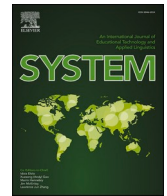




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# Mind the gap: English teachers' perceptions and practices of integrating social media into language classrooms in China

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## ABSTRACT

This study investigates the perception-practice gap among English teachers in China concerning the integration of social media into teaching, blending the Language Teacher Cognition (LTC) framework with the Technological Pedagogical Content Knowledge (TPACK) model. A mixed methods approach, including the adoption of online questionnaires, instructional documents and semi-structured interviews was utilised to investigate these research questions from different perspectives. We collected 119 valid questionnaires. From these, we selected seven volunteers—those who provided their contact information and represented a range of demographic profiles—for further study. Seven instructional documents were gathered from these volunteers. Subsequently, follow-up interviews were conducted with these selected participants to gain deeper insights into their experiences and perspectives. The study revealed a significant discrepancy between moderately high perceptions and relatively low practices. This dynamic and bi-directional gap is influenced by microscopic factors like schooling and affective issues, as well as macroscopic factors such as institutional and societal influences. These factors constitute a layered system. The findings illuminate the complexities underlying the perception-practice gap in English teaching with social media integration, offering theoretical, methodological, and practical implications.

## 1. Introduction

Language teacher cognition (LTC) captures the complex and implicit cognitive aspects of language teaching and intertwines with teachers' knowledge and beliefs (Borg, 2009). Since the 1970s, domains of LTC have evolved significantly with diverse focuses and methodological paradigms (Borg, 2003). A notable strand of this is the relationship between language teachers' perceptions and practices, particularly within the context of educational technology integration (Bahcivan et al., 2019). For example, Ertmer et al. (2012) highlighted how exemplary teachers demonstrate alignments between their effective use of technology and underlying perceptions. Nonetheless, this alignment does not always exist, as many scholars have observed a disparity between what teachers believe and how they practise regarding technology (Bauer & Kenton, 2005). Despite these valuable insights, there is a discernible scarcity of studies addressing the gap between perceptions and practices among language teachers, especially concerning integrating social media in language education.

Prior studies revealed that LTC was influenced by a variety of factors, ranging from individual elements like personality (Borg, 2003), to broader contextual influences, including professional development (Couper, 2017) and prevailing educational norms (Sun

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et al., 2022). Despite current scholarship, a comprehensive classification of these factors remains elusive, yet such clarity is important for future training programmes design and educational policies. Furthermore, there is a noted paucity in probing the specific factors that shape the perception-practice gap, which is crucial for providing implications for teachers' decision-making processes (Abedi, 2023).

Over the last decade, the exploration of social media has been fruitful, notably in the Chinese contexts (DeLisle et al., 2016). Within this broad field, the integration of social media within educational settings has emerged as a distinct and multidisciplinary domain, underpinned by a robust research agenda (e.g., Alharthi et al., 2020; Lambton-Howard et al., 2021; Merrill, 2011). This trend is especially evident in China, highlighted by initiatives such as the *Action Plan for Education Informatisation 2.0*, which underscores the essential role of social media in education (Zhou et al., 2020). Despite an increasing focus on integrating social media into English language teaching, there remains a significant discrepancy between English teachers' perceptions and their practices. Based on these premises, this study aims to bridge this gap by exploring the existence and extent of the perception-practice gap in English teachers' approaches to social media integration in teaching within the Chinese context, alongside investigating the multiple factors shaping this gap.

## 2. Literature review

### 2.1. Social media integration: mind the gap between perceptions and practices

The 2000s marked a transition in second language (L2) research, with an increasing focus on the insights of language teachers (Borg, 2015) with growing recognition of the relationship between perceptions and practices as a central theme in L2 teacher research (Kubanyiova & Feryok, 2015). Borg (2006) posited that while teachers' perceptions undoubtedly shape related practices, alignments between them were not always observed. This notion has been explored in subsequent studies, revealing various degrees of perception-practice gap (e.g., Atai & Fatahi-Majd, 2014; Nassaji et al., 2023). While Ertmer et al. (2012) highlighted a notable perception-practice gap, other research suggested a more moderate gap, indicating that teachers' practices are, to some extent, reflective of their thinking (e.g., Sun & Zhang, 2022). To navigate these differing viewpoints, Kang and Cheng (2014) asserted that the relationship between perception and practice is highly contextualised, outlining three scenarios where practice can confirm, expand on, or contradict perception, thus contextually nuanced investigations are needed to delineate the perception-practice gap.

Recognising the existence of the perception-practice gap, more recent research has increasingly focused on the context of social media integration in L2 research (e.g., Xue & Churchill, 2022). Specifically, studies have examined this gap across various aspects of L2 education—from vocabulary and writing to broader educational practices (Faizi, 2018; Saiful, 2019), incorporating perspectives from both students and teachers (Lai & Tai, 2021; Li, 2017). Here social media has been defined as networked technologies emphasising social aspects, serving both a communication medium and resource and has been classified into four types: social networking sites, collaborative tools, virtual learning, and online communities of practice (Jones & Cuthrell, 2011; Komito, 2011; Miller et al., 2019). However, discussions into this holistic notion of social media in L2 teacher research are needed since previous research often limited discussions to specific platforms, such as YouTube and Zoom (Chao, 2022; Tai, 2024).

Perceptions on social media integration have varied significantly, ranging from positive and cautious—acknowledging its networking potential while questioning its educational value—to outright negative, which are contrastive to an objective account of L2 teachers' practices (Chik, 2011; Saiful, 2019). Consequently, mixed views on the perception-practice gap regarding social media integration in L2 education highlight ongoing debates revealing how the gap varies and evolves based on personal and broader contextual factors (Chik, 2011; Lambton-Howard et al., 2021). This complex and dynamic gap underscores the need for further research to better understand the influencing factors.

Research on social media integration for educational purposes in China remains limited, with only some early attempts (e.g., Zhang & Wang, 2023) focusing on pre-service language teacher education programmes. Despite these efforts, there remains a notable gap in understanding the specific Chinese context. This is possibly due to issues such as policy barriers and institutional regulations which indicated the controversial nature of social media adoption in China (Sun et al., 2022; Zheng & Borg, 2014). Given the context-specific nature of L2 teacher research (Aslan, 2015), further investigation into English teachers' perceptions and practices in China, underpinned by a more solid theoretical framework, is imperative (Pan & Gan, 2020).

### 2.2. Factors influencing the gap

Numerous studies have explored various factors influencing language teachers' perceptions and practices. Borg (2006) classified these factors into two main categories: internal factors, which included teachers' educational and emotional experiences, and external factors, which covered contextual factors.

Drawing on Borg's (2006) framework, research increasingly focuses on factors influencing the perception-practice gap in integrating technologies like social media into L2 education (Gao & Zhang, 2020). Many studies have discussed influences of teachers' educational experiences, including both schooling and professional coursework, on shaping the perception-practice gap. For example, Gao and Yang (2022) suggested that well-structured educational initiatives could effectively change teachers' perceptions. Conversely, Kennedy (2016) revealed through a systematic review that some training programmes failed to instigate deep-seated changes in traditional teaching preferences. Based on mixed results, Bagheri and East (2021) asserted that the impact of educational experiences on the perception-practice gap hinged on the programmes' instructional design being continuous and context-specific. Beyond educational experiences, more recent studies have explored impacts of teachers' emotional engagement and lack of confidence in

influencing the integration of social media in L2 education (Couper, 2017; Gao & Yang, 2022). Nevertheless, past research has identified an ongoing need to explore how these affective elements contribute to the interplay between teachers' perceptions and practices (Li, 2020). This body of research presents a nuanced view of the internal dynamics in bridging the gap between teachers' perceptions and their practices.

Similar to the heated debate on internal factors, the role of external factors, such as schools and governments in shaping the perception-practice gap has also been critically examined. For instance, previous research highlighted the significant impact of institutional policies and curricula in shaping both perceptions and practices (Chen & Abdullah, 2023; Tondeur et al., 2008). Government policies also play a crucial role; Cheung and Hennebray-Leung (2023) noted that the exam-oriented education system in Hong Kong hindered English teachers' innovative pedagogical practices. This is paralleled in Iran, where governmental and religious beliefs influence how English teachers integrate social media in their practice (Mohammadabadi et al., 2019).

While studies on both internal and external factors have been insightful, there is still a lack of consensus on specific factors contributing to the discrepancy between English teachers' perceptions and practices in social media-integrated English education in China. Moreover, the influence of each factor across different teaching scenarios remains contentious (Chen & Abdullah, 2022). For instance, Ertmer and Ottenbreit-Leftwich (2010) argued that personal attributes, such as beliefs and self-efficacy, had a greater impact on pedagogical approaches than organisational factors. Conversely, Feryok (2008) highlighted the significant role of environmental factors. To resolve this conflict, future research should develop a systematic and holistic classification of these factors, considering their interplay at different levels within a rigorous and multifaceted theoretical framework to understand the perception-practice gap (Mohammadabadi et al., 2019).

### 2.3. A novel theoretical framework: LTC-TPACK framework

Exploring the complicated perception-practice gap in the context of social media-integrated English teaching requires a robust theoretical foundation. In this regard, two frameworks stand out due to their validity and suitability: the LTC framework and the Technological Pedagogical Content Knowledge (TPACK) model. According to Borg (2003) and Koehler et al. (2013), these frameworks provide a robust theoretical foundation for examining teachers' cognitive processes in various educational contexts, including social media-integrated language teaching, and offer valuable insights into the complex nature of teachers' pedagogical decision-making.

Notably, one of the most important theories concerning teachers' perceptions and practices is the LTC framework; it reflects the implicit cognitive aspect of what teachers know and think (Borg, 2006). To illustrate the multifaceted nature of LTC, Borg (2006) identified four interconnected domains of LTC, including schooling, professional coursework, contextual factors and classroom practices. Building on the LTC framework, Mishra and Koehler (2006) introduced a more detailed model specifically focusing on technology—the TPACK model. The TPACK model (Fig. 1.) revolves around teachers' knowledge of technology-integrated instruction and guides teachers in navigating the interplay of technology, pedagogy, and content knowledge (Tseng et al., 2022). The TPACK model fundamentally consists of three key elements: Technological Knowledge (TK), Content Knowledge (CK), and Pedagogical Knowledge (PK). Their intersections give rise to Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and Pedagogical Content Knowledge (PCK) (Luo & Zou, 2022).

Although previous research has often discussed the LTC framework and TPACK model separately, there is a growing recognition of

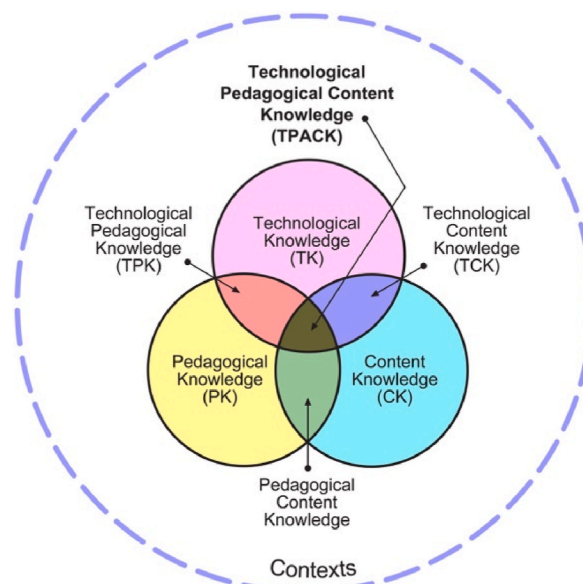


Fig. 1. TPACK framework (Mishra & Koehler, 2006).

the need to integrate these frameworks by examining the relationship between TPACK framework and LTC model. To start with, previous research highlighted that LTC, as a comprehensive theoretical construct, also encompassed its technological aspect of TPACK (Koehler et al., 2013). Brantley-Dias and Ertmer (2013) expanded on this relationship by asserting that TPACK should be regarded as an integral part of the LTC construct for a more comprehensive understanding. However, employing either LTC or TPACK alone in current L2 teacher research presents limitations. On the one hand, there is a general call for theoretical innovation in the LTC framework (Li, 2020), particularly in relation to technology integration; on the other hand, a primary critique of using TPACK in isolation is its failure to consider the wider cognitive and affective factors that influence teaching with technology (Falloon, 2020). Moreover, despite the growing body of research, a significant number of studies on TPACK have predominantly focused only on teachers' perceptions, leaving a gap in understanding how these perceptions translate into practices (Baran et al., 2019; Tseng et al., 2022). These limitations point to the importance of combining TPACK model with its broader framework, LTC, to achieve a more detailed and holistic understanding of the complexities involved in teaching with social media.

Responding to these critiques, previous research provided a plethora of evidence to support the integration of these two frameworks. Initially, Lee and Kim (2014) have addressed the necessity of combining TPACK model with another theoretical framework, though without clear specifications. Later on, Yildiz (2017) further specified "another framework" as something revolving around teachers' cognitive patterns, such as the LTC framework. In response to this advocacy, Gao and Zhang (2020) utilised LTC and TPACK frameworks to frame their pilot investigation into language teachers' perceptions of online teaching. However, they did not fully combine these two frameworks as Lee and Kim (2014) suggested. Hence, in response to TPACK's relationship with LTC and to bridge the considerable theoretical gap, a framework that combines LTC with TPACK, termed 'the LTC-TPACK Framework' is introduced (Fig. 2.).

In exploring language teachers' perceptions and practices within the realm of social media-integrated English education in a Chinese context, the adoption of the LTC-TPACK framework emerges as a particularly insightful approach. This choice is underpinned by the framework's unique ability to combine the critical elements of this study: perception, practice, and the technological aspect of social media integration. The combined LTC-TPACK framework provides a comprehensive lens through which these crucial elements can be examined. Specifically, the LTC framework offers a deep dive into the nuances of perception and practice, while the TPACK model brings to the forefront the critical role of technology integration in teachers' knowledge repertoire. To delve deeper into the LTC-TPACK framework and align with the specific focus of the study, which is set against the backdrop of English language education, the constructs of TCK and TPCK within the TPACK model are particularly relevant and therefore selected for the proposed framework. These elements align with the study's dual focuses on English (Content) and social media integration (Technology). This selective adoption of TPACK's sub-strands ensures a tailored approach that avoids unnecessary complexity, thereby enhancing the clarity and focus of the research (Hardman, 2019). This focused approach positions the LTC-TPACK framework as an appropriate guiding principle for this study.

2.4. Research questions

This study aims to explore the perception-practice gap among teachers in China regarding social media integration into English education. Using the LTC-TPACK framework, it examines both perceptions and practices to identify the existence and extent of this gap. Additionally, the study aims to pinpoint factors influencing the gap, understanding how these factors interact to form a layered system. This approach offers theoretical, methodological, and practical implications for future educational practices and policies.

1. To what extent does the gap exist between English teachers' perceptions of social media integration into classrooms and their classroom practices?
2. What are the factors contributing to the complex perception-practice gap of social media integration in English teaching?

3. Methods

This study employed a mixed methods approach to explore the research questions. Initially, the study focused on quantitative analysis based on the data collected from a modified version of the EFL-TPACK questionnaire (Bostancıoğlu & Handley, 2018). This was complemented by a qualitative analysis, which involved instructional documents collected from, and semi-structured interviews

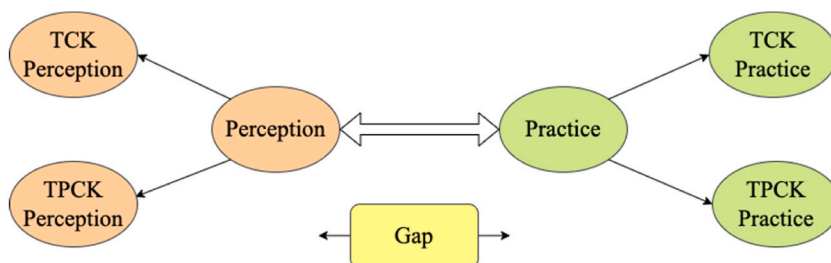


Fig. 2. LTC-TPACK framework.

conducted with, seven participants.

### 3.1. Participants, sampling, and research design

In this mixed methods study, 140 in-service English teachers in China, aged 20–60, were invited to participate in the research focusing on the integration of social media in English teaching. These participants represented a 70% response rate from 200 invitees. Of the 140 questionnaires administered, 119 were valid for analysis. Subsequently, seven teachers were purposively selected for qualitative data collection (Appendix A).

The sampling strategies varied across research phases. Initially, volunteer sampling was utilised for its flexibility and potential to minimise research bias (Daniel, 2011); subsequently, the qualitative research incorporated non-probability purposive sampling for its efficiency and potential to yield rich data (Campbell et al., 2020).

The criteria for selecting interview participants included a diverse demographic range, ensuring representation across various ages, genders, teaching experiences, educational backgrounds, and professional background, including both public and private institutions in rural and urban settings. Moreover, data saturation needed to be achieved (Guest et al., 2006). Participants’ willingness and availability for follow-up interviews and sharing instructional documents were also essential. This comprehensive selection strategy ensured a thorough understanding of social media integration in English teaching.

The process of research is presented in Fig. 3. The study contains two phases: pilot and main data collection. Initially, a two-week pilot study was conducted to refine the questionnaire and interview protocol based on participants’ feedback, with particular attention to establishing a non-judgmental rapport during interviews (Heath et al., 2018). In the main phase, questionnaires were disseminated first, followed by inviting participants for subsequent qualitative research. Seven participants were selected for a preliminary online meeting to clarify the study’s objectives. This was followed by the solicitation of informed consent and collection of instructional documents. Subsequently, these participants were invited for individual semi-structured interviews, in line with the refined interview protocol.

### 3.2. Instruments and data collection

This research employed a triangulation approach, incorporating online questionnaires, instructional documents, and semi-structured interviews in the analysis. To start with, this research employed an online questionnaire (Appendix B), adapted from the EFL-TPACK questionnaire (Bostancıoğlu & Handley, 2018), to explore teachers’ perceptions and practices of integrating social media into English education within the LTC-TPACK framework. Available both in English and Mandarin, the questionnaire included a demographic section and a 36-item, 7-point Likert scale across four dimensions of the LTC-TPACK framework. The term “technology”

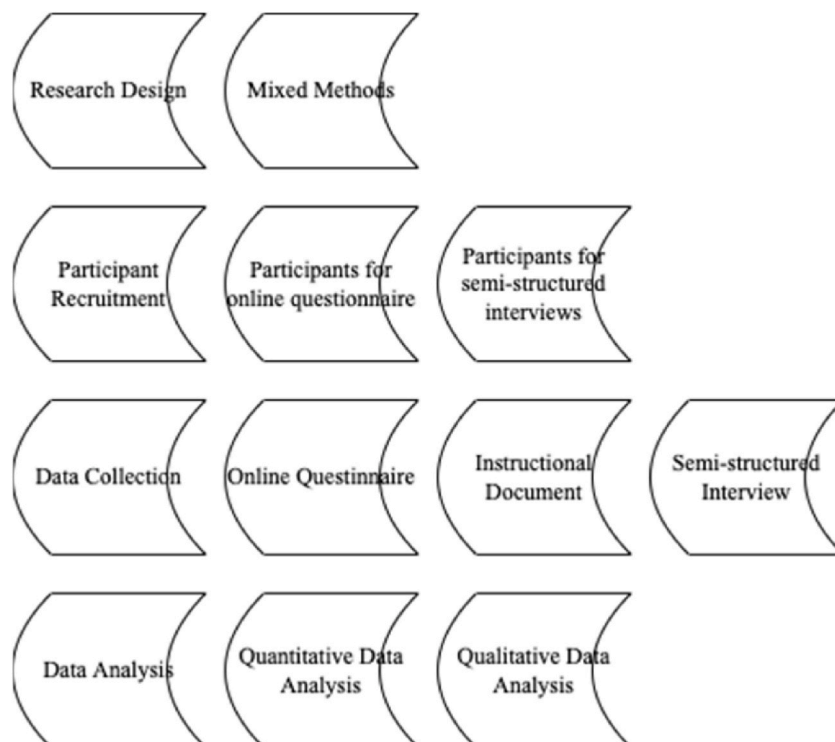


Fig. 3. Process chart of the research.

was specifically revised to “social media” to ensure consistency and clarity. Items were meticulously adapted to capture both perceptions and practices, with TCK and TPCK items rephrased to examine practices.

In addition to the questionnaire, qualitative data were obtained from seven instructional documents provided by participating teachers’ post-survey responses. These documents, which included background introductions, lesson plans, and instructional materials, demonstrated how teachers integrated social media into their English teaching practices. The use of instructional documents allowed for an authentic view of the teaching context, reflecting not only teachers’ practices without researcher involvement but also providing multiple perspectives (Bowen, 2009). These documents were analysed to identify themes about perception-practice gap and influencing factors.

Furthermore, based on the initial data analysis outcomes from questionnaires and submitted instructional documents, an interview protocol was developed according to Castillo-Montoya’s (2016) interview framework. Subsequently, seven semi-structured interviews were conducted, each lasting between 30 and 60 minutes. Before the interview, participants chose whether to be interviewed in English or Mandarin. These interviews, recorded via Teams, were divided into four sections: personal background, perceptions and practices of social media integration in English education, factors contributing to perception-practice gap, and closing question. These diverse data sources collectively afforded a comprehensive understanding of the landscape of social media-integrated English teaching of teachers in China.

### 3.3. Data analysis

The data analysis phase comprised both quantitative and qualitative approaches. Initially, four sets of quantitative data were analysed: TCK perceptions, TPCK perceptions, TCK practices, and TPCK practices, using STATA 17. To ensure reliability, Cronbach’s alpha was calculated ( $\alpha = 0.86$ ). Following this, descriptive statistics, the paired samples Wilcoxon signed-rank test, and Spearman’s correlation analysis were conducted.

Following the quantitative analysis, the qualitative data analysis was performed in NVivo 14. After transcribing interviews verbatim, a thematic analysis in a grounded theory manner was conducted. This involved three stages of coding: open coding, axial coding, and selective coding (Strauss & Corbin, 1990). The codes generated were derived from both interview transcripts and instructional documents.

Throughout the data collection process, this study strictly followed the research ethics guidelines of British Educational Research Association (2024). In general, privacy and confidentiality were respected throughout the research process.

## 4. Results

This section reports on the existence and extent of the perception-practice gap based on the quantitative data collected from the revised EFL-TPACK questionnaire, drawing on descriptive statistics, the Wilcoxon signed-rank test, and Spearman’s rank correlation. The degree of the gap was further investigated through qualitative data, which included instructional documents and semi-structured interviews with seven in-service English teachers in China. Furthermore, contributing factors for the perception-practice gap were analysed based on the qualitative data.

### 4.1. The perception-practice gap

As indicated in Table 1, mean scores for TCK perceptions ( $M = 4.92$ ,  $SD = 1.19$ ) and TPCK perceptions ( $M = 4.82$ ,  $SD = 1.05$ ) suggested that English teachers in China generally held moderately positive views towards social media integration in teaching. However, the mean scores for TCK practices ( $M = 3.63$ ,  $SD = 1.31$ ) and TPCK practices ( $M = 3.65$ ,  $SD = 1.35$ ) were notably lower, highlighting a substantial gap between teachers’ perceptions and their practices. The Wilcoxon signed-rank test (Table 2) confirmed significant discrepancies ( $P < 0.05$ ) between TCK and TPCK perceptions versus practices, highlighting a substantial gap between teachers’ self-assessed competencies and their classroom implementations.

The extent of the gap between perceptions and practices in the LTC-TPACK framework was demonstrated in Spearman’s rank correlation (Table 3), which indicated notably weak intercorrelations between TCK and TPCK perceptions and practices. To specify, a negligible positive correlation was observed between TCK perception and TCK practice ( $r = 0.037$ ,  $P > 0.05$ ). This suggests that English teachers’ TCK perception may not directly translate into their teaching practices. Similarly, the TPCK perception and TPCK practice correlation ( $r = 0.083$ ,  $P < 0.05$ ), though statistically significant, was very weak. This also implies that teachers’ TPCK practices with social media-integrated teaching may not mirror their perceptions.

**Table 1**  
Descriptive statistics of TCK and TPCK perceptions and practices.

	N	Range	Min	Max	Mean	Standard Deviation (SD)
TCK perceptions	119	6	1	7	4.92	1.19
TCK practices	119	6	1	7	3.63	1.31
TPCK perceptions	119	5	2	7	4.82	1.05
TPCK practices	119	6	1	7	3.65	1.35

**Table 2**

The paired samples wilcoxon signed-rank test results.

Test		N	Mean Rank	Sum of Ranks	Z	P
TCK Perception vs. TCK Practice	Positive Ranks	648	725.89	470379.5	21.12	0.00
	Negative Ranks	97	519.34	50375.5		
	Zero	326	163.5	53301		
TPCK Perception vs. TPCK Practice	Positive Ranks	599	755.82	452734	20.08	0.00
	Negative Ranks	110	505.63	55619		
	Zero	362	181.5	65703		

**Table 3**

Spearman's rank correlation analysis.

Spearman's rho	TCK Perception		TCK Perception	TPCK Perception	TCK Practice	TPCK Practice
		Correlation Coefficient	1.000	0.514	0.037	-0.085
		Prob >  t	0.000	0.000	0.223	0.005
		N	1071	1071	1071	1071
	TPCK Perception	Correlation Coefficient	0.514	1.000	-0.065	0.083
		Prob >  t	0.000	0.000	0.032	0.007
		N	1071	1071	1071	1071
	TCK Practice	Correlation Coefficient	0.037	-0.065	1.000	0.690
		Prob >  t	0.223	0.032	0.000	0.000
		N	1071	1071	1071	1071
	TPCK Practice	Correlation Coefficient	-0.085	0.083	0.690	1.000
		Prob >  t	0.005	0.007	0.000	0.000
		N	1071	1071	1071	1071

#### 4.2. Narrating the perception-practice gap: insights from English teachers

Qualitative data gathered from the instructional documents and semi-structured interviews with seven in-service English teachers illuminate the presence and the extent of the perception-practice gap. The findings corroborate the quantitative data, revealing a significant gap and the nuanced extent of this gap between perceptions and practices within the TCK and TPCK domains.

Firstly, a notable TCK perception-practice gap was revealed in several teachers' interviews. For instance, Sam and Sunnie, two English teachers from a tertiary institution and a vocational school respectively, both acknowledged the potential of collaborative writing tools, such as Padlet and Tencent Doc for enhancing English writing skills. However, they were reluctant to use these tools, citing significant impediments such as "time constraints" and "complexity for students." This disparity is characterised by a recurring pattern where, despite positive perceptions, there is a failure to implement these practices consistently and effectively. These findings align with Regan et al. (2019), who observed that teachers considered technology integration in writing as time-consuming and Abel et al. (2022), who noted that teachers often viewed technology as overly complex due to inadequate training and insufficient technical support.

Similarly, the TPCK perception-practice gap is evident across educational levels, from K-12 to higher education. For instance, Hannah, a grade 8 teacher with a PhD in education, "ambitiously" used a multimedia classroom to conduct an English class. Her goal was "to provide equal access to digital resources and guide students through setups", as stated in her instructional document. However, she encountered significant technical issues and finally "resorted to a traditional pedagogy", expressing reluctance to attempt this approach again. Similarly, Sam, a university English teacher with a PhD, narrated a story about a failure of his VR project that he proposed upon "recognising the potential of gamified VR tools" to "showcase cultural artifacts" during his PhD due to "budget constraints". These findings align with Mercader and Gairín (2020), who noted that technical and logistical barriers often prevented teachers' positive perceptions of technology integration from translating into teaching practices.

Although the perception-practice gap has been well-documented, our qualitative analysis reveal that its manifestations are subtly different within the contexts of TCK and TPCK. Within the TCK context, teachers generally view social media positively and attempt moderate integration into their teaching, although the effectiveness and sustainability of these efforts varies. These qualitative findings confirm the quantitative results, which indicate only a negligible positive correlation between perception and practice ( $r = 0.037$ ,  $P > 0.05$ ). Challenges such as increased monitoring needs and scheduling conflicts further complicate these efforts. Selected excerpts from instructional documents illustrate these dynamics and the nuanced challenges encountered:

**“Showcase Course Aim:** Introduce Grammarly for collaborative English writing to encourage ... peer editing (and) ... instant feedback ...

**Post-Course Note:** ... It demanded significant monitoring therefore only used for showcasing purposes.” (Sunnie, Instructional Document)

**“Objective:** ... Use shared forum to demonstrate excellent student essays ...

**Teaching Diary:** *Several posts uploaded and well-received ... but consistent updating was challenging due to scheduling conflicts.*” (Cici, Instructional Document)

Regarding the TPCK perception-practice gap, the qualitative results reveal a weak yet existent relationship between the perceived communicative value of social media and its moderate integration into English education; however, its educational value is largely disregarded. This finding supports our quantitative analysis, which identified a statistically significant but weak TPCK perception-practice correlation ( $r = 0.083$ ,  $P < 0.05$ ). For instance, in the interview, Cindy recognised the practical utility of WeChat for “*maintaining connections with students*”. However, she expressed reservations about its educational value, admitting she “*cannot see any educational values*” and “*barely uses it beyond communication purposes*”. Similarly, Sam’s experience with QQ mirrored Cindy’s. He often used QQ for sharing learning materials but doubted “*I’m not sure if it (QQ) is enhancing their learning.*” These narratives indicate that, even amidst the prevailing gap, there is a subtle link between the perceptions and practices of both TCK and TPCK, revealing a complex interplay.

### 4.3. Factors contributing to the perception-practice gap

In the previous section, the qualitative analysis identified a perception-practice gap among English teachers. This section reveals that the gap stems from several factors, based on the LTC-TPACK framework. Specifically, the framework facilitates a clear classification of the influencing factors into two domains: microscopic factors and macroscopic factors. Each factor is discussed in detail, supported by the indicative extracts from instructional documents and interview transcripts.

#### 4.3.1. Microscopic factors

This section discusses the microscopic factors that were found to influence the perception-practice gap. An array of factors, including schooling, professional coursework, and affective factors, are identified.

**4.3.1.1. Schooling.** Schooling is the first factor identified as affecting the perception-practice gap in the context of social media-integrated English education, characterised by a deficiency in practical exposure and outdated curricula. Specifically, practical exposure refers to opportunities students are provided to apply their theoretical knowledge in teaching environments. Vivi, Hannah, and Cici highlighted significant gaps in this area, noting the absence of mock classes, hands-on learning experiences, and internship opportunities. The following excerpts illustrate deficiencies in practical training:

*“Although I learnt interesting things about educational technology ... We never had a mock class or anything ... so, I’m not too sure about the meaning of these theories.”* (Vivi, Interview)

*“I got overwhelmed by the fancy notion of TPACK during my PhD research ... Honestly, when I’m in class, TPACK is not the thing I would think about, nor does any sort of technology.”* (Hannah, Interview)

*“I specifically chose an elective course in educational technology ... but that year, because of the pandemic, I didn’t even have the opportunity to do an internship.”* (Cici, Interview)

These excerpts demonstrate how the widespread lack of practical teaching opportunities contributes to the gap between positive perceptions and limited practices. Cici noted that the pandemic hindered her internship opportunities, unlike Vivi and Hannah, who had completed their studies before the pandemic. This suggests that the shortage of practical opportunities predates the pandemic and has been exacerbated by it. This has been attested by Hourani (2013), who reported inadequate practical training as a common issue in pre-service teacher training programmes. Furthermore, the pandemic has exacerbated this challenge, as online learning and social distancing measures have significantly restricted in-person teaching opportunities (Choate et al., 2021).

The other aspect, i.e., the outdated curricula in pre-service teacher programmes that lacked elements of social media-integrated pedagogies, significantly influences the perception-practice gap. This is evidenced in both interviews from Sam and Cindy.

*“I attended university many years ago when few teachers used technologies to teach English ... Our focus was more on educational psychology.”* (Sam, Interview)

*“My BA programme discussed merits of technology in teaching; however, it mainly discussed old-fashioned ones like desktop computers ... and failed to adequately cover ... social media.”* (Cindy, Interview)

Although Sam and Cindy noted the outdated university curricula lacked social media integration, a comparison of their experiences—Sam being 38 and Cindy 31—illustrated a trend towards increased integration of educational technologies over seven years. While social media remained absent, the updated curriculum showed promising signs of its future inclusion. This trend aligns with earlier scholarly recommendations; for instance, Pedro et al. (2018) advocated a cautious yet optimistic approach to incorporating mobile learning, including social media, into pre-service teacher education programmes.

**4.3.1.2. Professional coursework.** In addition to schooling, the qualitative data identified professional coursework as another factor

that contributed to the perception-practice gap. The primary issue with professional coursework is a misalignment in training focus. In some instances, the focus is overly theoretical, lacking adequate practical opportunities. In other cases, the coursework excessively concentrates on technical aspects instead of pedagogical ones. This misalignment is illustrated by the following excerpts:

*“As a computer science major student, I was very into ... technologies ... However, I felt that my professional training ... used too many vague words, which I ... have no idea about their applications”.* (Sunnie, Interview)

*“Some professional training courses are ... like my courses in the university ... They indeed facilitated my impression of education technologies ... However, the programme focused ... on the ‘how to use’, neglecting the ‘how to use it to teach’.”* (Vivi, Interview)

Both Sunnie and Vivi noted that the focus of their professional coursework, while fostering positive perceptions, hindered their ability to translate these perceptions into practical teaching. They highlighted the similarity between in-service professional coursework and pre-service university lectures. Vivi explicitly pointed out this resemblance, and Sunnie mentioned a lack of practical training—also a common issue in schooling contexts. Such a similarity is problematic because extensive research has advocated for distinct approaches between pre-service and in-service teacher education, particularly in terms of knowledge scope, practical applications, and the continuity between pre-service and in-service phases (Beck & Kosnik, 2017). The apparent uniformity across pre-service and in-service teacher education in China suggests a potential one-size-fits-all approach, which could hinder social media integrations in English education.

**4.3.1.3. Affective factors.** Beyond the schooling and professional coursework factors discussed earlier and identified within the LTC framework (Borg, 2003), the analysis also identified affective factors, notably fear of failure and lack of confidence. Several teachers shared personal experiences of integrating social media into their teaching and reflected on their emotional reactions towards teaching outcomes. The following accounts highlight how the fear of failure influenced the perception-practice gap.

*“Video integration distracted my students ... I won’t bother to do this again ... though I still think it’s a good thing.”* (Sam, Interview)

*“I failed to activate the system was drowned by the fear of losing my job ... Later I felt anxious about integrating social media into classrooms.”* (Vivi, Interview)

Sam and Vivi exemplified the multidimensional aspects of fear in social media integration: fear of integration failure (Sam) and job security (Vivi). These fears, linked to the increasing need for digital competence among teachers due to technological advancements (Fernández-Batanero et al., 2022), illuminate the necessity for further research into designing targeted professional development programmes which help language teachers integrate social media effectively. Additionally, Vivi’s concern about job security reflects systemic issues where rapid technological changes have not been accompanied by job stability guarantees (Mushtaque et al., 2022). Therefore, future research should also explore how educational policies can adapt to ensure job stability amidst rapid technological changes.

Besides, another affective factor deserving attention, albeit less prevalent, is the lack of confidence, as indicated in the following excerpt.

*“It must be interesting for students to play games ... but I don’t play any games at all ... if I incorporate games in class, it will be awkward if students find out I know nothing about games.”* (Janice, Interview)

Janice’s reluctance to integrate gaming into English teaching underscores the complex relationship between insufficient knowledge and low confidence. Although only one participant cited the lack of confidence as a significant factor, this issue aligns with the broader research that has illustrated how confidence and knowledge are interlinked in influencing the gap between perceptions and their practices. For example, Ertmer and Ottenbreit-Leftwich (2010) emphasised that effective integration of technology, including social media, required teachers to have both necessary knowledge and confidence to apply these knowledges meaningfully in educational contexts.

#### 4.3.2. Macroscopic factor

The qualitative data revealed a set of macroscopic factors that influence the perception-practice gap. The main macroscopic factors include institutional and societal factors.

**4.3.2.1. Institutional factor.** This section identifies and explores key institutional factors, such as policies and technological infrastructure, that contribute to the perception-practice gap. Firstly, several teachers addressed concerns about how institutional policies could influence practices.

*“When I first arrived, the classrooms were basic and unsuitable for social media use ... After the school upgraded to multimedia classrooms, more opportunities became available.”* (Sunnie, Interview)

“At a previous private school, I frequently used social media in teaching ... but strict policies at my current public school prevent its use.” (Janice, Interview)

Sunnie and Janice’s experiences illustrate the significant impact of institutional policies on the perception-practice gap, albeit from different perspectives. Sunnie’s account highlights how changes in institutional policies within a single school could exert a long-term influence on increased practices, while Janice’s experiences show how social media integration has been shaped by multiple school environments. This contrast highlights how the perception-practice gap varied dynamically across different institutional settings. This idea aligns with [Anyichie et al. \(2023\)](#), who argued that institutional policies should be tailored to fit different contexts and timelines to reflect the nuanced and evolving nature of various settings.

Furthermore, technological infrastructure within the institution has been another influencing factor. This is evidenced in the following instructional documents.

“**Resource Evaluation:** Check the availability of necessary technology like computers and Internet before implementation ...

**Alternative Methods:** If resources are lacking, consider offline alternatives that simulate online interaction.” (Janice, Instructional Document)

“**Equipment Readiness:** Confirm all video-playing equipment is operational ...

**Plan B:** Have audio activities ready in case of technical failures.” (Cindy, Instructional Document)

The documents from Janice and Cindy emphasise the crucial role of technological infrastructure in influencing the perception-practice gap. Janice, who developed instructional materials for volunteering teaching in impoverished areas, focused on the availability of basic technologies. Contrastively, Cindy was concerned about whether the equipment was sophisticated enough to support video integration. The stark contrast between Janice’s and Cindy’s resource availability and corresponding pedagogies highlights inequities in educational technology deployment. To mitigate these disparities, policies should provide targeted investments to enhance infrastructure in underserved institutions and ongoing professional development for teachers to optimally use limited resources ([Guggemos & Seufert, 2021](#); [Mog & Debbarma, 2020](#)).

4.3.2.2. *Societal factor.* Additionally, the societal factor surfaces as a component of macroscopic factors. For many participants, their perception-practice gaps were also situated in various policy climates. As for Cici, her narratives delineated her teaching experiences under distinct policies, particularly the transition from Shanghai’s “*e-schoolbag*” initiative (encouraging education technology in classrooms) ([Hoel, 2015](#)) to the “*Double Reduction*” policy (forbidding any extra classes in the K-12 setting) ([Xue & Li, 2023](#)).

“I recall the government’s encouragement for social media in teaching ... during the ‘*e-schoolbag*’ initiative ... However, the *Double Reduction* policy prohibited these technologies, as the lead teacher worried that ... (they) might burden students.” (Cici, Interview)

Cici’s experience transitioning from a supportive to a restrictive governmental policy illustrates how such changes can impact the perception-practice gap. These shifts underscore the embedded nature of institutional policies within broader governmental frameworks, with direct top-down influences shaping institutional practices. The adherence to governmental policies is notably evident in an instructional document from Sunnie, reflecting the pervasive impact of such policies.

“**Objective:** Responds to the advocacy of *Double Reduction* Policy ...

3. Reduce workload to 1 hour ...

1) Unit 5 Section 2 Listening Exercise (15min)

2) Unit 5 Section 3 “Simple Past Tense” Filling in the Blanks (30min)

3) Unit 5 Text Reading (15min)” (Sunnie, Instructional Document)

This observation aligns partially with [Abrahamsen and Aas’s \(2016\)](#) study, which examined the broader implications of international discourses on national policy and subsequently on school leadership. However, the current study solely focuses on the direct influence of government policies on institutional policies. A sensible explanation is that the current study’s reliance on qualitative data from English teachers has narrowed its focus and limited the scope of the investigation. Therefore, future research should aim for a more comprehensive analysis to fully understand the broader impacts of these policy dynamics.

## 5. Discussion

### 5.1. Mind the gap between perceptions and practices

In general, both the quantitative and qualitative results portrayed the existence and extent of the gap between language teachers’

perceptions and practices regarding social media-integrated English teaching. The descriptive statistics showed mean differences, and the paired samples Wilcoxon signed-rank test confirmed statistically significant differences in both TCK and TPCK perception-practice gaps. This contradicts previous studies that found alignments between teachers' decision-making and thinking (e.g., Sun & Zhang, 2021). Nevertheless, this result supports that the gap between language teacher perceptions and practices has been a recurring theme in L2 research (e.g., Barnard & Burns, 2012; Chen & Abdullah, 2022; Li, 2020). Specifically, the perception-practice gap in social media-integrated English classrooms corresponds with Chik's (2011) research where there was a gap between English teachers' positive perceptions of online social networking and video gaming and their strong reservations concerning classroom applications in Hong Kong. These results can be interpreted in two ways. Firstly, it is challenging to reconcile the informal nature of social media with the structured and formal nature of education (Selwyn et al., 2009). Secondly, from a sociocultural viewpoint, pedagogies of English teachers in China are profoundly shaped by the utilitarian, exam-centric doctrine that prioritises students' scores (Li, 2004). This doctrine may not align with social media integration, whose purpose is more recreational and eye-catching (Pickering et al., 2017), potentially illustrating a discrepancy between their perceptions and practices.

The correlation analysis between TCK and TPCK perception-practice pairs further solidified this perception-practice gap, revealing several key findings. Firstly, TCK perception did not correlate with TCK practice. Secondly, a weak and negligible positive correlation existed between TPCK perception and practice. The former non-correlation implies that English teachers' TCK perception is not likely to directly translate into their actual teaching practices. Likewise, the latter weak positive correlation indicates that English teachers are likely to demonstrate a limited inclination to transform their TPCK perceptions into TPCK practices. The non-correlation and weak correlation imply the specific degree of the perception-practice gap. This suggests that, despite some limited connections, English teachers' perceptions largely do not align with their actual practices.

Moreover, a qualitative examination into instructional documents and interviews further supported the quantitative findings by revealing that teachers' perceptions were not necessarily aligned with practices both in terms of TCK and TPCK. In examining the TCK perception-practice gap, English teachers like Sam and Sunnie showed clear disparities between their theoretical support for social media in English writing and its limited practical application due to social media integration's nature of time constraints and technical difficulties. A similar scenario occurred in the section discussing the TPCK perception-practice gap, supported by integration failure stories from both Hannah and Sam aiming at promoting educational equity and cultural diversity. Both TCK and TPCK perception-practice gaps highlight the need for specific supports to enhance teachers' technical abilities, improve time management within the classroom, and ensure adequate funding. These supports are crucial for aligning teachers' perceptions with the integration of social media in English education.

However, drawing parallels between these nuanced findings of perception-practice gap and current literature poses an intricate challenge, due to the lack of research explicitly investigating the non-correlations between TCK perception and practice, as well as the weak correlation between TPCK perception and practice. Nonetheless, these findings still find consistency with preceding literature. For instance, this result lends support to Daba and Teshome's (2022) quantitative research which testified to a weak positive correlation between the teachers' perceptions and implementation of language teaching. However, unlike their study which focused solely on language for communicative purposes—a sub-strand of TPCK—this study evaluates English teaching from a broader perspective, including both perspectives of TCK and TPCK.

Moreover, this study highlights a weak positive correlation between perceptions and practices in TCK and TPCK, rather than a stark discrepancy. Instructional documents from Sunnie and Cici illustrated specific examples of the TCK perception-practice gap, while interviews with Cindy and Sam revealed a similar gap in TPCK. These nuanced findings suggest that the relationship between teacher perceptions and their actual use of social media is complex and warrants further exploration. This finding is in line with previous studies, which asserted that teacher perceptions and classroom practices are interrelated (e.g., Aslan, 2015) and practices somehow reflected their perceptions (e.g., Sun & Zhang, 2022). However, this study complements these previous studies, which only pointed out the perception-practice relationships in a qualitative way, while this study presents a more comprehensive result with mixed methods: whereas quantitative statistics demonstrated its weak positive relationship, further interviews explained the extent of the relationship.

## 5.2. Contributing factors as a layered system

The qualitative phase identified potential factors shaping the perception-practice gap. Borg (2009) categorised various factors into the LTC framework encompassing schooling, professional coursework, and contextual factors. Informed by this framework, this study classified influencing factors into two categories: microscopic (schooling, professional coursework, and affective factors) and macroscopic (institutional and societal).

Initially, microscopic factors such as schooling, professional coursework, and affective factors influenced the English teachers' perception-practice gap. According to qualitative data, a lack of practice, outdated curricula during schooling, and a lack of practical exposure during professional coursework contributed to the perception-practice gap. The findings regarding schooling and professional coursework support Borg's (2009) view that prior learning experiences significantly impact LTC research. Moreover, this study supports Mishra et al. (2009) advocacy for the necessity of a well-rounded teacher training programme that aligns theoretical knowledge with practical instructional skills.

Despite the acknowledged influences of schooling and professional coursework, previous LTC studies often neglected the affective aspect (Golombek & Doran, 2014), an oversight that this research aims to address. During their interviews, Vivi and Sam described significant setbacks when attempts to integrate social media into classrooms failed; similarly, Janice admitted to a lack of confidence. These examples demonstrate how emotionally charged experiences could hinder the translation of positive perceptions into practice. This further supports Yamagata-Lynch and Haudenschild's (2009) claim that when teachers are demotivated, they are less likely to

implement innovative pedagogies.

From a macroscopic perspective, institutional and societal elements significantly influenced the perception-practice gap. To illustrate, institutional policies and technological infrastructure influenced the level of autonomy teachers have, which has impacted their social media-integrated teaching practices. These teachers' stories bolster the well-established argument that administrative support and school culture are linked to teachers' instructional practices (Ertmer, 1999). In contrast, this standpoint challenges Pajares's (1992) stance emphasising the roles of teachers' individual beliefs shaped by education and self-efficacy, putting aside institutional factors.

However, assertions from Ertmer (1999) and Pajares (1992) do not necessarily conflict; instead, experiences of respondents in this study revealed a layered system wherein individual and institutional influences coexist. Teachers' perceptions are shaped by personal experiences, yet nested within larger institutional contexts, demonstrating a dynamic interplay that influences the perception-practice gap (Öztürk & Gürbüz, 2017). This layered system was also reflected in the discussion of societal factors, where Cici and Sunnie narrated how the "Double Reduction" policy's constraints on social media integration informed their school regulations and further influenced relevant teaching practices. Language policies at both societal and institutional levels shape teachers' practices, exemplified by the changes in social media integration in schools, despite personal preferences. This reflects how schools, as societal subsets, mirror broader societal attitudes. This layered system supports Borg's (2006) argument on the contextual role in LTC, showing how teachers interpret societal and institutional influences uniquely, making the perception-practice gap a personal yet contextually embedded process. To sum up, based on the discussions above, a more complete LTC-TPACK framework is proposed as represented in Fig. 4.

### 6. Conclusions

The primary objective of this study is to explore how English in-service teachers in China perceive and implement social media-integrated teaching. The study triangulated the data derived from EFL-TPACK questionnaires, instructional documents, and semi-structured interviews. Two key goals underpinned the research: first, to portray English teachers' perception-practice gap and, second, to identify both microscopic and macroscopic factors contributing to the gap. The research has revealed several salient findings. Generally, English teachers in China demonstrated a moderate to moderately positive attitude toward social media-integrated teaching but exhibited a more negative implementation of the same. However, the extent of the perception-practice gap was not absolute, as there was a weak positive perception-practice correlation. Moreover, factors influencing this gap formed a layered system, wherein

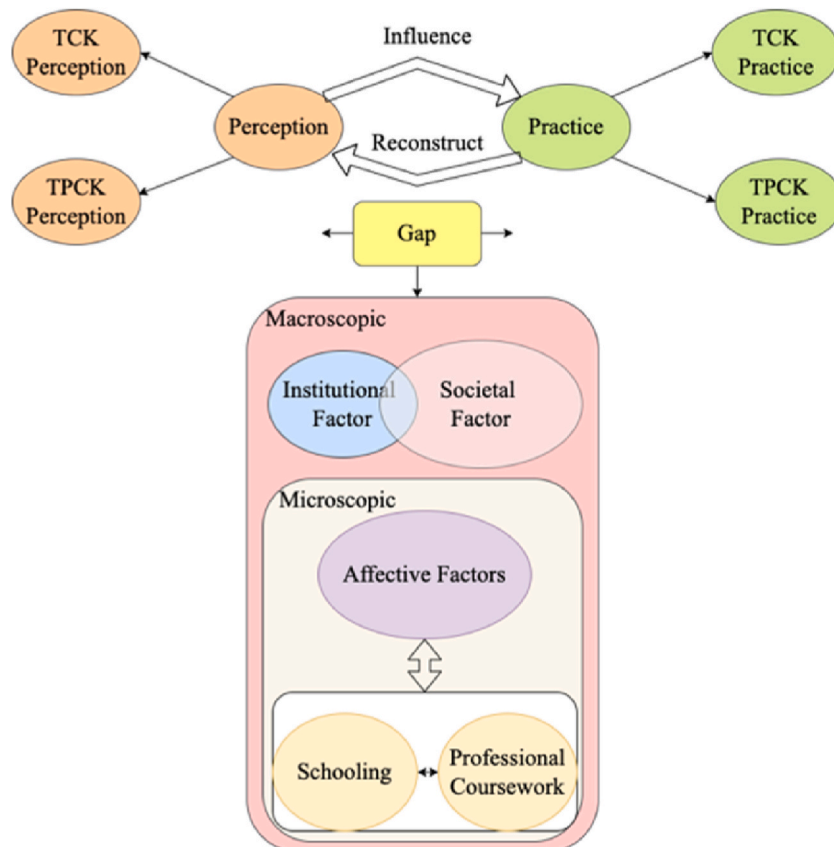


Fig. 4. LTC-TPACK framework for social media integration.

microscopic variables like schooling, professional coursework, and affective factors were nested within broader macroscopic influences such as institutional and societal factors.

A notable theoretical breakthrough of this study is the introduction of the LTC-TPACK framework, a novel conceptual lens integrating the LTC framework with the TPACK model. This framework, developed through comprehensive literature review and empirical research, offers a robust tool for understanding the perception-practice gap in social media-integrated teaching. Furthermore, this study marks a significant methodological shift from earlier research that relied primarily on qualitative methods (Borg, 2003). By employing a mixed method approach, the study advances the scholarship by filling a methodological gap, offering a comprehensive view of the complex perceptions and practices concerning social media integration.

From a practical perspective, this study serves as a pioneering approach to the perception-practice gap, particularly among English teachers in China—a demographic that has been largely overlooked in the field of LTC research. It provides a clarified system to capture the factors influencing the perception-practice gap and extends the realm of factors to include affective elements. Moreover, these results, especially the development of the LTC-TPACK framework, provide three implications for refining teacher development programmes. The first is contextual flexibility, which requires content designers to design training materials adaptable to various teaching contexts, acknowledging the diversity of technological infrastructure and institutional policies. The second insight is the need to provide affective support through adding psychological care sessions to address teachers’ emotional concerns and foster a more resilient mindset towards social media integration. The third implication is to ensure future professional development programmes emphasise practical experiences with social media, moving beyond theoretical knowledge to include classroom-based applications.

Furthermore, the study offers actionable recommendations for various educational stakeholders, from school administrators to policymakers, advocating for a more informed and supportive integration of social media into English language teaching. Policymakers should consider revising current educational policies to be more inclusive of innovative digital pedagogies. In addition, school administrators should enhance their technological infrastructure to ensure more reliable access to stable Internet and digital devices. Another suggestion is to cultivate a culture that encourages teachers to embrace innovative pedagogies, viewing failures as learning opportunities.

However, future research would benefit from acknowledging and avoiding this study’s limitations. Firstly, future research incorporating a similar design, and a larger sample size, would be of value. The present study is limited to a small number of participants, and it is not, therefore, possible to generalise its findings to the population of all English teachers in China. Secondly, this study has identified several factors that influenced the complex perception-practice relationship regarding social media integration in English classrooms. Future research, based on this premise, could examine the relationship among those factors in the study and the LTC-TPACK construct. Furthermore, although the EFL-TPACK questionnaire, a borrowed and well-established instrument served its purpose in the current study, its relevance for the purposes of the study is questionable because the author has narrowed the original term “technology” into “social media”. Future research should consider adopting instruments that are more specific to the context.

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During the preparation of this work the author(s) used ChatGPT 4.0 to proofread the article. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

**Appendix A. Demographic information of 7 interviewees**

Demographic Information							
Pseudonym	Gender	Region (Province)	Age	School Level	Educational Level	English Proficiency	Social Media Used
Cici	Female	Anhui	23	Primary school	Master	IELTS 8	<ul style="list-style-type: none"> <li>• Social networking sites</li> <li>• Collaborative Office Tools</li> <li>• Online Community of Practice</li> </ul>
Janice	Female	Shanghai	22	High school	Master	IELTS 7.5	<ul style="list-style-type: none"> <li>• Social networking sites</li> <li>• Social networking sites</li> <li>• Collaborative Office Tools</li> <li>• Online Community of Practice</li> <li>• Social networking sites</li> <li>• Collaborative Office Tools</li> <li>• Online Community of Practice</li> </ul>
Sam	Male	Hebei	38	University	PhD	IELTS 7	
Sunnie	Female	Guangdong	27	Professional School	Bachelor	CET 6	<ul style="list-style-type: none"> <li>• Social networking sites</li> <li>• Collaborative Office Tools</li> <li>• Online Community of Practice</li> </ul>
Cindy	Female	Chongqing	31	Middle School	Bachelor	CET 4	<ul style="list-style-type: none"> <li>• Social networking sites</li> <li>• Social networking sites</li> <li>• Collaborative Office Tools</li> <li>• Online Community of Practice</li> <li>• Virtual Learning Practice</li> <li>• Social networking sites</li> </ul>
Hannah	Female	Beijing	34	Middle School	PhD	IELTS 8.5	
Vivi	Female	Zhejiang	25	Middle School	Bachelor	IELTS 6.5	<ul style="list-style-type: none"> <li>• Social networking sites</li> <li>• Online Community of Practice</li> </ul>

## Appendix B. Adapted EFL-TPACK questionnaire

Section	Instruction	Questions
Demographic Information	Next is the first part of the questionnaire: demographic information collection. In this section, you will be asked some basic information, including your personal information, teaching information, etc.	<p>What is your gender?</p> <p>A Male</p> <p>B Female</p> <p>C I prefer not to say</p> <p>In which province are you currently located?</p> <hr/> <p>Which of the following levels does your school belong to?</p> <p>A Kindergarten</p> <p>B Primary School</p> <p>C Middle School</p> <p>D Higher Education</p> <p>E Professional School</p> <p>F Other, please specify</p> <p>What is your educational level?</p> <p>A Primary school or below</p> <p>B Middle school</p> <p>C Bachelor's Degree or equivalent</p> <p>D Master's Degree or equivalent</p> <p>E PhD's Degree or equivalent</p> <p>Have you participated in any teacher professional development programmes?</p> <p>A Yes</p> <p>B No</p> <p>C Not sure</p> <p>Do you have any previous experiences utilising social media in English education?</p> <p>A Yes</p> <p>B No</p> <p>What social media have you used before to teach English?</p> <p>A social networking sites (e.g., WeChat)</p> <p>B collaborative office tools (e.g., TenCent Docs)</p> <p>C virtual learning practices (e.g., games)</p> <p>D online community of practice (e.g., Bilibili)</p> <p>What is your English proficiency level?</p> <p>A English Language Proficiency in Secondary School Examinations</p> <p>B English Language Proficiency in College Entrance Examinations</p> <p>C English Language Proficiency of CET-4</p> <p>D IELTS 6–6.5 or equivalent</p> <p>E IELTS 7–8 or equivalent</p> <p>FIELTS 8 above or equivalent</p>
TCK Perceptions of Social Media Integration in English Teaching	Next is the second part of the questionnaire: exploring your views regarding the use of social media in English language education. This is one of the most central parts of the questionnaire. In this section, you are expected to give a true picture of your views about social media in English education. This is a 7-point Likert scale, therefore, for every question, you need to rate your perception from 1 (impossible) to 7 (always).	<p>I know about social media that I can use to teach listening in English.</p> <p>I know about social media that I can use to teach speaking in English.</p> <p>I know about social media that I can use to teach reading in English.</p> <p>I know about social media that I can use to teach writing in English.</p> <p>I know about social media that I can use to teach English language grammar.</p> <p>I know about social media that I can use to teach English vocabulary.</p> <p>I know about social media that I can use to teach pronunciation of English words.</p> <p>I know about social media that I can use to teach spelling of English words.</p> <p>I know about the social media that I can use to teach about the differences between cultures.</p> <p>I know how to teach lessons that appropriately combine English linguistic concepts, social media, and teaching approaches.</p> <p>I know how to select appropriate social media that combine English culture, technologies, and teaching approaches.</p>
TPCK Perceptions of Social Media Integration in English Teaching		

(continued on next page)

(continued)

Section	Instruction	Questions
TCK Practice of Social Media Integration in English Teaching	<p>Next is the third part of the questionnaire: exploring your practices regarding the use of social media in English language education.</p> <p>This is one of the most central parts of the questionnaire. In this section, you are expected to give a true picture of your practices about social media in English education. This is a 7-point Likert scale, therefore, for every question, you need to rate your practice from 1 (impossible) to 7 (always).</p>	<p>I know how to select social media to use in my classroom that enhance what I teach, how I teach, and what students learn.</p> <p>I know how to use social media effectively to communicate relevant information to students and peers.</p> <p>I know how to use a range of social media to help students pursue their individual curiosities.</p> <p>I know how to use a range of social media that enable students to become active participants.</p> <p>I know how to provide equitable access to digital language learning tools and resources</p> <p>I know how to facilitate intercultural understanding by using social media to engage students with different cultures.</p> <p>I know how to participate in digital learning communities to explore creative applications of social media to improve student learning.</p> <p>I have used social media to teach listening in English.</p> <p>I have used social media to teach speaking in English.</p> <p>I have used social media to teach reading in English.</p> <p>I have used social media to teach writing in English.</p> <p>I have used social media to teach English language grammar.</p> <p>I have used social media to teach English vocabulary.</p> <p>I have used social media to teach pronunciation of English words.</p> <p>I have used social media to teach spelling of English words.</p> <p>I have used social media to teach about the differences between cultures.</p>
TPCK Practice of Social Media Integration in English Teaching		<p>I have taught lessons that appropriately combine English linguistic concepts, social media, and teaching approaches.</p> <p>I have selected appropriate social media that combine English culture, technologies, and teaching approaches.</p> <p>I have selected social media to use in my classroom that enhance what I teach, how I teach, and what students learn.</p> <p>I have used social media effectively to communicate relevant information to students and peers.</p> <p>I have used a range of social media to help students pursue their individual curiosities.</p> <p>I have used a range of social media that enable students to become active participants.</p> <p>I have provided equitable access to digital language learning tools and resources.</p> <p>I have facilitated intercultural understanding by using social media to engage students with different cultures.</p> <p>I have participated in digital learning communities to explore creative applications of social media to improve student learning.</p>
<p>Thank you for your participation! The questionnaire is completed. If you would like to take part in our follow-up interviews, please leave your contact details below.</p> <p>Preferred name: Position: Tele/WeChat:</p>		

### CRedit authorship contribution statement

**Xiangning Li:** Writing – original draft, Visualization, Validation, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. **Yongcan Liu:** Writing – review & editing, Supervision, Project administration, Methodology, Conceptualization.

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