed, 2019).

IELTS Writing and Task 2 Challenges

IELTS writing consists of two tasks—Task 1 and Task 2—completed in 20 and 40 minutes, respectively. Task 2, requiring a formal written response, is the most challenging for EFL learners (Nguyen & Nguyen, 2022; Panahi & Mohammaditabar, 2015). Key difficulties include time constraints (Bingol, 2023), a lack of autonomy (Zhao, 2018), and limited exposure to academic English (Tohamba, 2021). Digital tools, such as AntConc for grammar (Pham, 2022), blogs, and Telegram peer-review groups (Farahani, Nemati, & Nazari Montazer, 2019), have also contributed to the process, with mobile-mediated peer review proving more effective than face-to-face review.

Despite progress, teacher-centred methods persist in many Chinese training centres, where students have often been spoon-fed language models with minimal interaction (Muluk, Zainuddin, & Dahliana, 2022; Buitrago & Diaz, 2018). Globally, Task 2 scores consistently remain the lowest among IELTS components, even in high-performing regions such as China and Japan (Nguyen & Nguyen, 2022). It is assessed using four criteria: Task Response (TR), Coherence and Cohesion (CC), Lexical Resource (LR), and Grammatical Range and Accuracy (GRA). Students often struggle with focus, cohesion, vocabulary, and the use of complex sentences (Bagheri & Riasati, 2016).

Web-Based Instruction

Web-based instruction (WBI) uses online platforms to support learning across geographical and cultural divides. Tools like Facebook and collaborative platforms increase motivation and writing skills (Vilbar, 2018; Togatorop, 2015). WeCWI-enabled hypertext blogs improve learner engagement and writing (Mah & Ab Rahim, 2019). Web 2.0 tools enhance access to materials and motivation for learning (Fathi et al., 2019). Telegram-based team learning



(TBML) enhances the emotional intelligence and engagement of EFL learners (Imamyartha et al., 2021), while WeChat facilitates collaboration and critical thinking in writing (Yan, 2019).

Tencent Meeting and WeChat are key platforms in English as a Foreign Language (EFL) instruction. Tencent Meeting supports synchronous learning and discussion (Qin & Yu, 2023), while WeChat fosters student-teacher and peer interaction, improving writing outcomes (Sun & Asmawi, 2023; Fu & Wang, 2020). Blended learning combines online and face-to-face methods for flexible, effective EFL instruction (Rasheed, Kamsin, & Abdullah, 2020; Isiguzel, 2014). In China, it boosts engagement and academic performance (Liu, Ginting, Chen, & Yeh, 2022). Although promising, challenges include insufficient training and a lack of technological familiarity (Altay & Altay, 2019). Solutions include teacher-student training, technical support, and the integration of curriculum. Learners report positive outcomes, such as improved collaboration and global literacy (Yang & Kuo, 2023; Mohamed, 2022; Wang, Chen, Tai, & Zhang, 2021).

Instructional Design Models: WeCWI, ADDIE, Gagné, and UTAUT

The integration of WeCWI with 21st CLD and ADDIE is deliberate and theoretically synergistic. WeCWI's focus on cognitive writing processes (Mah, 2015) aligns with 21st CLD's emphasis on collaborative problem-solving (Sah, 2022), while ADDIE's iterative design (Stapa & Mohammad, 2019) ensures pedagogical coherence. For instance, WeCWI's 'cognitive scaffolding' complements 21st CLD's 'knowledge construction' tasks, enabling learners to transition from structured writing exercises to authentic argumentation—a critical skill for IELTS Task 2. Papadakis (2023) further validates this integration, noting that MOOCs leveraging similar frameworks improve writing outcomes in diverse contexts. This tripartite model addresses the cognitive, collaborative, and instructional design demands of high-stakes writing tasks, offering a novel solution to China's IELTS challenges.

WeCWI-enabled tools are user-friendly and improve learners' writing skills and perceptions (Mah & Cheah, 2022). Recent advancements in AI, as explored by Lampropoulos and Papadakis (2025), demonstrate how social robots can facilitate collaborative learning, aligning with WeCWI's emphasis on interaction. WeCWI also powers 21st Century Learning Design (21st CLD), which encompasses tasks such as collaborative discussions, task regulation, and real-world problem-solving. Studies show that 21st-century learning design (CLD) enhances curriculum innovation and inclusion (Sah, 2022; O'Sullivan, Bird, & Marshall, 2021; Makaramani, 2015).

The ADDIE model—Analysis, Design, Development, Implementation, and Evaluation—is widely used for instructional planning and technology integration (Stapa & Mohammad, 2019; Hsu, Lee-Hsieh, Turton, & Cheng, 2014). It has helped develop e-learning and writing programs for EFL learners (Kawinkoonlasate, 2021; Park & Wang, 2019). Dao and Dan (2024) applied the ADDIE model to design collaborative writing interventions in Vietnamese secondary schools, demonstrating its adaptability across diverse cultural contexts.

Similarly, Gagné's Nine Events of Instruction include gaining attention and providing feedback to activate cognitive processes (Gagné & Medsker, 1996). These steps support memory and learning outcomes, enhancing student achievement and satisfaction (Loua, 2023; Ali & Ali,



2015). Lavidas et al. (2024) extend this by showing how AI-driven feedback systems (e.g., ChatGPT) can automate Gagné's principles, though ethical and pedagogical challenges persist.

The Unified Theory of Acceptance and Use of Technology (UTAUT) specifically explains how factors such as Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions influence user acceptance of technology (Alasmari, Brika, Wong, Al-Ahmari, & Al-Mawlid, 2024). It has been applied in educational settings worldwide (Ma, Chen, Zheng, & Wu, 2020), providing insights into how instructors adopt tools such as Web 2.0 or AI (Choudhary, Agrawal, Logeswaran, & Unhelkar, 2021). Venkatesh, Thong, and Xu (2012) extended UTAUT to include price value, habit, and enjoyment.

Methodology

This quantitative study provides a comprehensive evaluation of WeCWI-enabled Tencent Applications (WETA), developed to support EFL learners' preparation for the IELTS Writing Task 2, grounded in the pedagogical and theoretical frameworks of WeCWI, WeCWI-enhanced 21st-century CLD, and the ADDIE model. Four EFL instructors with over ten years of experience in EFL instruction and ICT-based language teaching were purposively sampled. To be specific, two instructors specialised in IELTS teaching, while another two instructors specialised in ICT-based language teaching. Their backgrounds provided informed insights into WETA's content, usability, technological advancements, pedagogical approach, assessment, and materials.

This small but expert sample was chosen to prioritise depth over breadth, ensuring rich, nuanced feedback on WETA's pedagogical and technological dimensions—a strategy aligned with qualitative research paradigms (Creswell, 2014). Instructors were selected based on three criteria: (1) expertise in IELTS Writing Task 2 instruction, (2) proficiency in educational technology integration, and (3) publication record in EFL pedagogy. While limited in size, this sample mirrors the 'elite interviewing' approach recommended for evaluating niche innovations (Littig, 2009), ensuring credibility through expert validation.

This study received approval from the Institutional Review Board of a famous university in Malaysia. Participants provided written consent after reviewing a disclosure form outlining data usage, anonymity protocols, and withdrawal rights. All evaluations were anonymised using their family name or nickname, with raw data stored on password-protected servers. A comprehensive evaluation checklist was adapted based on studies by Baldwin and Ching (2019), Fuentes and Martínez (2018), Lubniewski et al. (2018), and Makhachashvili and Smyrnova-Trybulska (2016).

The checklist included both closed-ended items (using Likert scales) and open-ended items for narrative feedback. Each instructor was provided with access to WETA, along with relevant information and the evaluation checklist. They were given one week to explore the application, complete the checklist, and provide feedback on content quality, design, usability, technological advancements, pedagogical approach, and assessment and materials. To enhance the trustworthiness of the evaluation checklist, content validity was verified using a content validity index. Table 1 shows the Content Validity Index results.

Table 1: Content Validity Index (CVI)

Content Validity Index (CVI) Results

I-CVI (Item-level CVI) for each item: 1.00
S-CVI/Ave (Scale-level CVI average): 1.00

The results show that all instructors rated all items in the expert review as relevant (score 4 or 5), indicating excellent content validity. The reliability of the evaluation checklist was assessed using Cronbach's alpha, yielding a score of 0.681. The score reveals a moderate level of internal consistency, indicating that the checklist items are acceptably cohesive when evaluating the WeCWI-enabled Tencent Applications (WETA).

Table 2: Reliability of Survey Reliability Statistics

Cronbach's Alpha	N of Items
.681	27

Data were analysed using a thematic analysis approach. Quantitative responses from the Likert-scale items were tabulated to provide a general overview of expert agreement levels across the evaluation domains. Qualitative data from open-ended checklist items were coded and categorised based on the five domains: content quality, design and usability, technological advancements, pedagogical approach, and assessment and materials. Qualitative data from the open-ended items of the evaluation checklist were analysed using Braun and Clarke's (2006) six-phase thematic analysis approach. This included (1) familiarisation with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report.

To begin, all narrative responses were imported into NVivo 14 to facilitate coding and retrieval. Two researchers independently reviewed the open-ended responses to familiarise themselves with the data and understand the context of each expert's feedback. During the initial coding phase, segments of text were coded with descriptive labels that captured the experts' concerns, suggestions, or affirmations related to five main evaluation domains: **content quality and alignment**, **instructional design and usability**, **technological features and functionality**, **pedagogical strategies**, and **assessment and learning materials**. For example, codes such as "learner autonomy," "interface intuitiveness," "AI feedback potential," and "guided writing tasks" were generated to capture specific features or concerns raised by the participants. The process of code refinement followed an iterative discussion between the two coders to resolve discrepancies and enhance consistency.

Discrepancies in coding, such as overlapping codes or vague category boundaries, were addressed by redefining categories and merging similar codes. For instance, the initial codes "interface intuitiveness" and "navigation clarity" were merged under the sub-theme of "intuitive user interface." In contrast, "pedagogical alignment" and "goal clarity" were grouped



under the sub-theme of "alignment with learning objectives." Themes were validated through member checking and aligned with the pedagogical frameworks of WeCWI and ADDIE. An audit trail documented all analytical decisions, ensuring transparency and replicability of the results. The final analysis provides a clear, theory-aligned interpretation of expert insights for refining WETA.

To determine the trustworthiness of the thematic analysis in evaluating WETA, a coding consistency check was performed. A second coder independently coded selected data segments to establish inter-coder reliability. Initially, the researcher developed a coding scheme, which was refined through detailed discussions with the second coder. After agreeing on the final version of the coding scheme, both coders independently coded a representative sample of the data. The inter-coder reliability was calculated using Cohen's Kappa (κ). The Cohen's κ value was 0.78, indicating substantial agreement. These results indicate high coding consistency, supporting the reliability and credibility of the thematic analysis findings related to the pedagogical and technological dimensions of WETA.

Findings and Discussion

Incorporating technology into language instruction has become a revolutionary element in the current educational scenario. This paper focuses on the innovative use of Tencent applications, such as Tencent Meeting and WeChat, which WeCWI specifically designs to enhance the IELTS Writing Task 2 performance of Chinese EFL (English as a Foreign Language) undergraduates. Favourable evaluations from four instructors across various aspects have confirmed the potential of these applications in reshaping EFL learning for this particular group of students, with the improvement section also deserving of attention.

Content Quality

Four instructors agree that the content of WETA is highly aligned with the syllabus and learning objectives. Instructors Yang, Zhao and Shan commented that the materials "align with syllabus and goals," helping learners meet their communicative needs. As illustrated by Suo (2019) and these four instructors, the content of WETA includes types of questions, sentence and paragraph writing, exemplary model essays and task-related prompts that strictly conform to the IELTS writing benchmarks.

Furthermore, as per what is alleged by Wotring, Chen, and Fraser (2021), it can be deduced that the content also needs to be directly aligned with the learning objectives of the IELTS writing courses (Wotring et al., 2021) to overcome such learners' writing challenges and improve IELTS writing scores in the aspect of TR, CC, LR and GRA. In this evaluation, the alignment provides detailed, gradual guidance on handling various writing tasks, from accurately interpreting the task requirements to crafting a well-structured and coherent response.

However, this strict adherence to established benchmarks may inadvertently limit learners' creative exploration. By focusing solely on meeting predefined criteria, students may struggle to develop a unique writing style or explore unconventional ideas, which are essential for achieving higher-level language proficiency. The content of WETA is adaptable to students' capacity and background knowledge. Given the diverse English proficiency levels and background knowledge of Chinese EFL undergraduates, the content in WETA is carefully customised. As these four instructors agree, the content follows a graduated (gradual) and



diversified approach, commencing with fundamental writing concepts and gradually delving into more complex areas when learners progress and gain more confidence and proficiency. Some high-end skills and knowledge are reserved for those with high proficiency.

In Sakkir, Dollah, Arsyad, and Ahmad's (2021) study, teaching and learning content should be organised logically from basics to advanced. As these four instructors said, the content within WETA is highly logical. It provides a clear-cut and sequential learning trajectory, guiding undergraduates from the basics to more advanced writing skills. One of the most far-reaching examples is that after grasping the art of writing a simple, unified paragraph, learners are introduced to the construction of comprehensive multi-paragraph essays, emphasising the maintenance of coherence and cohesion throughout the text.

Nevertheless, while this structured progression benefits many students, it may not adequately address the needs of those who learn at an accelerated pace or require more in-depth explanations at the foundational level. The one-size-fits-all nature of the progression, despite its logical design, might leave some learners either feeling frustrated due to slow advancement or overwhelmed by rapid jumps in difficulty. Widodo et al. (2022) emphasised the importance of cultural relevance in EFL instruction.

The content in WETA is tailored to be relevant to the undergraduates' background knowledge. It incorporates examples, real-life scenarios, and topics closely related to the Chinese cultural backdrop, daily experiences, and academic pursuits. This makes the learning process more relatable and engaging, thus enabling the learners to better internalise and utilise the knowledge in their writing.

WETA also effectively integrates multimedia elements and authentic materials, such as native-speaker audio and video renditions of model essays, writing tutorials, real-time writing demonstrations, and in-depth topic analyses, to assist learners in improving their TR, CC, LR, and GRA in IELTS Writing Task 2. This is agreed by Professor Wang, who commented that WETA "offers authentic materials, enabling undergraduates to make themselves motivated and engaged to learn something well".

However, this strong focus on the Chinese cultural context may limit the platform's appeal and effectiveness for non-Chinese learners or those with limited exposure to Chinese culture. Additionally, while multimedia elements enhance engagement, there is a risk of overstimulating learners, which can lead to distraction rather than improved learning outcomes. Striking the right balance between cultural specificity, universal appeal, and multimedia usage remains a significant challenge for WETA.

Design and Usability

Four instructors have lauded the Web-based English Writing Assistant (WETA) for its clear, consistent, and user-friendly design, which enables undergraduates to access the resources they need easily. Instructor Yang specifically noted that WETA's intuitive design encourages learners to engage with ICT tools, thereby directly enhancing performance in IELTS Writing Task 2. Key sections, such as "Model Essays," "Collaborative Discussion and Interaction Group," and "Messaging," are prominently featured on the main interface, aligning with the findings of Aprianto and Muhlisin (2024) that clear menus, logical layouts, and intuitive navigation in online learning platforms enhance learner engagement.



However, this straightforward design might also limit the platform's scalability. As the content and functionality of WETA expand over time, the current simplistic layout could become insufficient, potentially leading to clutter and decreased usability if not redesigned to accommodate new features. Additionally, while the design is intuitive for the average user, it may not fully cater to learners with diverse cognitive abilities or those new to digital learning environments, who might still struggle to navigate certain aspects despite the overall clarity.

Mallahi (2022) highlighted the profound impact of multimedia on various writing processes and educational activities, and WETA effectively incorporates audio, videos, images, hyperlinks, and graphics to enrich the learning experience, as affirmed by Professor Wang, Instructor Zhao, and other instructors. Features like the ability to control video playback and access supplementary resources via hyperlinks allow students to customise their learning pace and explore related materials. Nevertheless, the extensive use of multimedia elements also presents risks. As noted in cognitive load theory research, an overabundance of visual and auditory stimuli can overwhelm learners, causing information overload and hindering rather than facilitating knowledge retention.

Moreover, the reliance on hyperlinks to external resources assumes the stability and reliability of those links; broken or outdated hyperlinks could disrupt the learning flow and lead to frustration among users. Irgatoğlu (2021) underscored the importance of technical support for ICT facilities, and this is a strength of WETA, as acknowledged by Instructor Shan, who emphasised the convenience of having support available to address usage-related issues. Technical problems are among the primary concerns and drawbacks associated with using ICT products, such as ChatGPT-based products, in the EFL context (Balcı, 2024). The platform provides prompt assistance through multiple channels for technical issues, ranging from screen-sharing glitches to feature access problems.

However, the effectiveness of this support system depends on several factors. For instance, the availability of support staff during all hours of the day and across different time zones is crucial, especially for a diverse user base. Additionally, while the current channels like email and hotline are functional, there may be more efficient ways to provide support, such as through an integrated chatbot or a comprehensive FAQ section. Relying solely on human support can lead to longer response times during peak usage periods, potentially causing significant disruptions to the learning process for affected users.

Despite these strengths, several instructors have pointed out significant challenges related to WETA's sustainability. As highlighted by Aprianto et al. (2022) and Baresh (2022), funding shortages are a common obstacle in integrating ICT into education. The paid extended meeting service on WETA, which restricts multi-person interactions behind a paywall, exemplifies this issue. Professor Wang and Instructor Zhao have stressed the need for adequate funding, with Instructor Zhao proposing that multiple stakeholders contribute to covering the costs.

However, implementing this solution is a complex process. Securing funding from various sources requires careful negotiation and coordination, and there is no guarantee that all proposed contributors will be willing or able to provide financial support. Moreover, even if funds are obtained, allocating them effectively to maintain and improve the platform's design, usability, and technical support without overburdening users with additional costs remains a delicate balancing act.



Technological Features

Kuswoyo, Rido, & Mandasari (2022) advocate for the widespread use of ICT to enable students and teachers to access extensive online learning resources. The Web-based English Writing Assistant (WETA) embodies this principle with its large online database of IELTS-related materials, encompassing past exam questions, model essays, writing tips, academic skills, and AI tools like Doubao AI. The platform's intelligent and user-friendly search function allows learners to query by keywords, topics, difficulty levels, or specific IELTS Writing Task 2 criteria.

However, the abundance of resources might overwhelm learners, particularly those with limited digital literacy or time management skills. Without proper guidance, students may struggle to sift through the vast repository effectively, potentially hindering rather than enhancing their learning experience. Moreover, the reliance on specific AI tools assumes their accuracy and relevance at all times; any inaccuracies in the AI-generated content could mislead learners. Technological guidance is crucial for the effective integration of AI in EFL teaching, as emphasised by Vivi and Yamin (2024). WETA provides clear navigation instructions, guiding learners on platform usage and where to seek assistance. As Prasetya (2024) notes, such guidance is essential for the effective use of multimedia features.

Nevertheless, while the instructions are designed to be comprehensive, they may not cater to diverse learning styles. Some learners might require more hands-on or visual guidance, whereas others may prefer textual explanations. Additionally, as technology evolves rapidly, there is a risk that the provided guidance could quickly become outdated, leaving users without support for new features or changes in functionality. Al-Tamimi (2019) highlights the importance of creating interactive environments to promote EFL practice, and WETA achieves this through its real-time and asynchronous interaction technologies. Real-time features, such as screen sharing and synchronous communication, enable immediate feedback, simulating an in-person learning environment (Aimah, 2023).

Meanwhile, asynchronous options offer flexibility in pacing and review (Varkey et al., 2023). Instructors concur that these features enhance motivation by facilitating peer and instructor feedback. However, the effectiveness of these technologies hinges on reliable internet connectivity. As Muslim, Yusuf, and Juliana (2018) and Isnani and Fajarwati (2024) have shown, subpar internet quality can severely disrupt real-time interactions and impede the seamless use of asynchronous functions, leading to frustration and a loss of learning momentum.

Data collection and storage are integral to ICT applications (Silva-Perdomo, Duero-Naranjo, & Castañeda-Trujillo, 2022), and WETA leverages this through its data storage capabilities, utilising Tencent Meeting's audio-video recording and WeChat's data-saving functions. As Alfares (2024) found, this allows learners and instructors to revisit materials, feedback, and work, facilitating targeted learning and teaching. For instance, instructors can analyse learners' writing trajectories over time.

However, this extensive data storage raises concerns about privacy and security. The accumulation of personal learning data and interactions across multiple platforms may be vulnerable to breaches, making compliance with data protection regulations a significant challenge. Additionally, the sheer volume of stored data may require substantial technical



infrastructure and management, which could strain resources if not properly planned and implemented.

Instructors Yang and Zhao, echoing the concerns of Muslem et al. (2018) and Isnani and Fajarwati (2024), emphasise the critical role of high-speed internet for optimal teaching and learning on WETA. While the platform's features are designed to enhance learning, poor connectivity undermines their effectiveness. However, ensuring consistent high-speed internet access is not always within the control of the platform or its users, especially in regions with limited infrastructure. This disparity in access creates an equity gap, where learners in disadvantaged areas may not be able to utilise WETA's capabilities fully. Shan suggests integrating more AI-related search functions to enhance WETA's appeal and effectiveness to meet future educational demands.

While AI offers numerous benefits, such as personalised learning, immediate feedback, and resource abundance, it also presents challenges. As recognised in various studies, the potential negative impacts on critical thinking development and the spread of misinformation are significant drawbacks. Balancing the advantages of AI integration with mitigating these risks requires careful consideration and deliberation. Implementing AI features without proper safeguards could inadvertently undermine the very educational goals WETA aims to achieve, highlighting the need for a nuanced approach to technological advancement in the platform.

Pedagogical Aspect

Wen-Chi Chen, Hsieh and Yang (2017) have demonstrated that online learning communities enhance oral proficiency and foster positive collaboration and active engagement. WETA's features indeed contribute to cultivating such a vibrant community, with group work and peer collaboration serving as integral components of effective language acquisition, as noted by Alzubi, Nazim and Ahamad (2024). Chinese EFL undergraduates engage in collaborative learning through WeChat groups and in-app discussion forums, sharing experiences and mutual support. They can even undertake group projects, such as creating digital videos or collaborating online on writing tasks (Fathi & Rahimi, 2022). This setup, as proposed by Masood and Haque (2021), fosters a diverse learning community.

However, while the community fosters interaction, there is a risk of uneven participation. Some learners may dominate discussions, overshadowing quieter or less confident peers, which can potentially limit the diversity of perspectives and hinder the learning of those who struggle to assert themselves. Moreover, the reliance on digital platforms for collaboration assumes all students have equal access to technology and possess the necessary digital skills, which may not always be the case.

WETA incorporates robust feedback mechanisms, including peer-to-peer and peer-to-teacher feedback. During peer reviews, undergraduates exchange writing samples and offer constructive critiques, gaining from varied viewpoints and honing their writing skills. Instructors also provide detailed comments, advice, and scores. As Colomer, Cañabate, Stanikūnienė, & Bubnys (2021) advocated, these feedback loops guide learners to identify strengths and weaknesses for targeted improvement.



However, the effectiveness of peer feedback depends on students' ability to provide accurate and useful critiques. Inexperienced or ill-informed feedback can mislead peers rather than assist them. Additionally, instructor feedback, although valuable, may not always reach every student promptly, especially in larger groups, which can potentially delay the learning process and reduce the impact of the feedback.

Blended learning, a response to the challenges of online education (Zahra, Amel, & Mohamed, 2023), forms the basis of WETA's pedagogical approach. The platform integrates theories such as WeCWI (Mah, Rahim, Marimuthu, & Liaw, 2021), WeCWI-enhanced 21st-century CLD (Mah, 2023), and Gagné's Nine Events of Instruction (Gagné & Medsker, 1996; Loua, 2023). For instance, it clearly outlines learning objectives at the start of modules and offers detailed performance feedback and assignments at the end. Instructors agree that these frameworks support the development of critical thinking.

However, the complexity of these theoretical frameworks may pose challenges for both learners and instructors. Learners with limited exposure to advanced educational theories may struggle to understand the learning processes designed around them fully. Instructors, on the other hand, may find it difficult to adapt these frameworks to the diverse learning needs and paces of individual students, potentially resulting in a one-size-fits-all approach that fails to maximise learning outcomes. The tasks and activities in WETA are designed to be authentic, mirroring real-world writing scenarios from exams, academia, and professional settings, in line with the WeCWI-enhanced 21st CLD's emphasis on solving realistic problems (Mah, 2023). Such tasks, as Azmi (2017) suggested, boost motivation and performance.

However, while authenticity is beneficial, there is a risk of overemphasising practicality at the expense of creativity. These highly structured real-world tasks may limit students' opportunities to explore imaginative or unconventional writing styles, which are also important for developing a well-rounded writing ability. Additionally, the scenarios presented may not fully represent the wide range of cultural and professional contexts that students will encounter in the globalised world, potentially narrowing their perspective.

Hamidah (2021) underscored the importance of digital literacy in enhancing the learning process, and WETA places significant emphasis on developing these skills. Students using WETA learn to operate digital tools, such as screen sharing and online discussion platforms, as well as how to manage their digital identities and protect their privacy. Instructor Shan also advocated for focusing on digital literacy.

However, integrating digital literacy training within the context of IELTS writing instruction may stretch the platform's scope too thin. There is a danger that the core writing objectives could be overshadowed by the extensive digital skills training. Moreover, as technology evolves rapidly, ensuring that the digital literacy skills taught remain relevant and up-to-date becomes an ongoing challenge, requiring continuous curriculum updates and potentially straining the resources and capabilities of the instructional design team.

Assessment and Material

Hamed (2019) posits that pedagogical chunking activities enhance L2 learners' abilities to notice, organise, and record linguistic expressions. In line with this, the Web-based English Writing Assistant (WETA) effectively segments the IELTS Writing Task 2 curriculum into smaller, more manageable lessons. By dividing content into essay types, such as argumentative,



discussion, and report essays, and focusing on specific aspects like structure, linking words, and grammar within each lesson, WETA streamlines long-term learning.

However, this rigid segmentation might inadvertently limit learners' holistic understanding of writing. Breaking content into isolated segments could prevent students from seeing the interconnectedness between different writing elements, potentially hindering their ability to apply skills across various essay types. Moreover, overly structured chunking may not accommodate learners who prefer a more integrated or exploratory learning approach, stifling their creativity and adaptability.

Nurul Asri (2019) emphasises the importance of clear instructions and model samples in helping students track their progress. WETA adheres to this principle by providing explicit guidelines and examples for every exercise, from grammar drills to full writing tasks. For instance, writing exercises include detailed model introductions with analytical breakdowns. While these aids enhance understanding and completion rates, there is a risk of over-reliance. Learners may become too dependent on the provided examples, limiting their capacity to generate original ideas or develop independent problem-solving skills. Additionally, the examples might reflect only a narrow range of writing styles or perspectives, potentially biasing students' understanding of what constitutes "good" writing and constraining their creative expression.

Zhang, Yan, & Wang (2021) advocate for self-evaluation as a means to measure learner progress, and WETA offers a comprehensive set of self-assessment tools with reference answers. These instruments enable students to evaluate their writing across key IELTS criteria, fostering self-awareness and goal-setting. As Jiwandani, Utami, and Wahyuni (2021) and Darmawan, Alam, and Nirma (2021) note, self-assessment encourages reflection and targeted improvement.

However, the effectiveness of self-assessment depends on students' ability to assess their work accurately. Without sufficient metacognitive skills or a clear understanding of assessment criteria, learners may misinterpret feedback, leading to misguided improvement efforts. Moreover, relying solely on self-assessment might create a false sense of progress if students lack the objectivity to identify deeper-seated writing issues. Ma et al. (2024) emphasise the importance of alignment between writing tasks and assessment criteria, and WETA's exercises closely mirror the IELTS Writing Task 2 assessment rubrics, as affirmed by Professor Wang. Authentic assessment informs learners of the evaluation rubrics and criteria in advance, thereby offering numerous opportunities for transparency (Janse van Rensburg, Coetzee, & Schmulian, 2021). This alignment familiarises students with exam expectations, enabling targeted skill development.

However, an overemphasis on strict alignment with standardised criteria may promote formulaic writing. Students might focus solely on meeting rubric requirements at the expense of developing unique voices or innovative approaches, which are also valued in high-level writing. Additionally, rigid adherence to these criteria might not adequately account for cultural or stylistic variations in writing, potentially disadvantaging learners from diverse backgrounds. Zou, Kong, and Lee (2021) suggest that interactive assessment activities, such as discussions and quizzes, boost motivation and provide timely feedback.



WETA incorporates these elements, utilising quizzes to assess knowledge and discussion prompts to stimulate critical thinking. As Instructors Yang and Zhao note, these features enhance engagement. Quizzes with answers provided by teachers are set as activities or assignments, not only to measure students' progress but also to motivate their learning and encourage engagement (Maryo & Pujiastuti, 2022).

Nevertheless, the effectiveness of these interactive components depends on proper implementation. Poorly designed quizzes may fail to accurately assess learning, while discussion prompts that lack depth or relevance might not encourage meaningful engagement. Moreover, relying too heavily on these activities could create an environment where learning is driven by short-term assessment goals rather than long-term skill development, potentially undermining the overall educational value of the platform.

However, critical challenges exist. Experts flagged funding limitations and internet speed as potential hurdles. Insufficient resources may limit advanced features, and slow connectivity can disrupt real-time interactions. Moreover, although WETA addresses digital literacy, experts' comments suggest that opportunities remain to develop AI-driven functionalities and digital skills training further. While WETA shows great promise in transforming IELTS writing instruction, addressing these issues is essential. Future research could focus on its long-term impact, cost-effective solutions, and optimised AI integration to solidify its role in innovative language education.

To put it in a nutshell, this study demonstrates that WETA offers significant potential for enhancing the performance of Chinese EFL undergraduates in IELTS Writing Task 2. Across content quality, design, technological features, pedagogy, and assessment, WETA presents numerous strengths. Its alignment with IELTS benchmarks, incorporation of authentic materials, and logical progression of writing skills provide a solid foundation for learning. The platform's multimedia integration, intuitive design, and interactive functions boost learner engagement and facilitate personalised study experiences.

Moreover, its technological capabilities support autonomous learning, while the robust feedback mechanisms and well-structured assessment tools aid in tracking progress. However, challenges such as funding limitations, potential over-reliance on certain features, and issues related to digital equity and AI integration must be addressed. By overcoming these obstacles, WETA can play a more transformative role in IELTS writing instruction, equipping learners with both exam-oriented and practical writing skills that are essential for success.

Limitations

This study has several limitations. Firstly, the evaluation of WETA primarily relied on the feedback from four instructors, which may not fully represent the diverse perspectives of a larger user group, including students with varying English proficiency levels and learning styles. Secondly, the research primarily focused on Chinese EFL undergraduates, which limits the generalizability of the findings to other language learner populations or educational contexts.

Additionally, the study did not conduct a long-term follow-up to assess the sustained impact of WETA on students' writing abilities beyond the immediate performance improvements. Regarding technological aspects, the potential privacy and security risks associated with data storage were not thoroughly explored, and the effectiveness of AI-related features was not



comprehensively evaluated. These limitations suggest areas for future research to enhance the understanding of WETA's role in language education.

Conclusion

In conclusion, the WETA has already received high praise and recognition from these four instructors in multiple dimensions. The high-quality content, user-friendly design and utilisation, advanced technological features, sound pedagogical approaches, and well-structured assessment and materials allow WETA to become a highly effective instrument for improving the IELTS Writing Task 2 performance of Chinese EFL undergraduates.

By meeting the specific requirements of the target group(s) and offering a comprehensive, engaging learning experience, WETA has the potential to transform the approach to IELTS Writing Task 2 as instructed and learned in the Chinese educational context. As educational technology continues to evolve, this innovative application will undoubtedly play an increasingly pivotal role in enhancing language learning outcomes and preparing learners to overcome challenges worldwide.

Overall, this qualitative data analysis process, enriched by insights from four instructors and a focus on key themes and technologies, aimed to create a powerful solution for improving the IELTS Writing Task 2 performance of China's EFL undergraduates. By combining these elements, we strived to develop a technological innovation that was not only based on data but also informed by educational best practices and technological possibilities.

Practical recommendations also deserve attention. To maximise the effectiveness of the WETA platform and overcome existing challenges, a multi-faceted approach involving students, instructors, institutions, and policymakers is essential. Instructors should actively incorporate WETA's collaborative features, such as WeChat-based peer review and the synchronous and asynchronous interactive functions of Tencent Meeting and WeChat, into their teaching to enhance student engagement and learning outcomes.

Educational institutions need to invest in training programs that equip educators with the technical skills to fully utilise WETA's capabilities, including leveraging tools like Doubao AI to align with IELTS standards. Regarding funding, institutions and relevant stakeholders should collaborate to secure stable financial support, eliminating paid feature barriers and enabling platform enhancements.

From a technological perspective, implementing robust data protection measures, regularly updating AI functions, and offering personalised technological guidance are crucial. For design and usability, conducting user experience research and creating an adaptable layout will ensure scalability. Policymakers should recognise the platform's potential by certifying hybrid training programs, encouraging the adoption of blended learning models.

Additionally, continuous evaluation of assessment tools, balanced participation in online communities, and refined task design will further optimise the learning experience, making WETA a powerful tool for modernising English language education while maintaining academic rigour.



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