

Design of Interactive Spaces for Promoting Parental Involvement: Strategies Used by EFL Teachers

Dongni Guo, Yingru Zhao, and Qi Sun

School of Education, University at Albany, State University of New York

Roberto L. M. Ramos

*School of Education, University at Albany, State University of New York
Federal Institute of Education, Science and Technology of Brasilia (IFB)—
Riacho Fundo Campus, Brazil*

Abstract

Using a qualitative multiple-case study design, this study explored the strategies employed by five Chinese teachers of English as a Foreign Language (EFL) to design activities that incorporate digital tools and visuals, aiming to enhance parent-involved interactions in online language learning settings. Grounded theory analysis of teachers' iterative and semi-structured interviews, recorded videos, student artworks, and teacher-parent-student discourses on digital learning platforms and social media, revealed six emergent themes regarding digital-screen-mediated designs and interactive activities. These themes point to pedagogical strategies of using digital visuals, such as recorded videos, learning management systems, and social media. These digital visuals mediated authentic parent-involved communications and interactions in both interpersonal and community-based phases. The findings also demonstrate that the screen mediation process extended beyond merely illustrating, sharing, or anchoring targeted visual content with parents and students; it also involved co-creation of visuals on the screens. The findings of this study contribute to a deeper and more innovative view of digital-screen-mediated teaching approach for fostering multiple parent-involved interactions in online EFL learning settings. They can also assist EFL teachers to develop more effective instructional strategies in these learning environments.

Keywords: Parental involvement, online language teaching, digital screen mediation model, English teacher development, lesson design, English as a Foreign Language, social interactions

Guo, D., Ramos, R. L. M., Zhao, Y., & Sun, Q. (2025). Design of interactive spaces for promoting parental involvement: Strategies used by EFL teachers. *Online Learning*, 29(2), pp. 140–167. <https://doi.org/10.24059/olj.v29i2.4683>

Online language course enrollment has increased significantly over the past several decades (Borup et al., 2019), especially since the advent of the COVID-19 pandemic. Such technologically facilitated online learning, however, requires greater parental involvement, particularly for young English as a Foreign Language (EFL) students. These learners need high levels of support from adults due to their limited capacity for self-regulated learning and developing digital literacy skills (Tao & Xu, 2022). Increasing research recognizes the vital role of parental involvement in children's language education (e.g., Al-Mahrooqi et al., 2016; Kalaycı & Öz, 2018; Mahmoud, 2018). Involving parents in language learning not only improves language learning outcomes but also promotes their children's social, emotional, psychological, and interactional development (Al-Mahrooqi et al., 2016; Kalaycı & Ergül, 2020; Kalaycı & Öz, 2018; Niehaus & Adelson, 2014). This positive impact transcends cultures and nationalities (Tong et al., 2021).

In Asian countries, Wati (2015) found that parents support English-language learners by assisting with vocabulary acquisition and assignment completion; providing learning materials, including not only standard texts but also cartoons, puzzles, and videos; and seeking clarification from teachers on topics with which their children have difficulty. Chinese parents in particular harbor high expectations for their children's academic success and invest substantial efforts in their learning (Cheung & Pomerantz, 2011). This emphasis is rooted in the belief that education serves as the paramount avenue for social mobility (Gao, 2012; Tam & Chan, 2010; Tong et al., 2021). When Tao and Xu (2022) explored parental supportive practices for young EFL online learners in Chinese primary schools during the COVID-19 pandemic, they found that monitoring children's learning was parents' top priority among all their children's activities, followed by providing psychological, academic, and technological support.

However, online language teachers often find achieving productive parental involvement challenging. Gokturk and Dinckal (2018) found that significant misunderstandings and related tensions often arise between parents and teachers regarding their respective roles, which may hinder productive partnerships. At the same time, they found school administrators often fail to fully support teachers in fostering parental involvement. Helping teachers respond to this scenario in online language education of primary-school children requires an understanding of the mechanisms underlying their parental involvement strategies. This study addresses this research gap by investigating the practices of EFL teachers in designing constructive parent-involved interactive spaces for supporting children's online language-learning experiences. The results contribute to a deeper insight into instructional techniques integrating digital strategies and interactive learning designs for parental involvement. Furthermore, this study presents a more nuanced conceptualization of parent-involved interactive configurations, fostering authentic communication and both interpersonal and community-based interactions for EFL online learners.

Conceptual Frameworks

Parental Involvement as Social Interaction

Wagner (1994) defines *interactions* as reciprocal events involving at least two objects and actions that mutually influence each other. Palloff and Pratt (2001) describe *interactivity* as the creation of an environment where students feel comfortable asking questions, sharing ideas, and engaging in collaborative activities. Building on Rafaeli's (1988) examination of interactivity as a process-related variable and focusing on person-to-person rather than person-to-

machine interaction, Hyland (2008) emphasizes that social interactions between *individuals* are a means by which knowledge is constructed. Numerous studies have explored the significance of social relationships and group cohesion in facilitating meaningful online collaboration, particularly highlighting how dialogue triggers cognitive processes essential for deep learning and information retention (Johnson & Johnson, 1987; Kreijns et al., 2005). Such dialogue helps foster a sense of connectedness and belonging while serving as a resource for knowledge construction and growth (Händel et al., 2020; Mullen et al., 2021).

Interactivity frames parental involvement as interactions through which parents communicate directly with teachers and/or learners or mediate interactions between their children and others. Interaction has always been a defining and crucial concept in the educational process and context; it is challenging yet imperative to establish a clear definition and format for interaction in online language education. Studies revealed that novel interaction types, such as procedural and administrative interactions, emerged in online learning to assist learners struggling with digital course interfaces and learning tools in seeking assistance from others (Borup et al., 2013; Howkin et al., 2011; Offir et al., 2001). Tao and Xu (2022) proposed a tripartite support system for young learners' online language learning, expanding two-person interactions (i.e., teacher-parent and student-parent) to include parent participation in student-teacher interactions. This system involves diverse types of interactions among parents, teachers, and students, such as providing academic, affective, and technical support; consulting teachers; and assisting with schoolwork.

Upholding interactivity as a lens, our current study has investigated, coded, and analyzed the practices of the teachers in designing and promoting parent-involved interactions. As a result, it has conceptualized more interactive configurations among actors involved in parental involvement.

Digital Screen Mediation Model

Online language learning is based on the premise that students acquire language through interacting, interpreting, and negotiating meaning with others (Meskill, 2024). In the process of joint meaning making, digital visuals play a crucial role in simplifying complex ideas and making them more accessible (Kolyvas, 2020). Online language teachers are required to foster student social interactions with teachers, peers, parents, and other learning facilitators. The traditional monologic approach, where teachers simply convey information and test recall, is unsuitable for digital mediation; instead, the learning process should be highly dialogic (Meskill, 2024).

The *digital screen mediation model* posits that “academic content and the medium which expresses it and gives it shape” is “mediated collaboratively by instructors and students through authentic conversations about what they co-view” (Meskill, 2024). This model highlights the vital role of digital visuals and tools in fostering collaboration among teachers, parents, and students, describing the digital screen as a facilitator of authentic conversations that develop learners' language competencies. For example, Meskill et al. (2020) found that teaching using Digital Fairytales in an online program for learning Russian as a second language provided more opportunities for language-focused mediational practices than traditional approaches. Through

this program, young learners develop language and digital skills by observing the way others use them and by interacting with adults (Meskill et al., 2020).

However, little is known about the potential of applying the digital screen mediation model to involve parents, who play a vital role in their children's authentic conversations and language learning practices. To address this gap, this study used the digital screen mediation model to examine parental involvement as social interaction, exploring how EFL teachers use digital screens to create extended opportunities for parental involvement.

Literature Review

For our literature review, we searched Google Scholar and the ERIC databases for papers focusing on parental involvement in online English as Foreign Language (EFL) instruction in elementary and middle school contexts. We also reference conceptual frameworks employed in the field. Based on our exploratory approach, we present this review in a narrative form by discussing parental involvement in online language education broadly, before focusing on studies specific to teacher strategies in the online environment.

Parental Involvement in Online Language Education

Promoting *parental involvement—actions parents take to support their child's learning achievement*—requires forming partnerships: parent–child, parent–teacher, and parent–parent partnerships (Kalaycı & Öz, 2018; McNeal Jr, 2014). Compared to learning other subjects online, learning languages requires greater communication and interaction with others (Meskill, 2024). Interactions with parents in the home promote a form of cognitive socialization that contributes to children's fundamental intellectual development (Ryan, 1995; Wati, 2015). They also promote language learning. For example, Bang & Mackey (2024) investigated 63 Chinese parents' involvement in 5- to 6-year-old children's use of game-based language learning app. Their mixed methods analysis found that parents' initiation of app use correlated positively with learners' overall English skills, but negatively with student engagement. Qualitative results further showed that parents sought to foster their children's interest in English, helped their children connect the app content to real life, and employed various helping behaviors, mediating their children's learning, with potentially better result for those parents that foster their children's autonomy.

In studying the correlation between parental involvement and children's English proficiency, Halommi and Stevens (2023) collected self-reported survey data from 500 EFL learners and their parents and found that the parental factors of direct learning assistance at home and communication of curricula and child progress between school and parents were the factors that most positively correlated with children's achievement. Parents' socioeconomic status (SES) has also been found to affect their parental involvement. Ghajarieh et al. (2024) conducted a quantitative longitudinal study in Iran to investigate the correlation between 28 four- to six-year-old EFL children's achievement, their parents' SES, beliefs and parental involvement. The study found a strong correlation between parents' high SES and positive beliefs and parental involvement regarding their children's English learning, including parental factors such as parental expectations and reading of books at home. In response to challenges to parental involvement, Al Murshidi et al. (2023) interviewed 28 parents of EFL learners in elementary

school in the UAE. Their analysis showed that parents mostly used audio-visual resources and increased use of English at home and led them to suggest that schools supply parents with training, improve communication/coordination of learning targets, and foster children's independent learning.

Several parental involvement typologies have been employed within the fields of online and language education. Epstein's framework (1992; Epstein & Sanders, 2002) proposes six types of family involvement: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. The Hoover-Dempsey and Sandler (1995) model encompasses the mechanisms of parental encouragement, modeling, reinforcement, and instruction, which have unique roles in virtual education. In an examination of online elementary and middle schools, Hasler-Waters (2014) identified four parental roles that boost students' academic performance. First, parents act as *organizers* to plan their children's daily learning schedule and gather learning materials. Second, parents act as *instructors* by providing one-on-one instruction. Third, parents act as *motivators* to encourage students to persist in completing their work. Finally, parents act as *managers* of their children's learning progress.

These parental involvement models place significant emphasis on the roles and responsibilities of parents while often overlooking the contributions and actions of teachers (Lei & Vilbulphol, 2024). This imbalance may place high pressure on parents, causing anxiety. Rectifying this imbalance requires understanding both the mechanisms underlying parental involvement and developing strategies for EFL teachers to engage parents in online settings.

Teacher Practices and Parental Involvement

A growing body of research recognizes teachers' important roles in promoting effective parental involvement (e.g., Boivin et al., 2014; Borup, 2016; Sari et al., 2020). As educational experts, teachers design, encourage, guide, and facilitate parental involvement activities (Kalaycı & Ergül, 2020). Teachers can provide parents with the training, expertise, and opportunities that help them assist their children to succeed academically (Stevens & Borup, 2015).

To gain understanding of teachers' perceptions of practices regarding parental involvement, Borup et al. (2019) interviewed 12 online teachers and 12 on-site facilitators. They found that both groups valued parental involvement when parents advised students on course enrollment, nurtured relationships, and monitored student progress. They identified challenges that teachers and facilitators faced in the online learning process (e.g., no parent portal with a student progress dashboard and difficulty interpreting students' progress and grades). In an investigation of teachers' perspectives on parental involvement in Turkey, Hakyemez (2015) found that although teachers placed a high value on parental involvement, parents were often unwilling to become involved. In another study, Kalaycı and Ergül (2020) found that teachers value parental involvement but lack specific strategies to promote it. Furthermore, teachers view themselves as the main presence in the language-learning process and parents as only one of the moderating factors.

Willis and Exley (2018) explored Australian teachers' strategies in using digital screens to promote parental involvement, examining the use of social media as part of an inquiry curriculum to promote parental engagement. The teachers selected Seesaw as their social media platform for its rapid, secure, user-friendly, and age-appropriate approach to promoting home-

school partnerships. They found that the use of Seesaw promoted parents' enthusiasm for participation and enabled idea-sharing that expanded and enriched teachers' classroom practices. They also identified several impediments to parental involvement, including teachers' negative experiences with using digital technologies and the lack of lesson plans for using social media, which affected their ability to strategize for parental involvement.

Chichón (2022) investigated the degree and type of parental involvement of 165 parents of preschool children (aged 0–6) to outline a catalogue of practical proposals for supporting parental involvement by student teachers ($n = 10$) in a bachelor's degree training course in Cádiz, Spain. Eight strategies for providing materials, guidance and coordination of parents' support of their children's learning were proposed to address the identification of low levels of parental participation, a lack of a regular teacher-parent relationship, and parents' tendency to teach vocabulary in a decontextualized way and replicate their own previous EFL instruction as learners.

To manage home learning during the pandemic in China, many teachers established a class-communication platform using multiple digital channels, including both official and unofficial class/school groups on QQ and WeChat, instant messaging applications (Zhou & Li, 2020). For example, Jiangsu Zhenjiang Experimental School built a home-school coeducation network platform to promote online learning during the pandemic (Zhang & Li, 2020). These technologies helped teachers communicate effectively, maximizing support and collaboration with parents.

Also, in the context of the pandemic, Lei and Vilbulphol (2024) conducted a case study of how an English teacher in Thailand helped parents support their first- to sixth- grade children's learning during remote teaching. Identified across the themes were strategies of equipping parents to be teachers at home, irrespective of the varied levels of parents' proficiency and confidence in speaking and teaching the target language, by supplying examples and video clips of teaching and parental support as well as cultivating a relationship of trust and respect, capitalized on from Thai culture. The teacher reported continuing some form of these strategies even after the end of the pandemic's emergency remote learning period.

In the wake of the pandemic, Dao et al. (2023) investigated 124 Vietnamese teachers' perceived benefits, challenges and responses when conducting synchronous online teaching to 6 through 11-year-olds. Teachers' varied strategies in response to challenges were categorized as either approach-coping strategies (i.e., proactively seeking solutions) or avoidant-coping strategies (i.e., not addressing the problem).

The reviewed literature shows that parental involvement can help promote student success in online language education, specifically in EFL instruction for elementary and middle school students. Studies highlight the contribution of partnerships between parents, teachers, and children in fostering language learning. However, they also cite pedagogical challenges with technology use, parent engagement, and their varying levels of competency in the target language and its instruction. They also emphasize the teacher's crucial role as an expert and catalyst of pedagogy, leveraging the pedagogy-mediating spaces that are digital platforms and media in the online environment to effectively shape training, resources, communication and

collaboration for parents and children. Thus, strategizing to better support parental involvement can be an effective teaching tactic in online EFL education.

Current Study

While the reviewed literature highlights the importance of parental involvement in online language learning and the crucial role of EFL teachers in facilitating such involvement, there is a gap in understanding the specific mechanisms guiding teachers in designing interactive spaces that involve parents. This study examines how teachers engage parents by integrating various digital visuals and tools, as well as the learning structures they collaboratively construct with students and their parents. Specifically, this study investigates the practices used by Chinese EFL teachers of Grades 1–8 for involving parents during the COVID-19 lockdown period in China (March 2020–December 2022). During this period, EFL teachers developed a variety of strategies employing digital tools to encourage students and their parents to fully use learning management systems (LMSs) and take responsibility for constructing interactive and collaborative learning spaces. The aim was to contribute to the development of a new digital screen mediation model for facilitating and sustaining teacher-student-parent interactive spaces in online settings.

To fulfill this aim, this study was guided by the following research questions:

1. What strategies do Chinese EFL teachers employ in using digital screens for promoting parental involvement in online learning?
2. What interactive structures involving parents are constructed to support children's online language learning?

Methods

This study used a qualitative multiple-case study design (Yin, 2018) to explore how Chinese EFL teachers' use digital screens to promote parent-involved interactions in online learning contexts. The case study approach was chosen for its suitability in examining complex phenomena across multiple similar and contrasting cases, adding confidence to findings (Miles et al., 2020). This enables an in-depth understanding of teacher strategies in specific contexts. Using purposive sampling strategy (Miles et al., 2020), five teachers were selected as "critical cases" from an initial survey of 78 respondents based on their potential to provide strategic insights (Flyvbjerg, 2011). Rich qualitative data, including interviews, class recordings, designing materials, were collected and analyzed using a grounded theory approach. This design aligns with the study's goal of capturing nuanced practices in using digital screens and shaping parent-involved interactions. This study was approved by the university's Institutional Review Board (IRB) (protocol/study number 22X253).

Participants and Contexts

The selected teachers met the eligibility criteria of (1) teaching Grade 1–7 EFL, (2) working in public schools in China, (3) having taught EFL online during the pandemic, and (4)

valuing and encouraging parental involvement when teaching online. Table 1 presents the participants' pseudonyms, background, and demographic data.

Table 1

Interviewee Demographics

Name	Gender	Age	Educational degree	Grade	Years of teaching
Yu	Female	25	Bachelor's degree	Grade 3	4
Li	Female	34	Bachelor's degree	Grade 5	10
Liu	Female	36	Bachelor's degree	Grade 7	10
Yang	Female	42	Bachelor's degree	Grade 5	16
Zhang	Female	44	Bachelor's degree	Grade 4/6	20

The five teachers, who worked at elementary or middle public schools in China, transitioned from in-class to online teaching during the pandemic. To support such a swift transition, China's Education Department developed an elementary school network cloud comprising online courses recorded by expert teachers (Ministry of Education of the People's Republic of China, 2020). The participating teachers assigned their students to watch these 20-minute videos at scheduled times. Subsequently, the teachers either conducted synchronous lessons or recorded their own videos to help students better understand and expand upon the content. One participating middle-school teacher designed the entire online course herself without using the expert-recorded videos. All the participating teachers were responsible for designing after-class assignments.

Data Collection

This study drew upon a variety of data sources, including teacher interviews, class video recordings, micro-lesson videos, student artworks, interaction records on digital learning platforms, such as English Bao; and social media (e.g., WeChat). To gain an in-depth understanding of the teachers' design practices, semi-structured internet-based interviews were conducted iteratively in multiple formats with each participant (Ravitch & Carl, 2016) in both synchronous and near-asynchronous format (Salmons, 2014).

This iterative interview method, chosen for its ability to track teachers' dynamic development in constructing interactive environments for parental involvement (Josselson, 2013), facilitates reflection and adaptation. It enables researchers and participants to refine questions and responses over time (Guo et al., 2024), capturing evolving insights as teachers adjust their strategies (Salmons, 2014). The teachers under study moved to online teaching according to the severity of the pandemic and educational policies. Most online teaching occurred during two distinct periods, from March 2020 to June 2020 and from September 2022 to December 2022, between which most EFL teachers conducted in-class instruction.

Before the formal synchronous interviews, a shared document was made available to each participant teacher via a OneDrive link. This allowed the teachers to preview all the interview questions and provide written responses if desired. Interview questions focused on (a) teachers' pedagogical strategies/practices in using various digital tools to promote parent-

involved interactions, (b) teachers' responsibilities and roles, and (c) teachers' perceptions of parent-involved interactions.

The synchronous interviews were conducted via one-on-one audio chat using WeChat and lasted approximately 45 minutes. The interviews focused on the teachers' reflections on their design of strategies for using digital screens to create interactive environments for parental involvement. Near-synchronous written interviews were also conducted via WeChat to address any follow-up questions. All notes and interview transcripts were uploaded to the shared document site, allowing the teachers to review, verify, and add new information as needed.

Data Analysis

Figure 1 outlines the data analysis process. The data were analyzed using a grounded theory approach (Strauss & Corbin, 1998) to code the specific forms of digital screen mediation that teacher employed for parent-involved interactions. This approach was chosen to enable theoretical insights to emerge inductively from the rich qualitative data, making it well-suited for uncovering the complex dynamics of teaching practices. Using an open coding system (Merriam, 2009), all the interview transcripts were reviewed to generate low-inference codes for identifying the digital visuals teachers used, how they used them, and the resulting parent-involved interaction structures. Throughout the process, memos were written to further refine coding schemes and track themes across the data (Merriam, 2009).

The open codes were organized into themes. Comparing units of information to identify recurring concepts (Patish, 2016) led to the emergence of several concepts, including parent community building and extension of learning activities beyond the classroom. After a preliminary coding scheme was created, data units were grouped into an Excel file to facilitate exploration of the data and provide a holistic view of teachers' strategies and practices. This process aided in moving from the coding to interpretation of data and in generating a new model to explain the parental involvement practices of EFL teachers with digital screens in online learning settings. Supportive data shared by teachers such as their class video recordings, students' artworks and videos, not only validated key themes but also enriched the interpretation of teachers' evolving strategies. To ensure methodological rigor and consistency, the first and third authors co-code and co-developed the codebook. During this process, disagreements regarding codes or interpretations were resolved through consensus-building discussions until intercoder agreement exceeded 85% (Miles et al., 2020). However, some limitations arose. Open coding process resulted in a large number of fragmented codes. To address this, the coding refinement was iteratively conducted through multiple rounds of axial and selective coding (Strauss & Corbin, 1998).

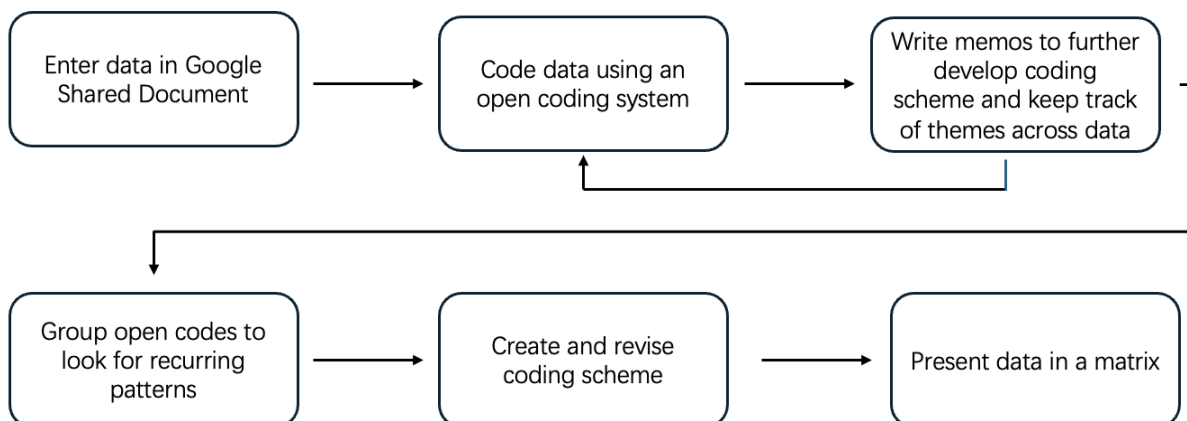
A matrix visual display with detailed descriptions and supporting examples was developed to address the two research questions and aid in data interpretation. Finally, based on deep reflection and interpretation of each theme, a novel digital-screen-mediated design model emerged, explaining how digital-screen-mediated design supported parent-involved interactions and how interactive structures were co-constructed by teachers, students, and parents.

Before concluding the research, member checking was conducted to confirm the accuracy and validity of the findings (Creswell, 2002). All participants were asked to review the

shared documents, identify missing information, correct incorrect information, and confirm that the records and related analysis were consistent with their views and experiences.

Figure 1

Data Analysis Process Flowchart



Findings

The following section describes in detail the digital tools, resources, and platforms that the teachers used; how they used them to provide instructional guidance; and which parent-involved interaction structures they enabled to support student online language learning (Table 2).

Table 2

Five Teacher Strategies for Promoting Parental Involvement

Theme	Teachers' actions	Frequency	Parent-involved interaction structures as outcomes	Frequency
Use learning management systems to exchange information and materials with parents (Teacher Li, Teacher Liu, Teacher Yang, Teacher Yu, Teacher Zhang)	Share visualized data on student performance	12	Agentively seek help from teachers and other parents on how to improve their children's learning performance	11
	Provide multiple means of access for parents to upload their children's work	6	Select the online platform with which they are most familiar	4
Use recorded videos to extend instruction and teacher-student-parent interaction (Teacher Li, Teacher Liu, Teacher Yu, Teacher Zhang)	Record short videos modeling parent-student interactions	1	Interact with their children by emulating teacher modeling of interactions	1
			Record the interactions to share them with other parents on social media and message platforms	

	Design micro-lessons to address difficult topics	7	Watch and discuss lessons with their children	7
Use social media to advance students' and parents' collective knowledge (Teacher Li, Teacher Liu, Teacher Yang, Teacher Zhang)	Establish online parent groups and communities	5	Form collective knowledge and expertise in tutoring their child Provide valuable feedback to teachers and parent communities Exchange views and learning resources with parent communities	5
	Invite parents to manage students' study groups on social media	2	Encourage all group members to complete all tasks on time Encourage students to review, comment on, and discuss each other's assignments in the chat box	3
	Encourage parents to share students' work on social platforms	3	Share and discuss their children's work with parent groups and communicates Provide feedback to and express appreciation of the work of other children and discuss it with their own children Encourage their children to improve their work based on peer and parental feedback Ensure that their children participate in daily learning activities	3
Invite parents to attend classes in real time using live conferencing platforms (Teacher Li, Teacher Liu, Teacher Yang, Teacher Yu, Teacher Zhang)	Encourage parents to attend classes with their children in real time	8	Act as supervisors, facilitators, and partners with and for their children Address technical issues for students	10
	Encourage students to practice dialogues with their parents	4	Reinforce their children's communication skills and ESL knowledge in an authentic context with their support	1
	Provide course links to parents to allow them to briefly enter the online classroom	2	Confirm their children's attendance at any time	1
Promote authentic conversations by simulating digital games (Teacher Li)	Structure opportunities for students to simulate digital games to play at home with their parents	2	Situate dialogue with children on authentic problems and ideas in target language Record interactions to share with other parents and wider community	2

Use assignment instructions to co-create meaning-making environments for students and their parents (Teacher Li, Teacher Liu, Teacher Yang, Teacher Yu, Teacher Zhang)	Structure opportunities for students to complete homework with their parents	4	Provide personalized instruction to their children	2
	Assign reading tasks to students and encourage them to retell the reading materials to parents	2	Record story-retelling activities as audio /video recordings to share with parent groups and communities	3
	Assign challenging homework to students Send digital materials to parents and ask them to explain to their children how to view and use these materials	2	Provide support to their children and seek help together online	3
		3	Assist their children fully comprehend teacher requirements, review essential materials, and complete their assignments	5
	Assign daily tasks to students and encourage parents to help their children complete it	6	Share children's work on parent instant messaging, online community, and social media groups	2
			Provide feedback to and express appreciation of the work of other children and share it their own children	

Using LMSs to Exchange Information and Materials with Parents

LMSs offer virtual educational platforms whereby teachers, students, and parents can exchange information, distribute content, design evaluations, and prepare lessons. Li, Yu, and Yang emphasized the importance of granting parents access to LMSs so that they could monitor their children's academic performance, real-time learning progress, and assessment results. For example, when Yu assigned reading tasks and quizzes to her students on an LMS called English Bao, she granted parents access so that they could track their children's progress in terms of quiz item completion and scores (Figure 2). Leveraging the convenience of LMSs and the information provided by teachers, parents proactively sought help from teachers and other parents to address their children's learning weaknesses.

Figure 2*Learning Task Progress Report*


姓名	平均分	用时	订正正确率
[Redacted]	100分	9分钟	无需订正 >
[Redacted]	100分	10分钟	无需订正 >
[Redacted]	100分	11分钟	无需订正 >
[Redacted]	100分	12分钟	无需订正 >
[Redacted]	100分	13分钟	无需订正 >
[Redacted]	100分	14分钟	无需订正 >
[Redacted]	100分	15分钟	无需订正 >
[Redacted]	100分	18分钟	无需订正 >
[Redacted]	99分	10分钟	无需订正 >
[Redacted]	99分	11分钟	无需订正 >
[Redacted]	98分	9分钟	100% >
[Redacted]	98分	10分钟	无需订正 >

Note. The first column shows student names (removed), the second the average scores, the third the amount of time elapsed for task completion, and the last the percentage of correct responses.

The teachers typically conducted various learning activities with their students on multiple LMSs, including English Bao, Banjixiaoguanjia, and Yiqizuoye. Yu found that some parents helped their children download and upload the required materials while others struggled with unfamiliar or complex digital platforms. To address this, Yu provided separate access points for parents and students to upload homework, allowing them to choose the platform with which they were most comfortable. This approach allowed parents struggling with complex digital platforms to choose the easiest option, ensuring all students could review essential materials and submit their assignments on time with parental support.

Using Videos to Extend Instructions and Teacher-Student-Parent Interactions

Recorded videos provide the opportunity to extend the instructional and communicative space beyond the classroom. The teachers emphasized that recorded videos allowed students to preview and review lessons at their convenience. The teachers recorded different types of videos for diverse learning purposes. For example, Li developed micro-lessons to address difficult or critical concepts and knowledge for each lesson and posted them on WeChat and the SeeWo LMS. Li explained that as every formal synchronous lesson was only 20 minutes long, they were inadequate for providing children with understanding of complex knowledge points and for

practicing learning content. Li also encouraged parents and students to watch these lessons together, thereby enabling parents to tutor their children more effectively.

In a different vein, Yu trained parents on how to facilitate their children's learning by recording videos modeling parent–student interaction for parents to emulate. She described her approach as follows:

I made a series of micro-courses of around 20 minutes each in which I invite a little girl to be my teaching assistant. I ask her to pretend to be my daughter. We learn English together by dancing, singing, playing games, etc. By doing so, I show parents how to interact with their children. Parents could model the process after class at home.

Yu observed that the children showed keen interest in these videos, acquiring new vocabulary and expressions that they applied in real-life interactions with their parents. Parents recorded the interactive processes and shared them through social media and messaging platforms, thereby gaining insights into effective ways to engage with their children, assist them in practicing English, and integrate English conversation into authentic situations at home.

Using Social Media to Advance Collective Knowledge

Establishing Online Parent Groups and Communities

The teachers integrated social media into their online teaching and learning activities to promote student and parent collective knowledge building and community building. All the participating teachers noted that they had established online parent chat groups on social media, enabling parents to discuss English-learning strategies, share resources, and seek advice. Liu observed that parents frequently turned to the community when their children had English-language-related questions they could not answer. By tapping into the collective knowledge and expertise of other parents with stronger English skills, they could offer more effective support to their children. Liu explained that parents commonly discussed topics such as the English books that their children were reading at home, the effective learning approaches, the best online courses and English learning platforms, sharing and commenting their children's daily English practice videos.

Moreover, the online parent community generated valuable feedback that Liu and Zhang were able to leverage to improve their teaching practices. Zhang postulated that collecting feedback from an online parent group helps teachers enhance their pedagogical strategies and lesson designs. She described how her approach evolved.

In the beginning, I used to send videos provided by an educational company to parents. However, some parents informed me that merely watching videos didn't result in a thorough comprehension of the subject matter, and it lacked genuine opportunities for practice and interaction. As a result, based on this feedback, I incorporated live class sessions for students during which we could delve into challenging topics and engage in English dialogues to enhance their learning experience.

Parents in the group shared motivations, interests and needs related to their children's English learning. Drawing from these discussions, they not only collaboratively developed new

insights into how to better support their children's English learning within this community but also helped teachers improve their pedagogical designs.

Inviting Parents to Manage Student Study Groups

To promote peer collaboration and mutual support, Li organized students into small learning groups of four to six students, each with a designated group leader. Leaders were selected based on their higher English proficiency and sense of responsibility, as well as the parents' willingness to assist with group management. Li encouraged the parents to create an online chat group for ongoing communication. To facilitate this collaborative learning process, Li assigned daily reading tasks to students and required them to submit their completed work to their group leaders. The leader's parents helped manage the study group by communicating with the other parents and encouraging timely task completion.

All parents shared their children's work in a chat group, enabling students to review, comment, and discuss each other's assignments. Sharing these discourses and student artifacts made their learning trajectories more visible, demonstrating that sharing on digital screens and collaborating on digital platforms can facilitate the cumulative progress of student learning and parent-student discussions within and across lessons. Yang similarly established a parent-facilitated study group but she opted to include more students in each group. The discussions among parents in Yang's groups encompassed not only the learning tasks themselves but also their children's plans for learning.

Encouraging Parents to Share Student Work on Social Platforms

Both Yu and Yang assigned daily tasks to their students including a range of activities, such as read-aloud sessions, home quizzes, and dialogue practice. Yu encouraged parents to share their children's work on the Parent Community or Moments platforms, enabling other parents to provide feedback, express appreciation, and showcase their own children's production. This approach increased the number of learners completing the daily assignments, leading to improved participation rates and active refinement of their work based on peer and parental feedback.

Inviting Parents to Participate in Real-Time Classroom through Live Conferencing Platform

A synchronous learning mode involves real-time online teaching, such as through online conferencing platforms like Zoom (Dailey-Hebert, 2018). Live conferencing was a key mode of online language teaching for all the participant teachers. The teachers used live conferencing platforms such as Voov and Ding Talk, which support screen sharing, chatting, recording, and whiteboarding. Despite these powerful features, teachers encountered challenges in consistently engaging students in synchronous classes and in supervising their students' status and thoughts due to camera constraints. For example, Yu recognized that young learners often struggled to maintain focus and engaged when learning English online at home, as they lacked the social interaction and guidance provided by a supervisor.

To mitigate these issues, Yu, Li, Yang, and Zhang advocated for parental involvement in synchronous classes, in which parents and students can co-view and engage in the learning content on the screen and discuss learning-content-focused topics. Parents were also able to help build stronger teacher-student connections, such as by helping students better understand teacher

guidelines. Yang selectively invited parents whose children required more support to attend online classes. Likewise, Zhang shared the online class link with parents, allowing them to briefly join the virtual classroom and monitor their children's learning progress. By attending classes, parents acted as guides, facilitators, and learning partners, providing guidance and support.

In synchronous classes, Yu asked every student to practice English dialogues with their parents. To facilitate this, Yu would first invite two or more students to model the dialogue for the entire class, allowing others to observe her expectations. She then assigned the students to practice the dialogue with their parents, thereby reinforcing students' language skills in an authentic context with parental support. For example:

in the unit called "What Is This?" I instructed my students to display their school bags to their parents, who would ask them to identify several school items by inquiring "What is this?" The students would respond to the questions in English using the phrase "It is a(n)..." This activity helped to reinforce their English language skills while also familiarizing them with school-related vocabulary.

Eliciting Authentic Conversations by Simulating Digital Games

With students increasingly engaged in digital games, teachers are seeking to capitalize on such interest for the learning of curricular concepts (Heafner, & Handler, 2018). The teachers emphasized that integrating games is invaluable for engaging students and fostering parent-student interactions. Yu encouraged parents to play games with their children to increase their understanding of the learning content and to provide opportunities for authentic language use.

In her synchronous classes, Yu seamlessly integrated engaging digital games aligned with lesson topics as effective tools for teaching students vocabulary and sentence structure. To foster authentic and contextualized conversations and promote genuine English language practice, Yu also encouraged her students to physically reenact the digital games at home with their parents. As an example, Yu assigned a game in which students had to explain the color-blending process in English using the phrase "If you mix . . . yellow with . . . blue, you will get . . . green" or simply stating "This is . . . yellow" (Figure 5). She encouraged them to ask questions, provide feedback, and record the entire process on video. This approach enabled students to consolidate their language skills in a collaborative and supportive learning environment while also providing parents with an opportunity to participate actively in their children's education.

Figure 5

Screenshot of Video of Parent and Child Playing Color Blending Game



Note. The child was blending the blue, red and yellow colors.

Using Assignment Instructions to Create Collaborative Meaning-Making Environments

In the context of developing effective homework strategies, Yu and Zhang asserted that parents are best positioned to provide personalized, one-on-one instruction to their children in the home environment.

After a formal synchronous lesson ended, Yu encouraged students to collaborate with their parents in completing their homework assignments. She explained that this approach afforded parents the opportunity to co-create learning content with their children as active partners and/or facilitators while also documenting the learning process.

I assigned English conversation tasks to my students, requesting them to complete them with their parents at home and record the process as either video or audio. They then shared and submitted their digital products to social networks, such as WeChat Group, or LMSs, such as Yiqizuoye. For instance, in the Describing Clothes learning unit, I instructed students to choose one of their parents' items of clothing at home and describe and discuss it with their parents in English. The entire process was recorded by video by the parents. I was pleasantly surprised by the quality of the work that they produced. I even presented them in my online classes!

To enhance students' reading skills, Zhang assigned daily reading tasks on digital platforms and encouraged students to re-tell stories with their parents. This approach aimed to provide students with regular opportunities to practice reading and comprehension skills while fostering stronger family interactions and joint meaning making activities around screens.

Yang believes that children are more likely to actively seek parental help when assigned challenging tasks they cannot complete alone. For instance, to celebrate Lunar New Year, Yang tasked students with designing a handmade poster or newspaper in English featuring Spring Festival-related drawings, short stories, and poems, and cultural descriptions and expressions of customs. While I did not require parents to assist with the English handwritten poster, many parents still chose to participate and help their children select a topic that they were interested in and collaborate on the design of the poster. As a result, I received numerous high-quality products that were submitted by the parents and their children showcasing their creativity and English writing skills.

Figure 6

A Student's Poster for Spring Festival



Discussion

This study investigated how parent-involved interactions in EFL student learning activities can be organized and supported through digital-screen-mediated instructional design in online language learning environments. Analysis of the collected data identified six themes related to teachers' design strategies. Each theme comprised two key issues underlying the design of digital-screen-mediated interactive structures and pedagogy.

Digital-Screen-Mediated Design Fosters Parent-Involved Interactions

Consistent with previous perspectives and studies (Mercer et al., 2019; Meskill, 2020), the findings of this study suggest that EFL teachers' digital-screen-mediated design can anchor authentic conversations and interactions among teachers, students, and parents. Teachers capitalized on digital screen features and affordances of learning platforms and applications to

create many opportunities for students and their parents to conduct English-related conversations with, through, and around digital screens.

Video-based supporting material proved effective in engaging parent involvement—in line with previous literature (e.g., Al Murshidi et al. 2023; Lei & Vilbulphol, 2024). Furthermore, facilitating parents' access to children's formative assessment and academic achievement data, as well as providing them multiple ways to upload assignments and log into synchronous classes helped teachers to create conditions conducive to dealing with common issues in the online parental involvement literature, such as parents' engagement with their children's tasks (e.g., Mckenna & Millen, 2013, Chicón, 2022) and differences in parents' language and technological competency (e.g., Al Murshidi et al. 2023; Lei & Vilbulphol, 2024). Participant teachers' use of game-based activities for homework confirmed their positive effect in promoting parent-student interaction with the target language (Bang & Mackey, 2024). Such strategies also improved communication with parents, a key factor in effective parental involvement (Al Murshidi et al. 2023; Epstein & Sanders, 2002; Halommi & Stevens, 2023; Zhang & Li, 2020), as teachers used instant messaging applications to guide parents on tutoring areas of focus.

Leveraging the sharing and communicating features of online modalities also contributed to the training of parents to perform their role in parent involvement tasks and structures, a strategy supported by prior research (e.g., Al Murshidi et al. 2023; Chicón, 2022; Lei & Vilbulphol, 2024; Stevens & Borup, 2015), especially through the modeling of parent-student interaction in the target language.

Community building, a generally overlooked dimension in previous research, was a prominent finding in this study. Teachers' strategies enabled parents to seek support not only from the teacher but also from other parents in the organized communities, further enhancing their ability to fulfill supportive roles.

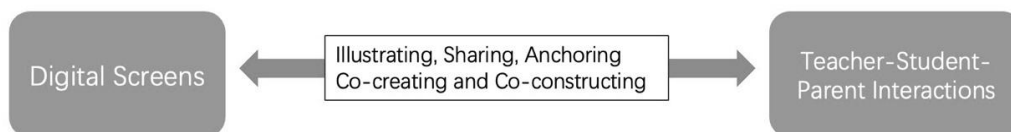
Our data showed that teachers' use of social media and online parent groups enabled parents to post and blog about their children's work to receive feedback and encouragement for both their children and themselves—contrary to Willis and Exley's (2018) findings on the challenges in using social media. This highlighted the potential of parent-to-parent interaction, an underexplored aspect in the online parental involvement literature. Strategies to promote the sharing of student work on social media also contributed positively to classroom management issues, ensuring student participation and timely completion of assignments. Moreover, the forums for parent participation provided teachers with feedback on students' and parents' difficulties, helping them plan subsequent strategies, as advocated in Chicón (2022).

Overall, teachers' strategies emerged as responses to their perceived challenges in online teaching, echoing other studies (e.g., Chicón, 2022; Dao et al. 2023; Lei & Vilbulphol, 2024). Our findings align with Katherine et al. (2016), who found that use of technology can enhance communication and feedback among students, teachers, and parents. These results demonstrate that digital screens are tools for not only teaching English but also mediating teacher–student–parent interactions (Twiner et al., 2010) and socially mediating the English-learning process.

Previous research has shown that digital screen communication supports constructive interactions through illustrating, sharing, and anchoring targeted visual content (Meskill, 2024). Building on this research, the current study found that the interactive process is also mediated by co-creation of visuals on the screen (Figure 7). For example, with parental assistance students created many artifacts, including dubbed and subtitled videos and posters, and constructed many discourses. Digital screens also allowed these artifacts and discourses to be downloaded and revised (Mercer, 2019) enabling students and parents to access, work with, and build upon them anytime, making their language learning sustainable.

Figure 7

Digital-Screen-Mediated Model



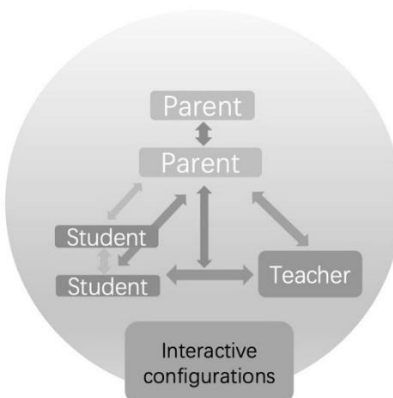
Teacher, Student, and Parent Co-Construction of Interactive Structures

Supported by teachers' designed actions, teachers, students, and parents co-constructed a variety of interactive structures as outcomes aligned with five parent-involved interactive, interpersonal, and community-based configurations: student–parent, teacher–parent, parent–parent, parent participation in student–student interaction, and parent participation in teacher–student interaction. The novel configurations—parent–parent and parent participation in student–student interaction—enhanced Tao and Xu (2022)'s tripartite model of parental support (see Figure 8).

These interactive configurations, which build on Hawkins et al. (2011) and Meskill et al. (2021), were primarily designed and initiated by teachers and sustained and expanded by parents and students. As such, they indicate how teachers, students, and parents agentively and actively collaborate to co-construct evolving structures across virtual, classroom, and home interactive spaces.

Figure 8

Interactive Configurations Among Teachers, Students, and Parents



Assuming a variety of roles, the teachers actively involved parents in students' EFL online learning and directed teacher–student–parent interactions through multiple modalities pivotal in supporting online language learning. One role was modeling an interactive ethos, demonstrating interactive practices, and encouraging parent and student agency. The teachers explored and continually developed new visions and possibilities for parent-involved interactions with digital screens. These findings enriched prior research on the pedagogical development of online EFL teachers (Meskill et al., 2023; Meskill et al., 2024).

Parents and students also positively engaged in learning activities. Parents proactively sought help from teachers and other parents when facing challenges, recorded their interactive activities (e.g., dialogues and games), and shared these on social media. In the process, parents advanced collective knowledge, expertise, and skills in tutoring their children in English. As the primary producers of learning artifacts, students attempted to connect class discussion topic and assignments to their own interests. For instance, guided by teachers and parents, students identified favorite clothes and described them in English. To complete their assignments, they actively sought help and collaboration from parents and teachers and selected and organized relevant materials. With teachers and parent support, they engaged in their own learning process and gained control over it, in line with other studies that advocate the development of student autonomy (e.g., Bang & Mackey, 2024; Al Murshidi et al., 2023). All these positive outcomes resulted from the teachers' design of parent-involved interactive spaces where teachers, students, and parents could co-construct structures for engaging young EFL learners.

Conclusions, Contributions, and Limitations

This study investigated the strategies employed by EFL teachers to facilitate parent-involved English-language-learning interactions in online settings. Interview data, parent-recorded videos and student work collected from five elementary and middle school teachers enabled the mapping of a collection of teacher strategies around digital screen and the reconceptualization of interactive dynamics and configuration among the three main actors of parental involvement: teachers, students, and their parents. Data analysis revealed six design strategies through which teachers, students, and parents not only illustrate, share, and anchor visuals but also collaboratively create and construct digital visuals, resulting in five types of parent-involved interactions. The findings illustrate that while the teachers established interactive spaces and opportunities for learning activities, parents and students actively engaged in learning processes and co-constructed interactive learning structures.

Although previous research has considered strategies for parental involvement—proposed by parents (e.g., Murshidi et al., 2023), teachers (e.g., Chichón, 2022), or implemented by teachers (e.g., Dao et al., 2023; Lei & Vilbulphol, 2024)—it has often focused on other key aspects such as parental engagement (Lei & Vilbulphol, 2024) and teacher capital (Dao et al., 2023). Our study focuses on instructional strategies involving digital modalities and their pedagogical outcomes, as reported by teachers. Our analysis of these strategies offers a more nuanced conceptualization of the interactive configurations among the main actors of parental involvement, building on previous research. The implication for teachers is that fostering interactivity for better language learning extends beyond the two-way avenue of parent-teacher and teacher-student interaction (possibly mediated by parents), and the one way of parents-

student interactions (as in Tao & Xu, 2022) to include community-based interactions among students and among parents through the digital medium.

Our study also contributes to the digital screen-mediation framework by showing that teachers not only capitalized on visual screens to promote conversations and learning (Meskill, 2024), but they also created spaces for parents and students to collaborate and produce visual materials that fostered further dialogue and learning. This, in turn, was conducive to the collective construction of knowledge and reinforced trust in parents and their role as pedagogical facilitators.

However, these insights are based primarily on teacher-reported data, with parents' perspectives being filtered through teachers' accounts. Furthermore, the study was limited to a small cohort of five teachers in the Chinese educational context. Another potential limitation is that the relationships between themes of using different digital approaches to promote parental involvement may not have been fully explored. Teachers may use multiple approaches simultaneously to involve parents. The effect of such trans-media strategies should be further explored in future research.

Given the challenges in engaging parents in their children's EFL learning reported in previous studies (e.g., Chicón, 2022; Hakyemez, 2015), the positive reception of teachers' strategies among parents may reflect Chinese cultural factors—similar to the intentional use of culture to promote parental involvement noted in Lei and Vilbulphol's (2024) study in Thailand. While cultural comparison lies beyond the scope of this study, this is an important consideration, and we hope that our findings serve as a foundation for future cross-cultural research on pedagogical and technical innovations that foster parental involvement.

Declarations

Roberto L. M. Ramos would like to acknowledge that for this work he received the partial support of Fulbright/Coordenação de Aperfeiçoamento de Pessoal de Nível Superior—Brasil (CAPES), Finance Code 001.

References

- Al-Mahrooqi, R., Denman, C., & Al-Maamari, F. (2016). Omani parents' involvement in their children's English education. *SAGE Open*, 6(1), 1–12.
<https://doi.org/10.1177/2158244016629190>
- Bang, H. J., & Mackey, A. (2024). Chinese parents' involvement in their young children's app-based language learning. *Language Teaching for Young Learners*.
<https://doi.org/10.1075/ltyl.00052.ban>
- Boivin N., Albakri, R. Yunus, Z. B. M., Mohammed, H., & Muniandy, N. (2014). Assessing emergent social and multiliteracy practices in urban Malaysian homes. *Malaysian Journal of ELT Research* 10(2), 34–54.
<https://meltajournals.com/index.php/majer/article/view/604>
- Borup, J. (2016). Teacher perceptions of learner-learner engagement at a cyber high school. *International Review of Research in Open and Distributed Learning*, 17(3), 231–250.
<https://doi.org/10.19173/irrodl.v17i3.2361>
- Borup, J., Chambers, C., & Srimson, R. (2019). Online teacher and on-site facilitator perceptions of parental engagement at a supplemental virtual high school. *International Review of Research in Open and Distributed Learning*, 20(2), 79–95.
<https://doi.org/10.19173/irrodl.v20i2.4237>
- Borup, J., Graham, C. R., & Davies, R. S. (2013). The nature of parental interactions in an online charter school. *American Journal of Distance Education*, 27, 40–55.
<https://doi.org/10.1080/08923647.2013.754271>
- Cheung, C. S., & Pomerantz, E. M. (2011). Parents' involvement in children's learning in the United States and China: implications for children's academic and emotional adjustment. *Child Development*, 82(3), 932–950. <https://doi.org/10.1111/j.1467-8624.2011.01582.x>
- Chichón, J. L. E. (2022). Parental involvement in children's (0–6-year-olds) EFL learning: Outlining practical proposals for improvement as part of student teachers' training. *Porta Linguarum: Revista Internacional de Didáctica de las Lenguas Extranjeras*, (5).
<https://doi.org/10.30827/portalin.vi.26179>
- Creswell, J. W. (2002). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Sage.
- Dailey-Hebert, A. (2018). Maximizing interactivity in online learning: Moving beyond discussion boards. *The Journal of Educators Online*, 15(3).
https://www.thejeo.com/archive/2018_15_3/hebert_interactivity
- Dao, P., Bui, T. L. D., Nguyen, D. T. T., & Nguyen, M. X. N. C. (2023). Synchronous online English language teaching for young learners: insights from public primary school

- teachers in an EFL context. *Computer Assisted Language Learning*, 37(8), 2359–2388. <https://doi.org/10.1080/09588221.2023.2260429>
- Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 301–316). Sage.
- Gao, X. (2012). Parental strategies in supporting Chinese children's learning of English vocabulary. *Research Papers in Education*, 27(5), 581–595. <https://doi.org/10.1080/02671522.2011.602102>
- Ghajarieh, A., Mozaheb, M. A., Mohd Don, Z., & Mirkazemi, F. (2024). The socioeconomic status of parents and parental involvement in post-pandemic era: A longitudinal TEFL study in Iran. *Applications of Language Studies*, 2(1), 1–23. <https://doi.org/10.22034/jals.2024.713323>
- Gokturk, S., & Dinckal, S. (2018). Effective parental involvement in education: experiences and perceptions of Turkish teachers from private schools. *Teachers and Teaching*, 24(2), 183–201. <https://doi.org/10.1080/13540602.2017.1388777>
- Guo, D., Ramos, L. M. R., & Wang, F. (2014). Qualitative online interviews: Voices of applied linguistics researchers. *Research Methods in Applied Linguistics*, 3(3), 1–14. <https://doi.org/10.1016/j.rmal.2024.100130>
- Hakyemez, S. (2015). Turkish early childhood educators on parental involvement. *European Educational Research Journal*, 14(1), 100–112. <https://doi.org/10.1177/1474904114565152>
- Halommi, L., & Stevens, J. (2023). Quantifying the relationship between parental involvement and English language proficiency among EFL learners. *Research Studies in English Language Teaching and Learning*, 1(4), 192–203. <https://doi.org/10.62583/rseltl.v1i4.21>
- Händel, M., Stephan, M., Gläser-Zikuda, M., Kopp, B., Bedenlier, S., & Ziegler, A. (2020). Digital readiness and its effects on higher education students' socio-emotional perceptions in the context of the COVID-19 pandemic. *Journal of Research on Technology in Education*, 54(2), 267–280. <https://doi.org/10.1080/15391523.2020.1846147>
- Hasler-Waters, L., Menchaca, M. P., & Borup, J. (2014). Parental involvement in K–12 online and blended learning. In R. Ferdig & K. Kennedy (Eds.), *Handbook of research on K–12 online and blended learning* (pp. 303–323). ETC Press.
- Hawkins, A., Barbour, M. K., & Graham, C. R. (2011). Strictly business: Teacher perceptions of interaction in virtual schooling. *The Journal of Distance Education*, 25(2). <https://www.ijede.ca/index.php/jde/article/view/726/1241>

- Heafner, T., & Handler, L. K. (2018). Online, hybrid, blended, and technology-mediated learning in social studies. In K. Kennedy & R. E. Ferdig (Eds.), *Handbook of research on K–12 online and blended learning* (2nd ed., pp. 335–355). Carnegie Mellon University—ETC Press.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 97(2), 310–331. <https://doi.org/10.1177/016146819509700202>
- Hoover-Dempsey, K. V., & Sandler, H. M. (2005). *The social context of parental involvement: A path to enhanced achievement. Final performance report for the Office of Educational Research and Improvement* (Grant No. R305T010673). <http://www.vanderbilt.edu/pea-body/family-school/Reports.html>
- Hyland, K. (2008). Persuasion, interaction and the construction of knowledge: Representing self and others in research writing. *International Journal of English Studies*, 8(2), 1–23. <https://wrap.warwick.ac.uk/48543/>
- Johnson, D. W., & Johnson, R. T. (1989). *Cooperation and competition: Theory and research*. Interaction Book Company.
- Josselson, R. (2013). *Interviewing for qualitative inquiry: A relational approach*. Guilford Press.
- Kalaycı, G., & Öz, H. (2018). Parental involvement in English language education: Understanding the parents' perception. *International Online Journal of Education and Teaching (IOJET)*, 5(4), 832–847. <https://iojet.org/index.php/IOJET/article/view/447>
- Kalaycı, G., & Ergül, E. (2020). Teachers' perceptions of the role of parental involvement in teaching English to young learners. *Journal of Language and Linguistic Studies*, 16(3), 1167–1176. <https://doi.org/10.17263/jlls.803608>
- Kirschner, P. A., & Kreijns, K. (2005). Enhancing sociability of computer-supported collaborative learning environments. In R. Bromme, F. W. Hesse, & H. Spada (Eds.), *Barriers and biases in computer-mediated knowledge communication: And how they may be overcome* (pp. 169–191). Springer. https://doi.org/10.1007/0-387-24319-4_8
- Kolyvas, S. (2020). Innovative and collaborative learning in visual arts with the use of modern educational software. *Education Quarterly Reviews*, 3(2). <https://doi.org/10.ssrn.com/abstract=3612835>
- Lei, J., & Vibulphol, J. (2024). Teacher-parent collaboration for young EFL learners: A Thai teacher's experiences. *English Language Teaching*, 17(8), 39–51. <https://doi.org/10.5539/elt.v17n8p39>

- Mahmoud, S. S. (2018). Saudi parents' perceptions of the kind of help they offer to their primary school kids. *English Language Teaching*, 11(3), 102–112.
<https://doi.org/10.5539/elt.v11n3p102>
- McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of Research on Technology in Education*, 48(3), 194–211.
<https://doi.org/10.1080/15391523.2016.1175856>
- McNeal Jr., R. B. (2014). Parent involvement, academic achievement and the role of student attitudes and behaviors as mediators. *Universal Journal of Educational Research*, 2(8), 564–576. <https://eric.ed.gov/?id=EJ1053945>
- Mercer, N., Hennessy, S., & Warwick, P. (2019). Dialogue, thinking together and digital technology in the classroom: Some educational implications of a continuing line of inquiry. *International Journal of Educational Research*, 97, 187–199.
<https://doi.org/10.1016/j.ijer.2017.08.007>
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Meskill, C. (2024). *Digital screen mediation in education: Authentic and agentive technology practices for teaching and learning*. Routledge.
- Meskill, C., Sadykova, G., & Kayumova, A. (2020). Mediating digital screens with very young emerging bilinguals. *Bilingual Research Journal*, 43(2), 137–156.
<https://doi.org/10.1080/15235882.2020.1743383>
- Meskill, C., Guo, D., Wang, F., & Kusumastuti, W. (2024). How emergency remote online language teaching informed post-lockdown language teaching practices: The case of two Chinese EFL elementary teachers. In L. Oliveira and Y. Xu (Eds.), *Pedagogies for equitable access: Reimagining multilingual education for an uncertain world*. Information Age Publishers. <https://www.infoagepub.com/products/Pedagogies-for-Equitable-Access>
- Meskill, C., Kusumastuti, W., Guo, D., Wang, F., & Ramos, R. L. M. (2023). Emergency remote EFL instruction in Brazil, China, and Indonesia: What teachers learned and how. In D. Tafazoli & M. Picard (Eds.), *Handbook of CALL teacher education and professional development*. (pp. 137–155). Springer. https://doi.org/10.1007/978-981-99-0514-0_9
- Miles, M., Huberman, M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed). Sage.
- Ministry of Education of the People's Republic of China. (2020, April 6). *Notice on work arrangements for primary and secondary schools' "School is Out, but Class is On" (关于深入做好中小学“停课不停学”工作的通知)*.
http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/s5987/202003/t20200306_428342.html

- Mullen, C., Pettigrew, J., Cronin, A., Rylands, L., & Shearman, D. (2021). The rapid move to online mathematics support: Changes in pedagogy and social interaction. *International Journal of Mathematical Education in Science and Technology*, 53(1), 64–91. <https://doi.org/10.1080/0020739X.2021.1962555>
- Murshidi, G. A., Daoud, S., Derei, R. A., Alhamidi, H., Jabir, W., & Sayed, N. (2023). Parental involvement in English as foreign language learners' education: Challenges and solutions in a post-pandemic era. *International Journal of Educational Research Open*, 5. <https://doi.org/10.1016/j.ijedro.2023.100297>
- Niehaus, K., & Adelson, J. L. (2014). School support, parental involvement, and academic and social-emotional outcomes for English language learners. *American Educational Research Journal*, 51(4), 810–844. <https://www.jstor.org/stable/24546700>
- Offir, B., Lev, Y., Lev, Y., and Barth, I. (2001). Using interaction content analysis instruments to assess distance learning. *Computers in the Schools*, 18(2), 27–41. https://doi.org/10.1300/j025v18n02_03
- Palloff, R., & Pratt, K. (2001). *Lessons from the cyberspace classroom: The reality of online teaching*. Jossey-Bass.
- Patish, Y. (2016). *The development of novice teachers' culturally responsive classroom management practice* [Doctoral dissertation, University of Washington]. <https://www.proquest.com/dissertations-theses/development-novice-teachers-culturally-responsive/docview/1804413962/se-2?accountid=14166>
- Rafaeli, S. (1988). Interactivity: From new media to communication. In R. P. Hawkins, J. M. Wiemann, and S. Pingree (Eds.), *Advancing communication science: Merging mass and interpersonal process* (pp. 110–134). Sage.
- Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Sage.
- Ryan, A. B. (1995). *The family-school connection: Theory, research, and practice*. Sage.
- Salmons, J. (2014). *Qualitative online interviews: Strategies, design, and skills*. Sage.
- Sari, D. K., & Maningtyas, R. T. (2020, November). Parents' involvement in distance learning during the COVID-19 pandemic. In *Proceedings of 2nd Early Childhood and Primary Childhood Education (ECPE 2020)* (pp. 94–97). Atlantis Press. [10.2991/assehr.k.201112.018](https://doi.org/10.2991/assehr.k.201112.018)
- Stevens, M., & Borup, J. (2015). Parental engagement in online learning environments: A review of the literature. In M. F. Rice (Ed.), *Exploring pedagogies for diverse learners*

- online* (Vol. 25, pp. 99–119). Emerald Group Publishing Limited.
<https://doi.org/10.1108/S1479-368720150000027005>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research*. Sage.
- Tam, V. C., & Chan, R. M. (2010). Hong Kong parents' perceptions and experiences of involvement in homework: A family capital and resource management perspective. *Journal of Family and Economic Issues*, 31(3), 361–370.
<https://ideas.repec.org/a/kap/jfamec/v31y2010i3p361-370.html>
- Tao, J., & Xu, Y. (2022). Parental support for young learners' online learning of English in a Chinese primary school. *System*, 105. <https://doi.org/10.1016/j.system.2021.102718>
- Tong, F., Zhang, H., Zhen, F., Irby, B. J., & Lara-Alecio, R. (2021). Supporting home literacy practices in promoting Chinese parents' engagement in their children's English education in low-SES families: an experimental study. *International Journal of Educational Research*, 109. <https://doi.org/10.1016/j.ijer.2021.101816>
- Twiner, A., Coffin, C., Littleton, K., & Whitelock, D. (2010). Multimodality, orchestration and participation in the context of classroom use of the interactive whiteboard: a discussion. *Technology, Pedagogy and Education*, 19(2), 211–223.
<https://doi.org/10.1080/1475939X.2010.491232>
- Wagner, E. D. (1994). In support of a functional definition of interaction. *American Journal of Distance Education*, 8(2), 6–29.
- Wati, S. (2015). Parental involvement and English language teaching to young learners: Parents' experience in Aceh. In D. D. Rochsantiningsih (Ed.), *Trends and issue in teacher training and education in the 21st century. Proceedings of the International Conference on Teacher Training and Education (ICTTE)*, FKIP UNS 2015 (pp. 527–533). Universitas Sebelas Maret, Surakarta, Indonesia.
- Willis, L., & Exley, B. (2018). Using an online social media space to engage parents in student learning in the early years: Enablers and impediments. *Digital Education Review*, 33, 87–104. <https://doi.org/10.1344/der.2018.33.87-104>
- Yin, R. (2018). *Case study research and applications: Design and methods* (6th edition). Sage.
- Zhou, L., & Li, F. (2020). A review of the largest online teaching in China for elementary and middle school students during the COVID-19 pandemic. *Best Evidence of Chinese Education*, 5(1), 549–567. <http://doi.org/10.15354/bece.20.re040>.