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Exploring Digital Formative Assessment Practices of EFL Teachers at a Chinese Vocational University

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Abstract: ***Digital formative assessment has garnered increasing academic attention within the realm of English-as-a-foreign-language (EFL) research. Leveraging the advancements in digital technologies and the pedagogical advantages of formative assessment, EFL teachers are enabled to adjust their instructional methods more promptly and provide more constructive feedback to enhance students' learning outcomes. However, the manner in which teachers implement digital formative assessment practices in vocational EFL contexts remains underexplored. This study investigates how EFL teachers at a Chinese vocational university integrate digital platforms into their formative assessment practices. Utilising a qualitative case study approach, it explores teachers' formative assessment practices across four digital platforms, including SuperStarLearn, FiF, iWrite, and iTest. The findings reveal that digital platforms demonstrate effectiveness in enhancing assessment efficiency, eliciting students' learning evidence, and personalising instructional feedback. The challenges encountered in teachers' practices are also reported. These insights contribute to a deeper understanding of digital formative assessment, offering implications for digital formative assessment practices in EFL classrooms and the development of technology-enhanced assessment solutions in vocational EFL contexts.***

Keywords: digital formative assessment, vocational university, assessment practices, EFL teachers

1. Introduction

Formative assessment has been extensively researched due to its critical association with instructional quality and its demonstrable capacity to enhance learning outcomes (Li & Gu, 2023). By unravelling students' performance in curricular tasks, formative assessment enables teachers, students, and peers to gain insights into current learning progress and identify specific needs for targeted support and instructional scaffolding (Lewkowicz & Leung, 2021). This process establishes a foundation for constructive feedback, facilitates dialogic exchanges among instructional stakeholders, and promotes reflective practices that cultivate student competencies (Brown, 2020). Recent scholarship has increasingly focused on technology-mediated assessment practices, driven by rapid technological evolution, diversified students' needs, and transformative assessment modalities in the digital learning environment (Bearman et al., 2020). Empirical investigations in English-as-a-foreign-language (EFL) contexts have documented the implementation of various digital tools, including automated scoring systems for writing and speaking skills alongside game-based learning platforms, demonstrating their pedagogical potential (Daniels, 2022; García-Pinar, 2024).

While existing research on digital formative assessment has advanced, a notable gap persists in studies focusing on vocational education contexts. Specifically, research into how vocational EFL teachers integrate digital tools to facilitate formative assessment remains underexplored. To address this gap, this exploratory study examines the digital formative assessment practices of four EFL teachers at a Chinese vocational university. Informed by Cusi and Morselli's (2024) analytical framework, the research investigates teachers' approaches to embedding multiple functionalities of digital technologies into formative assessment practices and explores the contextual hurdles emerging throughout the technology integration process, yielding pedagogical implications to guide vocational EFL teaching in the digital age.

2. Literature Review

2.1 Digital Formative Assessment

Formative assessment is a dynamic and continuous process of "seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (Assessment Reform Group, 2002). Rooted in Vygotsky's sociocultural theory, which emphasises the role of social interaction in learning, formative assessment facilitates dialogic exchanges between teachers and students to advance learning (Wiliam & Thompson, 2007). In this process, teachers draw on their understanding of assessment and disciplinary knowledge, mediating with their teaching contexts to refine instructional strategies and align them with students' evolving needs (Black & Wiliam, 2018).

As educational technologies evolve, digital formative assessment has emerged as a transformative approach, defined as technology-mediated practices that facilitate the cyclical collection and analysis of learning evidence to inform instructional adjustments (Børte et al., 2023). Unlike conventional formative assessment, which is constrained by challenges such as low student engagement and large-class management (Carless, 2015), digital tools offer teachers sophisticated solutions in formative assessment implementation. These include multimodal resources, from automated quizzing systems to Web 2.0 platforms with discussion forums, blogs, and e-portfolios (McLaughlin & Yan, 2017). Specialised software further addresses diverse instructional requirements. For example, Learning Management Systems (LMS) allow the creation, organisation, and delivery of digital learning materials while monitoring

student performance and achievements (Ma et al., 2024), and Student Response Systems (SRS) enable teachers to collect immediate student responses and administer real-time polls within large-scale classroom environments (Çelik & Baran, 2021). Research indicates that such tools enhance student engagement and foster student autonomy through interactive interfaces and timely feedback (Bearman & Ajjawi, 2023; Elkington & Irons, 2025), demonstrating how technological innovations address pedagogical needs in contemporary education.

Nonetheless, technology adoption alone does not intrinsically ensure effective formative assessment practices. Although an extensive array of digital tools has been devised to assist formative assessment practices, research reveals that rather than achieving formative objectives, teachers' assessment processes often devolve into administrative routines and summative formalities (Adams & Clough, 2015; Lillejord & Børte, 2020). Furthermore, entrenched behaviourist mindsets, prescriptive practices and insufficient professional digital competencies may collectively act as obstacles to the effective enactment of formative assessment strategies (Lillejord et al., 2018). Therefore, understanding digital formative assessment requires critical examination of technological integration and its alignment with assessment purposes, particularly its capacity to enhance learning processes and support teachers and students in achieving intended learning goals.

Cusi and Morselli (2024) developed an analytical framework to examine digital formative assessment across technology and assessment dimensions. For the technology dimension, the framework outlines three essential functions of digital formative assessment: *communicating*, which enables interaction among formative assessment agents through technology-mediated communication; *analysing*, which provides multi-level insights of student learning status and thinking; and *adapting*, which supports teachers in data-driven instructional decision-making. For the assessment dimension, the framework synthesises Wiliam and Thompson's (2009) formative assessment strategies, positioning teachers, students and peers as core agents responsible for its successful implementation. These strategies encompass clarifying and sharing learning goals, organising classroom discussions to elicit evidence of learning, delivering learning-oriented feedback, fostering collaborative environments for peer assessment, and cultivating students' self-regulatory skills (Wiliam & Thompson, 2007). The framework facilitates a thorough understanding of whether digital formative assessment practices effectively harness technological affordances to enhance learning, especially through assessing alignment between pedagogical intentions and technological support (Børte et al., 2023).

2.2 Digital Formative Assessment in EFL Contexts

The integration of digital formative assessment in EFL contexts has attracted scholarly interest, with studies exploring its pedagogical affordances and implementation challenges. Research highlighted the efficacy of digital tools in fostering real-time interaction and immediate feedback, which enhanced student engagement and metacognitive reflection. For instance, platforms such as Kahoot! facilitate dynamic classroom interactions by aggregating student responses to vocabulary and grammar exercises instantaneously, enabling teachers to adjust instructions based on emergent learning gaps (García-Pinar, 2024). Studies in Asian EFL contexts revealed that tools such as LMS, e-portfolios, and social media platforms allowed teachers to diagnose student needs and track learning progress longitudinally (Huang et al., 2021; Mahapatra, 2021; Slamet & Mukminatien, 2024). Similarly, Zenouzagh et al. (2025) emphasised the role of digital space in promoting agentive student engagement, where proactive documentation and analysis of feedback improved writing outcomes through iterative peer collaboration and self-regulated learning strategies. Pinto-Llorente and Izquierdo-Álvarez (2024) further demonstrated that embedding digital learning ecosystems within formative assessment significantly boosted students' motivation and language competencies, while fostering transversal skills such as digital literacy and collaborative problem-solving.

Despite its pedagogical potential, digital formative assessment in EFL contexts faces implementation barriers that undermine its transformative promise. Infrastructural deficiencies, including unreliable internet access and inadequate institutional support, were particularly acute in under-resourced regions, as evidenced by Mahapatra's (2021) multiple-case study of South Asian ESL contexts, where large class sizes and insufficient training reduced feedback practices to administrative formalities. Concurrently, digital literacy gaps persisted even in technologically equipped environments. Zou et al. (2021) demonstrated that EFL teachers' limited training in and scepticism towards digital tools diminished student engagement and compromised formative feedback effectiveness in online writing instructions. While digital platforms theoretically bridge assessment and language skill development through adaptive pathways (Pinto-Llorente & Izquierdo-Álvarez, 2024), their practical application was hindered by teachers' limited capacity to contextualise diagnostic data within broader curricular goals, as highlighted by Huang et al. (2021).

Despite expanding literature on digital formative assessment, a critical gap persists regarding vocational EFL teachers' integration of digital tools for formative assessment. This gap manifests in two dimensions. First, there is a lack of empirical inquiry into the strategies vocational EFL teachers employ to coordinate digital tools within formative assessment practices. Second, the field lacks insights into the real-world challenges that vocational EFL teachers encounter during the adoption of digital formative assessment. This study addresses these dimensions by exploring digital formative assessment practices of EFL teachers at a Chinese vocational university, seeking to answer the following research question:

- How do EFL teachers at the Chinese vocational university implement digital formative assessment practices, and what challenges do they encounter in this process

3. Methodology

This study employed a qualitative case study design to explore in depth the digital assessment practices of EFL teachers in a Chinese vocational university. As Yin (2018) explains, case study research allows for a thorough investigation of contemporary issues within their authentic contexts. This approach is particularly suitable for examining complex educational settings where multiple variables and stakeholders interact. It enables the researcher to uncover nuanced insights into teachers' practices of digital formative assessment.

3.1 Research Context

The study was situated in a vocational university in southern China that has undergone a decade-long digital transformation in its teaching systems. Initiated in 2015 under the guidance of a Vice President for Academic Affairs, the university's digitisation reform began with four pilot courses. Among these, the *General English* course, a compulsory EFL module for all non-English major first-year students, was chosen as a flagship digital reform course due to its broad institutional reach. The first implementation phase commenced in late 2016, marked by the adoption of SuperStarLearn, a mobile learning platform. This platform supports multifunctional operations, including enabling teachers to initiate real-time digital classroom activities and allowing students to download e-resources and browse online teaching materials catered by teachers (see Figure 1 for functions available in SuperStarLearn).

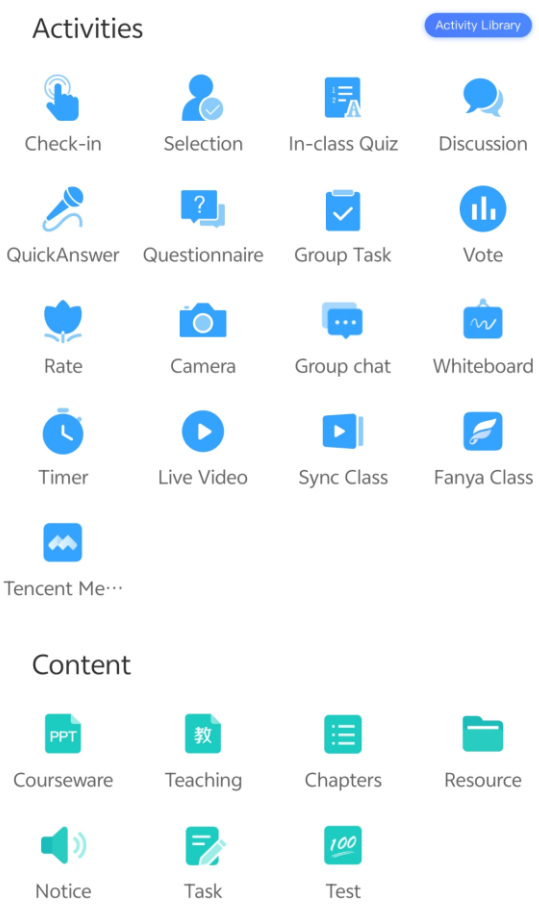

Figure 1: Functions available in SuperStarLearn

EFL teachers in this university were required to integrate this platform in their teaching, using its integrated SRS functions to facilitate classroom interactions. Students could access designated digital activities through mobile devices such as smartphones and tablets and respond to these activities. Their responses could be viewed by peers on their mobile apps and projected by teachers onto classroom screens (see Figure 2), enabling blended online-offline interactions during lessons.

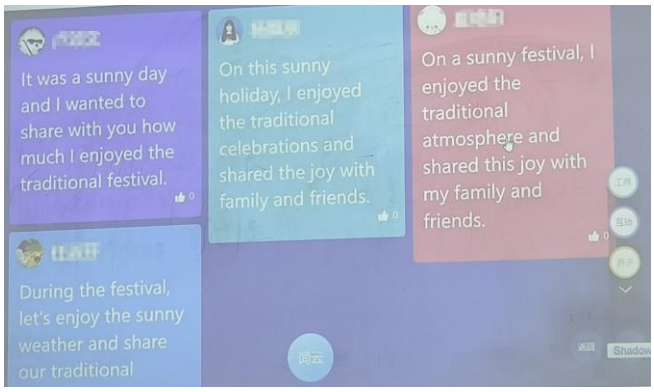

Figure 2: Projection of student responses in SuperStarLearn

The second phase of implementation began from 2018 onwards, when various digital tools were incorporated into the *General English* course to address teachers' needs for assessing varied aspects of students' language. During this phase, three digital platforms underwent pilot implementation before achieving widespread adoption. First, iWrite, a web-based English writing assistance platform, was introduced to support writing teaching and learning. The iWrite platform integrates an AI-driven marking system that can conduct multi-dimensional analyses of grammar and vocabulary and provide instant scoring feedback, which enables students to promptly identify and correct errors in their writing while assisting teachers in delivering further instructions for improvement (see Figure 3).

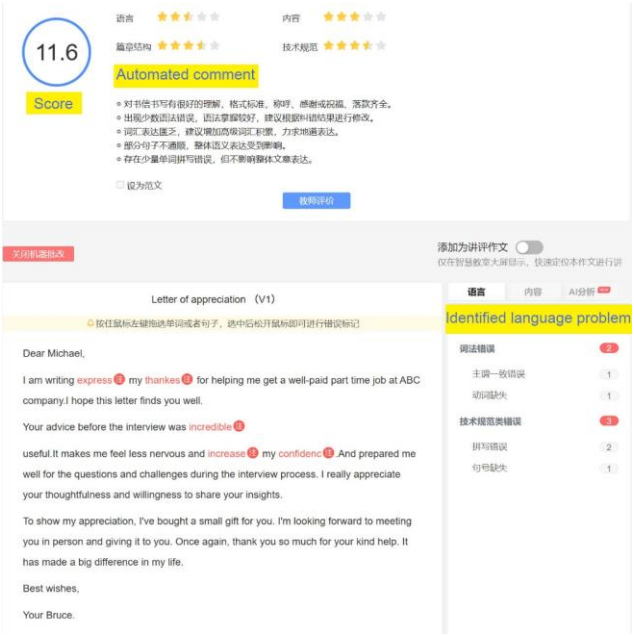

Figure 3: An automated assessment report from iWrite platform

Second, FiF, a mobile app that integrates speech synthesis, recognition, and assessment technologies, was deployed to enhance students' oral skills. The FiF platform can analyse

students' pronunciation, fluency, and task completion, generating detailed diagnostic reports that highlight areas for development (see Figure 4). Third, iTest, a digital platform that can be accessed through both website and mobile devices, was implemented to administer class-wide and institution-wide summative tests. The iTest platform supports comprehensive test item types, including closed tasks such as multiple-choice and gap-filling tasks and open-ended tasks for writing and translation, all of which support intelligent scoring (see Figure 5). Along with SuperStarLearn, these digital platforms featured the EFL teaching environment within this vocational university, which established an ideal research context for investigating teachers' digital formative assessment practices.

Figure 4: An automated assessment report from FiF platform

Figure 5: An automated assessment report from iTest platform

3.2 Research Participants

The participants were recruited from the *General English* teaching team at this vocational university. The researcher initially consulted the department director overseeing *General English* teaching to identify teachers actively integrating the four digital platforms into their teaching and assessment. Recommended candidates were then contacted, and the study's objectives and research procedures were explained. Finally, four teachers volunteered to participate in the study, each assigned a code (T1–T4) based on the order in which they were recruited. All participants were fully informed of their right to withdraw from the study at any time for any reason. The participants demonstrated varied teaching experience, with years of service ranging from 3 to 25 years. Specifically, their professional profiles were as follows: T1 (10 years), T2 (5 years), T3 (25 years), and T4 (3 years). Each teacher taught 5 to 6 classes of approximately 40 first-year students.

3.3 Data Generation and Analysis

Two primary methods of data generation were employed: observations and semi-structured interviews. Observations were conducted both in-class and online. Each participant was observed across three to four lessons, equivalent to a unit's instructional period, to ensure comprehensive recording of their digital assessment practices. They were also asked to provide screenshots of their digital assessment activities on the four platforms. These observational data enabled detailed documentation, categorisation, and interpretation of participants' digital formative assessment practices. They also helped construct the participants' assessment profiles, which later informed interview design. Semi-structured interviews provided deeper insights into participants' perceptions of digital teaching environments and their rationales for designing specific assessment activities. Interview schedules were structured to explore participants' understanding of digital formative assessment practices, offering a rich complement to the observational data (see Appendix A). The interviews were conducted in Mandarin Chinese, the shared language of both participants and the researcher, to ensure mutual understanding, and were digitally recorded.

Data analysis drew upon Cusi and Morselli's (2024) analytical framework, examining teachers' digital assessment practices through the lens of key functionalities of digital tools and formative assessment principles. Adopting a reflexive thematic analysis approach, where themes are interpreted as patterns reflecting meaning across the dataset (Braun et al., 2019), interview transcripts were repeatedly cross-examined with corresponding observational records. This iterative process facilitated the development of narrative profiles for each participant. Subsequent comparative analysis explored recurring patterns and notable contrasts across cases. Representative data extracts were translated and integrated into the data analysis section with identifiers, including participant pseudonyms and lesson codes or transcript page numbers (such as T1:L1 or T2:5) to ensure clarity and traceability.

4. Data Analysis

Based on the observational and interview data, four overarching themes emerged to characterise teachers' digital formative assessment practices across the four digital platforms (SuperStarLearn, FiF, iWrite and iTest): automated

scores and comments, elicitation of student responses, data-driven instructions, and a persistent challenge. The specific practices employed by teachers, together with their perspectives on these approaches, are detailed in the subsequent sections.

4.1 Automated Scores and Comments

Observational and interview data indicated that teachers assigned assessment tasks via all four digital platforms to generate automated scores and comments. SuperStarLearn was used for distributing and scoring dictation, listening, vocabulary and reading quizzes (e.g.: T1:L3, T2:L2, T3:L2, T4:L4). These quizzes primarily involved closed tasks (e.g., multiple-choice and gap-filling), which could generate automated reports providing students with scores and correct answers. Oral exercises were hosted on FiF for students to practise reading textbook passages aloud and to imitate daily conversations (e.g.: T1:L2, T2:L1, T3:L1, T4:L1). Writing tasks were managed via iWrite (e.g.: T1:L4, T2:L3, T3:L3, T4:L4), which served as both an assignment collector and a provider of automated scores and comments. iTest supported summative assessment, including unit tests, mid-term tests and final tests (T1:18, T2:2, T3:7, T4:3), providing scores for closed tasks alongside brief grammatical and lexical feedback for writing assignments.

Teachers highlighted the efficiency of automated scoring as a key advantage. For example, T4 considered assigning quizzes on SuperStarLearn as "a convenient way to check students' overall learning status" (T4:3); T3 praised iWrite's "ability to generate sub-scores for grammatical accuracy, vocabulary span, and coherence", noting this "streamlined initial grading process" and "allowed teachers more time to provide detailed feedback" (T3:5); T1 noted that FiF's automated pronunciation scoring "empowered students to practise speaking independently, with real-time data guiding self-correction", thereby fostering metacognitive reflection (T1:2). However, limitations were also identified. T2 observed that FiF's scoring system was often "inconsistent with human judgment – some students received high marks despite unclear pronunciation" (T2:2). T3 emphasised that automated comments on iTest "lacked the depth to address complex errors", requiring teachers to "review and revise" them (T3:7). Both T1 and T4 criticised iWrite's feedback. T1 noted its focus on "surface-level grammar and vocabulary errors" while neglecting "higher-order writing skills like argument development or cultural nuances" (T1:11); T4 critiqued the feedback as "overly templated" and "not personalised enough" (T4:6). While acknowledging the operational convenience of automated systems, teachers highlighted persistent gaps in platform-generated feedback, which failed to address their instructional needs. Their concerns demonstrated a prioritisation of assessment quality alongside digital efficiency.

4.2 Elicitation of Students' Responses

Besides automated scoring, teachers were observed to utilise digital platforms to elicit students' oral and typed responses during classroom instructions. Among the adopted platforms, SuperStarLearn emerged as the primary tool for stimulating students' oral engagement. Key features such as "selection", which randomly assigned students to answer questions, and "quick answer", which enabled students to compete for response opportunities via a dedicated icon within the SuperStarLearn app, were frequently used (e.g.: T1:L1, T2:L3, T3:L2, T4:L2). Teachers highly regarded these functions for their dual benefits: they "addressed long-standing issues of insufficient student participation" (T3:4) and "provided teachers with more opportunities to understand students' learning status" (T1:6). Specifically, T1 reported that students found the "selection" function stimulating, which motivated them to "focus more intently on lectures" (T1:6); T2 highlighted that "selection" could "ensure equitable opportunities" for all students to be called upon for assessment (T2:5); T3 noted that "quick answer" could "introduce a gamified element that motivated proactive learners" (T3:5), while T4 considered these activities "created a sense of urgency and competition" (T4:7) that encouraged participation.

Teachers also adopted the "discussion" function in SuperStarLearn to elicit typed responses from students. The "discussion" function enabled teachers to create a discussion forum regarding specific questions or topics within SuperStarLearn and invite students to submit their answers. Teachers regarded "discussion" as an advantageous tool for both tracking learning evidence and structuring peer collaboration in assessment activities. T2 noted that "discussion" allowed students to submit real-time responses visible to the entire class, which "enabled teachers to instantly identify unexpected insights and common problems" (T2:7). T1 further emphasised that this transparency facilitated peer interaction through actions such as liking or commenting on others' answers, which "opened the black box of learning" by revealing diverse student perspectives (T1:8). T3 highlighted that "discussion" could "enable students to engage in broader classroom discussions unconstrained by seating arrangements" (T3:5). T4 added that "discussion" could serve as an efficient channel to share "criteria for high-quality assignments", as he often "shared excellent student work in the discussion forum for all students to examine and learn" (T4:3), thereby clarifying expectations and fostering peer learning through tangible examples.

4.3 Data-driven Instructions

Evidence from observations and interviews demonstrates that teachers utilised digital platforms as data repositories to gather evidence of student learning, thereby informing their instructional design. Three types of data-driven instructions were identified: instructional strategies involving teacher post-assessment teaching, promoting students' autonomy, and facilitating peer collaboration. For post-assessment teaching, teachers adjusted knowledge delivery based on student performance in exercises and classroom interactions. For example, T1 identified lexical gaps through students' responses in SuperStarLearn's discussion forums, noting "overuse of simplistic vocabulary", and subsequently tailored vocabulary lessons to "strengthen grasp of word associations including synonyms and antonyms" (T1:7). T3 analysed iTest summative data to identify recurring errors in listening and reading comprehension, reallocating review session time to "address common problems" and "reinforce test-taking strategies" (T3:10). T4 similarly reviewed SuperStarLearn

assignments to pinpoint "grammar errors such as verb tense misuse", subsequently "design[ing] targeted remedial drills" and "us[ing] anonymised student errors as negative examples" to strengthen basic grammar knowledge (T4:11).

Teachers also promoted student autonomy through self-assessment based on platform-generated feedback. T1 directed students to "revise writing according to iWrite's automated comments" (T1:9), encouraging iterative editing and metacognitive reflections on structural and lexical weaknesses during observed writing sessions (T1:L4). T2 employed FiF's automated scores to design tiered learning pathways (T2:L2), asserting that "students at advanced levels should access challenging role-play dialogues on FiF", while "students at basic levels should engage with phonics drills", enabling targeted practice aligned with individual needs and empowering students to monitor their progress (T2:5). Additionally, teachers facilitated peer collaboration using platform features. T1 encouraged students to "comment on each other's answers" in SuperStarLearn's discussion forum, creating interactive digital spaces for "sharing perspectives and identifying problems" (T1:8). T3 implemented SuperStarLearn's "group task" function (T3:4), assigning collaborative projects with rubric-based peer assessment, where students could "grade their peers' work and provide feedback" (T3:12). T4 organised anonymous homework exchanges on SuperStarLearn (T4:3), where students "used checklists to assess each other's work", enabling teacher to "synthesise common issues from peer feedback" for instructional refinement (T4:6). These practices transformed digital platform data into opportunities for self- and peer assessment, cultivating a learning environment that encouraged deeper engagement with course content.

4.4 Persistent Challenges

Despite the pedagogical benefits, persistent challenges emerged across all cases concerning the simultaneous use of multiple digital platforms in teaching and assessment. Teachers reported that the digital platforms they employed required access through distinct apps and/or websites, necessitating frequent shifts between platforms during instructional delivery. Developed by separate educational technology companies, these platforms featured non-interoperable systems and incompatible data formats, an issue generating significant administrative inefficiencies and learning burden. For example, T1 considered it "very difficult" to "construct a comprehensive student profile using data with incompatible formats" (T1:10). T2 and T4 characterised the situation respectively as "app overload" (T2:7) and "app fatigue" (T4:9), citing students' frustration with managing separate apps for classroom tasks (SuperStarLearn), oral practices (FIF), writing assignments (iWrite), and summative testing (iTest), each requiring unique logins and interfaces. They argued that using multiple digital platforms "brought problems from various aspects" (T2:7), including diverting class time to "troubleshooting technical issues instead of engaging with textbook content" (T2:8), and "undermined learning focus", as "both students and teachers struggled with managing disjointed tasks across multiple apps" (T4:10). To address these challenges, T3 proposed developing "a unified digital platform" to "consolidate functions such as classroom interaction activities, grading, homework distribution and resource sharing" (T3:10). Implementing such an integrated platform that incorporates the practical features currently utilised by teachers would likely streamline workflows, enhance data coherence, and reduce cognitive overload, thus enabling more efficient teaching and assessment practices.

5. Discussion

This study explored digital formative assessment practices of four EFL teachers at a Chinese vocational university, aiming to report on their integration of digital platforms into EFL teaching and assessment. Using Cusi and Morselli's (2024) analytical framework, the study identified that digital platforms have facilitated teachers' formative assessment practices across three aspects: *communicating*, *analysing*, and *adapting*. Regarding *communicating*, the digital platforms provided teachers with efficient channels to elicit students' oral and written responses through synchronous and asynchronous digital assessment tasks. These tasks enhanced communication between teachers and students by boosting student engagement and sustaining focus, demonstrating how digital environments promote student involvement, clarifying learning objectives, and engineer classroom discussions (Zenouzagh et al., 2025). Besides facilitating teacher-student communication, digital platforms also enabled peer interaction, creating more opportunities for mutual learning and reflection, thereby transforming peers into instructional resources and empowering students as agents of their own learning (Wiliam & Thompson, 2007). By enabling communication among all agents of formative assessment, these digital platforms echoed the findings of Ball and Barzel (2018), highlighting the critical role of interactive digital spaces in supporting formative assessment practices.

As for *analysing*, the digital platforms enabled teachers to gain overviews of students' learning progress by providing insights into their thought processes and learning status. This was facilitated by generating automated assessment outcomes and reviewing student responses, enabling teachers to promptly assess multiple aspects of language proficiency and identify strengths and weaknesses requiring attention, which aligned with research highlighting how auto-scoring and timely understanding of student learning status support pedagogical decision-making (McLaughlin & Yan, 2017; Zou et al., 2021). These data served as prerequisite sources for *adapting* instructions, allowing teachers to make decisions about next pedagogical steps based on student needs. Analysis showed that teachers derived learning evidence from digital platform data, enabling targeted instructions and constructive feedback. Peer collaboration and self-reflection were also facilitated, thus expanding students' access to diverse feedback channels (Elkington & Irons, 2025). Such practices demonstrated the multi-faceted support of digital platforms for formative assessment across three dimensions: facilitating communication, analysing assessment results, and providing learning-oriented feedback, showcasing how digital technologies enhanced the dynamics of classroom teaching and assessment.

However, analysis highlighted mismatches between teachers'

formative assessment practices and their adopted digital platforms. First, automated scores and comments often exhibited inconsistency with human judgment, focused primarily on surface-level issues, and lacked depth in addressing complex errors. This misalignment between platforms' limited capacity for quality feedback and teachers' pedagogical expectations risked undermining collaboration between teachers and digital tools (Børte et al., 2023). Furthermore, the use of multiple platforms imposed administrative burdens on teachers and posed usability challenges for students. This phenomenon underscores that the effectiveness of digital formative assessment does not depend on the number of digital platforms utilised. On the contrary, excessive adoption of disjointed platforms might diminish teaching efficacy and student engagement, hindering the implementation of robust formative assessment practices.

Notwithstanding feedback quality concerns and app overload, the adoption of digital platforms has served as a key facilitator for teachers' delivery of formative assessment in this vocational university. Some recommendations are outlined as follows. First, teachers should engage proactively and critically with platform-generated feedback, leveraging the assessment data provided by the platforms to reduce workload and enhance assessment efficiency while integrating automated scores and comments with their professional judgment to ensure students receive feedback more conducive to their learning improvement. Second, there exists a tangible need among teachers and students for a unified platform consolidating in-class interaction tools, multi-skill language assessments, and data management features. Where such digital platforms are available in the market, institutions should adopt them, as they would allow teachers and students to organise assessment data and feedback into digital portfolios more conveniently, thereby offering a comprehensive overview of each student's progress. In the absence of such platforms, teachers should be permitted to flexibly select suitable digital platforms, using them selectively to prioritise instructional efficiency and user experience of both teachers and students.

6. Conclusion

This study has explored the digital formative assessment practices of EFL teachers at a Chinese vocational university, shedding light on how digital platforms are integrated into classroom instruction and assessment. Its limitations include a small dataset and an exclusive focus on one vocational university, limiting the generalisability of findings to broader educational contexts. Notwithstanding these constraints, the study offers practical implications for vocational EFL education. The findings demonstrate digital platforms' utility in enhancing teachers' assessment efficiency, eliciting students' learning evidence, and personalising instructional feedback. They further reveal how digital tools foster student autonomy via encouraging self-reflection and facilitating peer assessment. Future studies could delve deeper into three key areas: (1) the design of teachers' digital formative assessment activities, particularly how assessment tasks are designed to align with curricular goals; (2) the impact of digital platform features on assessment practices, exploring how interface design, data analytics, and interactive tools shape teachers' formative assessment strategies; and (3) the integration of automated and manual feedback, examining how platform-generated feedback could be merged with teacher feedback to address student language proficiency development. Such inquiry would contribute to more nuanced understandings of digital formative assessment, guiding the development of pedagogically-informed technological solutions for vocational EFL education.

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Appendix A: Interview schedules

1. Which platforms do you use in your teaching practice?
2. How do these digital platforms impact your teaching and assessment practices?
3. What role does assessment play in your teaching?
4. What roles do teachers and students respectively undertake in the assessment process?
5. Which assessment activities are most effectively facilitated through digital platforms?
6. What pedagogical insights do these assessment activities yield, and how do they subsequently inform your teaching practice?

Author Profile

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