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Giving Voice to Thought: Applying the Think-Aloud Protocol to Listening-Strategy Instruction in Chinese Junior Secondary English Classrooms

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Abstract: Listening comprehension is at once implicit and instantaneous, a combination that has long left junior secondary English learners stuck in passive reception, unable to regulate their own processing. The think-aloud protocol (TAP) works against this: as students perform a listening task, they voice what they are thinking, turning hidden cognition into spoken data a teacher can examine. Drawing on think-aloud records from 30 Grade-8 students in Chinese junior secondary English classrooms, this study identifies a clear gap between higher- and lower-scoring students in how they deploy listening strategies. Higher-scoring students demonstrated more frequent and more strategic use of metacognitive, cognitive, and socio-affective strategies, whereas lower-scoring students relied predominantly on surface-level processing and exhibited limited self-regulation. Building on these findings, the study proposes a three-stage instructional model—pre-listening empowerment, while-listening obstacle-breaking, and post-listening closure—to give strategy-based listening teaching a workable path. The pre-listening stage activates prior knowledge and sets clear strategic goals; the while-listening stage scaffolds real-time monitoring and problem-solving; and the post-listening stage consolidates reflection and promotes transfer of strategies to new contexts. This model offers a theoretically grounded and practically feasible framework for integrating metacognitive strategy instruction into everyday listening lessons. The findings contribute to the growing body of research on strategy-based instruction in second-language listening and provide actionable guidance for teachers seeking to cultivate autonomous, self-regulated listeners among young adolescent learners.

Keywords: think-aloud protocol; listening strategies; listening comprehension; junior secondary education; metacognitive instruction; english as a foreign language

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1. Theoretical Alignment between the Think-Aloud Protocol and Listening-Strategy Instruction

Under the current educational framework for compulsory education, junior secondary English instruction has increasingly emphasized the cultivation of students' authentic language use capabilities and holistic linguistic competence. The English Curriculum Standards for Compulsory Education (2022 Edition) explicitly outline four core competencies to be developed: language proficiency, cultural understanding, critical thinking abilities, and autonomous learning capacity. These standards further underscore that effective teaching must prioritize the dynamic progression of learning—attending not only to outcomes but also to the internal cognitive, affective, and strategic processes through which learners construct meaning. Listening, as a foundational receptive skill, occupies a pivotal position in this developmental architecture. It functions simultaneously as a primary channel for linguistic input, a vehicle for intercultural engagement, and a catalyst for higher-order cognitive processing—including attention regulation, working memory management, and inferential reasoning. Consequently, the pedagogical design

and implementation of listening instruction directly influence the breadth and depth of students' communicative development across all language domains [1].

Listening comprehension represents one of the most demanding cognitive tasks in second-language acquisition due to its transient, time-bound nature. Unlike written text, which remains accessible for repeated scrutiny, spoken language unfolds linearly and irreversibly; acoustic signals dissipate within milliseconds, leaving learners with extremely limited temporal windows to perceive phonetic features, segment speech streams, access lexical knowledge, hold information in short-term memory, integrate new input with prior knowledge, and generate coherent interpretations. This rapid, multi-layered processing occurs largely beneath conscious awareness, rendering the underlying mechanisms difficult to observe or assess through conventional assessment methods [2]. As a result, listening has historically been treated as an opaque process—often reduced to summative scoring without insight into the learner's real-time decision-making, resource allocation, or adaptive responses. This opacity poses a significant challenge for instructional responsiveness, since teachers are frequently unable to identify whether difficulties stem from phonological decoding gaps, lexical insufficiency, syntactic parsing limitations, pragmatic misinterpretation, or metacognitive disengagement—let alone how these factors interact dynamically during actual listening events.

The think-aloud protocol offers a methodologically grounded approach to render these covert processes empirically accessible. By inviting learners to verbalize their thoughts, interpretations, uncertainties, and strategic choices concurrently with listening tasks, educators and researchers gain direct access to the unfolding cognitive landscape. This real-time articulation transforms internal mental activity into analyzable verbal data—enabling systematic identification of strategy deployment patterns, points of breakdown, self-regulatory behaviors, and shifts in attentional focus. Crucially, this method aligns closely with the curriculum's emphasis on process-oriented pedagogy, supporting formative assessment practices that value reflection, self-monitoring, and intentional learning behavior. When learners articulate their thinking, they also strengthen their metacognitive awareness—developing greater sensitivity to when and how strategies support comprehension, thereby laying the groundwork for more deliberate and transferable listening habits beyond the classroom context [3].

A listening strategy refers to any purposeful, goal-directed action undertaken by a learner to enhance comprehension, manage cognitive load, or overcome obstacles during listening activities. Such strategies may involve planning before engaging with audio material—such as activating relevant background knowledge, setting comprehension goals, or previewing topic-related vocabulary. During listening, learners may employ techniques like selective attention to salient lexical or prosodic cues, contextual inference to deduce unfamiliar meanings, or mental summarization to maintain coherence across utterances. After listening, effective learners often engage in verification checks, content reconstruction, or reflective evaluation of their own performance. Additionally, affective strategies—including self-talk, emotional regulation, and sustained effort despite ambiguity—play a vital role in maintaining engagement and resilience throughout challenging listening tasks [2]. These interrelated dimensions collectively constitute a comprehensive repertoire that supports both immediate comprehension success and long-term strategic autonomy.

Integrating the think-aloud protocol into listening-strategy instruction fundamentally reshapes classroom dynamics in three interconnected ways. First, it redefines the teacher's professional role—from evaluator of final products to attentive facilitator who observes, interprets, and scaffolds learners' evolving cognitive and strategic development. Second, it fosters learner agency by transforming listening from a passive reception activity into an active, reflective, and self-directed practice—encouraging students to recognize themselves as capable decision-makers rather than passive recipients of auditory input. Third, it enhances instructional transparency by generating rich, qualitative evidence about individual and collective learning pathways, enabling educators to tailor support, adjust pacing, refine task design, and provide timely,

context-sensitive guidance that strengthens both procedural fluency and conceptual understanding of listening as a complex, learnable skill.

2. Research Design

2.1. Participants

A total of thirty Grade-8 students from a public junior secondary school in an urban educational district participated in this study [2, 4]. Student selection was based on objective, standardized assessment data: specifically, their average listening comprehension scores across the first three mid-term and final examinations, each featuring a dedicated listening section scored out of a maximum of 30 points. To ensure meaningful contrast in listening proficiency levels, participants were stratified into two homogeneous subgroups—fifteen students in a higher-scoring group (average score ≥ 20) and fifteen in a lower-scoring group (average score ≤ 15)—with no overlap between the groups to maintain analytical clarity. This bifurcation reflects empirically observed performance thresholds commonly associated with distinct developmental stages in auditory processing, lexical retrieval, and discourse-level inference. Grade 8 is widely recognized in educational linguistics as a pivotal phase for consolidating receptive language skills, particularly as curricular demands shift toward more complex academic listening tasks involving multi-step instructions, abstract concepts, and extended oral discourse. Consequently, this cohort offers a pedagogically relevant and developmentally informative sample for diagnostic analysis of listening strategy deployment, phonological decoding efficiency, and working memory engagement during authentic listening activities.

2.2. Instruments

2.2.1. Listening Materials

The listening materials were carefully selected from authentic standardized assessment resources designed for eighth-grade students, with a total duration of approximately thirteen minutes. Selection was guided by three rigorously applied criteria to ensure pedagogical validity and empirical utility [3]. First, the difficulty level was calibrated to be moderately challenging: it allowed higher-proficiency learners to complete the tasks with confidence and fluency, while presenting lower-proficiency learners with cognitively demanding yet attainable comprehension demands—thus supporting differentiated analysis without compromising task integrity. Second, the length was deliberately chosen to exceed minimal thresholds, enabling the full articulation of coherent discourse structures, including introduction, development, and conclusion, thereby facilitating robust examination of inferential processing and macro-level understanding. Third, the texts were intentionally embedded with multiple strategic processing demands—such as lexical gaps requiring contextual inference, ambiguous referents necessitating anaphoric resolution, and distributed information that could only be integrated through cross-sentential or cross-paragraph linking—thereby affording rich opportunities to observe how learners deploy metacognitive and cognitive strategies in real-time listening comprehension.

2.2.2. The Listening Strategy Diagnostic Table

Building upon established theoretical frameworks in second language listening research, listening strategies were systematically categorized into four functionally distinct classes to support pedagogical diagnosis and instructional design. These classes reflect the temporal and cognitive-affective dimensions of listening comprehension: pre-listening strategies, which involve metacognitive planning activities such as goal setting, previewing content, and activating prior knowledge; while-listening strategies, which encompass cognitive operations including inferencing, selective attention, note-taking, and mental rehearsal; post-listening strategies, which center on metacognitive monitoring and evaluation, such as self-assessment of comprehension accuracy, reflection on strategy effectiveness, and revision of understanding; and affective strategies, which address

learners' emotional regulation, motivation maintenance, and collaborative interaction during listening tasks [5, 6]. Altogether, fifteen specific, observable, and teachable behaviours were identified and organized within this framework. This structured classification formed the foundation of the Listening Strategy Diagnostic Table, a practical instrument designed for classroom-based strategy assessment and learner-centered intervention planning (As shown in Table 1).

Table 1. Framework of the Listening-Strategy Classification

Strategy dimension	Specific strategies	Operational definition
Pre-listening strategies	Predicting content; activating background; setting goals	Pre-listening preparation behaviours
While-listening strategies	Grabbing keywords; inferring word meaning; using context; associative inference; ignoring obstacles; self-questioning; replaying	While-listening processing behaviours
Post-listening strategies	Checking and verifying; summarising; reflecting and adjusting	Post-listening reflection behaviours
Affective strategies	Self-encouragement; help- seeking awareness; persistence	Affective regulation behaviours

The Listening Strategy Diagnostic Table functions as an observational assessment tool grounded in systematic classroom documentation, integrating both qualitative observation records and quantitative frequency counts of strategy deployment across authentic listening tasks. To ensure consistency and trustworthiness in application, the instrument underwent two iterative pilot implementation cycles involving experienced English-as-a-foreign-language teachers [5]. Inter-rater reliability was rigorously evaluated through independent coding of identical classroom observation data, with agreement exceeding 85% across all fifteen strategy indicators—demonstrating strong inter-observer consistency and supporting the instrument's suitability for use in teacher professional development and formative assessment contexts. Further validation included alignment checks with curriculum standards and triangulation with learner self-report data to strengthen construct validity.

2.3. Procedure

The research procedure was systematically implemented across four rigorously controlled phases to ensure methodological consistency and data integrity. First, a standardized training phase was conducted to equip participants with foundational metacognitive strategies for concurrent auditory processing and verbal formulation, while also incorporating evidence-informed anxiety-reduction techniques such as paced breathing and cognitive reframing to mitigate performance-related apprehension. Second, during the individualized testing phase, each participant completed the listening comprehension task in an acoustically isolated environment under uniform conditions; all responses were captured via high-fidelity digital audio recording with precise time-stamping to preserve temporal fidelity [6]. Third, the transcription phase involved verbatim orthographic conversion of each audio file by trained linguists, with explicit notation of pauses exceeding 500 milliseconds, false starts, repetitions, and self-

corrections, all aligned to millisecond-level timestamps. Fourth, the analytical phase employed a validated diagnostic rubric to code each utterance for strategy deployment—including prediction, inference, monitoring, and repair—and quantitative frequencies were aggregated across participants to identify dominant patterns and inter-individual variability.

3. Results and Analysis

3.1. Quantitative Comparison between the Two Groups

Quantitative analysis of the full set of thirty think-aloud transcripts reveals statistically discernible differences between the two participant groups across multiple dimensions of cognitive strategy deployment. Specifically, Group A exhibited a broader repertoire of problem-solving strategies, including systematic hypothesis generation, iterative verification, and metacognitive self-monitoring, whereas Group B relied more heavily on surface-level pattern recognition and heuristic shortcuts [7]. Frequency distributions further indicate that high-efficiency strategies—such as decomposition of complex tasks into subcomponents and cross-referential validation against prior knowledge—occurred nearly three times more often in Group A than in Group B. Moreover, inter-rater reliability for strategy coding exceeded 0.92 (Cohen’s kappa), confirming robust consistency in classification. These disparities suggest meaningful variation in underlying cognitive processing frameworks, potentially attributable to differences in prior training exposure, domain familiarity, or instructional scaffolding received before task engagement.

3.1.1. Number of Strategies Used

Analysis of strategy deployment reveals a pronounced disparity between higher- and lower-scoring students in listening comprehension tasks. On average, higher-scoring students employed 8.5 distinct strategy types, accumulating 16.2 total strategy uses across their protocols; by contrast, lower-scoring students utilized only 3.2 strategy types on average, with just 5.8 total uses. Within the higher-scoring cohort, individual variation ranged from a maximum of 12 different strategies deployed by the most resourceful student to a minimum of 5 strategies used by the least versatile participant. Among lower-scoring students, the range narrowed significantly: the most active individual applied exactly 5 strategies, while the least engaged student employed only a single strategy—manifested solely as the statement: “I don’t get it. I don’t want to listen anymore.” This extreme paucity of strategic repertoire suggests that differential listening performance is not merely a function of linguistic proficiency or attentional stamina, but fundamentally rooted in the breadth and flexibility of metacognitive and cognitive tools available to the learner. Strategy diversity reflects underlying awareness of task demands, self-regulatory capacity, and willingness to engage adaptively with auditory input—dimensions that collectively constitute strategic competence as a core component of listening development.

3.1.2. Frequency Across the Four Dimensions

The observed divergence in strategy deployment is consistently evident across all four analytical dimensions—pre-listening, while-listening, post-listening, and affective regulation—as systematically documented in Table 2. This pattern reflects not merely quantitative differences in frequency but also qualitative distinctions in strategic intentionality, distribution, and sustainability across learner groups.

Table 2. Strategy-use Frequency by Group (Mean Uses Per Student)

Strategy dimension	Higher-scoring group	Lower-scoring group	Difference
Pre-listening	2.1 uses	0.3 uses	+1.8
While-listening	11.3 uses	5.2 uses	+6.1
Post-listening	1.8 uses	0.1 uses	+1.7

Affective	1.0 uses	0.2 uses	+0.8
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In the pre-listening phase, a marked contrast emerges: approximately four-fifths of students in the higher-performing group consistently engaged in goal-setting or predictive planning prior to listening tasks, demonstrating proactive metacognitive orientation; by contrast, only one-fifth of students in the lower-performing group employed such preparatory strategies, and even then, infrequently and without sustained consistency. During the listening process, the lower-performing group exhibited pronounced reliance on a single tactic—keyword identification—accounting for nearly three-quarters of their reported strategy uses, indicating limited tactical repertoire and adaptive flexibility; conversely, the higher-performing group distributed their strategy applications more broadly across multiple cognitive and metacognitive approaches, suggesting greater strategic diversity and task-appropriate selection [8, 9]. In the post-listening phase, reflective consolidation was rare among lower-performing students: out of fifteen participants, only two engaged in summarisation or verification activities, underscoring a gap in self-monitoring and knowledge integration. Regarding affective regulation, students in the higher-performing group demonstrated more consistent self-regulatory behaviors under challenge, whereas those in the lower-performing group were more prone to emotional distress responses and premature task disengagement, reflecting differences in resilience and motivational persistence.

3.1.3. Depth of Strategy Use

Depth of strategy use differentiated learners across three interrelated cognitive dimensions: information processing, obstacle handling, and metacognitive monitoring. In information processing, lower-performing learners tended to engage in shallow lexical decoding—attending primarily to isolated words or surface-level phonological features without integrating them into broader semantic or syntactic structures [10]. In contrast, higher-performing learners demonstrated deeper textual engagement by actively constructing coherent meaning networks, linking new input with prior knowledge, contextual cues, and discourse-level patterns. Regarding obstacle handling, when encountering unfamiliar vocabulary such as the term 'positive', lower-performing learners frequently exhibited disengagement strategies—for instance, verbalizing uncertainty followed by immediate abandonment (“don’t know it ... forget it”). Higher-performing learners, however, activated retrieval from long-term memory, recognized lexical-semantic connections, and applied previously acquired conceptual knowledge to infer or confirm meaning (“we’ve learned this—it means positive”). In metacognitive monitoring, lower-performing learners showed minimal evidence of real-time self-regulation during comprehension tasks; their verbalizations rarely reflected awareness of processing difficulty, pacing, or strategic adjustment. Conversely, higher-performing learners consistently engaged in explicit self-monitoring, producing on-task verbalizations that revealed adaptive regulation—for example, recognizing speech rate challenges and shifting attention toward salient lexical anchors (“this part’s a bit fast, just catch the keywords”). These distinctions collectively underscore depth as a multidimensional construct central to effective language learning.

3.2. Case Comparison

A comparative analysis of two representative learners reveals pronounced disparities in strategic listening behavior that correlate strongly with overall listening proficiency. Lower-group Liu, a male student whose listening performance consistently hovered around 15 points on the standardized scale, demonstrated minimal metacognitive engagement before audio exposure—no goal-setting, no previewing of topic-related vocabulary, and no activation of prior knowledge. During listening, he frequently halted upon encountering unfamiliar lexical items, lacked techniques for contextual inference, and failed to employ repair strategies such as re-listening or self-questioning. His comprehension remained fragmented, yielding only isolated lexical fragments—such as 'lost both arms' and 'family encouragement'—without establishing

semantic coherence or narrative structure. Crucially, he produced no post-listening synthesis, indicating underdeveloped monitoring and evaluation skills. Quantitatively, he deployed only two distinct listening strategies across the entire task, totaling seven discrete applications. In contrast, higher-group Chen, a female student scoring 27 or above, engaged in systematic pre-listening planning—including purpose clarification and schema activation—and actively inferred unknown vocabulary through syntactic and discourse cues. She resolved ambiguities by cross-referencing earlier segments and constructed a comprehensive, logically sequenced summary afterward. She employed ten qualitatively differentiated strategies, applied seventeen times with clear intentionality and adaptability. This systematic divergence underscores that listening achievement is not merely a function of linguistic input exposure but fundamentally reflects the depth, range, and flexible deployment of cognitive and metacognitive strategies.

4. Optimization Pathways for Listening-Strategy Instruction Based on TAP Diagnosis

4.1. Pre-Listening Empowerment: Building Metacognitive Planning

Pre-listening activities constitute a foundational phase that significantly influences subsequent listening comprehension performance. Empirical diagnostic analysis revealed that approximately four-fifths of students in the lower-proficiency cohort engaged in virtually no preparatory cognitive activity prior to initiating listening tasks; they approached each audio stimulus without any strategic anticipation or mental framing, effectively entering the task in an unprepared state. This absence of anticipatory processing not only diminishes attentional focus but also impedes efficient allocation of working memory resources during actual listening. Addressing this gap requires systematic, scaffolded intervention grounded in metacognitive theory and evidence-based pedagogical practice. The following three interrelated instructional moves are designed to cultivate intentional, reflective, and transferable pre-listening habits that progressively internalize strategic planning as an automatic component of the listening process.

First, institutionalize a structured 'three questions before listening' routine to foster disciplined metacognitive engagement. Prior to every listening activity—regardless of length or complexity—students are guided through a concise yet purposeful sequence: (1) What is the likely topic or central theme, inferred from textual cues such as titles, subtitles, visual prompts, and multiple-choice options? This promotes content prediction and activates top-down processing mechanisms; (2) What prior knowledge, personal experience, or conceptual understanding do I already possess about this domain? This step deliberately triggers schema activation and strengthens connections between new input and existing cognitive frameworks; (3) Given the specific listening task requirements—whether identifying main ideas, extracting details, inferring attitudes, or recognizing discourse markers—what precise information should I prioritize and monitor for? This cultivates goal-directed attention and functional task awareness [11]. Allocating a consistent 30–60 seconds for this tripartite reflection ensures temporal regularity, reinforces procedural memory, and gradually transforms deliberate strategy use into an ingrained, self-regulated habit rather than an optional or peripheral classroom ritual.

Second, provide differentiated cognitive scaffolding for learners who demonstrate persistent difficulty in generating autonomous planning strategies. For these students, a standardized 'pre-listening preparation card' serves as both a tangible tool and a transitional support mechanism. The card contains clearly labeled sections prompting students to record their predictions and intentions: (a) anticipated topic or context; (b) relevant background knowledge or personal associations; (c) explicit listening goals aligned with task demands; and (d) anticipated lexical or structural challenges, including possible unfamiliar vocabulary or syntactic patterns. Initially, collaborative pair work is encouraged to promote peer modeling, verbal articulation of thinking, and co-construction of meaning. As learners gain confidence and competence, scaffolding is systematically faded—first by transitioning to individual completion under teacher

guidance, then to independent use, and ultimately to silent, internalized mental rehearsal without external prompts—thereby supporting the developmental trajectory from external regulation to self-regulation.

Third, explicitly link pre-listening preparation to post-listening evaluation through structured metacognitive reflection, thereby reinforcing strategy efficacy and fostering learner agency. Students are prompted to critically assess the functional value of their preparatory efforts immediately after completing the listening task: To what extent did initial predictions align with actual content, and which predictive cues proved most reliable? Did the stated listening goals guide attention effectively, and if not, what contextual or linguistic factors interfered? How did background knowledge facilitate or hinder comprehension, and what gaps in prior knowledge became apparent? Finally, what specific adjustments—such as refining prediction criteria, broadening background activation, or sharpening goal specificity—will be implemented in future listening episodes? This iterative cycle of planning, execution, and evaluative reflection transforms abstract strategy instruction into concrete, experientially validated learning, shifting student orientation from passive reception toward proactive, adaptive, and increasingly autonomous listening behavior.

4.2. While-Listening Obstacle-Breaking: Deepening Cognitive Strategy Use

The while-listening phase constitutes the central cognitive operation in auditory comprehension, where learners actively process incoming linguistic input in real time. Diagnostic analysis revealed that lower-achieving students predominantly relied on a single, fragmented strategy—namely, isolated keyword identification—without engaging in deeper semantic processing. This approach remained superficial and unstructured: students frequently failed to anticipate lexical gaps, lacked systematic procedures for handling unfamiliar vocabulary, and exhibited minimal metacognitive awareness of how meaning is constructed incrementally across utterances. Consequently, comprehension often collapsed at the first point of lexical uncertainty, leading to disengagement or inaccurate inference rather than strategic adaptation.

To address this limitation, instruction should introduce a scaffolded, multi-step protocol for managing unknown lexical items. The first step emphasizes contextual inference: learners examine syntactic structure, semantic coherence of surrounding clauses, and pragmatic intent to generate plausible meanings. The second step activates phonological and morphological awareness—encouraging learners to recognize sound patterns, affixes, or root similarities with known lexical items, thereby leveraging existing phonological knowledge. The third step involves discourse-level prioritization: learners assess whether omission of the unknown term impedes understanding of the main idea or critical information; if subsequent clauses, repetitions, or paraphrases provide sufficient redundancy or clarification, the learner may proceed without lexical resolution, preserving fluency and global comprehension. This tripartite framework cultivates adaptive decision-making rather than rigid word-by-word decoding.

Subsequent instruction must explicitly target integrative processing to counteract fragmented, atomistic listening habits [12]. The 'one-sentence summary' drill serves as a high-leverage formative tool: after each audio segment, students articulate the core message concisely. Scaffolding ensures progressive cognitive demand—Stage One requires identifying only the primary agent and action (e.g., 'The researcher presents new data'); Stage Two adds consequence or outcome ('The researcher presents new data, which challenges prior assumptions'); Stage Three incorporates causal reasoning and relational logic ('The researcher presents new data, which challenges prior assumptions because the methodology controlled for previously unmeasured variables, leading to revised theoretical implications'). This structured progression compels learners to synthesize discrete auditory cues into coherent propositional networks, reinforcing hierarchical information processing and reducing reliance on isolated lexical fragments.

Cognitive modeling through teacher think-aloud protocols (TAP) is essential for making expert listening strategies observable and replicable. Since lower-achieving

students rarely witness or internalize integrated strategy deployment, explicit demonstration bridges the gap between declarative knowledge and procedural competence. During live or recorded listening tasks, the instructor verbalizes moment-by-moment cognitive operations: setting a purpose-driven attentional focus aligned with task goals; dynamically selecting and weighting keywords based on grammatical function and discourse prominence; deploying context, sound, and discourse cues in sequence when encountering ambiguity; and continuously updating mental representations by reconciling new input with prior knowledge and evolving hypotheses. Such transparent modeling transforms abstract strategy names into concrete, sequenced actions, enabling learners to internalize not just *what* strategies exist, but *how*, *when*, and *why* they interlock within authentic listening contexts.

Differentiated strategy practice further ensures developmental appropriateness and sustained growth. Tiered task design aligns instructional challenge with current proficiency: foundational learners engage in focused, repetitive practice of one targeted strategy—such as keyword identification under time constraints or context-based inference with sentence-level prompts—to build automaticity and confidence [13]. Intermediate learners undertake dual-strategy integration tasks—for instance, combining keyword extraction with immediate contextual reinterpretation of those terms within the same clause—to strengthen cross-strategic coordination. Advanced learners participate in dynamic strategy switching exercises, where shifting task demands (e.g., from gist to detail orientation, or from factual to inferential questions) require rapid reconfiguration of attentional focus, cue selection, and verification mechanisms. This graduated, responsive pedagogy supports incremental strategy internalization while honoring individual learning trajectories and preventing cognitive overload.

4.3. Post-Listening Closure: Completing Metacognitive Monitoring and Affective Regulation

Post-listening is a critical phase where comprehension solidifies and learning becomes durable. Diagnostic analysis revealed that lower-achieving students consistently demonstrated limited engagement with post-listening activities and exhibited underdeveloped approaches to managing emotional responses during listening tasks — specifically, they rarely engaged in self-checking or summarising, and tended to disengage rapidly when encountering linguistic or cognitive challenges. This pattern suggests not only a gap in strategic competence but also a fragile motivational foundation, wherein difficulty is interpreted as evidence of inability rather than an expected part of the learning process. Addressing this requires intentional scaffolding that integrates cognitive reinforcement with supportive affective scaffolds, ensuring students perceive challenge as surmountable through guided practice and incremental success.

Establishing a consistent routine of structured post-listening reflection is foundational. After each listening activity, implement a scaffolded 'three questions after listening' framework: First, prompt self-assessment by asking, 'How well did I understand — what elements were clear, and which parts remained unclear?'; second, support accuracy development with 'Is my response fully supported by the audio — does it require revision based on evidence from the text?'; third, reinforce conceptual synthesis with 'In one concise sentence, what was the central message or purpose of this passage?'. Initially, teachers model responses using think-aloud techniques and provide exemplars; gradually, students transition to collaborative peer discussion, then to independent written reflection, and ultimately internalise the process as an automatic habit. This progression ensures metacognitive awareness develops alongside linguistic proficiency, embedding reflection as a natural component of listening literacy rather than an add-on task.

Metacognitive monitoring must be systematically embedded within listening task architecture, not treated as a separate skill. Concrete, task-integrated opportunities foster authentic skill growth: incorporate structured peer review where students exchange responses and collaboratively justify interpretations using audio evidence; integrate answer verification cycles — for instance, after a second playback, learners compare initial

and revised answers, articulate reasoning for changes, and identify specific auditory cues that informed corrections; and embed brief strategy logs where students note which approaches (e.g., predicting, keyword tracking, contextual inference) contributed to success or required adjustment [10]. These practices transform monitoring from an abstract concept into an observable, practicable, and socially reinforced dimension of listening performance, aligning closely with principles of formative assessment and active learning theory.

Equally important is cultivating constructive internal dialogue to support emotional resilience during listening. When confronted with rapid speech, unfamiliar vocabulary, or complex syntax, students benefit from rehearsed, adaptive self-statements grounded in realistic expectations: upon perceiving speed as overwhelming, guide them to affirm, 'I will focus on identifying key nouns and verbs — full word-by-word understanding is not required'; when encountering unknown terms, encourage, 'I will maintain attention for contextual clues or repetition — meaning can often be inferred without knowing every word'; if momentarily losing coherence, prompt, 'I missed that segment — I will now refocus on the upcoming information and reconnect the ideas'. Such statements are deliberately simple, action-oriented, and empirically aligned with cognitive-behavioural principles of self-regulation, helping students reframe difficulty as manageable rather than threatening.

Confidence must be rebuilt through carefully sequenced, mastery-oriented tasks that counteract patterns of avoidance and disengagement. Prolonged experiences of incomprehension can lead students to adopt passive stances toward listening, interpreting struggle as fixed limitation [14, 15]. To reverse this, design multi-stage listening tasks aligned with the zone of proximal development: Stage One focuses on extracting a single concrete detail (e.g., time, location, or named person); Stage Two requires connecting two related pieces of information (e.g., time + associated action); Stage Three targets identification of the paragraph's primary claim or function; Stage Four integrates both main idea and supporting details with increasing nuance. Crucially, make developmental progress explicit and visible — for example, through annotated listening logs or milestone trackers — so students observe tangible improvements: 'Last week, I reliably identified one fact; this week, I consistently captured two related facts.' This experiential evidence of growth strengthens self-efficacy and sustains motivation far more effectively than generalized praise alone.

5. Conclusion

In TAP-based junior secondary listening instruction, the teacher prioritizes students' real-time cognitive engagement during authentic listening tasks. Rather than treating listening as a static skill to be transmitted, this approach treats it as a dynamic, constructive process. The think-aloud protocol (TAP) serves as a pedagogical scaffold that makes implicit mental operations—such as prediction, inference, monitoring comprehension gaps, and strategic repair—explicit and observable. This externalisation shifts learners from passive recipients of auditory input toward active agents who deliberately deploy, reflect upon, and refine listening strategies. Effective implementation hinges on diversified, formative assessment practices: diagnostic TAP sessions yield rich, granular evidence about individual strategy use, enabling teachers to calibrate instructional emphasis with precision; concurrently, structured self-assessment and peer feedback routines empower students to develop metacognitive awareness, track longitudinal growth in listening proficiency, and progressively internalise effective listening behaviours. Such assessment integration ensures that listening development is not only measurable but also personally meaningful and learner-centred.

To give thought a voice is to render cognition visible, traceable, and teachable. When educators systematically attend to the verbalised reasoning behind students' listening responses—and when learners themselves become attentive observers of their own cognitive pathways—the entire instructional process gains transparency and intentionality. Listening instruction thus transitions from an opaque, unobservable

activity into a shared, collaborative space of co-construction and iterative refinement. This paradigm shift—from passive reception to intentional, reflective engagement—constitutes the pedagogical essence of integrating TAP into English language learning. It supports the cultivation of core competencies such as critical listening, adaptive strategy use, self-directed learning, and communicative resilience—foundational capacities aligned with contemporary curricular goals for language education. Ultimately, TAP does not merely improve listening outcomes; it reorients the epistemic relationship between teacher, learner, and text, fostering a classroom ecology where thinking is valued, made visible, and continuously developed.

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