A qualitative inquiry into digital adaptive learning platforms to (re)shape Chinese EFL teachers' pedagogical practices

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ABSTRACT: Educational technologies have long been approved to influence several aspects of second/foreign language (L2) education. However, research on the impact of digital adaptive learning platforms/systems on L2 teaching is insufficient in the context of English as a foreign language (EFL). To address the gaps, this qualitative study intended to examine Chinese EFL teachers' perceptions about the influence of such technologies on their pedagogical practices. A semi-structured interview was used to gather the data from 34 teachers. The results of thematic analysis indicated that digital adaptive learning platforms/systems had affected Chinese EFL teachers' pedagogy in six venues of 'teaching content', 'teaching methods', 'instructional resources', 'testing', 'classroom interactions', and 'classroom management', which were found to be changing and enriching in light of such technologies. A detailed discussion of each finding is separately provided and implications for L2 teaching are enumerated to promote EFL teachers' technological literacy, awareness, and practice.
Keywords: EFL teacher, Digital adaptive learning, Educational technology, L2 education, Teacher perception

Una investigación cualitativa sobre las plataformas digitales de aprendizaje adaptativo para (re)configurar las prácticas pedagógicas de los profesores de inglés como lengua extranjera (EFL) en China

RESUMEN: Durante mucho tiempo se ha reconocido que las tecnologías educativas influyen en varios aspectos de la enseñanza de lenguas segundas o extranjeras (L2). Sin embargo, en el contexto del inglés como lengua extranjera (EFL), la investigación sobre el impacto de las plataformas o sistemas de aprendizaje digital adaptativo en la enseñanza de L2 es insuficiente. Para cubrir estas lagunas, este estudio cualitativo tuvo como objetivo examinar las percepciones de los profesores de inglés como lengua extranjera (EFL) chinos sobre la influencia de tales tecnologías en sus prácticas pedagógicas. Se utilizó una entrevista semiestructurada para recopilar datos de 34 profesores. Los resultados del análisis temático indicaron que las plataformas o sistemas de aprendizaje digital adaptativo habían afectado la pedagogía de los

profesores de inglés como lengua extranjera (EFL) chinos en seis ámbitos: 'contenido docente', 'métodos de enseñanza', 'recursos educativos', 'evaluación', 'interacciones en el aula' y 'gestión del aula', que se encontraron en proceso de cambio y enriquecimiento gracias a tales tecnologías. Se ofrece una discusión detallada de cada hallazgo por separado, y se enumeran las implicaciones para la enseñanza de L2 con el fin de promover la alfabetización, la conciencia y la práctica tecnológica de los profesores de inglés como lengua extranjera (EFL).
Palabras clave: Profesor de inglés como lengua extranjera (EFL), Aprendizaje digital adaptativo, Tecnología educativa, Educación de lenguas segundas (L2), Percepción del profesor

1. Introduction

Technology-enhanced language learning has garnered noticeable attention due to its substantial impacts upon language education (Derakhshan et al., 2025; Gao et al., 2024; Ghanizadeh et al., 2015; Golonka et al., 2014; Liu & Wang, 2024; Qi & Derakhshan, 2025; Shadiev & Yang, 2020; Zhi et al., 2024; Wang & Xue, 2024). Technology integration promotes language performance, interactive communication, motivation, and metalinguistic awareness (Derakhshan & Zhang, 2024; Golonka et al., 2014). Additionally, Ghanizadeh et al. (2015) contend that technology is beneficial in the provision of immediate feedback, creation of authentic communication, and improvement of input. Likewise, all language skills and subskills can be enhanced through the adoption of technology in L2 educational domains (Qiu et al., 2023). The inclusion of technology in language education exerts influence on language production since it aids learners in producing language output, namely writing and speaking (Shadiev & Yang, 2020). It is also asserted that technology can augment one's interest and motivation for language learning and teaching (Shadiev & Yang, 2020).

In accordance with the ubiquitous nature of technology in L2 education, adaptive learning systems have gained momentum (Kaur et al., 2023). Adaptive learning systems nurture and promote individualized learning processes for each learner based on his/her needs and preferences (Richter, 2020). In other words, adaptive technologies cultivate learners' interactions with the technology to identify the next step in the learning process due to their dynamic and need-based nature. Given their potentialities, research into adaptive platforms such as virtual classrooms, MOOCs, Duolingo, Rosetta stone, and so forth have been thriving and different facets of such platforms have been inspected (e.g., Arbi, 2024; Richter, 2020; Weng et al., 2024). The inclusion of adaptive learning platforms in language education ushers in the improvement of language learning outcomes (Weng et al., 2024). These technologies also lead to instructional adaptability in teachers (Dutta et al., 2024). Additionally, it should be noted that adaptive learning platforms are reported to enhance engagement and motivation in language education domains (Liu & Zu, 2024). These affordances render the inclusion of digital adaptive systems important in L2 education.

Nevertheless, despite the substantial influences of adaptive systems on language teaching and learning, studies on adaptive learning platforms in L2 education are in their infancy (Kerr, 2016; Liu & Zu, 2024). Previous studies have been conducted predominantly on the different affordances alongside the drawbacks of adaptive systems (e.g., Arbi, 2024; Richter, 2020; Shadiev & Yang, 2020), and teachers' perceptions in the exploitation of such platforms have not attracted the scholarly attention it merits. Most of the studies on adaptive systems are situated in general education, focusing on learners and learning. Yet, how digital learn-

ing platforms can shape or reshape teachers' pedagogical practices in language education settings remains blurry. To fill these gaps, this qualitative study aspires to shed insights on EFL teachers' perceptions of digital adaptive learning platforms. Furthermore, we intend to elucidate how such platforms can (re)construct EFL teaching practices in L2 milieus. The findings may yield valuable insights into the potent role of advanced technologies, particularly adaptive platforms in language teaching, which is a crucial aspect of the contemporary L2 setting. The findings may also provide practical implications for teacher trainers on the significance of educating teachers on how to employ advanced technologies.

2. Literature Review

2.1. Technology-Assisted Language Education

With the outbreak of COVID-19, e-learning and online learning gained momentum in educational domains to compensate for the drawbacks of traditional face-to-face teaching (Kaur, et al., 2023). Given this, technology-based education serves a cardinal feature in this era. Seminal studies ascertain that technology-assisted education is beneficial in language education (Bos & Van de Plassche, 1995; Madhavaiah et al., 2013). Embedding technology within language education has empowered language teachers and learners by providing new opportunities and by changing traditional teaching methodologies (Zhang, 2022). It is declared that merging new technologies into instruction culminates in the effectiveness of teachers' teaching and students' learning (Cuban, 2009). As Kao et al. (2014) contemplate, L2 education is executing technologies with the aim of tackling the demanding process of learning and fostering the academic outcomes.

The rapid growth of technology has offered language learners with extraordinary opportunities to get involved in novel ways of learning a language including the use of virtual reality tools, mobile applications, online platforms, and interactive software which have mainly substituted traditional resources such as textbooks, worksheets, and the like (Zbar & Ali, 2024). The shift in teaching and learning of English has propelled many learners to seek self-guided learning opportunities (Lai et al., 2022). Technology-assisted learning nurtures collaboration and communication, fosters immersive learning, and caters for diverse learning styles (Zbar & Ali, 2024). Utilizing technology in education enables learners to acquire knowledge and skills with the assistance of tutors and technological resources and tools simultaneously (Gros, 2016). On the other side, it should be noted that inclusion of technology can have detrimental effects on learners' well-being by affecting their negative emotions, increasing their cognitive load, and displaying discomfort (Shadiev & Yang, 2020).

Given the unprecedented affordances of technology in language education, the use of adaptive systems also gained prominence since they have the propensity to teach and assess learners and fulfill their educational needs (Kaur, et al., 2023). It is argued that students' learning differences in the learning process are a pivotal factor in their performance (Sadeghi et al., 2012). That said, adaptive learning systems, which have the potential to tailor to students' needs and differences during language learning, have come to the fore in language education domains (Richter, 2020). Drawing on these learning systems is advantageous due to their distinctive potentialities, including availability of the course content, cost-effec-

tiveness, collaboration among students and instructors, feedback provision, and augmented performance (Dunn & Kennedy, 2019).

2.2. Adaptive Learning Systems in the Digital Era: Conceptualizations and Approaches

In response to the exponential growth of technology in language education domains, adaptive learning platforms have drawn increasing research interest (Kaur et al., 2023; Liu & Zu, 2024). Adaptive learning platforms cater for individualized learning needs through leveraging technology into education, leading to personalized language learning (Kaur et al., 2023). Conventional language learning systems often cannot address the adversities and challenges of language acquisition, namely individual differences in learning style, language proficiency level, needs and preferences, and cultural diversities (Weng et al., 2024). In a quest for circumventing such challenges, adaptive learning systems have penetrated into language learning environments with the potent aim of boosting language learning outcomes (Arbi, 2024). Adaptive learning approaches employ artificial intelligence (AI), algorithms of machine learning, and natural language processing in order to offer individualized instructions, which are adjusted to the needs and interests of each language learner (Liu & Zu, 2024). By integrating cultural diversities, sociopolitical texts, authentic language settings, adaptive system furnish an immersive language learning experience, which exceeds mere memorization and acquisition of grammatical structures (Zargane et al., 2024).

Given the aforementioned potentialities of adaptive learning systems, the exploitation of virtual classrooms, MOOCs, and other types of online learning environments has recently captured the attention of educational researchers (Arbi, 2024; Richter, 2020; Weng et al., 2024). Likewise, adaptive systems such as Adaptive Hypermedia Educational Systems (AEHSs), Intelligent Tutoring Systems (ITS), and Adaptive Systems (AS) have emerged in educational milieus to obtain optimal learning outcomes. In this regard, the inclusion of adaptive learning platforms such as Duolingo and Rosetta Stone has transformed L2 education by customizing the content based on students' requirements (Zbar & Ali, 2024). Such platforms fine-tune the educational content and adapt its difficulty level to students' performance, ushering in personalized learning that augments the processes of language learning (Richter, 2022). Recent research evinces that constantly drawing on these platforms boosts the general language proficiency of students (Duman et al., 2014; Richter, 2022).

Within this direction, Duolingo manifesting a gamified approach utilizes rewards, increases learners' motivation and involvement, and personalizes the learning process through its adaptive algorithms (Amin, 2021). In the same vein, Rosetta Stone tailors the exercises and the feedback based on learner's progress and responses, which culminates in improved language retention and overall proficiency (Zbar & Ali, 2024). It should be noted that the successful implementation of such platforms hinges heavily on the context in which they are being exploited, and they cannot fully replace human instructors (Richter, 2022). Other gamified platforms, such as Quizlet and Kahoot are renowned for converting traditional learning activities into joyous and active experiences through designing interactive tasks, quizzes, and flashcards that foster language skills and engage students (Zbar & Ali, 2024). Kahoot enables instructors to construct interactive quizzes and establish collaborative learning experiences that ameliorate students' motivation (Huang & Hew, 2021). As pinpointed

by Ebadi et al. (2023), gamified learning platforms can increase overall academic outcomes given their joyful and interactive nature. In this sense, Quizlet provides learners with opportunities to concentrate on areas, which need further improvement through the inclusion of flashcards, tests, and games based on learners' needs (Dizon, 2016).

2.3. Digital Adaptive Platforms and Teachers' Teaching: Is there any Impact?

The growing prominence of technological advancements has inspired the utilization of different technologies in EFL milieus (Derakhshan, 2025; Derakhshan & Ghiasvand, 2024). With the pervasiveness of technology in educational domains, it is incumbent on language teachers to adopt new technologies in their instructions to address the ways language is learned and accessed through innovative technologies (Chun et al., 2016; Xin & Derakhshan, 2024). Inventive technologies, namely virtual realities, wearable technologies, and adaptive learning systems have provided novel avenues for optimal teaching and learning (Shadiev et al., 2019). As pinpointed by Freeman and Anderson (2011), technology makes education easier and provides instructors with practical and user-friendly educational resources. Recent evidence suggests that teachers, by employing such technologies, can enhance learners' motivation and provide learners with a more efficient process of language learning (Jin, 2018; Shadiev & Huang, 2019). Drawing on adaptive learning systems, teachers can design and organize the content of the course more effectively and can establish rapport with different students simultaneously, given its time-efficient nature (Shadiev & Yang, 2020).

In addition, using these technologies aids teachers in modifying their teaching activities based on learners' requirements and levels and also employing diverse resources in their instructional practices (Shadiev & Yang, 2020). In this sense, such platforms can reduce teachers' workload by providing automated feedback systems, which can substitute teachers' feedback and offer instantaneous feedback to augment learners' autonomous learning (Li et al., 2015). It is essential to recognize that educators, through drawing on such technological advancements, can provide authentic language learning contexts, which can help learners construct both linguistic proficiency and cultural awareness, facilitating confident and fluent use of language in diverse linguistic and cultural settings (Liu & Zu, 2024). Moreover, adaptive learning systems accentuate the role of communicative approaches in language instruction by underscoring the role of interaction and production in learning a language, which facilitates teachers' task to cultivate and sustain communicative learning tasks (Moghadam et al., 2023). Instructional adaptability is another reported benefit of digital adaptive platforms/systems for teachers (Dutta et al., 2024).

Furthermore, adaptive tests have been utilized for both placement and proficiency testing, which can determine the degree of difficulty and order of test items in accordance with students' responses (Kerr, 2016). Through these adaptive systems, tests can be more or less difficult by fine-tuning the questions based on students' level. In this regard, such systems are time-saving for teachers because they both design the test and score the test with high levels of precision (Kerr, 2016). However, it is significant to point out that teachers need to be educated to incorporate adaptive learning systems in their instructional practices since teachers need technology competence to implement courses, which draw on advanced technologies (Kaur et al., 2023; Shadiev & Yang, 2020). Zhang (2022) maintains that teachers

may refrain from executing technologies in their instruction due to the lack of technological skills and literacy and the challenges of technologies.

Nevertheless, a thorough investigation of the literature indicates that research on digital learning platforms has mainly focused on learners (e.g., Ebadi et al., 2023; Shadiev & Huang, 2019; Lia et al., 2022) and teachers' perceptions and exploitation of such platforms have been barely explored in L2 education. Since teachers are at the forefront of employing technology in classrooms (Arnseth & Hatlevik, 2010), exploring their perceptions and practices warrants attention. To address this gap in knowledge, this study strives to unveil Chinese EFL teachers' perceptions of digital adaptive learning platforms and how such platforms can (re)construct their teaching practices. In particular, this study was guided by the following research question:

RQ: In what ways do digital adaptive platforms/systems influence Chinese EFL teachers' Pedagogical practices?

3. Method

3.1. Participants and Context

A group of 34 Chinese EFL teachers were selected via convenience sampling for this study. They included male (15, 44%) and female teachers (19, 56%) working in different language institutes and academies in China. The age of the participants ranged from 23 to 52 years. They had MA (18, 53%) and Ph. D degrees (16, 47%) in English language teaching field. Concerning teaching experience, two teachers had less than five years, 15 teachers had taught for 5 to 10 years, and 17 teachers had an experience from 10 to 23 years. They were all Chinese speakers of English voluntarily participated in the study.

3.2. Instruments

A face-to-face semi-structured interview was used to explore Chinese EFL teachers' perceptions and experiences of using digital adaptive systems. The interview was in English and during free times. There were nine items in the interview, five demographics and four open-ended questions on how such technologies affect L2 education (Appendix). Each interview lasted about 30 minutes on average. The interviews were recorded via an audio-recording device. The questions were not fixed and the respondents had freedom to explain and bring personal examples during the interviews. They were encouraged to provide as much information as possible.

3.3. Data Collection Procedure

To collect the data, the researcher employed a semi-structured interview because it could provide a flexible account of teachers' perceptions about digital adaptive systems in L2 teaching. It was an interactive and friendly interview conducted in person. Before

gathering the data, ethical codes of privacy and confidentiality were carefully observed. The teachers were free to abandon the study for any reason. There was no conflict of interest nor previous relationship between researchers and respondents. A consent form was signed out by all the participants. Then a list of questions was composed based on review of the literature and the formulated research question of the study. Two qualitative research experts inspected and approved of the content validity of the interview questions. Some revisions in terms of language were made based on their recommendations. The teachers were asked to suggest their preferred free time for the interviews as they had busy schedules. It took 19 days to conduct all the interviews. Since the participants were proficient users of English, the interviews were held in English as they preferred so. However, Chinese translation of the items was also available, if needed by a participant. The interviews were audio-recorded for later analyses.

3.4. Data Analysis

Thematic analysis was used to analyze the qualitative data collected via interviews. Braun and Clarke's (2006) framework was followed to extract common patterns of thinking regarding the impact of adaptive systems on EFL teachers' teaching practices (Figure 1). In the first stage, the researchers immersed in the data and read all the transcripts multiple times to know the data in general. Next, initial and tentative codes were provided during re-reading the transcripts and highlighting their segments and memo writing. There were nine initial codes, which were later connected together to generate six themes larger than initial codes.

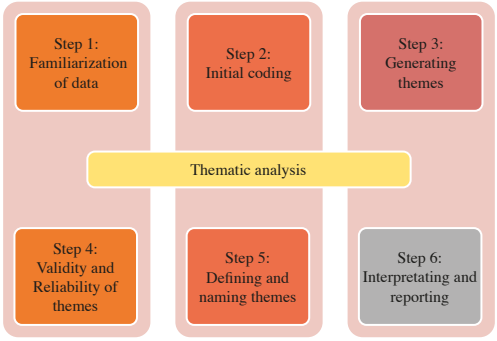

Figure 1. *Stages of Thematic Analysis*

In the fourth step, the extracted themes were reviewed in terms of reliability and validity. Afterwards, the themes were labelled and named in a catching way using simple and relevant phrases. Finally, a detailed and descriptive report of the findings was provided including sample extracts to buttress each theme and interpretation.

To establish trustworthiness, which is essential in qualitative research (Lincoln & Guba, 1985), the researchers took different steps. First, to observe credibility, member checking was done by asking the teachers to review the data, themes, and interpretations. Second, an outsider researcher was invited to inspect all stages of the data analysis to establish maxim

of confirmability. Wirth regard to dependability and transferability, the researchers offered a thick-description of different aspects of methodology including information about context, participants, data collection, and data analysis to allow replication of the current study in other contexts. The next effort was ensuring transparency and coherence. To this end, a research notebook and overall map was prepared in advance to take each step of data collection and analysis carefully. The researcher reflected on the process, as well. Finally, it is noteworthy that the researchers in this study took an outsider positionality and remained neutral during the interviews to offer an unbiased interpretation.

4. Findings

Thematic analysis was carried out on the last two interview questions that focused on the influence of digital adaptive learning systems/platforms on teachers. The results revealed that such technologies had affected Chinese EFL teachers' pedagogical practices in six ways, as shown in Figure 2. The first extracted theme in this regard suggested that digital adaptive learning platforms affected teachers' teaching by 'adjusting teaching content to learners' needs and interests'. Such an adjustment was stressed out by T13, who stated "*digital adaptive platform supports the combination of online and offline teaching, and I can flexibly choose teaching methods according to the teaching content and students' needs*". Another participant contended "*digital adaptive platforms dynamically adjust the difficulty and progress of the teaching content according to the students' learning situation and interest*" (T1). Moreover, another person pointed to the data analysis potentials of such platforms that allows teachers to "*accurately understand the weaknesses of students, so as to adjust the teaching focus, supplement the relevant teaching content, and make the teaching more suitable for the actual needs of students*" (T18).

- Adjusting Teaching Content to Learners' Needs and Interests
- Changing and Individualizing Teaching Methods
- Providing Rich Instructional Resources
- Digitalizing and Facilitating Language Testing
- Changing Classroom Interactions with Instant Feedback Provision
- Facilitating Classroom Management

Figure 2. *The Influences of Digital Adaptive Learning Platforms/Systems on Teachers' Teaching*

The second venue of influence was that such platforms were significant in 'changing and individualizing teaching methods'. As stated by T6, "*teaching methods can be adjusted at any time according to students' learning feedback with the platforms*". Another teacher said, "*these platforms provide a personalized learning experience for each student making L2 education individualized in methodology*" (T7). The third theme was that digital adaptive systems 'provide rich instructional resources' for teachers. By collecting and analyzing student learning data, "*teachers can understand each student's learning progress and ability*

level, thereby providing them with customized learning resources and tutoring" (T30). Additionally, it was maintained that "*the digital adaptive platform integrates a large number of different types of teaching resources, including text, pictures, videos, audio, and so on*" (T20). Referring to the same potential, T8 argued that "*the diversified teaching resources provided by the platforms, such as video, audio and interactive exercises, make my teaching more flexible and vivid*". The outcome of such resources was claimed to be "*improvements in the efficiency of lesson preparation*" (T2). The next theme suggests that digital adaptive platforms affected teachers by '*digitalizing and facilitating language testing*'. In this regard, T22 declared that with such platforms:

> *"Students are no longer evaluated by traditional test scores. The platforms record students' learning process data, such as learning time, effort, and progress. For example, although a student's final score is not the most outstanding, but a long learning time and obvious progress, can also be affirmed in the comprehensive evaluation, which helps to stimulate students' learning motivation"* (T22).

Furthermore, another teacher referred to an actual example of such a contribution by saying that "*the platforms enable teachers to conduct dynamic assessment of students' learning situation by paying more attention to the progress and development of students in the learning process and timely adjusts the teaching strategy* (T4). It was also mentioned in the interviews that "*these platforms foster a formative evaluation of learners' performance, which is more comprehensive and reasonable*" (T27). Classroom interaction changes was the focus of the next extracted theme, which was labelled as 'changing classroom interactions with instant feedback provision' in the analysis. To support this theme, T9 stated "*the platforms' instant feedback has changed classroom interactions between teachers and students. Students get feedback immediately after practice online*". The nature of such systems was perceived as a reason for such influence on teachers as declared by T29, who said "*the interactive nature of the platform enhances teacher-student interaction and promotes cooperation and communication among students. This really affects teachers' pedagogy*".

The last area of influence was that digital adaptive learning platforms affect teachers' pedagogical practices by 'facilitating classroom management'. To provide examples, T15 suggested "*with these platforms, teachers can easily manage students' classroom attendance, participation, and learning behaviors, saving a lot of time*". Moreover, another teacher stated "*through digital adaptive platforms, teachers can assign learning tasks, check students' learning situation, communicate with students online, and answer students' questions in time. These all-foster classroom management for teachers* (T11). To conclude, the results of interview data indicated that digital adaptive learning platforms/systems had affected Chinese EFL teachers' pedagogy in six venues of 'teaching content', 'teaching methods', 'instructional resources', 'testing', 'classroom interactions', and 'classroom management'.

5. Discussion

This qualitative study was an attempt to unveil Chinese EFL teachers' perceptions about the influence of digital adaptive learning systems/platforms on their pedagogical practices. The findings evinced that such technologies affected teachers' pedagogy in such areas in-

cluding ‘teaching content’, ‘teaching methods’, ‘instructional resources’, ‘testing’, ‘classroom interactions’, and ‘classroom management’. In particular, it was found that such platforms had adjusted and changed Chinese teachers’ teaching content in line with learners’ needs and interests. This agrees with previous studies that reported the role of digital adaptive learning systems in fine-tuning teaching content to students’ level, needs, and interests (e.g., Richter, 2022; Zbar & Ali, 2024). The capacity of educational technologies in enriching instructional content may explain this outcome. Moreover, the teachers’ mastery and knowledge of L2 education content can be another justification. The finding can be attributed to the learner-centered potential of digital adaptive systems, too. The second area of influence was changing teachers’ teaching methods by individualizing them. This outcome is in accord with Zhang (2022), who ran a research on technology and L2 teacher professionalism arguing that adaptive systems change and renovate traditional teaching methodologies. Likewise, previous studies support the idea that digital adaptive learning systems make education individualized (Kaur et al., 2023; Richter, 2020). Teachers’ preferences for innovative L2 teaching may be a reason for this theme. Moreover, the weaknesses of traditional teaching methods may have encouraged the participants to highlight a shift in methods due to digital adaptive learning systems. Practice-oriented approaches to L2 instruction among teachers may also be another justification. The adaptive algorithms of such technologies could also explain their individualization of teaching as reported by Liu and Zu (2024).

Providing rich instructional resources was the next venue of impact in this study. It is in agreement with prior studies that stress out the contribution of digital adaptive platforms in diversifying and enriching instructional resources for teachers and learners (Gros, 2016; Zbar & Ali, 2024). The ability of such technologies in offering a wide range of resources for education can explain this finding (Shadiev & Yang, 2020). So, the nature of technologies and having access to several online resources may have made the teachers to frequently mention this theme in interviews. Their digital literacy and familiarity with technology-driven L2 instruction resources are other explanations for this finding. Additionally, this finding might be due to their skills in content provision and materials development, adoption, and adaptation in light of technologies. That is why, they highlighted the impact of digital platforms on resource provision. Their comprehensive and excellent pedagogical content knowledge and expertise may also justify this theme. Another finding was that such technologies affected the participants’ language testing practices encouraging alternative assessments like dynamic assessment and formative assessment. Similar outcome was reported by Kerr (2016), who claimed that digital adaptive systems fine-tune classroom tests making them precise and adaptable to learners’ levels. It seems that the participants had high technological literacy and vision in the sense that their use of digital adaptive learning systems extended from teaching to testing areas, as well. The function of such technologies in taking and scoring tests may be another justification. The learner and learning-oriented basis of alternative assessment techniques can also explain the findings.

The next finding was that digital adaptive learning platforms affected teachers’ pedagogy by modifying classroom interactions and feedback techniques. Similar findings were reported by Zbar and Ali (2024) and Moghadam et al. (2023) in their studies on the impact of digital adaptive systems on classroom interaction, communication, and collaboration. The impact of such technologies on teachers’ feedback agrees with previous research, too

(Dunn & Kennedy, 2019; Ghanizadeh et al., 2015). The interactive nature of digital adaptive learning platforms explains their effect on classroom interactions and, ultimately, teaching. Moreover, the findings imply that such technologies affect feedback practices probably because they allow instantaneous feedback during instruction (Li et al., 2015). The participants' feedback literacy and interactional competency may justify this theme, as well. Feedback and interaction are two key elements of educational technologies including digital adaptive learning platforms. Teachers' knowledge of these elements may further clarify the findings.

Finally, the study showed that digital adaptive learning platforms affected teachers' teaching practices through affecting their classroom management, which is in line with Shadiev and Yang's (2020) study on the contributions of such technologies on various classroom practices. Digital adaptive learning platforms had fostered class attendance and participation probably because of their engaging and interactive potentials making students attend the classes more willingly and actively. Simply, they seem to enhance classroom engagement and ease managing the classroom behaviors and practices by teachers (Dunn & Kennedy, 2019; Liu & Zu, 2024). The adaptability of teachers to use technology-mediated L2 education can explain this finding. The findings can be attributed to the multiple functions and affordances of digital adaptive learning platforms for managing the course process. They can facilitate learner monitoring, attendance, progress, and behaviors, therefore making the class more manageable by teachers. Referring to classroom management practices also shows the Chinese participants' high teaching experience and pedagogical expertise. Another justification for proposing such venues of impact might be their high technological pedagogical content knowledge. The rapid growth of digitalization of education also explains the findings of this study.

6. Conclusion and Implications

This study reported on the ways through which digital adaptive learning platforms had affected Chinese EFL teachers' pedagogical practices. The findings imply that the integration of educational technologies such as adaptive systems positively affect different aspects of L2 education. It is then concluded that the potentials and algorithms of digital adaptive learning platforms pave the way for a better L2 teaching by modifying content, method, feedback techniques, interactions, and classroom management. Moreover, it is asserted that innovative technologies can augment and enrich both L2 learning and teaching in case they show adaptability to context, needs, and proficiency levels. Teaching English is no exception and digital adaptive learning platforms play a critical role in making it engage, interactive, dynamic, and effective. Hence, teachers are advised to become literate of these novel technological advancements, as well.

The findings expand theoretical understandings of educational technology in L2 education shifting from traditional technologies towards adaptive ones. The link between technology-integration and L2 pedagogy is also highlighted owing to the findings of this study. In terms of practice, the study provides new insights for EFL teachers to positively perceive and implement educational technologies in their L2 instruction. Their knowledge and awareness of digital adaptive learning platforms may be enhanced by the findings, too. Teachers also understand that digital adaptive learning platforms affect various aspects of

profession, hence they try to gain competency and literacy in their utilization to save their professional identity and effectiveness. The findings also help teacher educators in EFL contexts, who can develop and present training programs to teachers and make them ready for integrating educational technologies in their L2 instruction, especially digital adaptive learning platforms. Specific potential and challenges of digital adaptive learning platforms for L2 education can be taught to pre-service and in-service teachers. This study also informs policy-makers in that they may get encouraged to change current educational plans and increase the amount of technological facilities for teaching English. They can assign motivators for EFL teachers to attend self-development programs related to digital adaptive learning platforms and receive job promotions.

Some limitations, yet, existed in this study. The sample was small limiting the generalizability of the findings. Only one instrument was used to collect the data, while triangulation could provide a richer image of digital adaptive learning platforms. The study was one-shot and provided nothing about the dynamism of teachers' perceptions and experiences of digital adaptive learning platforms. Therefore, future researchers can use longitudinal studies like case studies to address the dynamism of teacher ideas. Another limitation was excluding the mediating influence of demographic factors like teaching experience in perceiving the topic. Further research can focus on how teachers with different genders, educational degrees, and fields of study perceive the impact of digital adaptive learning platforms on their teaching. Cross-disciplinary and cross-cultural studies are also recommended. To ensure the impact of such technologies on teachers, future researchers can run observational studies. The contributions of digital adaptive learning platforms to L2 teaching can be compared with other forms of technologies like AI. The emotional side of using such platforms is also interesting for future research as teachers may experience various emotions when using them. Providing a practical model of integrating digital adaptive learning platforms in EFL contexts is also advised to future scholars.

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8. Appendix

Part 1) Demographic Information

1. Age:
2. Gender:
3. Major:
4. University Degree:
5. Teaching:

Part 2) Teachers' Perceptions

1. Have you used digital adaptive platforms in your L2 classes? Would you explain your experiences?
2. What are the benefits of digital adaptive platforms for L2 education?
3. In what ways do digital adaptive platforms affect your teaching practices?
4. What changes do digital adaptive platforms bring to your pedagogical practices?