Advances in Research on Language Teacher Cognition: An Introduction to the Special Issue

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An oft-cited conceptualization of teacher cognition couches it as "the unobservable cognitive dimension of teaching—what teachers know, believe and think" (Borg, 2003, p. 81). While the term "unobservable" in Borg's definition implies, or even emphatically states, that a hidden body of knowledge, beliefs, and thoughts informs teacher behavior, this hidden dimension was "un-observable" in early conceptualizations of teaching (Borg, 2019; Burns, et al., 2015). Dominated for long by the process-product interpretation (Dunkin & Biddle, 1974), teaching was primarily viewed in terms of observable instructional behaviors (e.g., wait time practices, patterns of questioning) that were judged with regard to how effectively they influenced student achievement outcomes (Verloop, et al., 2001). Language teacher education also followed suit and as posited by Gatbonton (1999), formerly a major share of the theoretical base for language teacher education came from studies of overt classroom behaviors. However, teaching was subsequently recognized as cognition-backed and knowledge-informed performance. As best reflected in Borg's (2019, p. 2) words, although teaching involves observable behaviors, it "is not a purely behavioral enterprise; in the same way that icebergs have an exposed surface beneath which lies a significant hidden mass, teachers' behaviors are also powerfully shaped by a complex range of unseen influences".

Motivated by such re-conceptualization of language teaching, the study of language teacher cognition is currently a central pursuit in applied linguistics and has formed "an expanding and vibrant domain of contemporary applied linguistics research" (Baker & Murphy, 2011, p. 38). It has even by now claimed for itself the status of a "sub-discipline of applied linguistics" (Kubanyiova & Feryok, 2015, p. 435). The reason for such flourishing of research on teacher

cognition lies in the recognition of its centrality in guiding teachers' moment-by-moment decision making in their classroom performance (Karimi & Asadnia, 2023). The scope of this line of research has broadened in recent years to even include a focus on how teacher emotions interact with the state of "being" and the process of "becoming" a language teacher (Golombek, 2015; Golombek & Doran 2014), which has even questioned the appropriacy of the label "teacher cognition" for the sub-field. However, as Borg (2019, p. 4) posits, the broadness of the term "means [that] its boundaries are fuzzy and allow for the inclusion of a wide range of nonbehavioral aspects of teachers' lives".

Both the early parameters of teacher cognition and more recent parameters of the construct have received their fair share of research attention from a wide array of theoretical or analytical perspectives such as the individualist-cognitive (e.g., Gatbonton, 1999), discursive psychological (e.g., Li, 2023a, this volume), sociocultural (e.g., Ngo, 2018), and complex dynamic systems (Kiss, 2012; Nall & Hiratsuka, 2023, this volume). The concept has also been investigated in relation to a wide array of teacher- and context-related variables such as teacher experience (Gatbonton, 2008; Karimi & Norouzi, 2019), formal education (Akbari & Dadvand, 2011), students' proficiency level (Moradkhani, & Rahimi, 2020), online instruction (Karimi & Asadnia, 2023), EAP instruction (Atai & Taherkhani, 2018), etc. Language teachers' cognitions regarding specific language skills and components have also been a regular fixture of research in this area including cognitions as they relate to pronunciation instruction (e.g., Couper, 2017), oral corrective feedback (Nassaji, et al., 2023), written corrective feedback (Moradkhani & Mansouri, 2023), technology-enhanced assessment (Li, 2023b), vocabulary (Chung & Fisher, 2022), among others. This vibrant tradition of research has yielded a substantial knowledge base for the construct and has granted a distinct identity to teacher cognition as a now-well-established and fully-fledged domain of inquiry in applied linguistics, which has contributed substantially to our understanding of language teachers' professional performance.

The impetus for the present special issue in TESL-EJ, on Advances in Language Teacher Cognition, was that despite the significant contributions of this research tradition to our more effective understanding of teachers' pedagogical reasoning, we thought there are still unexplored avenues within the line of inquiry, which must be examined to help deepen our understanding of the interplay between cognition and instructional practice even further and widen the scope of the field. The issue brings together a number of innovative, interesting and fully representative studies from a number of research contexts by an interesting mix of well-established and aspiring researchers in teacher cognition.

The paper by Li Li argues that teacher cognition is social and situational and calls for more research adopting emic perspectives to understand the way teachers develop and renew their cognitions within their given teaching contexts. Adopting a Conversation Analysis perspective, the study investigates novice teachers' cognition, more specifically dealing with the way novice Chinese EFL teachers think about, know, understand, and conceptualize language education. The study draws upon a rich dataset including classroom instruction, interviews, and video-based guided reflections. The findings point to the complexity of novice teacher cognition and reveals three major themes in these teachers' cognitions including a focus on linguistic knowledge, a concern with establishing teacher authority, and a focus on developing practical pedagogical knowledge in their professional context. The study provides a number of interesting implications for second language teacher education.

Leal reports on a study in which she adopted an autobiographical narrative approach to explore the interconnection between language teacher cognition and critical language teacher identity. Drawing from the Freirean concept of *Conscientização*, Leal argues that research on teacher cognition should connect to the broader social, cultural, political, and economic context. Designed as a single qualitative case study, Leal conducted a three-level positioning analysis (Bamberg, 1997) to find out how Emily (i.e., the participant) makes sense of her experiences through the content of her narratives, how she co-constructs her identity as a critical language teacher in the interactional level of the interview, and how she reflects on, reproduces, and rejects dominant ideologies.

Nall and Hiratsuka take the mainstream language teacher cognition research to a less represented cohort in the existing literature- foreign assistant language teachers (ALTs) in Japan. Adopting a complex dynamic systems theory, the researchers analyzed the interview data collected from 35 ALTs and investigated how ALTs navigate the challenges posed by the Japanese educational environment, distinct from their home countries as well as the diverse traits, pedagogical beliefs, and team-teaching practices of their colleagues. The findings underscore the significant role of contextual factors in shaping ALTs' ability to develop and apply pedagogical knowledge. This study contributes to the understanding of language teacher cognition by demonstrating the applicability of complex systems theory as a framework for comprehending the intricate dynamics involved in pedagogical knowledge development within specific contexts.

Adopting a Vygotskyian sociocultural theory (SCLT), Rieker and Johnson propose *dialogic restorying* as an innovative methodology to research language teacher cognition. Drawing from their longitudinal qualitative study, the researchers explored the "dramatic moments" that the three teacher participants experienced within and beyond their 2-year-MATESL program. Utilizing interviews as a form of mutual dialogic engagement, the researchers showed how *restorying* can create a mediational space leading to further professional development. Additionally, the authors argue that *dialogic restorying* offers valuable longitudinal perspectives on the developmental trajectories of L2 teachers, while also emphasizing the crucial role of research methodology in influencing and benefiting the participants in investigations of L2 teacher development throughout their careers.

In another SCLT-driven study, Nazari and his collaborators focused on material development and evaluation in the context of teachers' daily practice as a less explored turf in research on language teacher cognition. The analysis of researcher-adapted questionnaire and semi-structured interviews with eight Iranian English language teachers revealed that teachers evaluated implemented materials based on both positive and negative aspects, with positive evaluations emphasizing pedagogical benefits and negative evaluations highlighting institutional and sociocultural challenges. The teachers' maxims emphasized the need for materials to address not only pedagogical issues but also emotions and sociocultural particularities, thereby fostering socio-educational capitals among educational stakeholders, particularly students. The study offers implications for teacher educators to design professional development courses that incorporate personal, interpersonal, and sociocultural aspects, enhancing teachers' awareness of the pivotal role materials play in their second language teacher cognition growth within the sociocultural context.

Focusing on the exiting gaps in research on language teacher cognition and language skills, Tajeddin and his collaborators conducted a longitudinal qualitative study to investigate the

pedagogical reasoning of four novice language teachers in relation to speaking instruction, shedding light on the cognitive processes underlying their teaching practices. Classroom observations and post-observation stimulated recall interviews were conducted over an eight-month period to collect data. The analysis showed that novice teachers employ diverse pedagogical arguments, including instruction-based, students-based, teacher-based, and context-based reasoning, to justify their pedagogical decisions. The study also highlighted the developmental changes in novice teachers' pedagogical reasoning, indicating a shift from a focus on subject matter and instructional activities to consideration of students' cognitive and affective characteristics.

Ziaabadi and her collaborators investigated how Iranian English teachers perceive and implement English as an International Language (EIL) in their classrooms. Situated in an Iranian EFL context and through interviews and classroom observations, the researchers explore the teachers' beliefs and practices using the theory of planned behavior (TPB) as a framework. Despite acknowledging the diversity of English, the teachers predominantly favor standard American or British English in their instruction. This preference is influenced by their attitudes, social pressures, and perceived challenges of incorporating EIL principles. The study reveals a disconnect between teachers' beliefs and their actual classroom practices regarding raising students' awareness of different English varieties.

With a focus on teachers' cognitions about Global Englishes Language Teaching (GELT), Behzadpoor and Manosuri designed a qualitative case study and explored how two Iranian English teachers approached GE pedagogy in their classrooms and what attitudes they held about it. Theoretically rooted in Cultural Historical Activity Theory (CHAT), the study used semi-structured interview, stimulated recall protocol, and non-participant classroom observation as its data collection techniques. The overall findings suggested that although the participants held varying beliefs about GE, both had a tendency to give importance to the utilization of standard American or British English in their instructional approaches, highlighting the existence of a disconnect between theoretical concepts and practical understandings with regard to GE-related matters in ELT.

Finally, Yazan and Lindahl provide their reflective insights on the evolving conceptual approaches to teacher learning, emphasizing the interconnectedness of teacher cognition and teacher identity. The authors intend to bridge the gap between academic writing and practitioners by adopting a conversational tone, making the concepts more accessible to a wider audience. By exploring their ongoing negotiation of theoretical orientations, they reflect on how language teacher cognition research influences the field of language teacher identity research. The key finding highlights the importance of combining teachers' individual cognitive and metacognitive processes in professional learning with their contextual embeddedness in social, cultural, political, and economic discourses. This integration allows for a more comprehensive understanding of the complexities involved in language teaching and the process of becoming language teachers.

All in all, the collection of articles in this special issue highlights pathways where language teacher cognition research can be directed. As the editors of this special issue, we hope the issue contributes to the field of L2 teacher education and sets new perspectives and future lines of research. In the end, we would like to thank the reviewers for generously taking their time and reviewing the submissions and helping us collect this special issue.

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References

Akbari, R., & Dadvand, B. (2011). Does formal teacher education make a difference? A comparison of pedagogical thought units of B.A. versus M.A. teachers. *The Modern Language Journal, 95*, 44–60. https://doi. org/10.1111/j.1540-4781.2010.01142.x.

Atai, M. R., & Taherkhani, R. (2018). Exploring the cognitions and practices of Iranian EAP teachers in teaching the four language skills. *Journal of English for Academic Purposes 36*, 108–118. https://doi.org/10.1016/j.jeap.2018.09.007

Baker, A., & Murphy, J. (2011). Knowledge base of pronunciation teaching: Staking out the territory. *TESL Canada Journal, 28*(2), 29–50. https://doi.org/10.18806/tesl.v28i2.1071

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching, 36*, 81–109. https://doi.org/10.1017/S0261444803001903

Borg, S. (2019). Language teacher cognition: Perspectives and debates. In X. Gao (Ed.), *Second handbook of English language teaching*. (pp. 1149–1170). Springer.

Burns, A., Freeman, D., & Edwards, E. (2015) Theorizing and studying the language-teaching mind: Mapping research on language teacher cognition. *Modern Language Journal, 99*, 585–601. https://doi.org/10.1111/modl.12245

Chung, E., & Fisher, L. (2022). A dialogic approach to promoting professional development: Understanding change in Hong Kong language teachers' beliefs and practices regarding vocabulary teaching and learning. *System, 110*, 102901. https://doi.org/10.1016/j.system.2022.102901

Couper, G. (2017). Teacher cognition of pronunciation teaching: Teachers' concerns and issues. *TESOL Quarterly, 51*(4), 820–843. https://doi.org/10.1002/tesq.354

Dunkin, M. J., & Biddle, B. J. (1974). *The study of teaching.* Holt, Rinehart and Winston.

Gatbonton, E. (1999). Investigating experienced ESL teachers' pedagogical knowledge. *The Modern Language Journal, 83*, 35–50. https://doi.org/10.1111/0026-7902.00004

Gatbonton, E. (2008). Looking beyond teachers' classroom behaviour: Novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research, 12*(2), 161–182. https://doi.org/10.1177/1362168807086286

Golombek, P. R. (2015). Redrawing the boundaries of language teacher cognition: language teacher educators' emotion, cognition, and activity. *The Modern Language Journal, 99*, 470–484. https://doi.org/10.1111/modl.12236

Golombek, P., & Doran, M. (2014). Unifying cognition, emotion, and activity in language teacher professional development. *Teaching and Teacher Education, 39*, 102–111. http://dx.doi.org/10.1016/j.tate.2014.01.002

Karimi, M. N., & Norouzi, M. (2019). 'Cognitive aging' in teachers: L2 teachers' cognitive performance across various stages in their teaching career. *Innovation in Language Learning and Teaching, 13,* 371–388. https://doi.org/10.1080/17501229.2018.1466893

Karimi M. N., & Asadnia, F. (2023). Variations in novice and experienced L2 teachers' pedagogical cognitions and the associated antecedents in tertiary-level online instructional contexts. *Language Awareness, 32*(2), 235–254. DOI: 10.1080/09658416.2022.2033251

Kiss, T. (2012). The complexity of teacher learning: Reflection as a complex dynamic system. *Journal of Interdisciplinary Research in Education, 2*, 17–35.

Kubanyiova, M., & Feryok, A. (2015). Language teacher cognition in applied linguistics research: Revisiting the territory, redrawing the boundaries, reclaiming the relevance. *The Modern Language Journal*, *99* (3), 435–449. https://doi.org/10.1111/modl.12239

Li, L. (2023a). Cognition-in-interaction: A discursive psychological perspective of novice language teacher cognition. *TESL-EJ, 27*(2), https://doi.org/10.55593/ej.27106s2

Li, L. (2023b). Developing language teacher cognition about technology-enhanced assessment: A case of student teachers in a TESOL programme. In S. W. Chong, & H. Reinders (Eds). *Innovation in learning-oriented language assessment* (pp 277–294). Palgrave Macmillan.

Moradkhani, S., & Rahimi, M. (2020). The impact of students' English proficiency level and teacher education on L2 teachers' pedagogical knowledge: A mixed-methods study. *TESOL Journal, 11*(2), e496. https://doi.org/10.1002/tesj.496

Moradkhani, S., & Mansouri, B. (2020). Impact of a research-informed intervention on L2 teachers' WCF cognitions and practices: A sociocultural perspective. *System, 115*, 103052. https://doi.org/10.1016/j.system.2023.103052

Nall, M. & Hiratsuka, T. (2023). "Indulge in a Little Chaos": Assistant Language Teachers' Cognition and Pedagogical Knowledge Development Through the Lens of Complex Dynamic System Theory. *TESL-EJ, 27*(2), https://doi.org/10.55593/ej.27106s3

Nassaji, H., Bozorgian, H., & Golbabazadeh, E. (2023). Teachers' stated cognition and its relationship with oral corrective feedback practices in EFL classrooms. *System, 113*, 102993. https://doi.org/10.1016/j.system.2023.102993

Ngo, X. M. (2018). A sociocultural perspective on second language writing teacher cognition: A Vietnamese teacher's narrative. *System, 78*, 79–90. https://doi.org/10.1016/j.system.2018.08.002

Verloop, N., Van Driel, J., & Meijer, P. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research, 35*(5), 441–461. https://doi.org/10.1016/S0883-0355(02)00003-4

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