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# Bridging Assessment and Cognition: A Review of Dynamic Assessment and Metacognitive Strategy Research in EFL Listening

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### ABSTRACT

Conventional approaches to English listening instruction and evaluation tend to prioritise final performance outcomes while overlooking the learning process and learners' developmental potential. As a result, opportunities to enhance listening skills systematically are often limited. Grounded in Vygotsky's sociocultural theory, dynamic assessment focuses on identifying learners' potential abilities through guided instructional intervention during assessment. This perspective offers a transformative approach to listening pedagogy. At the same time listening comprehension is closely associated with learners' self-regulation, where metacognitive strategies play a crucial role. A growing body of literature highlights the effectiveness of these strategies in enhancing listening performance and learner autonomy. However, existing studies often examine dynamic assessment and metacognitive strategies in isolation, with limited attention to their integration. This review synthesises theoretical and empirical studies on dynamic assessment and metacognitive strategy instruction in second language listening. It critically examines how these approaches contribute to process-oriented learning, diagnostic feedback, and learner development. The review further identifies gaps in current research, particularly the lack of systematic frameworks that combine mediated assessment with metacognitive regulation. Overall, the literature suggests that integrating dynamic assessment with metacognitive strategies provides a promising direction for improving English listening instruction by aligning processes and supporting learners' cognitive and metacognitive development.

## 1. Introduction

Listening comprehension is a fundamental component of foreign language acquisition, serving as the primary channel through which learners receive linguistic input. However, in many university-level English classrooms, listening instruction continues to face persistent challenges. Despite considerable instructional time and effort, learning outcomes remain unsatisfactory. In practice,

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listening lessons often revolve around completing exercises followed by answer checking, with assessment primarily focusing on test results. Such approaches emphasise performance rather than the learning process, limiting teachers' ability to diagnose learners' difficulties or provide targeted support. Consequently, listening instruction fails to fully contribute to learners' language development.

Research has shown that listening comprehension is not merely a process of decoding language but involves complex cognitive and metacognitive processes [7,29]. Effective listeners actively regulate their understanding through planning, monitoring, and evaluating their comprehension. However, many learners lack awareness of these processes and struggle to manage listening tasks effectively, even when they possess adequate linguistic knowledge. This highlights the limitations of traditional assessment methods, which fail to capture learners' cognitive development. As a result, there is a growing need for alternative approaches that integrate assessment with instruction.

Dynamic assessment, rooted in Vygotsky's [31] sociocultural theory, provides such an approach. It emphasizes identifying learners' potential development through guided interaction and instructional support. Unlike static assessment, dynamic assessment focuses on learning processes and developmental progress.

Meanwhile, metacognitive strategies, which involve planning, monitoring, and evaluating learning activities, are widely recognised as key factors in successful listening comprehension. However, in many classrooms, these strategies are taught in isolation without systematic integration into assessment. Therefore, this study seeks to review and synthesise existing literature on the integration of dynamic assessment and metacognitive strategy instruction in English listening. This review aims to examine how these approaches contribute to listening development and learners' ability to regulate their learning processes.

## **2. Research Methodology**

This study adopts a qualitative literature review approach, using thematic analysis to examine and synthesise relevant scholarly works. This approach is appropriate for review-based research, as it enables the identification of recurring patterns, key concepts, and emerging issues across existing studies. The review is organised around three central domains: metacognitive strategies in EFL listening, dynamic assessment in language learning, and the integration of assessment and instruction. Guided by Braun and Clarke's [3] thematic analysis framework, the selected literature was analysed and grouped into major themes to provide a clearer understanding of how these concepts are discussed and interconnected in previous research. Rather than merely describing earlier studies, this review critically synthesises the literature to highlight major trends, research gaps, and implications for English listening pedagogy.

## **3. Literature Review and Thematic Analysis**

### *3.1 Listening as a Complex Cognitive Process in EFL Contexts*

Listening comprehension in second language acquisition has increasingly been conceptualised as a complex and dynamic cognitive process rather than a passive reception of auditory input [5,22]. Early models of listening tended to emphasise decoding and recognition of linguistic elements; however, more recent perspectives highlight the interplay of multiple cognitive processes, including perception, parsing, memory activation, inferencing, and integration of contextual knowledge [30]. Contemporary research suggests that learners' listening difficulties often arise not from a lack of linguistic knowledge but from limitations in processing spoken language in real time [5,9]. Studies

indicate that learners frequently struggle with segmenting continuous speech, recognising reduced forms, and maintaining attention while simultaneously constructing meaning [22,28]. These challenges are particularly pronounced in EFL contexts, where exposure authentic input may be limited [9].

Recent work by Christine and Goh [6] emphasises that listening comprehension should be understood as a process involving multiple stages of cognitive processing. According to this perspective, breakdowns in comprehension may occur at various points, including perceptual processing (e.g., identifying sounds), parsing (e.g., organising syntactic structures), and utilisation (e.g., integrating meaning with prior knowledge). This reconceptualization shifts the focus from outcome-based evaluation to process-oriented understanding.

Furthermore, listening is increasingly viewed as an interactive process in which learners actively construct meaning rather than passively receive information [30]. Cognitive theories of language processing highlight that listeners continuously generate predictions, monitor incoming information, and revise their interpretations as new input becomes available [2]. This dynamic nature of listening underscores the importance of instructional approaches that support learners in managing these processes effectively.

Another important dimension of listening is its reliance on working memory and attentional control [1]. Research indicates that learners with limited working memory capacity may struggle to retain and process incoming information, particularly in tasks that require integration of multiple ideas. This suggests that listening instruction must address not only linguistic knowledge but also cognitive and processing efficiency.

In addition, emotional and affective factors play a significant role in listening comprehension. Anxiety, lack of confidence, and negative prior experiences can hinder learners' ability to engage effectively with listening tasks [8,28]. Studies have shown that learners who perceive listening as difficult or overwhelming are less likely to persist in processing input, leading to reduced comprehension. Overall, the literature highlights that listening comprehension is a multidimensional process influenced by cognitive, linguistic, and affective factors. This complexity necessitates instructional approaches that move beyond traditional product-oriented methods and instead focus on supporting learners' cognitive engagement and processing strategies.

### *3.2 Development of Self-Regulation in Listening*

The concept of self-regulation has gained prominence in language learning research as a key factor influencing learner success. In the context of listening, self-regulation refers to learners' ability to plan, monitor, and evaluate their comprehension processes. Rather than relying solely on external instruction, self-regulated learners actively manage their learning by setting goals, selecting strategies, and reflecting on their performance. Recent research has moved beyond reviewing strategies as discrete technique and instead conceptualises them as part of a broader system of learner regulation. This perspective emphasises that effective listening involves not only the use of strategies but also the ability to adapt and coordinate them in response to tasks demands.

Studies indicate that successful listeners demonstrate a high degree of metacognitive awareness, enabling them to anticipate challenges, monitor their understanding, and adjust their approach when necessary [6,21,24]. For example, learners may predict content based on contextual clues, verify their understanding during listening, and evaluate their performance after completing a task. These processes contribute to more effective comprehension and greater learner autonomy [27,32].

Recent empirical studies further support this claim. Metacognitive listening strategies such as planning, monitoring, and evaluation have been consistently associated with improved listening

performance and increased learner confidence among EFL learners [6,21]. Similarly, research in technology-mediated and self-regulated environments shows that learners who actively engage in reflection and self-monitoring demonstrate significantly higher listening achievement compared to those using traditional approaches [4,24].

Moreover, metacognitive instruction has been shown to enhance not only listening performance but also learner autonomy and self-regulation, particularly when learners are guided to reflect on their listening processes and strategy use [27,32]. In addition, collaborative and multimedia-based learning environments further strengthen learners' ability to monitor comprehension and adapt strategies during listening tasks, reinforcing the critical role of metacognitive awareness in successful listening [24].

In technology-mediated environments, the role of self-regulation becomes even more critical. Digital learning platforms often require learners to manage their own learning processes, including pacing, task selection, and evaluation of progress. Research has shown that learners who engage in reflective activities, such as self-assessment and written reflection, can achieve stronger listening outcomes, particularly in online metacognitive listening practice settings. However, the evidence is more consistent for gains in listening comprehension than for gains in metacognitive awareness itself, so that distinction should be made carefully [4,16].

Collaborative learning environments also support the development of self-regulation. When learners engage in peer discussions and joint problem-solving, they are exposed to different perspectives and strategies, which can deepen their understanding of listening processes. In multimedia-based collaborative listening contexts, learners who participated in metacognitive instruction were reported to benefit from interaction, reflection, and shared problem-solving during listening tasks [24].

Another important aspect of self-regulation is its transferability across tasks and contexts. Research suggests that metacognitive regulation can extend beyond a single task type and may transfer across domains and even across first- and second-language contexts, although such transfer does not always occur automatically and often requires structured support or training [25,32]. However, despite its importance, many learners still struggle to develop effective self-regulation. Recent studies indicate that learners may be unfamiliar with metacognitive strategies unsure how to apply them appropriately, or unable to monitor their comprehension effectively during listening tasks. These findings suggest that explicit instruction and sustained support remain necessary for helping learners develop stronger self-regulatory control [6].

In summary, self-regulation plays a crucial role in listening comprehension by enabling learners to manage their cognitive processes and adapt to different task types. The development of self-regulation therefore requires instructional approaches that provide opportunities for reflection, interaction, and guided practice [23,24].

### *3.3 Regulatory Processes and Learner Agency in Listening Development*

In technology-mediated environments, the role of self-regulation becomes even more critical. Digital learning platforms require learners to actively manage their learning processes, including pacing, task selection, and evaluation of progress. Research indicates that learners who engage in reflective activities such as self-assessment, journaling, and monitoring demonstrate improved listening performance and stronger metacognitive control [4,16]. These environments promote learner autonomy by shifting responsibility from teacher to learner, thereby enhancing self-directed learning behaviours [27].

Collaborative learning environments also support the development of self-regulation. When learners engage in peer discussions, group tasks, and joint problem-solving, they are exposed to diverse strategies and perspectives that enhance their understanding of listening processes. Empirical studies have shown that collaborative and multimedia-supported listening tasks significantly improve learners' ability to monitor comprehension and adjust strategies during listening [24]. Interaction with peers also encourages learners to articulate their thinking, justify their interpretations, and refine their strategic approaches, which contributes to deeper cognitive engagement [30].

Another important aspect of self-regulation is its transferability across tasks and contexts. Research suggests that learners who develop strong metacognitive regulation skills are more likely to apply these skills across different domains of language learning. For example, Xu and Zhu [32] found that metacognitive strategies can transfer across first and second language tasks, indicating that self-regulation functions as a generalisable learning capability rather than a task-specific skill. Similarly, Teng [27] reported that self-regulated learners demonstrate higher adaptability and are better able to manage diverse learning challenges.

However, despite its importance, many learners struggle to develop effective self-regulation. Studies indicate that learners often lack awareness of how to apply strategies appropriately or fail to monitor their comprehension effectively during listening tasks [6,10]. This suggests that self-regulation does not develop automatically and requires explicit instruction and sustained support. Without structured guidance, learners may remain passive and rely on surface-level processing strategies.

In summary, self-regulation plays a crucial role in listening comprehension by enabling learners to manage cognitive processes, adapt to task demands, and improve learning outcomes. The development of self-regulation therefore requires instructional approaches that incorporate reflection, interaction, and guided practice to support learners' gradual transition from external regulation to independent learning [27,29].

### *3.4 Mediated Learning and Dynamic Assessment*

Dynamic assessment represents a significant departure from traditional assessment practices by emphasising the role of mediation and interaction in learning [13,17]. Rooted in Lev Vygotsky's sociocultural theory, dynamic assessment focused on learners' potential development rather than their current performance, particularly through the concept of the Zone of Proximal Development [31]. One of the key principles of dynamic assessment is the integration of teaching and assessment. Instead of evaluating learners' abilities in isolation, dynamic assessment involves providing support during assessment to help learners improve their performance [12]. This approach allows teachers to observe how learners respond to guidance and identify their developmental potential [18].

Research has shown that dynamic assessment can provide deeper insights into learners' abilities and support personalised instruction. By examining learners' responsiveness to mediation, teachers can gain a better understanding of their learning needs and tailor their instruction accordingly [19,26].

In recent years, dynamic assessment has been applied to various areas of language learning, including reading, writing, and speaking. Empirical studies demonstrate its effectiveness in improving learners' performance through guided feedback and scaffolding [11,20], its application in listening remains relatively limited, particularly due to the challenges associated with real-time interaction and immediate feedback during listening tasks [14].

Technological advancements have opened new possibilities for dynamic assessment in listening. Digital tools and AI-supported platforms can facilitate interaction, provide immediate feedback, and support repeated practice, thereby enhancing learner engagement and performance [4]. These developments make it increasingly feasible to implement dynamic assessment in classroom settings and address some of the practical challenges associated with traditional approaches.

Nevertheless, the implementation of dynamic assessment requires careful consideration of factors such as teacher training, classroom context, and resource availability. Teachers must develop the pedagogical skills necessary to provide effectively mediation and manage the complexity of dynamic assessment processes [12,15].

#### 4. Identified Research Gap

Despite the growing body of research on listening comprehension, self-regulation, and dynamic assessment, several gaps remain. First, many studies continue to focus on isolated aspects of listening, such as strategy use or assessment practices, without considering their interaction. Second, there is limited research on how these approaches can be integrated into a coherent instructional framework. While some studies have explored the potential of combining dynamic assessment and metacognitive strategies, systematic models remain underdeveloped. Third, practical challenges such as teacher training, classroom constraints, and resource limitations continue to hinder implementation. Addressing these challenges require further research and the development of practical guidelines for teachers. Overall, the literature indicates a need for a more integrated and comprehensive approach to listening instruction that aligns cognitive processes, instructional practices, and assessment methods.

#### 5. Conclusion

In addition to cognitive factors, affective variables such as anxiety and motivation significantly influence listening comprehension. Learners who experience high levels of anxiety may have difficulty concentrating on input, leading to reduced comprehension. Conversely, learners with higher confidence and motivation are more likely to engage actively with listening tasks and persist in overcoming difficulties. Overall, the literature indicates that listening comprehension is a complex interplay of cognitive, linguistic, and affective factors. This complexity necessitates a shift from traditional product-oriented approaches to process-oriented instruction that supports learners' cognitive engagement and strategic control.

#### References

- [1] Baddeley, Alan. "Working memory: Theories, models, and controversies." *Annual review of psychology* 63, no. 1 (2012): 1-29. <https://doi.org/10.1146/annurev-psych-120710-100422>
- [2] Anderson, J. R. (2015). *Cognitive Psychology and Its Implications* (8th ed.). Worth Publishers. (Original Work Published in 2000)
- [3] Braun, Virginia, and Victoria Clarke. "Using thematic analysis in psychology." *Qualitative research in psychology* 3, no. 2 (2006): 77-101.
- [4] Chen, Angxuan, Yuyue Zhang, Jiyu Jia, Min Liang, Yingying Cha, and Cher Ping Lim. "A systematic review and meta-analysis of AI-enabled assessment in language learning: Design, implementation, and effectiveness." *Journal of Computer Assisted Learning* 41, no. 1 (2025): e13064. <https://doi.org/10.1111/jcal.13064>
- [5] Field, J. (2008). *Listening in the Language Classroom*. Cambridge: Cambridge University Press.
- [6] Goh, Christine CM. "Learners' cognitive processing problems during comprehension as a basis for L2 listening research." *System* 119 (2023): 103164.

- [7] Goh, Christine Chuen Meng. "Listening as process: Learning activities for self-appraisal and self-regulation." (2010).
- [8] Goh, Christine. "Metacognitive instruction for second language listening development: Theory, practice and research implications." *RELC journal* 39, no. 2 (2008): 188-213. <http://dx.doi.org/10.1177/0033688208092184>
- [9] Graham, Suzanne, Denise Santos, and Robert Vanderplank. "Exploring the relationship between listening development and strategy use." *Language Teaching Research* 15, no. 4 (2011): 435-456. doi: 10.1177/1362168811412026
- [10] Graham, Suzanne, and Ernesto Macaro. "Strategy instruction in listening for lower-intermediate learners of French." *Language learning* 58, no. 4 (2008): 747-783. <https://doi.org/10.1111/j.1467-9922.2008.00478.x>
- [11] Kushki, Ali, Hossein Nassaji, and Mohammad Rahimi. "Interventionist and interactionist dynamic assessment of argumentative writing in an EFL program." *System* 107 (2022): 102800. <https://doi.org/10.1016/j.system.2022.102807>
- [12] Lantolf, James P., and Matthew E. Poehner. "Dynamic assessment in the classroom: Vygotskian praxis for second language development." *Language teaching research* 15, no. 1 (2011): 11-33.
- [13] Lantolf, James P., and Matthew E. Poehner. "Dynamic assessment of L2 development: Bringing the past into the future." *Journal of applied linguistics* 1, no. 1 (2004).
- [14] Liu, H. Y., & Liu, Q. (2020). Dynamic assessment in academic English-speaking classrooms for science and engineering undergraduates. *Language Testing and Assessment*, (1), 53–60.
- [15] Milliner, B & Dimoski, B. (2021). The effects of a metacognitive intervention on lower-proficiency EFL learners' listening comprehension and listening self-efficacy. *Lang. Teach. Res.* 10.1177/13621688211004646.
- [16] Pei, Tao, Jitpanat Suwanthep, and Huashan Lu. "The effect of self-directed online metacognitive listening practice on Chinese EFL learners' listening ability, metacognition, and self-efficacy." *Frontiers in psychology* 14 (2023): 1285059. doi: 10.3389/fpsyg.2023.1285059
- [17] Poehner, Matthew E. *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development*. Boston, MA: Springer US, 2008.
- [18] Poehner, Matthew E., and James P. Lantolf. "Dynamic assessment in the language classroom." *Language teaching research* 9, no. 3 (2005): 233-265.
- [19] Poitras, Eric G., and Susanne P. Lajoie. "A domain-specific account of self-regulated learning: The cognitive and metacognitive activities involved in learning through historical inquiry." *Metacognition and Learning* 8, no. 3 (2013): 213-234.
- [20] Rashidi, Nasser, and Zahra Bahadori Nejad. "An investigation into the effect of dynamic assessment on the EFL learners' process writing development." *Sage Open* 8, no. 2 (2018): 2158244018784643. <https://doi.org/10.1177/2158244018778651>
- [21] Rezaei, Afsheen, Ehsan Namaziandost, and Gholam Hossein Hosseini. "Impact of online self-assessing metacognitive strategies accompanied with written languaging on cultivating Iranian IELTS candidates' listening comprehension." *Smart Learning Environments* 10, no. 1 (2023): 45. <https://doi.org/10.1186/s40561-023-00265-7>
- [22] Rost, M. (2013). *Teaching and Researching: Listening*. Taylor & Francis Group.
- [23] Schuster, Corinna, Ferdinand Stebner, Detlev Leutner, and Joachim Wirth. "Transfer of metacognitive skills in self-regulated learning: an experimental training study." *Metacognition and Learning* 15, no. 3 (2020): 455-477. <https://doi.org/10.1007/s11409-020-09237-5>
- [24] Shamsi, Esmat, and Hossein Bozorgian. "Collaborative listening using multimedia through metacognitive instruction: A case study with less-skilled and more-skilled EFL learners." *Asian-Pacific Journal of Second and Foreign Language Education* 9, no. 1 (2024): 25.
- [25] Stebner, Ferdinand, Corinna Schuster, Xenia-Lea Weber, Samuel Greiff, Detlev Leutner, and Joachim Wirth. "Transfer of metacognitive skills in self-regulated learning: Effects on strategy application and content knowledge acquisition." *Metacognition and Learning* 17, no. 3 (2022): 715-744. <https://doi.org/10.1007/s11409-022-09322-x>
- [26] Sternberg, Robert J., and Elena L. Grigorenko. *Dynamic testing: The nature and measurement of learning potential*. Cambridge university press, 2002.
- [27] Teng, Mark Feng, Chuang Wang, and Lawrence Jun Zhang. "Assessing self-regulatory writing strategies and their predictive effects on young EFL learners' writing performance." *Assessing Writing* 51 (2022): 100573. <https://doi.org/10.1016/j.asw.2021.100573>.
- [28] Vandergrift, Larry. "Second language listening: Listening ability or language proficiency?." *The modern language journal* 90, no. 1 (2006): 6-18.
- [29] Vandergrift, Larry, and Marzieh H. Tafaghodtari. "Teaching L2 learners how to listen does make a difference: An empirical study." *Language learning* 60, no. 2 (2010): 470-497. <http://dx.doi.org/10.1111/j.1467-9922.2009.00559.x>

- [30] Vandergrift, L. & Goh, C.M. (2012). *Teaching and Learning Second Language Listening: Metacognition in Action*. New York: Routledge.
- [31] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- [32] Xu, Wandong, and Xinhua Zhu. "Examining metacognitive strategy use in L1 and L2 task-situated writing: Effects, transferability, and cross-language facilitation." *Metacognition and Learning* 19, no. 3 (2024): 773-792. <https://doi.org/10.1007/s11409-024-09387-w>