Probing into novice and experienced teachers' knowledge, perceptions, and practices in the EFL classroom

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ABSTRACT: Due to the invaluable role of scaffolding in the language education environment, several language studies to date have been conducted on this construct. However, the role of teaching experience in understanding and implementing scaffolding practices in the English as a foreign language (EFL) context has rarely been explored. To fill this gap, this study investigated novice and experienced EFL teachers' perceptions, knowledge, and practices of scaffolding in China. In doing so, a questionnaire was completed by 487 Chinese EFL teachers followed by a semi-structured interview with 22 respondents. The results of the thematic analysis revealed that novice and experienced EFL teachers have different perceptions of scaffolding and its practices in the classroom. Moreover, the results of the independent samples t-test revealed a statistically significant difference between novice and experienced EFL teachers' perceptions, knowledge, and practices of scaffolding in the Chinese context with the experienced group having higher scores. Possible implications for EFL teachers and trainers are discussed to raise their understanding of scaffolding theory and practice.
Keywords: SEFL teacher, novice teacher, experienced teacher, scaffolding

Sondear el conocimiento, las percepciones y las prácticas de maestros novatos y experimentados en el aula de EFL

RESUMEN: Debido al inestimable papel de los andamios en el entorno de la enseñanza de idiomas, hasta la fecha se han realizado varios estudios de idiomas sobre esta construcción. Sin embargo, el papel de la experiencia docente en la comprensión e implementación de prácticas de andamiaje en los contextos de inglés como lengua extranjera (EFL) ha sido raramente explorado. Para llenar este vacío, este estudio investigó las percepciones, el conocimiento y las prácticas de andamiaje de los profesores de EFL novatos y experimentados en China. Al hacerlo, 487 maestros chinos de EFL completaron un cuestionario seguido de una entrevista semiestructurada con 22 participantes. Los resultados del análisis temático revelaron que los profesores de EFL novatos y experimentados tienen diferentes percepciones de los andamios y sus prácticas en el aula. Además, los resultados de la prueba t de muestras independientes revelaron una diferencia estadísticamente significativa entre las percepciones, el conocimiento y las prácticas de andamiaje de los profesores principiantes y experimentados de EFL en el contexto chino, con el grupo experimentado teniendo puntuaciones

más altas. Se discuten las posibles implicaciones para los maestros y capacitadores de EFL para aumentar su comprensión de la teoría y práctica de andamios.
Palabras clave: maestro EFL, maestro principiante, maestro con experiencia, andamio

1. INTRODUCTION

It is widely believed that teaching, testing, and learning a second/foreign language (EFL) are among the difficult and demanding affairs that place heavy responsibility on the shoulders of teachers and students (Derakhshan, 2022a, b). L2 education is now perceived as a social activity affected by one's social interactions with others within social settings (Li & Zhang, 2022; Mitchell & Myles, 2004). This shift from pure linguistic and cognitive perspectives toward social and contextual bases of L2 education is rooted in Vygotsky's (1978) sociocultural theory (SCT). For the proponents of SCT, L2 education is a complicated task for learners to accomplish autonomously from the very beginning (McLeod, 2019). Hence, they highlight mediation and scaffolding as a result of knowledge gaps in non-proficient learners (Wolf *et al.*, 2016; Vygotsky, 1978). According to Vygotsky (1978), teachers should use scaffolding practices to assist learners to construct meaning and accomplish the academic tasks successfully. However, with organized scaffolding practices provided by an expert (teacher) in a social context, learners grow as time passes, and ultimately obtain skills to achieve such tasks independently in the future (Engine, 2014; Vygotsky, 1986). Scaffolding is a metaphor taken from building construction and emanates from the zone of proximal development (ZPD) theory, which pinpoints the gap between what one can do with and without assistance from others (Engine, 2014; Vygotsky, 1978). The concept of scaffolding refers to different forms of support to students during interactions with others to foster their skill development and understanding (Maybin *et al.*, 1992). It is a guidance from a proficient and capable individual to solve a problem in the learning process (van de Pol *et al.*, 2010). Such guidance can take the form of simple cues, prompts, modeling, suggestions, partial solutions, or direct instructions (Hartman, 2002).

To date, an increasing number of studies have been carried out to examine the importance and contribution of scaffolding to L2 education (Ahmadi Safa & Motaghi, 2021; Li & Zhang, 2022; Piamsai, 2020; Spycher, 2017). The results of these studies revealed that the scaffolding practices foster EFL students' autonomy (Dabbagh, 2003), task engagement (Wolf *et al.*, 2016), overcoming of learning setbacks, (van de Pol *et al.*, 2010), control over learning (Kazak *et al.*, 2015), and classroom interactions (Khamwan, 2007). The study outcomes also demonstrated that the success of scaffolding in EFL classes largely depends on teachers' attitudes, perceptions, knowledge, and practices of scaffolding (Awadelkarim, 2021; Holton & Clarke, 2006). However, the majority of previous studies in this area is limited to the interplay between students' academic outcomes and teachers' scaffolding practices. Yet, EFL teachers' perceptions and insights regarding scaffolding have been insufficiently explored, especially in light of their teaching experience level. Novice and experienced EFL teachers may have different conceptualizations and practices of scaffolding, yet their comparison has been overlooked in L2 research. To bridge the existing gaps in the pertinent literature, the present mixed method study aims to delve into Chinese EFL teachers' knowledge, perceptions, and practices of scaffolding using an interview and a closed-ended questionnaire. This inquiry can shed more light on the state of scaffolding knowledge and practices in EFL contexts.

2. Literature review

2.1. The concept of scaffolding

The concept of scaffolding is a social activity referring to a temporary and meaningful support from a mature (knowledgeable) individual to learners culminating in their future independence (Bruner, 1987; Wood *et al.*, 1976). It is an interactive process in education that intends to gradually develop learners' capacity (Walqui, 2006). Simply, scaffolding is a tutorial or help given by the expert to help learners achieve tasks above their current ability (Scheb-Buenner, 2013). Although scaffolding is originally used in psychology, its application has expanded to L2 education and assessment in the past decades (Engine, 2014; Li & Zhang, 2020; Wolf *et al.*, 2016). The concept is the upshot of different theoretical developments in educational psychology proposed by Vygotsky including his conceptualizations of SCT, the Zone of Proximal Development (ZPD), mediation, and other-regulation (Mitchell & Myles, 2004). Of these concepts, ZPD, which is the distance between one's current level of ability and his/her potential level, is the most pertinent foundation of scaffolding (Vygotsky, 1978). SCT and ZPD highlight the presence of an expert (i.e., adult, teacher), mediation, social interactions, and scaffolding in academia to assist learners to pass the ZPD (McLeod, 2019).

In sum, scaffolding stresses the social, interactive, collaborative, and dynamic nature of learning (Li & Zhang, 2020; Pan *et al.*, 2023; Vygotsky, 1978). It also emphasizes mediation and feedback provision between the teacher and his/her students when accomplishing classroom tasks, being pedagogical or assessment (Lantolf, 2005; Poehner & Infante, 2016). It is essential to note that to scaffold their practices, EFL teachers should consider students' needs, amount of assistance, teaching and testing conditions, and future independence in accomplishing similar tasks (Ahmadi Safa & Motaghi, 2021; Qaracholloo *et al.*, 2015; van de Pol, *et al.*, 2010). Regardless of its various forms, teachers' scaffolding practices guide learners to solve their learning difficulties and functionally grow in a meaningful, collaborative, and dialogic way (Li & Zhang, 2020; Poehner & Infante, 2016; Walqui, 2006). Given its contribution to L2 education, several typologies of scaffolding practices have been proposed in the literature, which are explained below.

2.2. Types of scaffolding practices

There are different classifications for teacher scaffolding. As a case in point, McKenzie (2000) introduced four scaffolding categories based on their function, namely conceptual, strategic, metacognitive, and procedural scaffolding. As the first category, conceptual scaffolding refers to the provision of assistance to learners by empowering their thinking by considering different phenomena and concepts. Strategic scaffolding is a practical help given to students through different techniques, tips, and tricks. Metacognitive scaffolding is the next classification in which the teacher assists students in thinking, generating, and regulating their learning process. Moreover, procedural scaffolding enables learners to use different tools and resources available in their learning environment. Another type of scaffolding is cognitive scaffolding which assists learners in creating and connecting ideas together and revealing what they do not know (Smith & Higgins, 2006).

In a recent study, Tajeddin and Kamali (2020) suggested four types of scaffolding in a corpus-based research. They called them meta-scaffolding, affective scaffolding, linguistic scaffolding, and under-scaffolding. Additionally, Walqui (2006) proposed six categories of instructional scaffolding including contextualization, building schema, modeling, developing metacognition, bridging, and re-presenting text. Other than these typologies, scaffolding strategies can be divided into individual vs. collective, and peer-directed vs. teacher-directed scaffolding, too (Nathan & Knuth, 2003). There are many other subcategories related to each of these classifications (e.g., see Tajeddin & Kamali, 2020). The use and implementation of each of these strategies may have certain benefits and challenges in L2 classes, as explicated below.

2.3. The benefits and challenges of scaffolding in the classroom

Research indicates that scaffolding has different benefits for education, in general, and L2 learning, in particular (Tajeddin & Kamali, 2020). Additionally, scaffolding techniques can enhance learners' classroom participation, understanding, task engagement, and achievement and minimize their frustration (Bransford *et al.*, 2000; Hogan & Pressley, 1997). Moreover, it has been found that scaffolding benefits students from different age groups by improving their positive peer interactions in the class (Acara *et al.*, 2017). Likewise, scaffolding strategies are able to help different types of learners, especially low-achievers (Haruehansawasin & Kiattikomol, 2017). They provide more opportunities for learners to learn via positive feedback in a positive learning atmosphere (van Der Stuyf, 2012). The contribution of teacher scaffolding practices in the language competence development of L2 learners is also highlighted in previous research (Reynolds, 2017).

Despite these utilities, the implementation and uptake of scaffolding is a challenging activity in EFL contexts. First, it requires teacher knowledge and expertise in detecting learners' needs and preferences before providing any assistance (Acara *et al.*, 2017). Second, in many situations, teachers are not trained to implement scaffolding strategies. Hence, there is a need for professional development in this regard. Third, teachers and school staff should concur that scaffolding strategies require small classes and each strategy may function in a specific context and course but not others (van Der Stuyf, 2012). Fourth, EFL teachers may lack sufficient knowledge of the theories, principles, philosophies, and typologies of scaffolding practices in L2 classes. Therefore, appropriate training and knowledge sharing is demanded. Finally, scaffolding is mostly connected to emotions and this demands teachers to recognize students' intellectual and social histories (Meyer & Turner, 2007). Furthermore, the attitudes and perceptions of EFL teachers and educators regarding scaffolding are sometimes in contrast with its theories, practices, and contributions. Thus, a shift of view is required in many settings to encourage scaffolding practices.

2.4. Related studies

Given its impact on L2 education as a whole, scaffolding has recently gained a growing amount of scholarly attention in different areas. The perceptions and practices of EFL teachers regarding scaffolding have been the focal point of investigations related to L2 assessment and testing (Banitalebi & Ghiasvand, 2022; Hasan & Zubairi, 2016; Oz, 2014).

Moreover, Nasr *et al.* (2019) examined the scaffolding practices of EFL teachers in relation to context and textbook in a mixed method study. The results of their study indicated that EFL teachers' scaffolding practices varied in light of the textbooks taught and the context of instruction. Furthermore, other scholars made attempts to disclose the typologies of scaffolding practices of EFL teachers in different countries (e.g., Tajeddin & Kamali, 2020; Walqui, 2006). The most fertile area, however, has been the role of teachers' scaffolding practices in developing different language skills and sub-skills in EFL contexts including reading comprehension (Li & Zhang, 2020; Reynolds, 2017), writing skills (Piamsai, 2020; Wette, 2014), listening comprehension (Ahmadi Safa & Motaghi, 2021), speaking (Goh, 2017), grammar (Chen & Tseng, 2019), collocations (Rezaee *et al.*, 2015), and lexicon and pronunciation (Mirahmadi & Alavi, 2016).

Another line of research has revolved around the impact of technology and virtual contexts on teachers' scaffolding practices which led to new types of scaffolding called digital/online scaffolding (e.g., Brauer *et al.*, 2019; Park *et al.*, 2018). However, the perceptions, attitudes, and knowledge of scaffolding practices in EFL contexts have been studied insufficiently. As one of rare cases, Awadelkarim (2021) investigated 30 EFL teachers' insights, views, familiarity, and attitudes toward scaffolding in Saudi Arabia. The results of the questionnaire and focus group discussions revealed that the participants had a positive attitude toward scaffolding, perceived scaffolding practices as challenging, lack pertinent knowledge/competence of scaffolding, and were less confident of their beliefs regarding scaffolding in the actual classroom. Likewise, the role of teaching experience in scaffolding practices has been scantly investigated, while previous research (e.g., Fareed *et al.*, 2016; Rodsawang, 2017) endorses its impact on teachers' feedback and scaffolding in writing. Despite the fact that novice and experienced EFL teachers may differ in their perceptions, knowledge, and practices of scaffolding, few studies (if any) have empirically examined this area of research. To bridge this gap, the present study used a mixed method design to examine Chinese EFL teachers' perceptions, knowledge, and practices of scaffolding. In doing so, it delved into the following research questions:

1. What are the perceptions of novice and experienced EFL teachers regarding scaffolding in L2 classes?
2. Is there any ~~statistically~~ significant difference between novice and experienced EFL teachers' perceptions, knowledge, and practices of scaffolding in L2 education?
3. How do novice and experienced EFL teachers practice scaffolding in their L2 classes?

3. METHOD

3.1. Participants

The participants of this study were 487 Chinese EFL teachers including 380 women and 107 men. They were full-time English teachers majoring in foreign linguistics and applied linguistics. Their age ranged from 18 to 50 years old and their average age was 38. Regarding their educational structure, the participants had BA, MA, and Ph.D. degrees. The participants were from 21 provinces in China. Based on their teaching experience below

and above five years, the participants were classified as novice (244) and experienced (242) teachers. They attended the study voluntarily with codes of ethics being observed by the researcher. Informed consent was obtained from the participants and they were given the right to leave the study for any reason.

3.2. Instruments

The subjects of this study were 42 freshmen majoring in Spanish at a university in Eastern China. According to the National Exam for Spanish Major University Students, Level 4 (Examen Nacional para Estudiantes de Licenciatura de Filología Española Nivel 4/ National exam for Spanish Philology Majors-Level 4), students at this university represent the middle level of all Chinese universities which offer Spanish majors nationwide. These 42 students were enrolled in two parallel groups of 21 subjects each. The curriculum plan and the instructors for the two groups were the same; one group was chosen randomly to be the experimental group, while the other was the control group. Therefore, it was assumed that there was no significant difference in the Spanish proficiency level between the two groups in the pre-test (before the application of our experimental materials).

In terms of the data collection, 7 of the 42 subjects failed to participate in all the tests, and their data were excluded from the analysis. Therefore, the final number of subjects taking part in the research was 35 (N = 35). The size of the experimental group was 18 (EG, N = 18), whereas the control group was 17 (CG, N = 17).

3.2.1. Teacher scaffolding questionnaire

In this study, Wozney *et al.*'s (2006) questionnaire was used to examine EFL teachers' perceptions, knowledge, and practices of scaffolding. The questionnaire included 15 items that followed a 5-point Likert scale from 1 (Strongly Agree) to 5 (Strong Disagree). The items were divided into three sections considering knowledge, perceptions, and practices of scaffolding in the classroom Moreover, Cronbach's Alpha was calculated in the original study whose results revealed that the questionnaire has an acceptable reliability index in each section (0.86, 0.83, 0.79, respectively).

3.2.2. Semi-structured interview

To triangulate the data, a semi-structured interview was conducted with 22 Chinese EFL teachers (10 novice, 12 experienced) recruited from an international studies university in Shaanxi province. The interview included six open-ended questions for which the respondent had the freedom to provide as much information as possible. The questions concerned the degree of familiarity, knowledge, perceptions, and practices of scaffolding in EFL classes. The interviews took 20 minutes and audio-recorded for later transcription and analysis. The entire interview sample had passed TEM8 (Test for English Majors Band 8) and had an MA degree (7) and a doctoral degree (15). Additionally, 12 respondents were university lecturers and 10 were associate professors. The age of interviewees ranged from 33 to 52 and their average age was 41.

3.3. Data collection procedure

The data of this study were collected via a previously developed and validated questionnaire and a series of semi-structured interviews with Chinese EFL teachers. The questionnaire was filled in by 487 teachers after 50 days. The collection and collation of all data were completely done by January 19, 2023. The questionnaire was distributed in-person by the researcher. Before data collection, research ethics were ensured. The participants were informed of their rights in participating in the study. They were guaranteed that their information will be kept confidential and used only for research purposes. The participants were contacted in advance and there was no conflict of interest between the researcher and the participant. During the completion of the questionnaire, the researcher explained the purpose of the study and the way items should be answered. After checking and finalizing the authenticity of data in this phase, the researcher carried out a semi-structured interview with 22 EFL teachers from Xi'an International Studies University based on their willingness and quantitative responses. The interview was done personally and the session was audio-recorded for subsequent analyses. After checking the entire data, the interviews were transcribed and coded for frequent themes in thematic analysis. To this end, the researcher went back and forth between interview questions, interview questions, and responses provided by the interviewees. First, general themes were created. Then the researcher tried to connect and reduce the number of broad themes to specific and pertinent ones in light of the research questions. Finally, the most frequent themes were specified and supported by sample responses and frequencies of emergence. The quantitative results were also obtained via statistical techniques.

3.4. Data analysis

The analysis of data in this mixed method study was done both quantitatively and qualitatively. More specifically, the first and the third research questions were analyzed through thematic analysis. In so doing, the interview data were sorted, transcribed, and codified for generating the most frequent themes/codes across the interviewees. The researchers listened and re-listened to all the audio files to detect inconsistencies and mistakes in audios and transcriptions. Then frequent themes/ codes were identified by going back and forth between interviews. After that, the extracted themes were given to a second coder with a doctoral degree in Xi'an International Studies University. He examined the codes and after two weeks, we had a friendly meeting and discussed the ambiguities. Finally, we concurred on the preciseness and pertinence of the extracted codes/themes ($r = 98$). Regarding the second research question, descriptive statistics and independent t-tests were used to analyze the collected data considering EFL teacher' differences in perceptions, knowledge, and practices of scaffolding.

4. Results

To answer the first research question considering novice and experienced EFL teachers' perceptions of scaffolding, the third and the fourth interview questions were examined

meticulously. The results of the thematic analysis revealed that most of the novice teachers perceived scaffolding as a pedagogical tool to assist students. More specifically, 50% of the respondents argued that scaffolding is "a form of assistance to learners", while its contribution to knowledge and autonomy development was raised by 30% of the novice teachers (Figure 1). The rest regarded scaffolding as "a metaphor related to cognition and mediation" (10%) and "an auxiliary tool to apply SLA theories in the class" (10%).
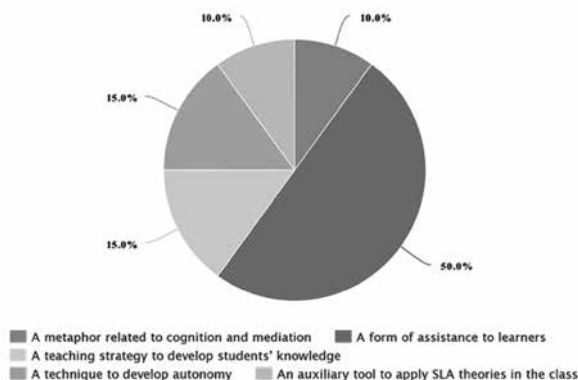
Figure 1. *Novice EFL Teachers' Perceptions of Scaffolding*

The following represents some interview excerpts related to novice teachers' extracted themes:

Well, to me, scaffolding is a teaching technique to promote students to the higher level of knowledge. In this process, the main position of teachers is to promote learning rather than leading the class (Novice T 3).

Scaffolding is a kind of auxiliary tool, which can help teachers better apply SLA theories to second language classes (Novice T 6).

In my ideas, scaffolding is a metaphor associated with cognition and mediation, which concerns how to learn something unknown from something already known. Its main function, as its name suggests, is to use the familiar as a scaffolding to understand the unfamiliar (Novice T 1).

The scaffolding, in my opinion, is to give the guidance and assistance to students in language classes to, help them to build their own knowledge system, and absorb the new knowledge (Novice T 9).

In a similar manner, experienced EFL teachers perceived scaffolding as a technique, method, process, and strategy to help EFL students' learning in general. Seven themes were raised frequently in the interviews (Figure 2). 40% of the respondents perceived scaffolding as "a process to improve learning and independence" among EFL students, while others referred to it as "a framework for students' learning through mediation" (20%) and "an assistance from the teacher to build knowledge and cooperation in the class" (20%). The rest

of the respondents perceived scaffolding as "a combination of pedagogical and emotional methods" (10%) and "an assistance from the teacher to generate motivation, joint effort, higher-order thinking skills in learners" (10%).
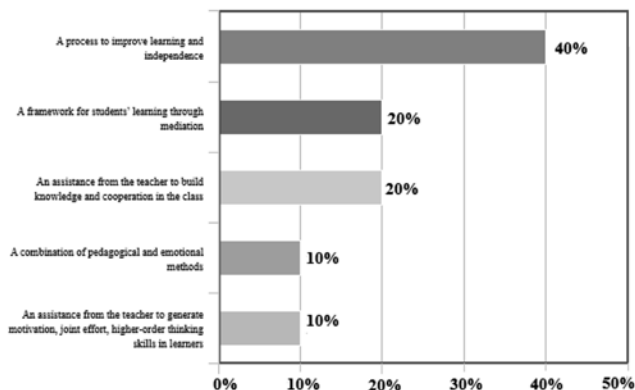
Figure 2. *Experienced EFL Teachers' Perceptions of Scaffolding*

The abovementioned themes are represented in the following interview samples:

In scaffolding, as I understand, teachers provide students with a framework for learning through mediation as they build and strengthen their understanding (Experienced T 2).

In my view, scaffolding in the context of L2 education is a combination of pedagogical and emotional methods teachers use to guide, support, and facilitate students' second language acquisition. And such methods may involve emotional guidance such as arousing students' interest in learning English or academic guidance such as helping students to find the useful learning methods (Experienced T 6).

Scaffolding means teachers helping students acquire new language knowledge by using simplified language, or visuals and graphics etc. And the teacher can also organize cooperative learning activities, in which more advanced learners can help those less advanced (Experienced T 4).

In second language learning, scaffolding is a process in which teachers find, analyze, and solve students' problems to foster their learning and independence in the classroom. It is a process to help students from zero (or very small) to have (or very large) (Experienced T 8).

My understanding of scaffolding is that it is firstly some support and assistance from for the teacher to motivate students to learn and have a joint effort learning. In this process, different partners help each other and higher-order thinking skills are developed in learners (Experienced T 11).

To conclude, the results of this research question revealed that novice and experienced EFL teachers had comparable perceptions of scaffolding. However, experienced teachers showed more understanding regarding the scaffolding theory and its functions. Novice

teachers mostly perceived scaffolding as a form of assistance to learners to develop their knowledge and autonomy in the language learning process. Similarly, experienced teachers regarded scaffolding as a process that fosters learners' learning and independence. Additionally, experienced teachers argued that scaffolding is a framework that enhances cooperation, motivation, collaboration, and higher-order thinking in students.

Concerning the second research question, which delved into the difference between novice and experienced Chinese EFL teachers' perceptions, knowledge, and practices of scaffolding, descriptive statistics and independent t-tests were employed. As for perceptions, the results indicated significant differences between the mean and standard deviations of experienced and novice teachers (Table 1).

Table 1. *Descriptive Statistics for EFL Teachers' Perceptions of Scaffolding*

	Teaching Experience	N	Mean	Std. Deviation	Std. Error Mean
Perception	Novice Teachers	244	9.4467	3.62224	.23189
	Experienced Teachers	242	12.8347	4.53359	.29143

To be sure about the values, the researchers conducted independent t-tests analysis. The results of this analysis are presented in Table 2.

Table 2. *Experienced and Novice EFL Teachers' Perceptions of Scaffolding*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Perception	Equal variances assumed	27.597	.000	-9.105	484	.000	-3.38799	.37209	-4.11910	-2.65687
	Equal variances not assumed			-9.097	459.928	.000	-3.38799	.37243	-4.11987	-2.65611

An independent-samples t-test was conducted to compare the experienced and novice EFL teachers' perceptions of scaffolding in their classrooms. There was a significant difference in scores for novice (M = 9.44, SD = 3.62) and experienced EFL teachers (M = 12.83, SD = 4.53).

Similarly, regarding teachers' knowledge of scaffolding, significant differences between mean and standard deviations of experienced and novice teachers were found in descriptive statistics (Table 3).

Table 3. *Descriptive Statistics for EFL Teachers' Knowledge of Scaffolding*

	Teaching Experience	N	Mean	Std. Deviation	Std. Error Mean
Knowledge	Novice Teachers	244	8.9631	4.02087	.25741
	Experienced Teachers	242	12.6157	4.70863	.30268

To be sure about the values, the researchers conducted independent t-tests analysis. The results of this analysis are presented in Table 4.

Table 4. *Experienced and Novice EFL Teachers' Knowledge of Scaffolding*

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Perception	Equal variances assumed	13.731	.000	-9.199	484	.000	-3.65259	.39708	-4.43280	-2.87237
	Equal variances not assumed			-9.193	471.211	.000	-3.65259	.39734	-4.43336	-2.87182

An independent-samples t-test was conducted to compare the experienced and novice EFL teachers' knowledge of scaffolding in their classrooms. There was a significant difference in scores for novice (M = 8.96, SD = 4.02) and experienced EFL teachers (M = 12.61, SD = 4.70). In a similar manner, the results of statistical analyses revealed significant differences between mean and standard deviations of experienced and novice teachers (Table 5).

Table 5. *Descriptive Statistics for EFL Teachers' Practice of Scaffolding*

	Teaching Experience	N	Mean	Std. Deviation	Std. Error Mean
Perception	Novice Teachers	244	9.7172	3.71488	.23782
	Experienced Teachers	242	12.9008	4.40370	.28308

Moreover, to ensure the obtained values, the researchers conducted independent T-Tests analysis. The results of this analysis are presented in Table 6.
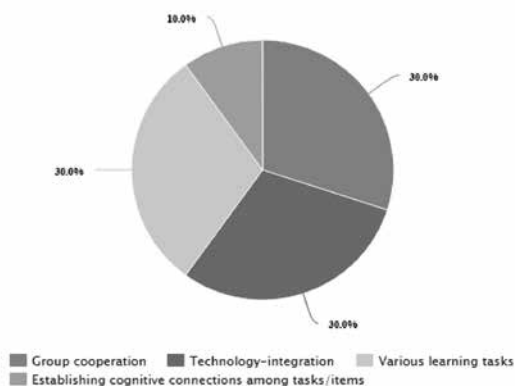
Table 6. *Experienced and Novice EFL Teachers' Practice of Scaffolding*

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Perception	Equal variances assumed	12.212	.001	-8.617	484	.000	-3.18361	.36946	-3.90957	-2.45766
	Equal variances not assumed			-8.611	469.361	.000	-3.18361	.36972	-3.91013	-2.45710

An independent-samples t-test was conducted to compare the experienced and novice EFL teachers' knowledge of scaffolding in their classrooms. There was a significant difference in scores for novice (M = 9.71, SD = 3.71) and experienced EFL teachers (M = 12.90, SD = 4.40). In sum, the results of this research question demonstrated that there were statistically

significant differences between novice and experienced EFL teachers' perceptions, knowledge, and practices of scaffolding in the Chinese context.

To answer the third question considering the implementation of scaffolding in the classroom, the fifth and the sixth interview questions were examined. The results of the thematic analysis illustrated that 90% of the novice teachers practiced scaffolding by triggering "group cooperation", "technology-integration", and using "various learning tasks" in the class (each 30%, respectively). Additionally, 10% of the respondents argued that they implemented scaffolding by "establishing cognitive connections among tasks/items" (Figure 3).
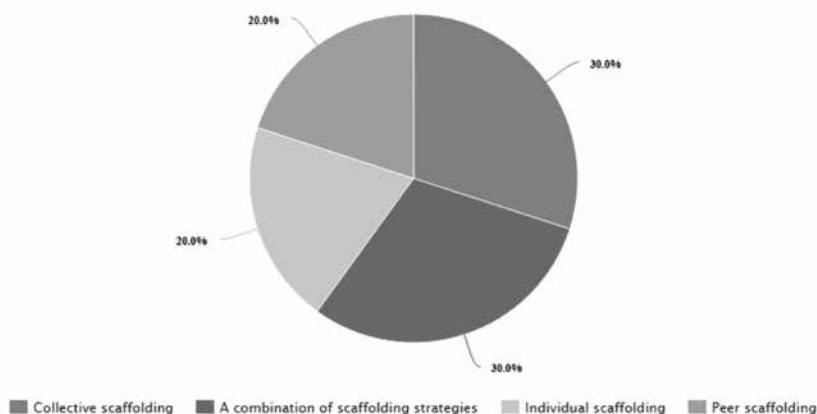

Figure 3. *Novice EFL Teachers' Practice of Scaffolding*

On the other hand, most of the experienced teachers (40%) practiced scaffolding through "group discussion/cooperation" in their classes (Figure 4). Furthermore, the respondents suggested the use of "mind maps and graphic tools" (20%) and "constant feedback provision" (20%) to practice scaffolding. The rest of interviewees stated that they had practiced scaffolding in L2 classes by "modeling and emotional engagement" (10%) and "self and peer talk in the class (10%).
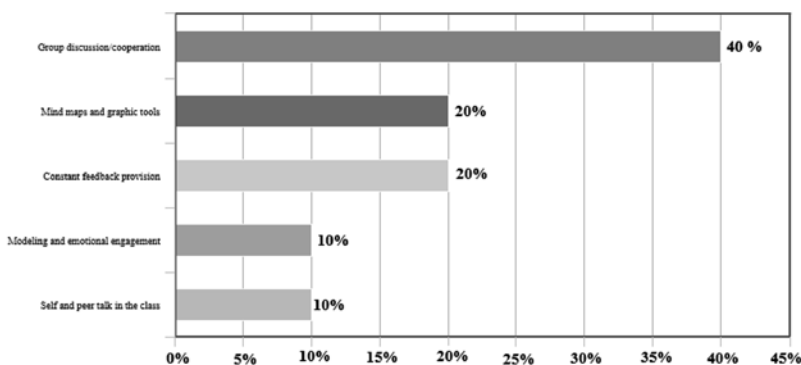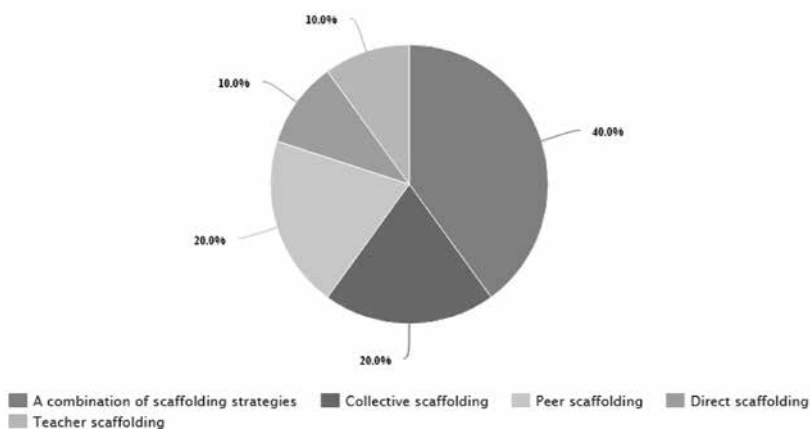

Figure 4. *Experienced EFL Teachers' Practice of Scaffolding*

The respondents were also asked about their preferred type of scaffolding to practice in their L2 classes. The results indicated 60% of the novice teachers preferred to use "collective scaffolding" and "a combination of scaffolding strategies" (30%, respectively). Moreover, the remaining 40% argued for the use of "peer scaffolding" (20%), and "individual scaffolding" (20%) as depicted in Figure 5.

Figure 5. *Novice EFL Teachers' Preferred Scaffolding*

However, most of the experienced teachers (40%) stated that they prefer "a combination of scaffolding strategies" (Figure 6). Likewise, they referred to "collective scaffolding" (20%) and "peer scaffolding" (20%) as the next frequently raised practices.

Figure 6. *Experienced EFL Teachers' Preferred Scaffolding*

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The abovementioned themes are represented in the following interview excerpts:

I usually use <u>group cooperation</u>, through students' own grouping, the group of students with good language foundation and students with poor language foundation are divided into a group, in which the good students can promote the poor students (Novice T 1).

I use the combination of all types of scaffolding with an emphasis on the collective (Experienced T 1).

Well, I make use of <u>technologies and multimodal tools</u> in the class to practice scaffolding strategies. These tools involve students more than traditional strategies… (Novice T 4).

I personally use <u>explicit modellings</u> when providing scaffolding in teaching writing or grammar. <u>Mind maps or other graphic scaffolds</u> are sometimes introduced when teaching reading or discourse (Experienced T 3).

In my classroom, I prefer a <u>mixture of scaffolds</u>: peers, teachers, collective, individuals, etc. I cover all of these scaffolding forms in my class (Novice T 6).

Since classroom is a <u>collective</u> community, I prefer to practice <u>collective scaffolding</u> because it connects all students together as a group. In addition, learning occurs in all not a single learner (Experienced T 7).

In this research question, it was found that novice and experienced EFL teachers practiced scaffolding using different techniques with different preferences. Novice teachers mostly employed "group cooperation", "technology-integration", and "various learning tasks" to practice scaffolding. They also preferred "collective scaffolding" and "a combination of scaffolding strategies". On the other hand, the experienced teachers practiced scaffolding through "group discussion/cooperation", "mind maps and graphic tools", and "constant feedback provision". Concerning their preferred scaffolding type, experienced teachers mostly preferred "a combination of scaffolding strategies".

5. DISCUSSION

The results of this study revealed that novice and experienced EFL teachers had comparable perceptions of scaffolding practices. Yet, experienced teachers seem to have a better understanding of the scaffolding theory and its functions. The results are partly consistent with the idea that teachers' perceptions of scaffolding determine their implementation of such practices in the classroom (Awadelkarim, 2021). Like other areas of L2 teaching, teachers' perceptions and practices of scaffolding develop over time. Hence, the findings can be attributed to the developmental nature of EFL teachers' pedagogical knowledge/expertise. It seems that experienced teachers had gained more information of scaffolding and its utilities in comparison to novice teachers. Moreover, it is noteworthy that the difference between novice and experienced teachers' perceptions was not that vast. This might be due to their similar pedagogical content knowledge regarding scaffolding and mediation in L2 domains. Their familiarity with SCT and mediation theory (Vygotsky, 1978) may have helped them know the logic and uses of scaffolding in a comparable way.

In the quantitative phase, the results also indicated statistically significant differences between novice and experienced EFL teachers' perceptions, knowledge, and practices of scaffolding in the Chinese context with the experienced group having higher scores. The results concur with Li and Zhang (2020), who maintained that teacher scaffolding is a dynamic process affected by several factors. A reason behind this finding might be experienced teachers' prior knowledge and trial and error in implementing scaffolding practices in their classes. In doing so, they may have grasped enough knowledge of various types of scaffolding. Additionally, experienced teachers' training courses and discussions with colleagues could have enhanced their understanding and use of scaffolding. On the other hand, novice teachers, who are at the initial stages of their careers lack sufficient knowledge and confidence to employ different scaffolding practices. This is tenable in that novice teachers require time and training in instructional techniques, especially those highlighted in SCT and social constructivism. In simple words, their limited previous knowledge and teaching experience may have kept their scores lower than the experienced group.

The study also revealed that novice and experienced EFL teachers practiced scaffolding using several techniques. Novice teachers mostly employed "group cooperation", "technology-integration", and "various learning tasks" to practice scaffolding. This might be because of their willingness to collectively solve pedagogical problems, especially in light of technologies. Moreover, the trial and error period of their career might be the reason behind using various tasks that require different scaffolding strategies. They may have not been certain of specific strategies and kept testing different types of scaffolding in the class. Furthermore, experienced teachers practiced scaffolding through "group discussion/cooperation", "mind maps and graphic tools", and "constant feedback provision". Again, the use of group discussion/cooperation is attributable to the dialogic and collaborative nature of scaffolding. This reflects previous studies (Li & Zhang, 2020; Poehner & Infante, 2016; Vygotsky, 1978) that highlighted the dialogic and co-constructed basis of scaffolding practices to help students learn better. The use of "mind maps" by experienced teachers echoes Walqui's (2006) classification of scaffolding strategies, especially "building schema" that underscores mental links during scaffolding. Concerning their preferred scaffolding type, both groups preferred "a combination of scaffolding strategies". This emphasis on a hybrid scaffolding can be due to teachers' sufficient knowledge base regarding scaffolding theory and practice and the fact that scaffolding typologies may be practical in some contexts but not others. In this research, teaching experience level was found to cause all the differences between novice and experienced teachers' perceptions, knowledge, and practice of scaffolding. However, it is not clear, yet, whether experience is the only factor or other intervening factors playing a role in L2 education play a role.

6. Conclusion and implicationes

In this study, it was found that teaching experience level is a key factor in determining novice and experienced EFL teachers' perceptions, knowledge, and implementation of scaffolding in China. Based on this, it can be concluded that scaffolding knowledge and practice is dynamic and developmental and increases as teachers acquire more experience in teaching. Through constant trial and error, EFL teachers can identify the applicability and challenges

of different types of scaffolding. Additionally, it can be asserted that teachers' perceptions and knowledge of scaffolding are the preconditions to practice scaffolding practices in EFL classes. This calls for professional efforts to raise teachers' knowledge base of scaffolding and SCT as well as pedagogical content knowledge.

Drawing on these conclusions, the present research can offer implications to EFL teachers, teacher educators, and curriculum designers. EFL teachers may find this study fruitful in that they can understand the typologies of scaffolding practices and their benefits for L2 learning. They can also practice different types of scaffolding depending on students' needs and levels and language (sub)skills. Moreover, the study is momentous for teacher knowledge theory in that it highlights teacher roles beyond a transmitter of knowledge. It raises their knowledge of the importance of being a constant feedback-provider and mentor in the learning process. Likewise, teacher educators can benefit from the results of this mixed-methods study by enriching their training courses in light of scaffolding theory and practices. They can cultivate different forms of scaffolding in teachers with various experience and expertise level using practical techniques. In such courses, teacher trainers can inform EFL teachers that they are now mentors and facilitators of knowledge instead of simple content experts. Finally, curriculum designers can use the findings and modify the content of curricula to promote teachers' pedagogical content knowledge of scaffolding and mediation. The current curricula are overwhelmed with pedagogical issues and mentoring aspects of L2 learning are overlooked. Attending to these aspects may enhance EFL students' classroom engagement and learning motivation, as well.

Despite these benefits, this study is limited in scope and generalizability in that it only collected data from a single context (China). Moreover, most of the findings were based on teachers' self-reported data and the observation of their actual practice of scaffolding was excluded. Therefore, future studies can be done on the mismatches between teachers' perceptions and practices of scaffolding. Experimental studies are also suggested to testify the applicability of different types of scaffolding in different proficiency levels. In addition, the dynamic nature of scaffolding knowledge and practice can be examined through longitudinal designs. Finally, the contribution of scaffolding and mediation strategies can be further explored in relation to L2 assessment, especially alternative assessment techniques like learning-oriented assessment or LOA (Banitalebi & Ghiasvand, 2022; Derakhshan & Ghiasvand, 2022) and dynamic assessment (DA).

Disclosure testament

No potential competing interest was reported by the authors.

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8. Appendix

Interview questions:

1. Would you please describe your academic qualifications?

2. How long have you been teaching English?

3. What is your understanding of scaffolding in the context of L2 education?

4. What are the goals of scaffolding in L2 education?

5. How do you implement scaffolding in your classes?

6. What types of scaffolding do you prefer to use in your classes? (e.g., peer, teacher, individual, collective scaffolding). Why?