Pedagogical Beliefs as a Foundation of Teacher Cognition in English Language Teaching

Nio Awandha Nehru*[1)], Supriyono[2)]

1. Tadris Bahasa Inggris, Departemen Pascasarjana, Universitas Islam Negeri Sayyid Ali Rahmatullah Tulungagung, Indonesia
Email address : nioawandha25@gmail.com
2. Pendidikan Bahasa Inggris, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Islam Balitar, Indonesia
Email address : supriyono@unisbablitar.ac.id

Abstract—*This study explores the central role of pedagogical beliefs in shaping teacher cognition within English Language Teaching (ELT) by synthesizing perspectives from Borg, Calderhead, and Johnson. Findings indicate that pedagogical beliefs function as the foundation of teacher cognition, guiding teachers' interpretations of knowledge, classroom practices, and professional decisions. Teacher thinking, as conceptualized by Calderhead, reveals that decision-making in the classroom is mediated by beliefs that filter teachers' perceptions and shape instructional choices, even under contextual pressures. Johnson further emphasizes that teachers' beliefs about language and its acquisition serve as the interpretive lens through which pedagogical orientations are enacted, though often negotiated against institutional demands and learner needs. Taken together, the literature highlights the dynamic interplay between belief systems, cognition, and contextual realities, underscoring the importance of reflective practice and professional development that explicitly engage with teachers' underlying beliefs. This synthesis suggests that addressing pedagogical beliefs is critical for fostering coherence between teachers' cognition and classroom practice, ultimately contributing to more effective and sustainable approaches in ELT.*

Keywords—*Teacher cognition; pedagogical beliefs; teacher thinking; English Language Teaching (ELT).*

I. INTRODUCTION

Understanding teacher cognition is crucial in English language teaching (ELT), as it encompasses the unobservable cognitive dimension of teaching, what teachers know, believe, and think [1]. Research has consistently shown that teachers' pedagogical beliefs form the foundation of their cognition, shaping how they perceive language teaching, make instructional decisions, and interact with students in the classroom [2]. These beliefs function as a filter through which teachers interpret knowledge and experiences, thereby guiding classroom practices.

Pedagogical beliefs play a central role in determining whether teachers adopt transmissive, teacher-centered approaches or constructivist, learner-centered pedagogies. Teachers with constructivist beliefs are more likely to adapt or design instructional materials that align with student needs, while those with transmissive beliefs may adhere closely to prescribed curricula [3], [4]. However, studies also highlight a persistent gap between teachers' stated beliefs and their actual classroom practices, often caused by contextual constraints such as institutional policies, curriculum demands, class size, and students' proficiency levels [5], [6]. Such discrepancies suggest that pedagogical beliefs do not always directly translate into practice, reflecting the complex interplay of cognition, context, and teacher agency.

Within the theoretical landscape, Calderhead emphasized the importance of teacher thinking, which underscores how teachers' beliefs and prior experiences influence their instructional choices. Similarly, Johnson [8] argued that teacher beliefs in second language teaching are deeply embedded in personal experiences as language learners and shape classroom practices, even when these beliefs conflict with official pedagogical reforms. Borg further advanced the notion of teacher cognition, integrating beliefs, knowledge, and attitudes as interconnected factors that drive pedagogical decision-making in ELT [1]. Together, these frameworks highlight that pedagogical beliefs are not peripheral but rather the foundation upon which teacher cognition is constructed.

Given the significance of this relationship, conducting a literature-based inquiry into the interplay between pedagogical beliefs and teacher cognition is both relevant and necessary. This study seeks to analyze and synthesize key theoretical perspectives from Borg, Calderhead, and Johnson to better understand how pedagogical beliefs operate as the foundation of teacher cognition in ELT. By doing so, it aims to provide a conceptual framework that explains both the congruence and discrepancies between teachers' beliefs and practices, and to offer insights for teacher education and professional development programs.

In addition, literature consistently emphasizes that teacher cognition cannot be fully understood without examining the role of pedagogical beliefs as mediators between knowledge and classroom action. Recent studies reveal that while teachers may articulate progressive, student-centered beliefs, their practices often revert to traditional methods due to systemic pressures, assessment regimes, and institutional expectations [9], [10]. This incongruence underscores the importance of reflective practice and professional development programs that address not only skills but also the underlying belief systems of teachers [11], [12]. By synthesizing insights from Borg's framework of teacher cognition, Calderhead's model of teacher thinking, and Johnson's research on teacher beliefs, this study positions pedagogical beliefs as the conceptual foundation upon which teacher cognition in ELT should be critically examined and developed.

II. RESEARCH METHOD

This study employed a systematic literature review (SLR) to synthesize theoretical and empirical insights on pedagogical beliefs as the foundation of teacher cognition in English Language Teaching (ELT). Following Creswell the review proceeded through identification, screening,

eligibility, and inclusion to ensure rigor [13]. Relevant studies were retrieved from Scopus, Web of Science, Taylor & Francis, SpringerLink, and Google Scholar, covering the period 2010–2025 to include both classical theories and recent developments. The search used key terms such as "teacher cognition," "pedagogical beliefs," "teacher thinking," "belief–practice gap," and "English Language Teaching (ELT)." Articles were included if peer-reviewed, published in English, and directly related to teacher cognition, pedagogical beliefs, or decision-making in second language teaching, whether conceptual or empirical [7], [14], [15]. Non-scholarly works, studies outside language education, and inaccessible full texts were excluded.

The initial search yielded 125 publications, from which duplicates were removed and 68 studies were screened by abstract, resulting in 45 articles for full analysis. Using thematic analysis, findings were synthesized under three key frameworks: Borg's teacher cognition, Calderhead's teacher thinking, and Johnson's perspectives on pedagogical beliefs. Each study was examined for its treatment of beliefs in shaping cognition, decision-making, and classroom practice, with particular attention to themes such as the belief–practice gap [14], contextual and institutional influences [10], [16], and the role of reflection and professional development [11], [17]. This process produced a comprehensive mapping of how pedagogical beliefs underpin teacher cognition in ELT, highlighting both areas of consensus and ongoing debate.

III. RESULT AND DISCUSSION

A. Pedagogical Beliefs as the Foundation of Teacher Cognition

Teacher cognition has been widely defined as the unobservable cognitive dimension of teaching what teachers know, believe, and think, which significantly influences their instructional practices [1]. Borg further elaborated that teacher cognition encompasses the interplay between teachers' prior experiences, professional coursework, contextual factors, and actual classroom practices. This framework has become a cornerstone in applied linguistics, situating cognition as central to understanding language teachers' professional performance [18].

Borg's conceptualization emphasizes that teaching is not merely a behavioral enterprise but is guided by a complex range of cognitive, affective, and experiential influences. Much like an iceberg, classroom behaviors are only the visible manifestations of deeper, often hidden, mental constructs [19]. Recent studies confirm that teacher cognition plays a central role in guiding teachers' moment-to-moment decision-making and pedagogical reasoning in ELT [20], [21].

According to Borg, teacher cognition in English Language Teaching (ELT) can be examined through four interrelated dimension. Teachers' beliefs and instructional choices are strongly shaped by their prior learning experiences and professional coursework. Early experiences as learners, often described as the "apprenticeship of observation," continue to influence pedagogical decisions, with novice teachers frequently reproducing methods they encountered as students training [22]. Formal teacher education provides theoretical and methodological frameworks that can expand teachers' pedagogical repertoire, yet research indicates that coursework alone may not fully reshape pre-existing beliefs unless combined with reflective practice [23], [24] (Akbari & Dadvand, 2011; Atai & Taherkhani, 2018).

Classroom practices and contextual factors further mediate teacher cognition. Teachers' beliefs often surface in pedagogical reasoning, observable in strategies such as corrective feedback, material adaptation, or translanguaging [25], [26]. Nevertheless, a persistent belief–practice gap exists, influenced by institutional policies, curriculum requirements, sociocultural expectations, and classroom variables such as student proficiency, class size, and available resources [5], [27], [28]. Recent studies emphasize that teacher cognition is socially situated and dynamically reconstructed through interaction with contextual conditions, making it adaptable rather than fixed [29].

The literature strongly supports the view that pedagogical beliefs constitute the foundation of teacher cognition in second language teaching. In this framework, pedagogical beliefs shape how teachers interpret knowledge, structure classroom activities, and evaluate their own practice. Recent studies have reaffirmed Borg's argument, showing that teachers' classroom choices are often more strongly influenced by their beliefs than by theoretical knowledge acquired through formal training [16].

Borg noted that beliefs are often resistant to change, more recent findings suggest that contextual factors such as curriculum policies, institutional expectations, and classroom constraints mediate the extent to which beliefs are enacted [1]. For example, Gao, Qin, and Gu found that EFL teachers' beliefs about communicative practices during the COVID-19 pandemic were shaped not only by their prior experiences but also by their agency and resilience in adapting to remote teaching environments [16]. Similarly, Yuan and Cui reported that while teachers' core beliefs remained stable, peripheral beliefs and teaching practices shifted in response to contextual pressures (Yuan Gao & Cui, 2022). These studies indicate that teacher cognition cannot be fully understood without considering pedagogical beliefs as the interpretive filter through which teachers engage with their professional contexts.

In addition, recent empirical evidence demonstrates that pedagogical beliefs are not only influential at the individual level but also shape collective practices within schools and departments. From the evidence, native English-speaking teachers in China expressed strong communicative beliefs but their practices diverged considerably depending on institutional requirements and student expectations. Comparable findings are reported by Shabani, Ashkani, and Karimi, who demonstrated that teachers with higher levels of grit were able to enact their beliefs more consistently, while others reverted to traditional practices when faced with classroom challenges [30]. This supports Borg's assertion that teacher cognition is situated, highly contextual, and always mediated by both personal and institutional factors [1].

The centrality of pedagogical beliefs also carries important implications for teacher education and professional development. Research highlights that merely providing teachers with new knowledge or techniques is insufficient if their underlying beliefs remain unexamined. Effective interventions, such as reflective practice, collaborative lesson

study, or video-stimulated recall, have been shown to help teachers make their beliefs explicit and align them with pedagogical innovations [31], [32]. Moreover, Gläser-Zikuda et al. argue that guided reflective writing in teacher education can foster metacognitive awareness, enabling teachers to interrogate their long-held assumptions and adjust them to new teaching demands [17]. Such approaches suggest that addressing pedagogical beliefs explicitly is essential to fostering long-term change in teacher cognition and classroom practice.

Taken together, these findings highlight that pedagogical beliefs are both stable and malleable: they provide continuity in shaping cognition, yet they are open to reinterpretation when teachers are exposed to critical reflection and supportive professional environments. As Borg and others affirm, the study of teacher cognition without attention to pedagogical beliefs risks overlooking the very foundation of how teachers construct meaning in their professional practice [1]. By integrating theoretical insights with recent empirical findings, it becomes clear that pedagogical beliefs are not merely abstract notions but active, powerful determinants of instructional decision-making in second language teaching.

The body of research demonstrates that pedagogical beliefs represent the core of teacher cognition and serve as the most consistent predictor of instructional decision-making in ELT. Borg's framework clarifies that cognition cannot be divorced from prior learning experiences, professional training, classroom practices, and contextual realities, with beliefs acting as the central interpretive filter across these dimensions. While these beliefs are often deeply rooted and resistant to change, they are not static; evidence from recent studies shows that contextual pressures, such as curriculum policies, assessment demands, or digital learning environments can reshape how beliefs are enacted in practice. This dynamic explains the recurrent tension between what teachers claim to value and what they are able to implement in their classrooms.

At the same time, pedagogical beliefs exert influence beyond the individual teacher, shaping collective practices within institutions and professional cultures. Studies on teacher resilience and grit illustrate that beliefs are enacted more consistently when supported by personal perseverance and favorable institutional conditions, but may be compromised under structural or contextual constraints. These findings reinforce Borg's argument that teacher cognition is always situated and socially mediated rather than a fixed, individual attribute.

The implications are clear, teacher education and professional development must engage directly with pedagogical beliefs if they are to effect meaningful change in practice. Simply transmitting methodological knowledge is insufficient without opportunities for reflection, collaborative inquiry, and the interrogation of long-held assumptions. Evidence from reflective writing, lesson study, and mentoring indicates that structured opportunities to surface and critique beliefs can narrow the gap between espoused theories and classroom realities, fostering professional growth and pedagogical innovation.

B. Teacher Thinking Shows that Teachers' Beliefs Influence The Process of Decision-Making in The Classroom

Calderhead conceptualized teacher thinking as a complex cognitive process in which teachers act as decision-makers who continuously interpret classroom situations and select instructional actions based on their knowledge, beliefs, and prior experiences. This view highlights that teaching is not a mechanical execution of predetermined plans but rather a dynamic process where professional judgment is shaped by what teachers notice, how they interpret those observations, and how they reflect on their practices. Recent research reinforces this perspective by showing that instructional decisions in areas such as assessment, material adaptation, and classroom management are mediated by teachers' ability to draw on prior learning and contextual cues [33], [34].

Teachers' prior experiences as learners and practitioners play a central role in shaping their cognitive schemas, as multiple studies confirm that early learning histories strongly influence teachers' beliefs and subsequent instructional choices [22]. These experiences often persist even when teacher education programs introduce alternative pedagogical approaches, creating tensions between pre-existing beliefs and newly acquired professional knowledge. Longitudinal research demonstrates that reflective professional practice and structured mentoring can gradually shift these entrenched patterns, indicating that teacher thinking is simultaneously shaped by context and amenable to change over time [17].

The model of teacher thinking underscores the interconnected roles of perception, interpretation, and reflection in shaping teachers' classroom practices. Perception, or noticing, refers to teachers' ability to attend to salient classroom events such as students' misunderstandings or affective signals, which subsequently activate evaluative reasoning [35], [36]. Interpretation involves constructing meaning from what has been noticed by integrating pedagogical beliefs, disciplinary knowledge, and institutional expectations, a process often influenced by contextual constraints and cognitive heuristics [37]. Reflection, both during teaching (reflection-in-action) and after teaching (reflection-on-action), provides opportunities for teachers to assess their instructional decisions and adjust future practices [38]. Recent research highlights that structured reflection activities, such as peer dialogue, video-based analysis, and lesson study, are effective in uncovering implicit beliefs and fostering greater coherence between cognition and practice [39].

Recent studies have confirmed and extended this view. Tajeddin and Bolouri investigated novice EFL teachers and found that their pedagogical reasoning in areas such as classroom management, task adaptation, and student interaction was heavily informed by their pre-existing beliefs, even when these conflicted with institutional expectations [40]. Similarly, Gao and Zhou showed that teachers' beliefs about the medium of instruction directly influenced how they made day-to-day language choices in the classroom, although contextual constraints often led them to adapt their practices [41]. These findings support Calderhead's claim that decision-making is never a neutral process but is constantly shaped by belief systems interacting with contextual pressures.

Beliefs also strongly affect teachers' approaches to language assessment. Tsagari, Reed, and Lopriore demonstrated that EFL teachers in a professional development program expressed beliefs in favor of flexible, communicatively oriented assessment practices, yet in reality, their decisions were mediated by institutional policies and standardized testing demands [42]. Such results underscore the belief–practice tension already noted in earlier research but highlight that it remains a persistent issue even in contemporary educational contexts. Decision-making in classrooms, therefore, emerges as a negotiation between personal beliefs and external demands, where teachers exercise professional judgment to reconcile the two.

Teacher thinking is a complex, dynamic cognitive process in which teachers act as decision-makers, continuously interpreting classroom situations and selecting instructional actions based on their knowledge, beliefs, and prior experiences. Early experiences as learners and practitioners shape teachers' cognitive schemas, often persisting despite exposure to alternative pedagogical approaches. Instructional decisions in assessment, material adaptation, and classroom management are therefore strongly mediated by prior learning and contextual cues. The model of teacher thinking highlights how perception, interpretation, and reflection interact—teachers notice classroom events, interpret them through beliefs and knowledge, and refine their practices through ongoing reflection. Structured reflective activities, such as peer dialogue, video analysis, and lesson study, have been shown to reveal implicit beliefs and enhance coherence between cognition and practice.

Empirical research confirms that teachers' beliefs significantly shape pedagogical reasoning in areas like classroom management, task adaptation, and student interaction, even when they conflict with institutional expectations. Beliefs also influence approaches to language assessment, with preferences for communicative and flexible practices often moderated by policies and standardized testing requirements. This persistent belief–practice tension highlights classroom decision-making as a negotiation between personal convictions and external demands. Consequently, professional development should move beyond methods or techniques to actively engage teachers in examining and reflecting on their beliefs. Structured reflection through mentoring, collaborative inquiry, or guided writing can make implicit beliefs explicit, refine decision-making, and align classroom practices with pedagogical principles, fostering adaptable, context-sensitive, and effective educators.

C. Johnson Underscores that Teachers' Beliefs in Second Language Teaching Play A Pivotal Role in Shaping Their Approaches to ELT

Johnson positioned pedagogical beliefs as central to understanding teachers' work in second language classrooms [15]. Pedagogical beliefs, in this view, represent the underlying assumptions and personal theories that teachers hold about the nature of language, how it is learned, and how it should be taught. These beliefs provide the interpretive lens through which teachers design lessons, interact with students,

and evaluate classroom events. Because they are shaped by teachers' prior experiences as learners and mediated by professional training and institutional contexts, pedagogical beliefs often constitute the foundation of teacher cognition in second language teaching. Recent studies reaffirm this perspective, showing that teachers' beliefs interact dynamically with agency and contextual resilience, particularly in times of disruption such as the COVID-19 pandemic [16]. Similarly, Yuan & Cui emphasize that while teachers' core beliefs tend to remain stable, peripheral beliefs and classroom practices adapt flexibly to contextual challenges, highlighting the interplay between stability and change in pedagogical orientations [10].

The influence of teacher beliefs on instruction is evident in method and interactional choices. Communicatively oriented teachers tend to promote pair-work, authentic tasks, and learner autonomy, while those emphasizing structural accuracy prefer teacher-fronted explanations and form-focused practice [15]. These beliefs shape classroom design and the extent to which students are encouraged to participate and use the target language. More recent evidence suggests that divergences between teachers' articulated beliefs and their enacted practices often arise because of institutional constraints, student expectations, and assessment requirements. For example, Wang and Lam found that while native English teachers in China shared broadly communicative beliefs about oral communication, their practices diverged depending on class size and learners' proficiency levels [43]. Likewise, Shabani, Ashkani, and Karimi demonstrated that teachers with higher levels of grit were better able to enact their pedagogical beliefs consistently, whereas those with lower perseverance often defaulted to safer, more traditional practices [30]. Consequently, pedagogical beliefs operate as a filter that shapes both the opportunities for learning that are created and the roles that teachers and learners are expected to play in the second language classroom.

A recurring finding in the literature is the presence of a belief practice gap, where teachers' stated pedagogical orientations do not always correspond with their classroom practices. Johnson already observed this tension in preservice teachers, and subsequent studies have repeatedly confirmed it. Phipps and Borg showed that teachers who expressed strong commitments to communicative grammar instruction often defaulted to more traditional, form-focused methods under pressure from examinations and curriculum requirements [14]. More recent research has deepened this understanding. Gao, Qin, and Gu found that during the COVID-19 pandemic, teachers' communicative beliefs were reshaped by contextual challenges and digital teaching demands, producing hybrid practices that only partially aligned with their espoused orientations [16]. Likewise, Yuan and Cui demonstrated that while teachers' core beliefs remained relatively stable, their classroom enactments shifted in response to the exigencies of online and hybrid teaching environments [10]. These findings highlight the dynamic interplay between beliefs and practice, suggesting that beliefs provide direction but are constantly negotiated in relation to external constraints.

Another strand of research explores how professional development and reflection can transform or refine teachers'

beliefs, thereby influencing their practices. Farrell and Yang showed that structured reflective practice allowed ESL teachers to surface implicit assumptions about speaking instruction and realign them with their pedagogical goals [11]. Building on this, Gläser-Zikuda et al. demonstrated that reflective writing in teacher education fosters metacognitive awareness and helps teachers critically examine the alignment between beliefs and practices [17]. Similarly, Yu & Chao found that participation in professional learning communities encouraged EFL teachers to collaboratively negotiate their pedagogical beliefs, which in turn enhanced their decision-making in classroom settings [44]. These studies suggest that teacher education programs can reduce the belief–practice gap by creating systematic opportunities for reflection, peer dialogue, and critical inquiry.

Recent scholarship also emphasizes the sociocultural and emotional dimensions of teacher beliefs. Barcelos and Ruohotie-Lyhty argued that teacher beliefs are not purely cognitive but are also tied to teachers' identities and emotions, which shape how they respond to challenges and contextual pressures [45]. For example, Shabani, Ashkani, and Karimi demonstrated that teachers with higher grit and resilience were more consistent in enacting their beliefs, whereas others reverted to safer, more traditional approaches when facing classroom difficulties [30]. Such findings resonate with Johnson's view that beliefs are socially mediated and negotiated within institutional contexts, making them both deeply personal and contextually situated.

Based from the dicsussion can be sythesized that Johnson statement emphasizes that teachers' beliefs in second language teaching are central to shaping their approaches to English Language Teaching (ELT). Teachers' pedagogical beliefs, assumptions and personal theories about language, its acquisition, and teaching, shape how lessons are designed, interactions unfold, and classroom events are interpreted. These beliefs are shaped by prior learning experiences, professional training, and institutional contexts, forming the foundation of teacher cognition. While core beliefs tend to remain stable, peripheral beliefs and classroom practices adapt to contextual challenges, illustrating the dynamic interplay between stability and change, particularly during disruptions such as the COVID-19 pandemic. Teachers' beliefs influence instructional methods and interactional choices, guiding communicative or form-focused approaches, yet divergences often arise due to institutional constraints, student expectations, and assessment pressures (Martinez et al., 2025).

A persistent belief–practice gap demonstrates that teachers' espoused pedagogical orientations do not always align with their enacted practices. Professional development and structured reflection, through reflective writing, mentoring, or participation in professional learning communities can help teachers examine and refine beliefs, fostering alignment between implicit assumptions and classroom practices. Teacher beliefs are socially and emotionally situated, intertwined with identity, resilience, and grit, influencing how challenges and contextual pressures are navigated. Overall, the literature confirms that teacher beliefs are pivotal in second language pedagogy: they guide instructional design, shape interactional patterns, and inform decision-making, yet must be continuously negotiated. Explicit engagement with teacher beliefs through reflective

and collaborative professional development is essential to reduce the belief–practice gap and promote sustainable pedagogical change in ELT.

CONCLUSION

The findings indicate that pedagogical beliefs form the core of teacher cognition, shaping professional decisions, classroom strategies, and evaluations of practice. While theoretical knowledge offers valuable frameworks, it is teachers' beliefs that filter how this knowledge is enacted. These beliefs are both stable and adaptive, evolving through reflective inquiry and new professional experiences. Calderhead's concept of teacher thinking frames decision-making as a dynamic, belief-mediated process, where teachers actively interpret classroom events and negotiate instructional choices between personal convictions and external demands. Johnson's framework further underscores that beliefs about language and pedagogy guide instructional orientations, interactional patterns, and classroom practices, yet systemic pressures such as examinations and institutional expectations often create a belief–practice gap. Addressing this gap requires professional development that explicitly engages teachers in reflective practice, peer dialogue, and collaborative inquiry, enabling them to align beliefs with classroom realities and foster sustainable improvements in ELT.

REFERENCES

[1]   S. Borg, "Teacher cognition and language education," 2015.

[2]   N. F. Almunawaroh, C. D. Diem, and J. Steklács, "EFL teachers' pedagogical beliefs, pedagogical content knowledge, and instructional material use: A scale development and validation," *Cogent Educ.*, vol. 11, no. 1, p. 2379696, 2024.

[3]   P. Ertmer, A. Ottenbreit-Leftwich, O. Sadik, E. Sendurur, and P. Sendurur, "Teacher beliefs and technology integration practices: A critical relationship," *Comput. Educ.*, vol. 59, pp. 423–435, Sep. 2012, doi: 10.1016/j.compedu.2012.02.001.

[4]   S. Shawer, "Communicative-based curriculum innovations between theory and practice: Implications for EFL curriculum development and student cognitive and affective change," *Curric. J.*, vol. 21, no. 3, pp. 333–359, 2010.

[5]   A. Alghamdi, "The Impact of EFL Teachers' Pedagogical Beliefs and Practices: Communicative Language Teaching in a Saudi University Context.," *English Lang. Teach.*, vol. 14, no. 12, pp. 171–182, 2021.

[6]   E. A. Salimi, Z. Tian, and A. Ghasempour, "Exploring EFL teachers' beliefs and practices about translanguaging pedagogy: A qualitative study from Iran," *Aust. J. Appl. Linguist.*, vol. 7, no. 3, p. 2120, 2024.

[7]   J. Calderhead, "Teachers: Beliefs and knowledge.," 1996.

[8]   K. E. Johnson, "Language teacher education," in *The Routledge handbook of English language teaching*, Routledge, 2016, pp. 121–134.

[9]   A. A. Tootkaboni, "Teachers' beliefs and practices towards communicative language teaching in the expanding circle," *Rev. Signos. Estud. Lingüística*, vol. 52, no. 100, 2019.

[10]   Yuan Gao and Yaqiong Cui, "English as a Foreign Language Teachers' Pedagogical Beliefs About Teacher Roles and Their Agentic Actions Amid and After COVID-19: A Case Study," *RELC J.*, vol. 55, no. 1, pp. 111–127, Jan. 2022, doi:

10.1177/00336882221074110.

[11] T. S. C. Farrell and D. Yang, "Exploring an EAP teacher's beliefs and practices in teaching L2 speaking: A case study," *RELC J.*, vol. 50, no. 1, pp. 104–117, 2019.

[12] S. E. Nxasana, J. Chen, X. Du, and M. A. Hasan, "Teachers' Pedagogical Beliefs in a Project-Based Learning School in South Africa," *Education Sciences*, vol. 13, no. 2. 2023. doi: 10.3390/educsci13020140.

[13] J. W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. California: SAGE Publications Ltd, 2021.

[14] S. Phipps and S. Borg, "Exploring tensions between teachers' grammar teaching beliefs and practices," *System*, vol. 37, no. 3, pp. 380–390, 2009.

[15] K. E. Johnson, *Second language teacher education: A sociocultural perspective*. Routledge, 2009.

[16] Y. Gao, L. Qin, and Q. Gu, "Unpacking language teacher beliefs, agency, and resilience in the complex, unprecedented time: A mixed-method study," *Front. Psychol.*, vol. 13, p. 958003, 2022.

[17] M. Gläser-Zikuda, C. Zhang, F. Hofmann, L. Plößl, L. Pösse, and M. Artmann, "Mixed methods research on reflective writing in teacher education," *Front. Psychol.*, vol. 15, p. 1394641, 2024.

[18] M. N. Karimi, S.-F. Behzadpoor, and B. Mansouri, "Advances in research on Language teacher cognition: An introduction to the special issue," *TESL-EJ*, vol. 27, no. 2, 2023.

[19] X. Gao, *Second handbook of English language teaching*. Springer, 2019.

[20] M. N. Karimi and F. Asadnia, "Variations in novice and experienced L2 teachers' pedagogical cognitions and the associated antecedents in tertiary-level online instructional contexts," *Lang. Aware.*, vol. 32, no. 2, pp. 235–254, 2023.

[21] A. Burns, D. Freeman, and E. Edwards, "Theorizing and studying the language-teaching mind: Mapping research on language teacher cognition," *Mod. Lang. J.*, vol. 99, no. 3, pp. 585–601, 2015.

[22] M. N. Karimi and M. Norouzi, "'Cognitive aging'in teachers: L2 teachers' cognitive performance across various stages in their teaching career," *Innov. Lang. Learn. Teach.*, vol. 13, no. 4, pp. 371–388, 2019.

[23] R. Akbari and B. Dadvand, "Does formal teacher education make a difference? A comparison of pedagogical thought units of BA versus MA teachers," *Mod. Lang. J.*, vol. 95, no. 1, pp. 44–60, 2011.

[24] M. R. Atai and R. Taherkhani, "Exploring the cognitions and practices of Iranian EAP teachers in teaching the four language skills," *J. English Acad. Purp.*, vol. 36, pp. 108–118, 2018.

[25] S. Moradkhani and B. Mansouri, "Impact of a research-informed intervention on L2 teachers' WCF cognitions and practices: A sociocultural perspective," *System*, vol. 115, p. 103052, 2023.

[26] L. Li, "Cognition-in-interaction: A discursive psychological perspective of novice language teacher cognition," *TESL-EJ*, 2023.

[27] S. Moradkhani and M. Rahimi, "The impact of students' English proficiency level and teacher education on L2 teachers' pedagogical knowledge: A mixed-methods study," *TESOL J.*, vol. 11, no. 2, p. e496, 2020.

[28] M. Nall and T. Hiratsuka, "' Indulge in a Little Chaos': Assistant Language Teachers' Cognition and Pedagogical Knowledge Development through the Lens of Complex Dynamic System Theory.," *TESL-EJ*, vol. 27, no. 2, p. n2, 2023.

[29] P. Leal, "Emily Is an Egg: An Example of a Narrative Analysis Approach to Identifying the Antecedents of Critical Language Teacher Cognition.," *TESL-EJ*, vol. 27, no. 2, p. n2, 2023.

[30] M. B. Shabani, P. Ashkani, and M. N. Karimi, "L2 Teachers' pedagogical thoughts: Variations across teachers with varying levels of grit," in *Frontiers in Education*, Frontiers Media SA, 2022, p. 890834.

[31] M. Minott, "Reflective teaching, inclusive teaching and the teacher's tasks in the inclusive classroom: A literary investigation," *Br. J. Spec. Educ.*, vol. 46, no. 2, pp. 226–238, 2019.

[32] K. Qi, "The Impact of Reflective Practice on Teacher Efficacy and Professional Growth among English as a Foreign Language (EFL) Teachers in China," *Uniglobal J. Soc. Sci. Humanit.*, vol. 4, no. 2 SE-Articles, pp. 191–197, Aug. 2025, doi: 10.53797/ujssh.v4i2.23.2025.

[33] D. Alonzo, C. Davison, and C. A. Harrison, "Exploring classroom assessment practices and teacher decision-making," in *Frontiers in Education*, Frontiers Media SA, 2023, p. 1098892.

[34] E. B. Mandinach and J. B. Jimerson, "Data ethics in education: a theoretical, practical, and policy issue," *Stud. Paedagog.*, vol. 26, no. 4, pp. 9–26, 2021.

[35] E. A. Van Es and M. G. Sherin, "Mathematics teachers''learning to notice' in the context of a video club," *Teach. Teach. Educ.*, vol. 24, no. 2, pp. 244–276, 2008.

[36] T. Seidel and K. Stürmer, "Modeling and measuring the structure of professional vision in preservice teachers," *Am. Educ. Res. J.*, vol. 51, no. 4, pp. 739–771, 2014.

[37] H. Borko, S. A. Roberts, and R. Shavelson, "Teachers' decision making: From Alan J. Bishop to today," in *Critical issues in mathematics education: Major contributions of Alan Bishop*, Springer, 2008, pp. 37–67.

[38] F. Korthagen, "Inconvenient truths about teacher learning: Towards professional development 3.0," *Teach. Teach.*, vol. 23, no. 4, pp. 387–405, 2017.

[39] H. Wang, T. Xu, and Z. Zhong, "A qualitative study on Chinese primary school EFL teachers' beliefs about incorporating intercultural competence into foreign language teaching," *Heliyon*, vol. 10, no. 12, p. e32635, 2024, doi: https://doi.org/10.1016/j.heliyon.2024.e32635.

[40] Z. Tajeddin and M. Bolouri, "Decision Making in English Language Teaching: Unpacking Novice Teachers' Pedagogical Reasoning.," *Lang. Teach. Res. Q.*, vol. 33, pp. 115–131, 2023.

[41] Y. Gao and Y. Zhou, "Exploring language teachers' beliefs about the medium of instruction and actual practices using complex dynamic system theory," in *Frontiers in Education*, Frontiers Media SA, 2021, p. 708031.

[42] D. Tsagari, K. Reed, and L. Lopriore, "Teacher Beliefs and Practices of Language Assessment in the Context of English as a Lingua Franca (ELF): Insights from a CPD Course," *Languages*, vol. 8, no. 1. 2023. doi: 10.3390/languages8010058.

[43] L. Wang and R. Lam, "Native English teachers' beliefs and practices in teaching oral communication: A multiple case study in China," *Indones. J. Appl. Linguist.*, vol. 12, no. 3, pp. 665–679, 2023.

[44] T.-K. Yu and C.-M. Chao, "Encouraging teacher participation in Professional Learning Communities: exploring the Facilitating or restricting factors that Influence collaborative activities," *Educ. Inf. Technol.*, vol. 28, no. 5, pp. 5779–5804, 2023, doi: 10.1007/s10639-022-11376-y.

[45] A. M. F. Barcelos and M. Ruohotie-Lyhty, "Teachers' emotions and beliefs in second language teaching: Implications for teacher education," in *Emotions in second language teaching: Theory, research and teacher education*, Springer, 2018, pp. 109–124.