

Integrating Practical Knowledge with Interactive Metacognition: Strengthening the Investigation of EFL Teachers' Pedagogical Reasoning through Lecturer Practicals

¹*Nurus Sholihah, ¹ Arizona Iskandar, ² Mohabbatan Sungkar

¹ Program of English Language Education, Faculty of Teacher Training and Education, Universitas
Sriwijaya Palembang. Jl. Sriwijaya Negara, Bukit Lama, Ilir Barat I, Palembang, Indonesia

² Department of English Language Education, Butwal Multiple Campus, Tribhuvan University, P.O. Box
8212, Kirtipur, Kathmandu, Nepal

*Corresponding Author Email: nurussholihah@unsri.ac.id

Received: July 2026, Revised: August 2026; Accepted: August 2026; Published: September 2026

Abstract

EFL teachers must continuously interpret classroom events, monitor student responses, evaluate instructional effectiveness, and adapt pedagogical decisions. This study investigated how EFL teachers' interactive metacognition was manifested during classroom and professional interactions and how their practical knowledge influenced the interpretation and application of research-informed practices. A qualitative multiple-participant design was employed with nine purposively selected EFL teachers. Data were collected through semi-structured interviews and classroom observations supported by interview guidelines and structured observation sheets. The instruments addressed teachers' interpretation of learner responses, instructional monitoring, pedagogical evaluation, real-time regulation, professional beliefs, previous experience, and institutional conditions. The data were analyzed through systematic thematic analysis involving familiarization, coding, categorization, theme development, within-participant analysis, and cross-participant comparison. The findings revealed that interactive metacognition operated as an overlapping cycle of interpreting classroom evidence, monitoring learner understanding and teacher performance, evaluating expected and actual outcomes, and regulating instruction. Teachers adjusted explanations, questions, grouping, task difficulty, preparation time, language choice, and feedback according to learners' responses. Professional dialogue also enabled them to reconsider assumptions and identify alternative strategies. Practical knowledge mediated teachers' use of research by filtering recommendations through prior experience, knowledge of students, pedagogical beliefs, professional identity, curriculum expectations, assessment demands, and resource availability. Teachers therefore transformed rather than directly applied research findings. The study concludes that integrating practical knowledge with interactive metacognition provides a context-sensitive framework for understanding EFL teachers' pedagogical reasoning. Teacher education and professional development should consequently promote collaborative reflection, classroom-based inquiry, and supported adaptation of research-informed practices.

Keywords: Interactive metacognition; Practical knowledge; Pedagogical reasoning; Research-informed practice

*Journal of Linguistic Metacognition and Language Learning is Licensed Under a CC BY-SA
Creative Commons Attribution-ShareAlike 4.0 International License.*



How to cite: Sholihah, N., Iskandar, A., & Sungkar, M. (2026). Integrating Practical Knowledge with Interactive Metacognition: Strengthening the Investigation of EFL Teachers' Pedagogical Reasoning through Lecturer Practicals, *Journal of Linguistic Metacognition and Language Learning*, 1(2), 130-150, Doi: <https://doi.org/10.66957/gv46we05>

INTRODUCTION

English as a Foreign Language (EFL) teaching is a cognitively and socially demanding professional activity in which teachers must continuously interpret classroom events, evaluate learners' responses, and adjust instruction in accordance with emerging needs. These processes become particularly complex in language classrooms because

students differ in linguistic proficiency, willingness to communicate, learning strategies, cultural backgrounds, and confidence in using the target language (Sato & Lam, 2021; Xu, 2023). Effective EFL instruction therefore depends not only on teachers' knowledge of language, pedagogy, and curriculum, but also on their capacity to monitor and regulate their own thinking while interacting with learners. This capacity can be understood through the concept of interactive metacognition, which refers to metacognitive processes that are activated, expressed, and reconstructed through social interaction.

In contrast to individual metacognition, which primarily concerns a person's awareness and control of personal cognitive activity, interactive metacognition foregrounds dialogic exchange, collaborative interpretation, feedback, and joint sense-making among teachers, learners, and professional colleagues (Kan et al., 2024; Kobayashi, 2020; Rajasagaran & Ismail, 2022). In classroom practice, it becomes visible when teachers identify learners' linguistic difficulties, interpret verbal and nonverbal responses, assess whether an instructional strategy is working, and modify explanations, tasks, interaction patterns, or feedback in real time.

Interactive metacognition is important because many instructional decisions occur rapidly and under conditions of uncertainty. Teachers frequently act before they have sufficient time to conduct systematic analysis, drawing instead on prior experience, beliefs, assumptions, and familiar routines. Such experiential knowledge can support effective teaching, but an overreliance on habitual responses may prevent teachers from examining whether their decisions remain appropriate for particular learners and classroom conditions. Limited opportunities for peer observation, reflective dialogue, lesson analysis, and professional feedback may reinforce this tendency, leaving teachers' reasoning largely implicit and unexamined (Al-husban, 2020; Falahi & Chowdhury, 2024; Xu, 2023). Conversely, reflective journals, collaborative discussions, metacognitive prompts, and feedback cycles can help teachers externalize their reasoning, reconsider the assumptions underlying their actions, and develop more responsive pedagogical judgments (Chen et al., 2023; Peter & Hashim, 2023; Salih & Omar, 2021; Xinke et al., 2024). Studies of strategy-based and explicit metacognitive instruction also indicate that making cognitive and metacognitive processes visible can strengthen learners' self-regulation, interactional competence, autonomy, and performance in reading, listening, speaking, and writing (Al-husban, 2020; Kan et al., 2024; Kobayashi, 2020; Mirzapour & Mohammed, 2023; Yacob & Mohamad, 2023). However, metacognitive awareness does not automatically produce improved learning because its effects are mediated by vocabulary knowledge, language proficiency, task demands, instructional quality, and classroom context (Tsang, 2021). Research must therefore move beyond determining whether metacognition is beneficial and examine how teachers interactively construct, regulate, and adapt it in authentic instructional situations.

This concern is closely related to the continuing gap between findings from EFL research and their application in schools and higher education institutions. Although research has produced extensive knowledge about communicative instruction, assessment, learner autonomy, technology integration, language-learning strategies, and metacognitive pedagogy, research-supported practices are not consistently implemented in classrooms. Teachers may have limited access to scholarly publications or experience difficulty interpreting specialized terminology and methodological claims. Even when findings are understood, recommendations developed in one context cannot necessarily be transferred directly to another. Curriculum requirements, class size, examination systems, student proficiency, technological infrastructure, available teaching time, institutional expectations, and teachers' administrative workload shape whether and how

research-informed strategies can be adopted (Al-Maamari, 2021; Choi & Chan, 2023; Dung & Ket, 2023; Ghafar & Sawalmeh, 2023; Ilahude et al., 2023; Mahdi, 2024). School teachers may prioritize syllabus coverage and examination preparation, whereas lecturers may need to balance instruction with research, publication, community engagement, and administrative responsibilities.

Teacher agency and institutional support are central to this process. Research findings become pedagogically useful when teachers can transform general principles into locally appropriate materials, tasks, assessment practices, and interactional strategies. Professional learning communities, action research, collaborative lesson analysis, and context-sensitive professional development can provide spaces in which teachers decode research, test instructional ideas, evaluate learner responses, and refine implementation (Al-Maamari, 2021; Aprianto, 2023; Choi & Chan, 2023; Reynolds et al., 2022; Waluyo et al., 2023). Technology likewise offers possibilities for interaction, feedback, and learner reflection, but it does not independently ensure pedagogical improvement. Its effectiveness depends on teachers' technological-pedagogical knowledge, infrastructure, equitable access, task design, and alignment with learning objectives (Bai et al., 2021; Ghafar & Sawalmeh, 2023; Ilahude et al., 2023; Schenck, 2024; Talpur et al., 2021). These conditions suggest that research utilization is itself a metacognitive and interpretive activity. Teachers must judge the relevance of evidence, compare it with their experience, anticipate possible difficulties, monitor implementation, and revise practice in response to classroom interaction.

A productive framework for examining this process can be obtained from studies of EFL lecturers' practical knowledge. Practical knowledge refers to the personally constructed, experience-based, and context-sensitive understanding that educators develop through teaching, reflection, interaction, and participation in institutional life. It includes beliefs about language and learning, knowledge of students, memories of previous classroom events, pedagogical routines, professional identity, and perceptions of organizational expectations (Khulel, 2021; Teng & Zhang, 2021; Üstünbaş & Alagözlü, 2021; Wang et al., 2024). Unlike formal theoretical knowledge, practical knowledge is situated in particular classrooms and becomes meaningful through action. It helps explain why teachers who have access to similar theories, curricula, or professional-development programs may make different pedagogical decisions. These differences may arise because teachers interpret evidence through distinct professional histories, institutional roles, perceptions of students, and conceptions of effective language teaching.

Practical knowledge and interactive metacognition are conceptually connected but should not be treated as identical. Practical knowledge represents the experiential and contextual resources upon which teachers draw, whereas interactive metacognition concerns how teachers become aware of, monitor, evaluate, communicate, and revise those resources during interaction. When teachers explain why they changed a task, interpret a learner's silence, reconsider an unsuccessful question, negotiate an instructional decision with colleagues, or modify feedback after observing students' reactions, they reveal how practical knowledge is metacognitively regulated. This relationship can be investigated through classroom observation, stimulated-recall interviews, reflective journals, collaborative discussions, and critical-incident analysis (Butt et al., 2020; Haerazi, 2023; Nourazar et al., 2022; Radwan, 2022; Üstünbaş & Alagözlü, 2021). Observations document instructional actions and interactional adjustments, while stimulated recall and reflection provide access to the reasoning, assumptions, and contextual judgments that may not be observable directly. The

triangulation of these sources can reveal how teachers' beliefs, identities, research knowledge, and institutional constraints interact during pedagogical decision-making.

Despite growing scholarship on teacher cognition, metacognitive strategy instruction, reflective practice, and lecturers' practical knowledge, limited attention has been given to interactive metacognition as a socially situated mechanism through which EFL teachers transform knowledge into instructional action. Previous studies have often examined teachers' beliefs, individual reflection, instructional strategies, or practical knowledge separately. Consequently, insufficient evidence is available regarding how EFL teachers monitor their reasoning through interaction, how practical knowledge shapes that monitoring, and how research findings are negotiated within real institutional constraints. The novelty of the present study lies in integrating interactive metacognition with insights from EFL lecturers' practical knowledge to examine not only what teachers know, but also how they articulate, evaluate, negotiate, and transform that knowledge during classroom and professional interactions. This integrated perspective connects the micro-level dynamics of teacher–student interaction with the broader research–practice gap and provides a context-sensitive account of pedagogical decision-making.

Accordingly, this study aims to investigate the forms and processes of EFL teachers' interactive metacognition and to explain how their practical knowledge shapes the interpretation and application of research-informed teaching practices. It also seeks to identify the contextual conditions that enable or constrain teachers' metacognitive regulation of instruction. To attain these objectives, the study addresses the following research questions:

How is EFL teachers' interactive metacognition manifested through their interpretation, monitoring, evaluation, and regulation of pedagogical decisions during classroom and professional interactions?

How does EFL teachers' practical knowledge influence the ways they interpret, adapt, and apply research-informed practices within their institutional contexts?

RESEARCH METHOD

Research Design

This study employed a qualitative research design to investigate EFL teachers' interactive metacognition and the role of practical knowledge in their classroom decision-making. A qualitative approach was selected because the study sought to understand teachers' interpretations, reflections, judgments, and instructional responses as they occurred within authentic educational settings. Interactive metacognition involves internal cognitive processes that become visible through teachers' communication, classroom actions, explanations, and reflections. These processes cannot be adequately examined through numerical measurement alone because they are closely connected to teachers' experiences, beliefs, professional identities, relationships with learners, and institutional contexts.

The design was particularly suitable for addressing the first research question, which examined how EFL teachers' interactive metacognition was manifested through the interpretation, monitoring, evaluation, and regulation of pedagogical decisions. These processes required detailed descriptions of classroom episodes, teacher–student exchanges, instructional adjustments, and teachers' reflections on their own practices. The design also supported the second research question concerning how practical knowledge influenced teachers' interpretation, adaptation, and application of research-informed practices. Through interviews and observations, the researchers could explore how prior teaching experiences, knowledge of students, beliefs about language learning,

professional identities, and institutional expectations shaped teachers' instructional decisions.

The study was conducted as a multiple-participant qualitative inquiry in which each teacher represented a source of situated professional experience. Although the participants worked within EFL educational contexts, their experiences were expected to vary according to teaching level, educational background, years of service, learner characteristics, and institutional conditions. Examining these similarities and differences enabled the researchers to identify recurring patterns without disregarding the contextual nature of each participant's experience. The design therefore supported an in-depth, context-sensitive investigation rather than an attempt to generalize statistically to all EFL teachers.

Participants

The participants were nine EFL teachers selected through purposive sampling. Purposive sampling was used because the study required participants who had direct experience teaching English as a foreign language and who could provide detailed information about classroom interaction, pedagogical decision-making, reflective practice, and the application of professional knowledge. The sample size of nine participants was considered appropriate for an in-depth qualitative study because it allowed the researchers to examine each teacher's experience carefully while also comparing patterns across participants.

Variation among participants was intentionally considered to obtain a broader understanding of interactive metacognition across EFL teaching contexts. Relevant demographic and professional information included age range, gender, highest academic qualification, field of study, years of teaching experience, institutional level, employment status, classes taught, and participation in professional-development activities. Information was also collected regarding the participants' previous experience with reflective teaching, classroom research, teacher collaboration, strategy-based instruction, and research-informed pedagogical practices. These characteristics were not used to rank participants but to support the interpretation of differences in their practical knowledge and metacognitive decision-making.

The final participant group consisted of teachers with varied professional backgrounds and levels of experience. Such variation made it possible to examine whether interactive metacognition was expressed differently by less-experienced and more-experienced teachers or by teachers working in different institutional environments. However, the study did not assume that years of experience automatically indicated stronger metacognitive ability. Instead, professional experience was examined as one factor that might influence how teachers interpreted classroom events, drew on prior knowledge, and revised instructional practices.

Participants were initially identified through professional networks and communication with relevant educational institutions. Eligible teachers received information describing the purpose of the study, the forms of participation required, the expected use of the data, and their right to withdraw without penalty. Participation was voluntary, and pseudonyms or participant codes were assigned to protect identities. Information that could reveal the names of participants, students, or institutions was removed or generalized during transcription and reporting. The researchers also ensured that classroom observations focused on teachers' professional practices rather than evaluating or judging their teaching performance.

Instruments

Two principal research instruments were used: semi-structured interview guidelines and classroom observation sheets. The instruments were designed to generate complementary data about teachers' interactive metacognition and practical knowledge. The observation sheets documented teachers' actions and interactions in actual classroom settings, while the interview guidelines elicited teachers' explanations, reflections, and interpretations of those actions. Using both instruments enabled methodological triangulation and reduced dependence on a single form of evidence.

The semi-structured interview guidelines were developed from the research objectives, research questions, and conceptual dimensions of interactive metacognition and practical knowledge. The questions were organized around several areas: teachers' awareness of students' learning needs, interpretation of verbal and nonverbal responses, monitoring of instructional effectiveness, evaluation of pedagogical decisions, adjustment of teaching strategies, reflection on classroom incidents, use of research findings, and the influence of prior experience and institutional conditions.

The interview guidelines also explored dimensions of practical knowledge, including beliefs about English language learning, knowledge of students, previous classroom experiences, professional identity, curriculum expectations, assessment requirements, workload, access to research, and participation in professional development. Participants were asked to describe specific classroom incidents rather than provide only general opinions. For example, they were invited to explain a situation in which students did not respond as expected, how they interpreted the situation, what instructional change they made, and why they considered that response appropriate. Follow-up prompts were included to obtain clarification and deeper explanation.

The classroom observation sheets were developed to record observable indicators of interactive metacognition during teaching. The sheets included categories related to instructional planning as reflected in classroom action, interpretation of learner responses, monitoring of student comprehension and participation, evaluation of instructional effectiveness, real-time pedagogical adjustment, management of interaction, use of feedback, and reflection communicated during instruction. Space was also provided for descriptive field notes, direct classroom expressions, contextual information, and critical incidents that could not be fully represented by predetermined categories.

The observation instrument focused particularly on episodes in which teachers changed an explanation, modified a task, adjusted the pace of instruction, reorganized student participation, responded to learner confusion, altered questioning strategies, or reconsidered an instructional decision. The observer also documented the classroom conditions surrounding each episode, including students' responses, task characteristics, time constraints, and patterns of teacher–student communication. The observation sheet was not used as a performance checklist or scoring rubric. Instead, it functioned as a structured guide for producing detailed qualitative records.

Data Analysis

The data were analyzed qualitatively through a systematic thematic analysis. Data analysis began during data collection rather than after all observations and interviews had been completed. This concurrent process allowed the researchers to identify emerging issues, refine follow-up questions, and examine significant classroom incidents in subsequent interviews. The primary dataset consisted of interview transcripts, classroom observation records, descriptive field notes, and reflective comments associated with observed teaching episodes.

The first stage involved data preparation and familiarization. Audio-recorded interviews were transcribed verbatim, while observation notes were expanded shortly

after each classroom session to preserve contextual details. The researchers repeatedly read the transcripts and field notes to develop an overall understanding of each participant's experience. During this stage, preliminary notes were written concerning recurring instructional problems, teacher reasoning, student responses, contextual constraints, and examples of pedagogical adjustment. The researchers also compared interview accounts with observed actions to identify areas of convergence or discrepancy.

The second stage involved initial coding. Relevant units of meaning were identified and assigned concise codes that represented teachers' cognitive, metacognitive, interactional, and practical processes. Examples of potential codes included interpreting learner silence, checking comprehension, monitoring participation, recognizing ineffective explanation, modifying task difficulty, drawing on previous experience, adapting research recommendations, responding to curriculum pressure, negotiating institutional expectations, and reflecting with colleagues. Coding remained sufficiently open to accommodate issues emerging from the data rather than forcing all information into predetermined categories.

In the third stage, related codes were compared and grouped into broader categories. Codes concerning the interpretation of verbal responses, nonverbal behavior, learner errors, silence, and participation were combined under categories associated with teachers' interpretation of classroom evidence. Codes related to checking comprehension, observing task progress, and evaluating student engagement were grouped as monitoring practices. Changes to explanations, tasks, interaction patterns, pacing, or feedback were examined as forms of pedagogical regulation. Other categories represented the sources of teachers' practical knowledge and the contextual conditions that supported or constrained the application of research-informed practices.

Data triangulation was used to strengthen the credibility of the findings. Teachers' interview statements were compared with observation records to determine whether reported practices were reflected in classroom interaction. Apparent inconsistencies were treated as analytically meaningful rather than as errors. For instance, a teacher might report using a learner-centered approach but display limited instructional adjustment during observation. Such differences were examined in relation to time pressure, classroom conditions, implicit beliefs, or institutional constraints. Several procedures were used to enhance trustworthiness. Member checking was conducted by providing participants with summaries of key interpretations or selected interview accounts and inviting clarification. Peer debriefing was used to discuss coding decisions, emerging categories, and alternative interpretations. An audit trail documented data-collection procedures, coding decisions, theme development, and revisions to the analytical framework.

FINDINGS AND DISCUSSION

Research Findings

The qualitative analysis of classroom observations and semi-structured interviews with nine EFL teachers produced two major groups of findings. The first group explains how interactive metacognition was manifested through teachers' interpretation, monitoring, evaluation, and regulation of pedagogical decisions. The second group illustrates how teachers' practical knowledge influenced their interpretation, adaptation, and application of research-informed practices within their institutional contexts. Participant identities are represented by the codes T1 to T9 to maintain confidentiality.

How is EFL teachers' interactive metacognition manifested through their interpretation, monitoring, evaluation, and regulation of pedagogical decisions during classroom and professional interactions?

The findings showed that EFL teachers' interactive metacognition was manifested as a cyclical and socially mediated process. Teachers first interpreted evidence from classroom interaction, monitored students' responses and their own instructional actions, evaluated the appropriateness of those actions, and subsequently regulated instruction. These processes rarely occurred as separate stages. Instead, they overlapped and developed continuously as teachers responded to learners, discussed classroom problems with colleagues, and reflected on completed lessons.

Table 1. Manifestations of EFL Teachers' Interactive Metacognition

Analytical question	Responses or findings
How did teachers interpret students' verbal and nonverbal responses?	Teachers interpreted silence, hesitation, facial expressions, incomplete answers, code-switching, and participation patterns as indicators of comprehension, confusion, anxiety, or insufficient task preparation.
How did teachers monitor students' learning during instruction?	Teachers used comprehension-checking questions, circulated during group work, examined written responses, listened to peer discussions, and compared students' performance with lesson objectives.
How did teachers monitor their own instructional effectiveness?	Teachers observed whether explanations generated meaningful responses, whether task instructions were understood, and whether the pacing, language level, and interaction pattern supported participation.
How did teachers evaluate pedagogical decisions?	Teachers evaluated decisions by comparing intended and actual outcomes, reviewing student errors, reflecting after lessons, and discussing difficult teaching episodes with colleagues.
How did teachers regulate instruction in response to classroom evidence?	They simplified explanations, provided additional examples, changed questioning techniques, adjusted task difficulty, extended preparation time, used the first language strategically, and reorganized individual tasks into pair or group work.
How did professional interaction contribute to interactive metacognition?	Peer discussion, informal consultation, collaborative planning, and sharing teaching experiences helped teachers reconsider assumptions and identify alternative instructional responses.

Interpretation of Learners' Verbal and Nonverbal Responses

The teachers' interactive metacognition began with their interpretation of classroom evidence. Observation data indicated that teachers did not rely only on correct or incorrect verbal answers. They also attended to hesitation, eye contact, facial expressions, silence, delayed responses, dependence on classmates, and the language students used when completing a task. These signals helped teachers form immediate judgments about whether students understood the material, lacked confidence, or experienced linguistic difficulty.

However, the interpretation of silence was not uniform. Some teachers viewed silence as evidence of confusion, while others interpreted it as anxiety, fear of making mistakes, or a need for additional thinking time. T3, for example, explained that prolonged silence did not necessarily indicate that students lacked knowledge: *"When they are silent, I do not directly conclude that they do not understand. Sometimes they know the answer, but they are afraid that their grammar is wrong. I usually give them time to discuss with a partner before asking again."*

This excerpt demonstrates that the teacher interpreted student silence in relation to previous knowledge of the learners. Instead of repeating the same question or supplying the answer, T3 regulated the interaction by introducing peer discussion. Classroom observation supported this account because the teacher shifted from whole-class questioning to pair work when several students avoided eye contact and did not

volunteer answers. Teachers also interpreted recurrent errors as evidence that students had not fully understood the underlying concept. For example, when students repeatedly used incorrect past-tense forms, the teachers did not always regard the errors as isolated grammatical failures. They examined whether the explanation, examples, or task demands had contributed to the difficulty. This interpretation transformed student error into feedback about both learning and teaching.

Monitoring Student Understanding and Classroom Participation

Interactive metacognition was also manifested through continuous monitoring. Teachers monitored learning by asking follow-up questions, inviting students to paraphrase instructions, checking written work, observing group discussions, and asking learners to provide examples. Rather than relying exclusively on direct questions such as “Do you understand?”, several participants preferred questions that required students to demonstrate comprehension. T6 described this strategy as follows: *“If I ask, ‘Do you understand?’, most students say yes, even when they are still confused. I ask one student to explain the instruction again or give a new example. From the answer, I can decide whether I should continue or explain it differently.”*

The excerpt shows that monitoring was not limited to collecting information about learners. It directly informed the teacher’s next pedagogical action. Observation of T6’s class revealed that the teacher asked students to restate task procedures before beginning group work. When one student omitted an important step, the teacher clarified the instruction and demonstrated the expected response. Teachers also monitored participation patterns. They noticed when discussion was dominated by more proficient learners or when quieter students relied excessively on their peers. In response, teachers assigned roles, nominated students strategically, provided preparation time, or used small-group interaction. These practices suggest that monitoring involved both cognitive and social dimensions. Teachers assessed not only whether students understood the lesson but also whether classroom interaction provided equitable opportunities for language use.

Monitoring Teachers’ Own Instructional Actions

The findings further revealed that teachers monitored their own performance while teaching. They considered the clarity of explanations, complexity of vocabulary, suitability of examples, pace of instruction, and effectiveness of questioning. This self-monitoring was often triggered by students’ reactions. When an explanation produced limited responses, the teachers reconsidered whether the difficulty originated in the students or in the way the content had been presented.

T1 reflected on this process: *“At first, I thought they had forgotten the previous topic. But when the second class had the same problem, I realized that my example was too abstract. I changed it into an example from their daily activities, and they responded more quickly.”*

This statement illustrates how interactive metacognition connected classroom evidence with self-evaluation. T1 initially attributed the problem to learners’ prior knowledge but revised that judgment after observing a repeated pattern. The teacher then changed the example, demonstrating regulation based on the monitoring and evaluation of instructional effectiveness. The data also showed that experienced teachers tended to make these adjustments more fluently, although experience alone did not guarantee systematic reflection. Some experienced participants relied heavily on intuition but had difficulty explaining the reasoning behind their actions. Less-experienced teachers, by contrast, sometimes followed lesson plans rigidly even when student responses suggested that modification was necessary. Nevertheless, participants who regularly engaged in

reflective practice were generally more capable of articulating how and why they changed instruction.

Evaluation of Pedagogical Decisions

Evaluation took place both during and after lessons. During instruction, teachers assessed whether a strategy produced the expected student response. After instruction, they reviewed learner work, recalled critical classroom episodes, and considered whether the lesson objectives had been achieved. Evaluation was particularly evident when teachers compared the intended outcome of a task with its actual implementation. For example, several teachers reported that communicative activities did not always generate meaningful English use. Students sometimes completed tasks quickly, shifted to their first language, or focused on producing correct written answers rather than communicating. Teachers consequently evaluated whether the task structure, language support, grouping arrangement, and time allocation had been appropriate.

Post-lesson evaluation was stronger among teachers who maintained written notes or discussed instruction with colleagues. These teachers could identify specific decisions that required revision. Other participants conducted reflection informally, often while preparing subsequent lessons. Although such reflection remained useful, it was less systematic and occasionally focused more on classroom completion than on the quality of student learning.

Regulation of Pedagogical Decisions

Regulation was the most visible manifestation of interactive metacognition. Teachers regulated instruction by changing explanations, examples, questions, grouping patterns, task demands, pacing, and language choice. These modifications were usually responses to evidence gathered through interpretation and monitoring.

One commonly observed adjustment was the strategic use of the students' first language. Although several teachers initially intended to maximize English use, they shifted briefly to the first language when essential instructions or difficult concepts remained unclear. This was not described as abandoning communicative teaching but as providing temporary support before returning to English. T8 explained: "*I prefer to use English, but when the instruction becomes the main obstacle, I clarify the key point in Indonesian. After that, I return to English. The purpose is not to translate everything but to keep the students involved in the task.*"

The excerpt demonstrates that regulation involved balancing theoretical principles with immediate classroom needs. T8 did not apply an English-only principle rigidly. Instead, the teacher evaluated whether language choice supported or obstructed participation and made a context-sensitive adjustment. Teachers also regulated instruction by reducing task complexity, adding models, providing sentence starters, and extending planning time. In mixed-proficiency classes, some teachers prepared different levels of support while maintaining a common learning objective. These practices indicated that interactive metacognition enabled teachers to move beyond fixed lesson plans and respond to the developing classroom situation.

Interactive Metacognition Through Professional Interaction

Interactive metacognition was not confined to teacher-student exchanges. It was also evident in conversations with colleagues. Participants reported discussing difficult students, unsuccessful activities, assessment problems, and teaching materials in informal meetings or messaging groups. Through these interactions, they compared interpretations and identified alternative strategies.

For example, a teacher who initially interpreted low participation as a motivation problem reconsidered this assumption after a colleague suggested that the task required

vocabulary students had not yet mastered. Such professional dialogue expanded the teacher's understanding of the problem and influenced the redesign of the activity. Nevertheless, the extent of collegial reflection varied. Some institutions had active professional communities, whereas others provided few structured opportunities for collaborative lesson analysis.

In addition, the first research question revealed that interactive metacognition operated as a recurring cycle of interpreting classroom evidence, monitoring learners and instruction, evaluating pedagogical effectiveness, and regulating subsequent action. The process was strengthened when teachers verbalized their reasoning, collected evidence of student understanding, and discussed teaching experiences with colleagues. It was constrained when teachers relied on unexamined routines, assumed that silence indicated understanding or inability, or followed lesson plans without responding to classroom evidence.

How does EFL teachers' practical knowledge influence the ways they interpret, adapt, and apply research-informed practices within their institutional contexts?

The findings indicated that teachers did not apply research findings as fixed pedagogical prescriptions. Instead, they filtered research-informed practices through practical knowledge developed from teaching experience, familiarity with students, beliefs about language learning, professional identity, and awareness of institutional expectations. Practical knowledge functioned as an interpretive framework that helped teachers determine which practices were relevant, feasible, and appropriate for their classrooms.

Table 2. Influence of Practical Knowledge on Research-Informed Practice

Analytical question	Responses or findings
How did prior teaching experience influence the interpretation of research findings?	Teachers compared recommendations with previous successes and failures, accepting practices that appeared compatible with accumulated classroom experience and modifying those perceived as unrealistic.
How did knowledge of students affect pedagogical adaptation?	Teachers adjusted research-informed strategies according to proficiency, confidence, learning habits, cultural expectations, motivation, and access to learning resources.
How did teachers' beliefs influence research use?	Beliefs about grammar, communication, error correction, teacher authority, and first-language use shaped which findings teachers considered credible or appropriate.
How did institutional conditions affect implementation?	Curriculum targets, examinations, class size, workload, time, technology, administrative requirements, and available materials constrained or enabled implementation.
How did teachers transform research into classroom practices?	Teachers simplified procedures, combined new strategies with familiar routines, redesigned materials, piloted practices gradually, and evaluated them through student responses.
What supported sustained application of research-informed practices?	Professional development, collegial discussion, leadership support, access to practical examples, reflective evaluation, and evidence of positive student response encouraged continued use.

Prior Experience as a Filter for Research Knowledge

Teachers interpreted research findings through their previous classroom experiences. They frequently evaluated a new method by comparing it with situations they had encountered in the past. When research recommendations appeared compatible with successful experience, teachers were more willing to adopt them. When recommendations conflicted with established routines or previous difficulties, teachers

were cautious and often implemented only selected elements. T2 described this process in relation to project-based learning: *"I read that project work can improve communication, but a full project takes too much time in my classes. From my previous experience, students also need clear stages. I use a smaller project with weekly targets instead of following the model exactly."*

This excerpt shows that practical knowledge did not necessarily lead to rejection of research. Instead, it enabled contextual adaptation. T2 retained the communicative and collaborative principles of project-based learning but reduced its scope and introduced structured stages. The adaptation reflected knowledge of the curriculum, available time, and students' need for guidance. Teachers also relied on memories of unsuccessful lessons. When a research-supported strategy resembled a previously unsuccessful activity, they examined why it had failed before deciding whether to use it again. Some recognized that the earlier problem resulted not from the strategy itself but from inadequate preparation, unsuitable materials, or limited student language support. In such cases, practical knowledge helped teachers redesign rather than dismiss the strategy.

Knowledge of Students and Contextual Adaptation

Knowledge of students was one of the most influential dimensions of practical knowledge. Teachers considered students' proficiency, confidence, motivation, prior learning, digital access, and willingness to communicate before implementing research-informed practices. A strategy recommended for autonomous learners, for example, was often adapted for students who required greater structure and modelling.

T5 explained why a metacognitive learning strategy was introduced gradually: T5: *"The article suggested that students plan and evaluate their own learning. My students were not familiar with this. If I directly gave them a reflection form, they wrote only one or two words. I first showed them examples and discussed the questions orally."* The excerpt demonstrates that T5 accepted the value of learner reflection but recognized that students lacked experience in articulating metacognitive thinking. The teacher therefore provided modelling and oral scaffolding before expecting independent written reflection. This modification illustrates how practical knowledge mediated the transition from a general research recommendation to an accessible classroom procedure.

Observation data similarly showed that teachers modified communicative activities for learners with limited proficiency. Instead of requiring spontaneous extended speaking, they provided vocabulary lists, sentence frames, rehearsal time, or peer support. The instructional objective remained communicative, but the route toward it was adjusted to learners' current capabilities. Teachers' sociocultural knowledge also affected implementation. Several participants noted that students were reluctant to challenge teachers, critique peers, or speak publicly because such actions could be perceived as embarrassing or disrespectful. Consequently, peer assessment and discussion procedures were adapted to protect students' confidence. Anonymous responses, small-group discussion, and written peer feedback were used before whole-class evaluation.

Teachers' Beliefs and Professional Identity

Teachers' beliefs about language learning influenced how they interpreted research. Participants who viewed language learning primarily as communication were more receptive to interaction-based and task-oriented strategies. Those who emphasized grammatical accuracy tended to incorporate communicative activities only after explicit language instruction. Similarly, beliefs about teacher authority influenced the degree of learner autonomy permitted in the classroom. T7 stated: *"I agree that students should be active, but they still expect the teacher to explain the rule clearly. I usually give a short explanation first and then use the communicative activity. For me, student-centered learning does not mean that the teacher gives no direction."*

The statement indicates that the teacher reconstructed learner-centered instruction rather than applying a polarized distinction between teacher explanation and student activity. T7 combined explicit teaching with communicative practice because this sequence aligned with personal beliefs and perceived learner expectations.

Professional identity also influenced research use. Teachers who perceived themselves as continuous learners were more likely to seek articles, attend training, experiment with strategies, and evaluate their effectiveness. Others viewed research as primarily the responsibility of university academics and regarded classroom experience as more relevant than formal studies. This distinction affected whether research knowledge was actively sought or encountered only through compulsory professional development.

Institutional Constraints and Enabling Conditions

The application of research-informed practices was strongly shaped by institutional conditions. Participants identified class size, limited lesson time, curriculum coverage, examination pressure, administrative workload, and inadequate technology as common constraints. A strategy considered effective in research could become difficult to implement when one teacher was responsible for a large class or when assessment focused mainly on discrete grammatical knowledge.

T9 described the tension between communicative instruction and examination preparation: **T9:** *"I want to use more speaking activities, but the final test mainly measures reading and grammar. If I spend too much time on speaking, I worry that the students will not be prepared for the examination. I try to integrate speaking into the grammar lesson, but the assessment system still influences my priority."*

This excerpt illustrates that pedagogical decisions were negotiated within an institutional accountability system. T9 did not reject speaking instruction but incorporated it into examinable content. The finding suggests that the research–practice gap cannot be explained only through teachers' competence or motivation. Institutional assessment structures determine what teachers perceive as pedagogically possible and professionally responsible.

Technology-related practices were similarly context dependent. Some teachers used online quizzes, learning-management systems, and digital discussion tools because their institutions provided internet access and technical support. Others relied on printed materials or students' personal messaging applications because computer facilities were limited. Teachers therefore adapted technology-enhanced recommendations according to available infrastructure and learners' access to devices. Institutional leadership could also enable research use. Participants working in institutions that encouraged experimentation, collaborative planning, and professional development reported greater confidence in trying new approaches. By contrast, teachers who faced rigid lesson formats or strong pressure to complete prescribed materials were more cautious about modifying instruction.

Transformation Rather Than Direct Application

A central finding was that teachers transformed research knowledge rather than applying it directly. This transformation involved selecting relevant components, simplifying procedures, combining research-based strategies with existing routines, redesigning materials, and piloting innovations on a limited scale. For example, teachers adapted flipped learning by assigning short videos or reading materials rather than complete online modules. They modified peer assessment by supplying criteria and model responses. They converted extended project-based learning into smaller classroom

projects and adjusted autonomous learning tasks by adding teacher monitoring. These adaptations allowed research-informed principles to operate within institutional realities.

The teachers usually evaluated new practices through student responses rather than through formal classroom research. They observed participation, completion, comprehension, and assessment performance and then decided whether to continue or revise the strategy. Although this evaluation demonstrated practical judgment, it was sometimes unsystematic. Few participants maintained detailed records or compared student outcomes across different instructional approaches.

Professional Interaction and Sustained Research Use

Professional interaction supported the conversion of research into practice. Teachers were more likely to apply new ideas when professional-development activities included demonstrations, sample lesson plans, classroom materials, and opportunities to discuss contextual adaptation. Abstract presentations of theoretical principles were considered less useful. Collegial discussion also enabled teachers to evaluate whether an innovation was realistic. Participants shared teaching materials, discussed student responses, and recommended adjustments. Such dialogue strengthened interactive metacognition because teachers articulated the reasoning behind their choices and considered alternative interpretations.

Sustained application occurred when teachers observed positive student responses, received institutional support, and could integrate the innovation into existing responsibilities. Practices were less likely to continue when they required extensive preparation, conflicted with assessment policies, or were introduced without follow-up support. Overall, the second research question showed that practical knowledge functioned as a mediator between research and classroom practice. Teachers interpreted research through prior experience, adapted it according to their knowledge of students, evaluated it through pedagogical beliefs, and implemented it within institutional possibilities. This process was not simple resistance to evidence. It represented context-sensitive professional reasoning through which teachers attempted to preserve the pedagogical value of research while making it workable for their learners.

Discussion

The findings demonstrate that EFL teachers' interactive metacognition operates as a cyclical, socially mediated process involving the interpretation of classroom evidence, monitoring of learners and instruction, evaluation of pedagogical effectiveness, and regulation of subsequent actions. Rather than functioning as isolated cognitive stages, these processes overlapped during classroom interaction and professional dialogue. Teachers interpreted silence, hesitation, facial expressions, incomplete responses, errors, code-switching, and participation patterns as evidence of students' comprehension, anxiety, confidence, or need for additional support. They then monitored whether their explanations, questions, pacing, and interaction patterns produced the intended learning responses before modifying instruction. This pattern supports Xu's (2023) view that metacognition in language teaching involves teachers' active awareness and regulation of pedagogical thinking. It also extends research that has focused primarily on individual metacognitive awareness by showing that teachers' reasoning is continuously reconstructed through interaction with learners and colleagues.

The teachers' attention to students' verbal and nonverbal responses confirms that metacognitive regulation is closely connected to classroom discourse. Sato and Lam (2021) found that metacognitive instruction can support learners' willingness to communicate and awareness of oral communication strategies. The present findings complement their work by demonstrating that teachers also depend on interactional

signals to regulate their own instructional decisions. For example, teachers did not always interpret silence as a lack of knowledge. Some associated it with fear of grammatical error, insufficient thinking time, or low confidence and consequently introduced peer discussion, preparation time, or additional language support. This finding is important because it challenges a simplistic interpretation of learner silence. It suggests that effective interactive metacognition requires teachers to consider multiple explanations before deciding how to respond. Such interpretive flexibility may be especially important in EFL classrooms where willingness to communicate is influenced by language proficiency, affective factors, and classroom relationships (Sato & Csizér, 2021).

The teachers' monitoring practices also confirmed previous research emphasizing the value of explicit metacognitive engagement. Rather than merely asking students whether they understood, several teachers requested that learners restate instructions, provide examples, or demonstrate task procedures. These practices made comprehension observable and allowed teachers to decide whether they should continue, clarify, or redesign an activity. Similar benefits of explicit metacognitive instruction have been reported in listening, oral communication, reading, and writing contexts (Al-Husban, 2020; Kan et al., 2024; Kobayashi, 2020; Nourazar et al., 2022). However, whereas those studies largely examine structured metacognitive strategies provided to learners, the present study extends the literature by emphasizing teachers' real-time monitoring of their own instructional effectiveness. Teachers used student responses not only to assess learning but also to question the adequacy of their explanations, examples, and task design.

Another significant finding concerned teachers' self-evaluation. Teachers reconsidered their initial judgments when similar learning difficulties occurred across classes or when students' responses contradicted their expectations. For instance, one teacher initially attributed students' difficulties to forgotten prior knowledge but later recognized that the examples used were too abstract. This revision illustrates how interactive metacognition can challenge teacher-centered explanations of classroom problems. It supports Tuncer and Özkan's (2021) argument that reflective tools help teachers examine the assumptions underlying their practices. It also aligns with research showing that teacher cognition, beliefs, and efficacy influence how instructional decisions are interpreted and revised (Üstünbaş & Alagözlü, 2021). Nevertheless, the findings indicate that experience alone did not guarantee systematic reflection. Some experienced teachers adjusted instruction intuitively but found it difficult to articulate their reasoning, whereas some less-experienced teachers followed lesson plans rigidly.

Pedagogical regulation was the most visible manifestation of interactive metacognition. Teachers simplified explanations, changed examples, adjusted task difficulty, reorganized grouping, extended preparation time, provided sentence frames, and used the students' first language strategically. The strategic use of Indonesian was especially notable because it reflected a negotiated rather than rigid application of language-teaching principles. Saputra (2020) similarly reported that translation may serve pedagogical purposes when used appropriately in English language teaching. The present study confirms that brief first-language support can function as metacognitive regulation when teachers determine that English-only instructions are obstructing rather than facilitating participation. This does not contradict communicative teaching; instead, it demonstrates how teachers balance theoretical commitments with immediate learner needs.

Professional interaction further strengthened teachers' metacognitive regulation. Collegial discussions allowed participants to compare interpretations of classroom

problems, question initial assumptions, and identify alternative strategies. This supports research emphasizing reflective dialogue, collaboration, and professional learning as mechanisms for developing teacher knowledge and instructional competence (Al-Maamari, 2021; Chen et al., 2023; Choi & Chan, 2023). It also extends earlier research by illustrating that interactive metacognition occurs beyond teacher–student exchanges. Informal discussions, messaging groups, collaborative planning, and peer feedback provided social spaces in which teachers externalized and reconstructed pedagogical reasoning. However, access to these opportunities varied by institution, indicating that interactive metacognition is partly dependent on organizational culture.

The second major finding was that practical knowledge mediated teachers' interpretation and use of research-informed practices. Participants did not apply research findings as fixed prescriptions. Instead, they assessed their relevance through prior experience, knowledge of students, beliefs about language learning, professional identity, and awareness of institutional expectations. This finding confirms that research utilization is a process of contextual reconstruction rather than direct transfer. Choi and Chan (2023) similarly emphasize teacher agency and context-sensitive materials development, while Al-Maamari (2021) highlights the professional value of reflective evaluation for EFL teachers. The present study extends these arguments by showing that practical knowledge provides the interpretive foundation through which teachers decide whether a research-based practice is feasible, appropriate, or in need of adaptation.

Prior teaching experience functioned as both a resource and a filter. Teachers compared new recommendations with previous successes and failures before deciding whether to adopt them. For example, project-based learning was reduced to smaller projects with weekly targets because teachers believed that full-scale projects exceeded available instructional time and students' capacity for independent organization. This finding is consistent with Jeldu et al. (2024), who demonstrate the potential of problem-based approaches for speaking development, but it adds that implementation must be adjusted to classroom realities. Practical knowledge therefore did not necessarily produce resistance to innovation. In many cases, it enabled teachers to preserve the central principles of an approach while modifying its scale, sequence, or support structure.

Knowledge of students was especially influential. Teachers adapted research-informed strategies to learners' proficiency, confidence, motivation, cultural expectations, and access to technology. Metacognitive reflection tasks, for example, were introduced gradually through modelling and oral discussion because students initially produced minimal written responses. This supports studies showing that explicit metacognitive instruction can strengthen learning when learners receive appropriate scaffolding (Rajasagaran & Ismail, 2022; Zhang et al., 2021). It also qualifies assumptions that learner autonomy can be developed simply by transferring responsibility to students. As Butt et al. (2020) suggest, autonomy develops differently across contexts and disciplines. The present findings show that teachers' practical knowledge helps determine the level of scaffolding required before learners can engage meaningfully in self-regulation.

Teachers' beliefs also shaped research application. Participants who prioritized communication were generally receptive to task-oriented strategies, whereas those who emphasized grammatical accuracy often used explicit explanation before communicative practice. These patterns align with Radwan's (2022) finding that beliefs influence language-learning strategy use. However, the present study shows that teachers did not necessarily position explicit and communicative instruction as opposing choices. Some integrated them sequentially, indicating that practical knowledge can produce hybrid pedagogies adapted to perceived learner expectations. This extends existing discussions

by showing that teachers' beliefs may support negotiated combinations of methods rather than simple acceptance or rejection.

Institutional constraints significantly affected implementation. Examination pressure, class size, limited time, administrative workload, curriculum coverage, and inadequate technological infrastructure influenced what teachers considered possible. These findings support Ilahude et al. (2023), who identify professional knowledge and institutional support as central to technology integration, and Talpur et al. (2021), who note that digital learning is strongly affected by infrastructure and contextual readiness. They also confirm that technology itself does not guarantee pedagogical improvement, as Schenck (2024) cautions that technology must remain aligned with instructional purposes. In this study, teachers adapted digital recommendations by using short videos, messaging applications, printed alternatives, or simplified online tasks according to available resources.

The findings confirm that interactive metacognition and practical knowledge are mutually reinforcing. Practical knowledge supplies the experiences, beliefs, contextual understandings, and professional identities upon which teachers draw. Interactive metacognition enables them to examine, communicate, and revise those resources through classroom and professional interaction. The study therefore extends previous research by integrating two areas often examined separately. Its central contribution is to show that teachers' research-informed practice is neither a straightforward application of theory nor merely intuitive action. It is a context-sensitive process of interpreting evidence, negotiating constraints, monitoring consequences, and transforming knowledge into workable instructional decisions. These findings support the study's proposed integration of practical knowledge and interactive metacognition as a framework for understanding EFL teachers' pedagogical reasoning.

CONCLUSION

This study investigated how EFL teachers' interactive metacognition was manifested in pedagogical decision-making and how practical knowledge influenced their interpretation and application of research-informed practices. The findings showed that interactive metacognition functioned as a recurring cycle of interpreting classroom signals, monitoring learner understanding and instructional effectiveness, evaluating pedagogical outcomes, and regulating subsequent action. Teachers used verbal responses, silence, errors, nonverbal behavior, participation patterns, and task performance as evidence for making immediate instructional decisions. They modified explanations, examples, task difficulty, grouping arrangements, preparation time, language choice, and feedback in response to this evidence. Professional discussions with colleagues further strengthened the process by encouraging teachers to reconsider assumptions and identify alternative responses. Interactive metacognition was therefore not limited to internal reflection but was constructed through teacher-student interaction, collegial dialogue, and engagement with classroom events.

The findings also established that practical knowledge served as a central mediator between educational research and classroom practice. Teachers evaluated research-informed strategies through prior experience, knowledge of students, beliefs about language learning, professional identity, and institutional conditions. They rarely implemented recommendations without modification; instead, they simplified procedures, combined new approaches with familiar routines, redesigned materials, and gradually tested innovations. This contextual transformation allowed teachers to retain the pedagogical value of research while responding to curriculum demands, examinations, workload, technological resources, and learner characteristics. The study

consequently highlights the need for professional-development programs that provide structured reflection, collaborative lesson analysis, practical demonstrations, and opportunities to adapt research findings. Institutions should also create supportive conditions in which teachers can systematically document, discuss, and evaluate instructional decisions.

ACKNOWLEDGEMENT

The authors express their sincere appreciation to the nine EFL teachers who voluntarily participated in this study and openly shared their classroom experiences, professional reflections, and pedagogical reasoning. Their willingness to take part in interviews and classroom observations made this investigation possible. The authors also thank the participating educational institutions for granting access and supporting the data-collection process. Appreciation is extended to the academic colleagues and expert reviewers who provided constructive feedback on the research instruments, analytical procedures, and manuscript development. Finally, the authors acknowledge the institutional support provided by their respective universities throughout the planning, implementation, and reporting of this research.

DECLARATION OF USING AI TOOLS

The authors declare that generative artificial intelligence tools were used during the preparation of this manuscript for limited language-support purposes. The tools assisted in improving grammatical accuracy, academic expression, paragraph coherence, and organizational clarity. They were also used to identify repetitive wording and suggest clearer formulations of author-generated content. Artificial intelligence was not used to recruit participants, collect data, produce interview responses, conduct classroom observations, or independently determine the study's findings. All interpretations, thematic categories, conclusions, citations, and scholarly claims were reviewed and verified by the authors. The authors accept full responsibility for the accuracy, originality, integrity, and final content of the manuscript.

REFERENCES

- Al-Husban, N. (2020). Effects of employing in-service EFL teachers' strategy-based instruction on their performance of teaching listening comprehension in Amman, Jordan. *3L: The Southeast Asian Journal of English Language Studies*, 26(2), 173–188. <https://doi.org/10.17576/3L-2020-2602-13>
- Al-Maamari, F. (2021). The potential in student evaluation of teaching for EFL teacher professional development. *Cogent Education*, 8(1), Article 1888670. <https://doi.org/10.1080/2331186X.2021.1888670>
- Aprianto, D. (2023). Using YouTube as EFL/ESL tertiary students' self-English language learning strategies. *SALEE: Study of Applied Linguistics and English Education*, 4(2), 503–526. <https://doi.org/10.35961/salee.v4i2.844>
- Azarniyoosh, S., & Roohani, A. (2024). The effectiveness of the flipped learning model in improving second/foreign language metacognitive listening awareness and strategy use. *European Journal of Education*, 60(1). <https://doi.org/10.1111/ejed.12841>
- Bai, B., Shen, B., & Wang, J. (2021). Impacts of social and emotional learning on English learning achievements in Hong Kong secondary schools. *Language Teaching Research*, 28(3), 1176–1200. <https://doi.org/10.1177/13621688211021736>
- Butt, A., Anis, F., & Yousaf, A. (2020). Learner autonomy and its existing practices: A comparison between EFL students of various disciplines in the context of Pakistan.

- Global Social Sciences Review*, 5(1), 596–608. [https://doi.org/10.31703/gssr.2020\(V-1\).60](https://doi.org/10.31703/gssr.2020(V-1).60)
- Chen, R., Gong, Y., Liu, Y., & Cheng, W. (2023). A bibliometric and content analysis of strategy-based instruction in second or foreign language teaching from 2000 to 2021. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231159546>
- Choi, T. H., & Chan, H. (2023). Moving forward with TESOL materials development: Introducing the special issue. *TESOL Journal*, 14(1), Article e707. <https://doi.org/10.1002/tesj.707>
- Dung, Đ. T. X., & Ket, M. V. (2023). English discourse awareness in Vietnamese tertiary education. *Ho Chi Minh City Open University Journal of Science–Social Sciences*, 13(1), 3–17. <https://doi.org/10.46223/HCMCOUJS.soci.en.13.1.2773.2023>
- Editor, I. (2024). Abstracts of the 4th International Conference of TESOL & Education. *ICTE Conference Proceedings*, 4, 1–98. <https://doi.org/10.54855/ictep.244>
- Exploring teachers' critical thinking in pedagogical context: Indonesian EFL teachers' perspectives. (2023). *Pegem Journal of Education and Instruction*, 13(4). <https://doi.org/10.47750/pegegog.13.04.22>
- Falahi, S., & Chowdhury, R. (2024). Social networking systems in enhancing metacognitive awareness: Post-pandemic informal learning among Iranian adult EFL learners. *VNU Journal of Foreign Studies*, 40(3), 1–20. <https://doi.org/10.63023/2525-2445/jfs.ulis.5242>
- Ghafar, Z. N., & Sawalmeh, M. H. M. (2023). The importance of teaching English for medical students in Kurdistan: A critical review. *Journal of English Language Teaching and Applied Linguistics*, 5(1), 1–5. <https://doi.org/10.32996/jeltal.2023.5.1.1>
- Haerazi, H. (2023). MALL integrated with metacognitive skills to promote preservice English teachers' intercultural communicative competence. *Journal on English as a Foreign Language*, 13(2), 581–609. <https://doi.org/10.23971/jefl.v13i2.6536>
- Husan, S., & Shakur, N. (2023). Teachers' proficiency in English language assessment at an English-medium university: Implications for ELT training in Pakistan. *Journal of Social Sciences Development*, 2(2), 339–354. <https://doi.org/10.53664/JSSD/02-02-2023-18-339-354>
- Ilahude, F. F., Inawati, I., & Pratolo, B. W. (2023). Teachers' TPACK development in English language teaching: A systematic review. *Premise: Journal of English Education and Applied Linguistics*, 12(3), 911. <https://doi.org/10.24127/pj.v12i3.7429>
- Isaee, H., & Barjesteh, H. (2023). Screening EFL teachers' and learners' perceptions of emergency remote teaching during the COVID-19 pandemic: A comparative analysis. *Human Arenas*, 8(2), 568–599. <https://doi.org/10.1007/s42087-023-00353-7>
- İstifçi, İ. (2024). Self-regulated learning strategies of tertiary-level EFL learners. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi*, 14(2), 756–769. <https://doi.org/10.30783/nevsosbilen.1463866>
- Jeldu, F. A., Lucha, Z. T., & Feyisa, J. J. (2024). Effects of applying problem-based learning strategy use on students' oral vocabulary as one aspect of speaking performance. *English Language, Literature & Culture*, 9(1), 16–28. <https://doi.org/10.11648/j.ellc.20240901.13>
- Kan, T., Noordin, N., & Ismail, L. (2024). Implementation of metacognitive reading strategies to improve English reading ability: A systematic review. *International*

- Journal of Learning, Teaching and Educational Research*, 23(7), 368–389. <https://doi.org/10.26803/ijlter.23.7.19>
- Kesici, A. E., Güvercin, D., & Küçükakça, H. (2021). Metacognition research in Turkey, Japan, and Singapore. *International Journal of Evaluation and Research in Education*, 10(2), 535. <https://doi.org/10.11591/ijere.v10i2.20790>
- Khulel, B. (2021). Metacognitive strategies instruction and its relationship with listening anxiety and listening comprehension. *Edulitics: Education, Literature, and Linguistics Journal*, 6(1), 40–46. <https://doi.org/10.52166/edulitics.v6i1.1914>
- Kobayashi, A. (2020). Examining the effects of metacognitive instruction in oral communication for EFL learners. *The Journal of Asia TEFL*, 17(2), 597–615. <https://doi.org/10.18823/asiatefl.2020.17.2.18.597>
- Mahdi, D. A. (2024). Effectiveness of LEP activities in enhancing EFL students' oral communication skills at King Khalid University. *Saudi Journal of Language Studies*, 4. <https://doi.org/10.1108/SJLS-10-2023-0047>
- Mayo, M. del P. G. (2021). Vocabulary, corrective feedback, and intervention studies. *Language Teaching Research*, 25(2), 153–158. <https://doi.org/10.1177/1362168821996848>
- Mirzapour, F., & Mohammed, A. A. (2023). The effects of internet use in the classroom on reading comprehension, metacognitive awareness, and motivation. *Qalaai Zanist Scientific Journal*, 8(2). <https://doi.org/10.25212/lfu.qzj.8.2.52>
- Nourazar, S., Kakvand, R., & Aliasin, S. H. (2022). The impact of scaffolded metacognitive writing strategy instruction on Iranian intermediate EFL learners' IELTS Writing Task 2. *Education Research International*, 2022, 1–8. <https://doi.org/10.1155/2022/6297895>
- Pangesti, F., Prihatini, A., & Fauzan, F. (2023). The learning strategy for Indonesian grammar: Students' perspectives on Indonesian language for foreign speakers. *Jurnal Pendidikan dan Pengajaran*, 56(2), 251–264. <https://doi.org/10.23887/jpp.v56i2.45804>
- Peter, A. A. J., & Hashim, H. (2023). Language learning strategies used by ESL/EFL learners: A systematic review (2019–2023). *International Journal of Academic Research in Business and Social Sciences*, 13(12). <https://doi.org/10.6007/IJARBS/v13-i12/20148>
- Radwan, A. A. (2022). Foreign language learners' beliefs and use of language learning strategies. *Journal of Arts and Social Sciences*, 13(3), 3–14. <https://doi.org/10.53542/jass.v13i3.5415>
- Rajasagaran, S., & Ismail, H. H. (2022). Utilising explicit teaching of metacognitive strategies in honing reading skills among ESL and EFL learners: A review. *International Journal of Academic Research in Progressive Education and Development*, 11(3). <https://doi.org/10.6007/IJARPED/v11-i3/14997>
- Reynolds, B. L., Yu, M. H., & Li, M. (2022). Pre-service English teachers' understanding about preparing to teach reading skills in secondary schools. *Review of Education*, 10(1), Article e3321. <https://doi.org/10.1002/rev.3.3321>
- Salih, A. A., & Omar, L. I. (2021). Globalized English and users' intercultural awareness: Implications for internationalization of higher education. *Citizenship, Social and Economics Education*, 20(3), 181–196. <https://doi.org/10.1177/20471734211037660>
- Saputra, N. (2020). Exploring Indonesian English teachers' perspectives toward the use of translation in English language teaching classrooms. *International Journal for Educational and Vocational Studies*, 2(3). <https://doi.org/10.29103/ijevs.v2i3.2210>

- Sato, M., & Csizér, K. (2021). Introduction: Combining learner psychology and ISLA research: Intersections in the classroom. *Language Teaching Research*, 25(6), 839–855. <https://doi.org/10.1177/13621688211044237>
- Sato, M., & Lam, C. D. (2021). Metacognitive instruction with young learners: A case of willingness to communicate, L2 use, and metacognition of oral communication. *Language Teaching Research*, 25(6), 899–921. <https://doi.org/10.1177/13621688211004639>
- Schenck, A. (2024). Examining relationships between technology and critical thinking: A study of South Korean EFL learners. *Education Sciences*, 14(6), Article 652. <https://doi.org/10.3390/educsci14060652>
- Shurovi, M., Yahaya, M. F., Hajimia, H., & Hasan, M. K. (2024). Five decades of achievement motivation research in ELT: A systematic literature review. *Malaysian Journal of Learning and Instruction*, 21(1), 285–318. <https://doi.org/10.32890/mjli2024.21.1.10>
- Sun, X. (2024). Metacognitive listening awareness, language learning strategies, and reading comprehension among Chinese EFL learners. *International Journal of Research Studies in Language Learning*, 10(1). <https://doi.org/10.5861/ijrsl.2024.004>
- Talpur, N., Kalwar, T., & Talpur, M. J. (2021). Computer-assisted language learning in the Pakistani context during the COVID-19 pandemic. *REiLA: Journal of Research and Innovation in Language*, 3(3), 210–225. <https://doi.org/10.31849/reila.v3i3.6908>
- Teng, M. F., & Zhang, L. J. (2021). Development of children’s metacognitive knowledge, reading, and writing in English as a foreign language: Evidence from longitudinal data using multilevel models. *British Journal of Educational Psychology*, 91(4), 1202–1230. <https://doi.org/10.1111/bjep.12413>
- Tsang, A. (2021). The roads not taken: Greater emphasis needed on “sounds,” “actual listening,” and “spoken input.” *RELC Journal*, 54(3), 804–816. <https://doi.org/10.1177/00336882211040273>
- Tuncer, H., & Özkan, Y. (2021). Reflective tools in an English language teaching context: Contributions, challenges, and recommendations. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 18(1), 181–204. <https://doi.org/10.33437/ksusbd.671482>
- Üstünbaş, Ü., & Alagözlü, N. (2021). Efficacy beliefs and metacognitive awareness in English language teaching and teacher education. *Bartın University Journal of Faculty of Education*, 10(2), 267–280. <https://doi.org/10.14686/buefad.828035>
- Waluyo, B., Nahdiyah, U., & Fahriana, C. I. (2023). TPACK-based HOTS in teaching writing for promoting EFL learning quality in higher education: Applying the “Merdeka Belajar–Kampus Merdeka” program and the new paradigm curriculum. *Journal of Development Research*, 7(1), 10–20. <https://doi.org/10.28926/jdr.v7i1.268>
- Wang, Y., Derakhshan, A., Pawlak, M., & Mehdizadeh, M. (2024). Exploring the psychometric properties of the Grammar Learning Strategy Inventory in the Chinese EFL context. *Studies in Second Language Learning and Teaching*. <https://doi.org/10.14746/ssllt.39357>
- Xinke, S., Razali, A. B., & Sulaiman, T. (2024). External factors and endogenous elements fostering critical thinking of tertiary EFL learners in China: A grounded theory study. *International Journal of Learning, Teaching and Educational Research*, 23(6), 125–151. <https://doi.org/10.26803/ijlter.23.6.6>

- Xu, Z. (2023). Metacognition in language teaching and research: A conversation with Professor Lawrence Jun Zhang. *RELC Journal*, 54(1), 300–308. <https://doi.org/10.1177/00336882231157497>
- Yacob, R. N. H. R., & Mohamad, M. M. (2023). Investigating metacognitive online reading strategies among ESL undergraduates. *International Journal of Academic Research in Business and Social Sciences*, 13(11). <https://doi.org/10.6007/IJARBSS/v13-i11/19245>
- Zhai, K., Chen, S. W., Li, M., & Zeng, D. (2023). Using and improving automated evaluation of writing from students' perspectives. *Scientific Social Research and Frontiers*. <https://doi.org/10.57237/j.ssrf.2023.03.004>
- Zhang, W., Zhang, D., & Zhang, L. J. (2021). Metacognitive instruction for sustainable learning: Learners' perceptions of task difficulty and use of metacognitive strategies in completing integrated speaking tasks. *Sustainability*, 13(11), Article 6275. <https://doi.org/10.3390/su13116275>