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DESIGN AND PRELIMINARY EVALUATION OF THE SIMBARA MODEL FOR CULTURALLY SITUATED LISTENING INSTRUCTION IN HIGHER EDUCATION

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ABSTRACT

Listening instruction in higher education requires pedagogical approaches that move beyond the comprehension of spoken information toward the interpretation of meaning within culturally situated contexts. However, opportunities for students to engage in inquiry, cultural interpretation, reflection, and meaning-making during listening activities remain limited. This study aimed to design and preliminarily evaluate the Simbara Model for culturally situated listening instruction in higher education. The study employed a research and development approach informed by the ADDIE framework, comprising analysis, design, development, implementation, and evaluation. The research was conducted in an Indonesian Language and Literature Education program at Universitas Muhammadiyah Makassar, Indonesia. The limited trial involved five students, while the extended trial involved 26 students. Three experts evaluated the model and its supporting instructional materials. Data were collected through needs-analysis instruments, expert validation sheets, implementation observations, student and lecturer response questionnaires, and listening performance assessments. The Simbara Model comprises six stages: Cultural Orientation, Cultural Problem Identification, Cultural Listening Exploration, Linguistic and Cultural Interpretation, Cultural Reflection, and Cultural Value Internalization. Expert validation indicated that the model, learning materials, and alignment with Outcome-Based Education met the predefined validity criteria. Classroom implementation reached 91.25%, while student and lecturer responses were 92.09% and 98%, respectively. In the extended trial, mean listening scores increased from 66.71 in the pretest to 91.55 in the posttest, with an N-Gain of 0.75 and a statistically significant paired-samples difference ($p < .001$). These preliminary findings indicate that the Simbara Model provides a feasible framework for connecting culturally situated inquiry with listening exploration, linguistic and cultural interpretation, and reflection. The study contributes a culturally situated pedagogical framework for higher education listening instruction while highlighting the need for controlled, larger-scale, and multi-context studies to establish its effectiveness and transferability.

Keywords: Ethnopedagogy; discovery learning; listening instruction; culturally situated learning; cultural interpretation; higher education; Outcome-Based Education

INTRODUCTION

Listening is a fundamental component of language learning because it enables learners to construct meaning from spoken input, integrate linguistic information with prior knowledge, and respond appropriately to communicative situations. In higher education, listening involves increasingly complex processes that extend beyond identifying words or recalling explicitly stated information. Learners are expected to interpret implicit meanings, evaluate spoken information, connect discourse with contextual knowledge, and regulate their comprehension during listening. Recent research conceptualizes listening comprehension as a multidimensional process involving cognitive, metacognitive, and affective factors, highlighting the importance of active learner engagement in constructing and monitoring meaning (In'nami, 2023; Lee, 2024; Mahdian Rad & Baleghizadeh, 2025). Metacognitive awareness is particularly relevant because learners who are able to monitor and regulate their listening processes are better positioned to identify comprehension difficulties and adjust their strategies accordingly (Dalman, 2025; Zhang et al., 2024).

Nevertheless, listening instruction in higher education may still rely heavily on comprehension-oriented practices in which students listen to spoken texts, identify information, answer comprehension questions, and reproduce meanings provided by the text or instructor. Although such practices are useful for assessing comprehension, they may provide limited opportunities for learners to investigate how meaning is constructed through discourse, context, and prior knowledge. Recent studies indicate that metacognitive instruction, collaborative listening, and multimedia-supported activities can encourage learners to become more actively engaged in the listening process (Shamsi & Bozorgian, 2024; Zhang et al., 2024). These developments suggest that listening pedagogy needs to move beyond the transmission and retrieval of spoken information toward learning processes in which students actively investigate, interpret, and reflect on what they hear.

This issue becomes more complex when listening materials contain meanings that are culturally embedded. Spoken discourse is not produced independently of the social and cultural context in which it occurs. Expressions, narratives, values, social practices, and culturally specific references may require contextual knowledge for learners to construct an adequate interpretation. Culturally and linguistically responsive pedagogy emphasizes the importance of recognizing learners' cultural experiences and the resources they bring to the learning process (Kim, 2024; Alamsyah et al., 2025). Similarly, culturally sustaining pedagogy positions learners' cultural and linguistic resources as meaningful foundations for learning rather than as supplementary content (Foulis & Gillen, 2024; Herrera, 2023; Luna et al., 2023; Domke et al., 2024). From this perspective, culturally situated listening materials can create opportunities for learners to connect linguistic comprehension with contextual interpretation and personally meaningful knowledge.

The pedagogical significance of culture is particularly evident in educational approaches grounded in local knowledge and ethnopedagogy. Ethnopedagogy places local wisdom, cultural practices, community knowledge, and cultural values within educational processes (Ishak et al., 2025). Recent research has demonstrated the potential of ethnopedagogy to integrate local wisdom into formal education, character development, and culturally relevant learning (Gunardi et al., 2024; Pertiwi et al., 2024; Rohyadi et al., 2024; Sakti et al., 2024; Sugiarto et al., 2025; Uswatun et al., 2026; Fathurrochman et al., 2025). Other studies have demonstrated how local wisdom can be incorporated into literacy and language-related learning, including the development of inferential reading materials based on local cultural knowledge (Aji & Legowo, 2024; Adela et al., 2023; Septiyana et al., 2025; Prasanty & Nurlina, 2024). Local wisdom has also been examined as a foundation for cooperative learning, social-value development, and broader pedagogical transformation (Ananda et al., 2025; Setiyadi et al., 2025; Sarmini et al., 2025). Collectively, these studies indicate that local culture can function as a substantive educational resource rather than simply as contextual decoration.

However, existing ethnopedagogical research has largely concentrated on character education, primary and secondary education, local-content curriculum, science learning, or broader cultural integration. Systematic discussions of ethnopedagogy similarly emphasize its potential for cultural preservation, identity formation, and values education, while comparatively less attention has been given to how culturally embedded oral materials can be transformed into systematic listening-learning processes in higher education (Lubis & Baiduri, 2025; Salleh et al., 2026). This leaves an important pedagogical question unresolved: how can local cultural knowledge become part of the cognitive process through which learners listen, investigate, interpret, and construct meaning from spoken discourse?

A complementary perspective is provided by inquiry- and discovery-oriented learning. Inquiry-based approaches emphasize learners' active participation in questioning, exploration, evidence interpretation, and knowledge construction rather than passive reception of information. Recent systematic reviews have documented the contribution of inquiry-oriented learning to active knowledge

construction and learner engagement across educational settings (Urdanivia Alarcon et al., 2023; Strata et al., 2024; Dah et al., 2024). In a listening context, an inquiry orientation offers an alternative way of conceptualizing the listening process: students do not listen merely to obtain correct answers but listen to investigate. Spoken discourse can therefore become evidence from which learners identify problems, examine information, infer meanings, compare interpretations, and construct conclusions.

Despite the relevance of both culturally situated pedagogy and inquiry-based learning, their intersection with listening instruction remains insufficiently theorized and operationalized. Research on listening has increasingly addressed metacognitive regulation, cognitive processes, affective factors, and collaborative learning, whereas research on culturally responsive pedagogy emphasizes cultural and linguistic resources. Ethnopedagogical studies demonstrate the educational value of local wisdom, but provide comparatively limited explanation of how culturally embedded oral materials can be organized into structured listening activities. At the same time, inquiry-based research emphasizes active investigation and knowledge construction but does not necessarily specify how inquiry can be enacted systematically through culturally situated listening.

The resulting gap is therefore not simply the absence of another listening instructional model. More fundamentally, there is a need for a pedagogical mechanism that connects cultural situatedness, inquiry through listening, linguistic and cultural interpretation, and reflective meaning-making. Such a mechanism is important because culturally meaningful listening requires learners to move between different levels of meaning: from what is explicitly said, to what is implied, to how linguistic expressions relate to cultural practices and values. This requires a pedagogical sequence that makes cultural interpretation an integral part of listening rather than an activity added after comprehension has been completed.

To address this gap, the present study developed the Simbara Model, a culturally situated pedagogical model for listening instruction in higher education. The model conceptualizes listening as an inquiry process through which learners progressively construct meaning from spoken cultural texts. Culture is positioned not merely as the topic of the listening material but as an epistemic resource that supports problem identification, investigation, interpretation, reflection, and meaning-making. The model integrates four interconnected design principles: cultural situatedness, in which listening input is embedded in meaningful cultural contexts; inquiry through listening, in which learners investigate spoken information through questioning, problem identification, and exploration; dual interpretation, in which learners construct linguistic and cultural interpretations of listening input; and reflective internalization, in which learners reflect on cultural meanings and connect them with their developing understanding.

These principles are operationalized through six sequential stages: Cultural Orientation, Cultural Problem Identification, Cultural Listening Exploration, Linguistic and Cultural Interpretation, Cultural Reflection, and Cultural Value Internalization. The sequence moves learners from contextual activation toward increasingly complex processes of investigation, interpretation, and reflection. In this configuration, discovery is not restricted to finding factual or conceptual information. Instead, learners are guided to discover meanings embedded in spoken discourse, including linguistic patterns, contextual meanings, cultural references, social values, and culturally situated perspectives. Ethnopedagogy consequently becomes integrated into the learning process itself, while listening becomes the principal medium through which cultural knowledge is investigated and interpreted.

The conceptualization of the Simbara Model is also informed by recent scholarship on Educational Design Research (EDR), which emphasizes the relationship among educational problems, theoretical perspectives, design principles, iterative development, and empirical evidence. EDR scholarship highlights the importance of methodological fit and the articulation of explicit design principles that can contribute beyond the development of a single instructional product (Tinoca et al.,

2022; Lehrmann et al., 2022; Hanna et al., 2022; Jacobsen & McKenney, 2024). Recent studies further emphasize the role of design principles in producing theoretically meaningful and potentially transferable educational innovations (van den Berg & Bozalek, 2024; Bisognin et al., 2025; McKenney & Reeves, 2025; Säfström & Lithner, 2025). Accordingly, the present study considers the Simbara Model not merely as a locally developed teaching product but as an empirically examined design for culturally situated listening instruction.

The study was conducted in an Indonesian higher education context, where local cultural knowledge provides a rich setting for examining the relationship between listening, inquiry, and cultural interpretation. The Indonesian context is particularly relevant because ethnopedagogical scholarship has demonstrated the diversity of local wisdom and its potential integration into formal educational practices (Adela et al., 2023; Sakti et al., 2024; Sugiarto et al., 2025). However, the purpose of the study is not to claim that one cultural context can represent all educational settings. Rather, the study uses the Indonesian context as a design setting from which theoretically informed principles for culturally situated listening instruction can be articulated and subsequently examined in other contexts.

The present study therefore aimed to design and preliminarily evaluate the Simbara Model for culturally situated listening instruction in higher education. Specifically, it examined the model's instructional validity, implementation practicality, learner and lecturer responses, and preliminary changes in students' listening performance following implementation. By connecting culturally situated learning, inquiry-oriented listening, linguistic and cultural interpretation, and reflective meaning-making, the study seeks to contribute a theoretically grounded pedagogical framework for higher education listening instruction. Given the developmental nature of the study and its context-specific empirical evidence, the findings are interpreted as preliminary evidence of feasibility and learning potential rather than as definitive evidence of causal effectiveness or broad generalizability.

METHODS

2.1 Research Design and Procedure

This study employed a research and development (R&D) design informed by the ADDIE framework to develop and preliminarily evaluate the Simbara Model for listening instruction in higher education. The development process comprised five stages: Analysis, Design, Development, Implementation, and Evaluation, with iterative revisions conducted following expert validation and the limited trial. The developmental orientation was informed by principles of Educational Design Research (EDR), particularly the relationship among authentic educational problems, theoretical perspectives, design principles, iterative development, and empirical evaluation (Tinoca et al., 2022; Jacobsen & McKenney, 2024; McKenney & Reeves, 2025). During the Analysis stage, learning needs, instructional problems, learner characteristics, and required listening competencies were identified through questionnaires and interviews involving lecturers and students. The analysis examined the need for more active listening instruction, integration of local cultural knowledge, critical and analytical engagement, meaningful learning experiences, and opportunities for students to connect listening activities with their sociocultural experiences.

The Design stage translated the identified needs into the conceptual structure of the Simbara Model. The model was designed by integrating principles of Discovery Learning, ethnopedagogy, reflective learning, social constructivism, and Outcome-Based Education (OBE). Particular attention was given to establishing a coherent relationship between learning objectives, learning activities, listening materials, student tasks, and assessment. The design was organized around four principles: cultural situatedness, inquiry through listening, dual interpretation, and reflective internalization.

During the Development stage, the prototype of the Simbara Model was produced together with culturally based listening materials, learning activities, supporting instructional materials, and assessment instruments. The prototype was evaluated by three experts representing relevant areas of expertise in language learning, instructional design, and local cultural knowledge. Expert feedback was used to identify aspects requiring revision before classroom implementation. The Implementation stage consisted of two sequential trials. A limited trial involving five students was

conducted to identify problems related to the clarity, feasibility, and implementation of the model. Revisions were subsequently made based on observations and participant responses. An extended trial involving 26 students was then conducted in the Indonesian Language and Literature Education Study Program, Universitas Muhammadiyah Makassar, Indonesia. The extended implementation was conducted over five learning sessions.

The Evaluation stage integrated evidence obtained from expert validation, classroom observations, student and lecturer responses, and students' listening performance. The evaluation focused on the preliminary validity, practicality, and learning potential of the Simbara Model. Because the extended trial employed a single-group pretest–posttest design without a control condition, the observed changes in listening performance were interpreted as preliminary evidence of learning change following implementation, rather than definitive evidence of causal effectiveness.

2.2 Participants and Data Collection

Participants were selected purposively from the Indonesian Language and Literature Education Study Program at Universitas Muhammadiyah Makassar, Indonesia. The participants represented the main stakeholders involved in the development and preliminary evaluation of the model. The needs analysis involved lecturers and students to identify instructional needs, perceived problems in listening instruction, learner characteristics, and expectations regarding culturally situated listening activities. The product testing was conducted sequentially, involving five students in the limited trial and 26 students in the extended trial. Three experts participated in the validation of the model and its supporting instructional materials.

Data were collected using several instruments corresponding to the different stages of development. These included needs-analysis questionnaires and interviews, expert validation sheets, classroom observation instruments, student and lecturer response questionnaires, and listening performance assessments. The expert validation instruments assessed the quality of the model and supporting materials in relation to instructional content, instructional design, language, cultural integration, and alignment with Outcome-Based Education. Classroom observations examined the implementation of the model, including its instructional syntax, social system, supporting system, and observable learning processes. Student and lecturer response questionnaires were administered to obtain information concerning the practicality and acceptability of the model following implementation. The listening assessment was administered as a pretest and posttest during the extended trial. The assessment addressed several dimensions of listening comprehension, including factual information, identification of main ideas, inference, interpretation of meaning, and cultural interpretation.

2.3 Data Analysis

Quantitative data obtained from the needs analysis, expert validation, classroom implementation, and participant responses were analyzed descriptively using mean scores and percentages. These analyses were used to determine the level of perceived need, expert judgments of model quality, degree of implementation, and participant responses to the Simbara Model.

Improvement in students' listening performance was examined using the normalized gain (N-Gain), calculated as:

$$g = \frac{Posttest - Pretest}{Maximum\ Score - Pretest}$$

N-Gain values of ≥ 0.70, 0.30–0.69, and < 0.30 were interpreted as high, moderate, and low improvement, respectively.

A paired-samples t-test was conducted to examine whether the difference between students' pretest and posttest listening scores was statistically significant, with the significance level set at $\alpha = .05$. The interpretation of the quantitative findings was integrated with evidence from classroom observations and participant responses to provide a preliminary assessment of the model's feasibility and learning potential. In particular, the pretest–posttest results were not interpreted as establishing a causal effect because the extended trial involved a single group and did not include a control condition.

Results

3.1. Development of the Simbara Model

The development process resulted in the Simbara Model, a culturally situated learning model designed to support listening instruction in higher education. The model comprises six sequential learning stages: (1) Cultural Orientation, (2) Cultural Problem Identification, (3) Cultural Listening Exploration, (4) Linguistic and Cultural Interpretation, (5) Cultural Reflection, and (6) Cultural Value Internalization. The model was designed to position local culture not merely as instructional content but as a context and resource for inquiry, interpretation, reflection, and meaning-making during listening activities. The six stages form a progressive learning pathway from contextual activation to culturally situated meaning construction.

In the first stage, Cultural Orientation, students connect their prior knowledge and experiences with a cultural stimulus presented by the lecturer. The second stage, Cultural Problem Identification, directs students to identify questions, issues, or cultural phenomena that become the focus of the listening activity. The third stage, Cultural Listening Exploration, engages students in exploring and organizing information obtained from culture-based oral materials. The fourth stage, Linguistic and Cultural Interpretation, requires students to interpret both linguistic information and meanings associated with the cultural context of the oral text. The fifth stage, Cultural Reflection, encourages students to connect their interpretations with personal experiences and contemporary social realities. Finally, Cultural Value Internalization guides students to identify relevant cultural values and consider their application to their own understanding and practices. The six stages and their sequential relationships are illustrated in Figure 1.

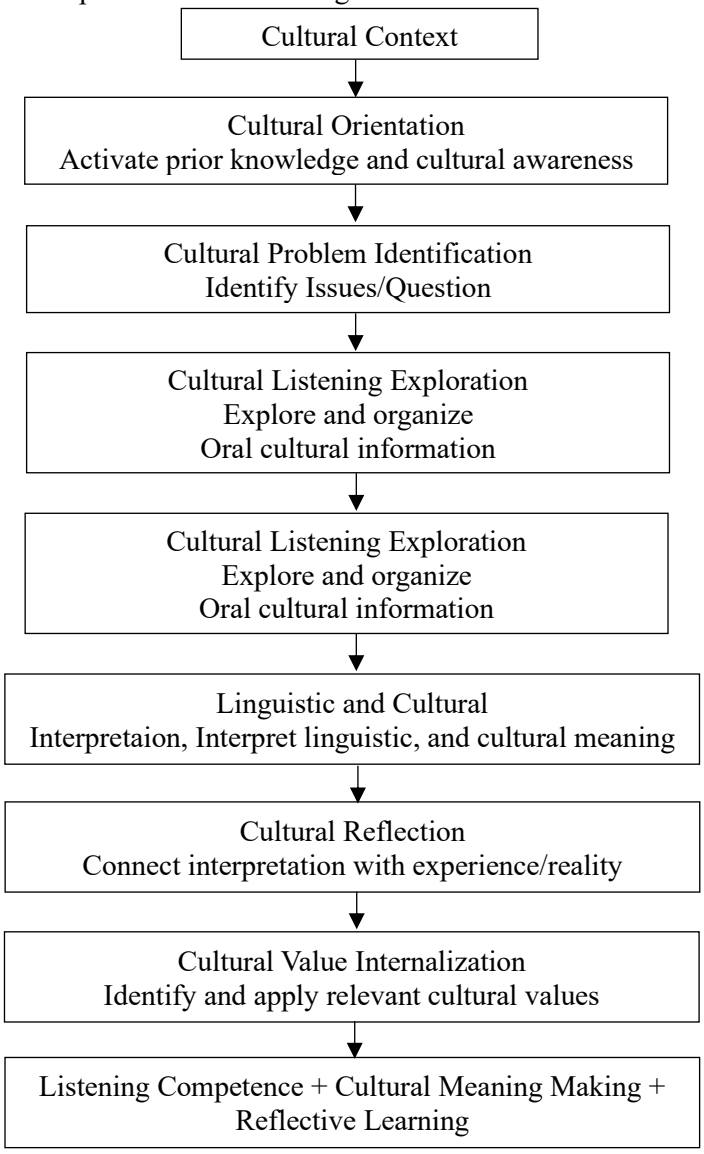


Figure 1. Conceptual sequence of the Simbara Model

The resulting instructional architecture establishes a progressive relationship among cultural context, inquiry, listening exploration, linguistic-cultural interpretation, reflection, and value-oriented meaning-making. Thus, the model operationalizes listening as a process through which students do not merely receive spoken information but investigate and construct meanings from culturally situated oral discourse.

3.2. Validation and Practicality of the Simbara Model

Three experts evaluated the Simbara Model and its supporting instructional materials. The mean validation scores were 3.00 for the model, 2.70 for the learning materials, and 3.20 for alignment with Outcome-Based Education (OBE). These results met the predetermined validity criteria used in the study. Expert feedback was subsequently incorporated into revisions of the model and its supporting materials before classroom implementation.

The practicality of the model was examined through classroom implementation observations and responses from students and lecturers. The implementation of the six learning stages reached 91.25%, indicating a high level of implementation. Student and lecturer responses reached 92.09% and 98.00%, respectively, indicating very positive perceptions of the model. The validation and practicality results are presented in Table 1.

Table 1. Summary of validation and practicality results

Dimension	Result	Interpretation
Model validation	3.00	Valid
Learning-material validation	2.70	Valid
OBE alignment	3.20	Valid
Model implementation	91.25%	High
Student response	92.09%	Very positive
Lecturer response	98.00%	Very positive

The combined findings indicate that the Simbara Model demonstrated preliminary instructional validity and practical feasibility in the investigated higher-education context. The high implementation percentage suggests that the six-stage instructional sequence could be enacted in classroom practice, while the positive student and lecturer responses indicate favorable perceptions of its usability and learning experience.

3.3. Preliminary Listening Learning Outcomes

The extended trial involved 26 students. Students' mean listening performance increased from 66.71 in the pretest to 91.55 in the posttest, representing an absolute increase of 24.84 points. The normalized gain was 0.75, which falls within the high-gain category. A paired-samples t-test also indicated a statistically significant difference between pretest and posttest scores ($p < .001$). The students' listening performance before and after implementation is presented in Table 2.

Table 2. Students' listening performance before and after implementation

Measure	Pretest	Posttest	Change
Mean score	66.71	91.55	+24.84
N-Gain			0.75
Paired-samples t-test			$p < .001$

These results provide preliminary evidence of substantial improvement in students' listening performance following implementation of the Simbara Model. However, because the extended trial employed a single-group pretest–posttest design without a control condition, the observed improvement cannot be attributed exclusively to the model. The findings are therefore interpreted as evidence of preliminary learning gains and learning potential, rather than definitive causal evidence of effectiveness.

Disccusion

4.1. Reframing Listening as Culturally Situated Inquiry

The central contribution of the study lies not simply in combining ethnopedagogy and Discovery Learning, but in developing a culturally situated inquiry mechanism for listening instruction. The Simbara Model reorganizes listening as a progressive process in which students encounter a cultural context, identify a problem or question, explore oral information, interpret

linguistic and cultural meanings, reflect on their understanding, and consider values emerging from the listening experience.

This configuration extends contemporary conceptualizations of listening comprehension as a multidimensional process involving cognitive, metacognitive, affective, and contextual factors. In'nami (2023) demonstrated through meta-analytic structural equation modeling that metacognitive awareness is meaningfully associated with L2 listening comprehension. Similarly, Mahdian Rad and Baleghizadeh (2025) conceptualized listening comprehension as a system involving interactions among cognitive, metacognitive, and affective factors. These perspectives challenge a narrow view of listening as the passive reception of spoken information.

The Simbara Model responds to this complexity by embedding listening within an inquiry sequence. Students are not only required to understand what is said but are guided to investigate what the oral text means, identify culturally relevant issues, examine evidence, interpret linguistic and cultural information, and reflect on the implications of their interpretations.

This design also resonates with recent research on collaborative and metacognitive listening, which indicates the value of instructional conditions that encourage learners to become more actively engaged with listening processes (Shamsi & Bozorgian, 2024; Zhang et al., 2024). The distinctive contribution of Simbara, however, is that cultural context becomes the starting point of the inquiry process, while the oral text functions as evidence through which students investigate meaning.

4.2. Culture as a Learning Mechanism Rather Than Merely Instructional Content

A second contribution concerns the role assigned to culture within the learning process. In culturally oriented instruction, culture can easily become limited to examples, themes, narratives, or contextual illustrations. The Simbara Model takes a different position by making culture structurally consequential to the learning process.

The first two stages—Cultural Orientation and Cultural Problem Identification—activate students' cultural knowledge and transform culturally meaningful phenomena into objects of inquiry. Culture-Based Listening Exploration then provides oral evidence through which students investigate those phenomena. Linguistic and Cultural Interpretation subsequently requires students to examine the relationship between what is linguistically expressed and what is culturally signified.

This orientation is consistent with recent ethnopedagogical scholarship emphasizing that local wisdom involves knowledge, beliefs, values, practices, and culturally situated processes of meaning construction. Research on ethnopedagogy in Indonesia has demonstrated its potential to connect local knowledge with formal education and character development (Gunardi et al., 2024; Pertiwi et al., 2024; Rohyadi et al., 2024; Sakti et al., 2024). Sugiarto et al. (2025), for example, showed that ethnopedagogical learning associated with Indonesian batik heritage involves the transmission of local knowledge, beliefs, and cultural values rather than cultural information alone.

Research has also demonstrated the incorporation of local wisdom into literacy and language-related learning. Adela et al. (2023) examined the enculturation of Bugis Sidenreng Rappang local wisdom through ethnopedagogical traditional games, while Septiyana et al. (2025) demonstrated the use of Lampung local wisdom in developing inferential reading materials. These studies support the potential of culturally grounded pedagogy to connect language learning with locally meaningful knowledge.

The present study extends this literature to higher education listening instruction. In the Simbara Model, cultural material becomes pedagogically productive because it generates questions, directs attention, provides evidence for interpretation, and becomes the basis for reflection. Culture is therefore not an additional layer attached to listening instruction; it becomes part of how students learn to listen and construct meaning.

4.3. Discovery Learning as the Inquiry Mechanism of Listening

The findings further indicate that Discovery Learning provides the inquiry mechanism through which culturally situated listening can become an active learning process. In the Simbara Model, Cultural Problem Identification and Cultural Listening Exploration require students to formulate questions, identify relevant information, organize evidence, and construct interpretations.

This orientation is consistent with the broader literature on inquiry-based learning. Systematic reviews have emphasized questioning, exploration, evidence interpretation, and

knowledge construction as important components of inquiry-oriented learning (Urdanivia Alarcon et al., 2023; Strata et al., 2024; Dah et al., 2024).

Simbara adapts these principles specifically to listening. Instead of treating an oral text primarily as an object for comprehension testing, the model treats the text as an evidence base for investigation. Students listen because they need information to address a question or cultural problem. This creates a functional relationship between listening and higher-order meaning construction.

This mechanism may help explain the substantial improvement observed in students' listening scores. However, the present design does not permit the effect of Discovery Learning to be isolated from the other components of the Simbara Model. The result should therefore not be interpreted as evidence that Discovery Learning alone produced the observed improvement.

Rather, the findings suggest that inquiry-oriented listening provides a plausible pedagogical mechanism through which students can engage more actively with spoken information, consistent with contemporary research emphasizing active and metacognitively regulated listening (In'nami, 2023; Mahdian Rad & Baleghizadeh, 2025).

4.4. Dual Interpretation of Linguistic and Cultural Meaning

The fifth stage, Cultural Reflection, provides a transition between interpretation and personal and social meaning-making. At this stage, students are encouraged to connect information obtained from listening with their own experiences, prior knowledge, and social realities. The sixth stage, Cultural Value Internalization, extends this process by encouraging students to identify relevant cultural values and consider their significance and possible application in their own lives.

This sequence is consistent with contemporary understandings of listening as an active process involving comprehension, monitoring, interpretation, and reflection. Research on metacognitive awareness indicates that effective listening involves learners' ability to monitor their comprehension, recognize difficulties, and regulate their listening processes (In'nami, 2023; Dalman, 2025; Lee, 2024). Within the Simbara Model, however, reflection is not limited to monitoring whether students have understood the spoken text. It is positioned as a subsequent process through which students reconsider the meanings they have constructed and relate those meanings to their experiences and cultural context.

The contribution of Simbara lies in positioning reflection after culturally situated interpretation. Students first engage with the oral text and investigate the information presented, then interpret its linguistic and cultural meanings before reflecting on the significance of those interpretations. This arrangement provides continuity between listening comprehension and broader meaning-making because students are given an opportunity to reconsider not only what they have understood but also what the interpreted cultural meanings signify in relation to their own experiences and social environment.

The reflective component also distinguishes the Simbara Model from listening activities that conclude primarily with the identification of correct answers. Rather than ending the learning process after comprehension has been demonstrated, the model extends the activity toward reflection and consideration of cultural values. In this respect, reflection functions as an instructional mechanism that connects comprehension with deeper interpretation and personally meaningful learning.

Importantly, the present study does not establish that the Simbara Model independently improved students' cultural awareness, critical thinking, or reflective capacity because these constructs were not separately measured. The empirical evidence supports a more specific conclusion: the model systematically incorporates cultural interpretation and reflection into the architecture of listening instruction. This distinction is essential for maintaining an evidence-based interpretation of the findings and for avoiding claims that extend beyond the variables directly examined in the study.

4.5. Reflection as a Bridge Between Comprehension and Meaning-Making

The fifth stage, Cultural Reflection, provides a transition between interpretation and personal or social meaning-making. Students connect information obtained from listening with their experiences and social realities. The sixth stage, Cultural Value Internalization, then encourages students to identify relevant cultural values and consider their implications.

This sequence is consistent with the broader understanding of listening as an active process involving monitoring and interpretation. Research on metacognitive awareness suggests that listening development involves learners' ability to reflect on and regulate their comprehension processes (In'nami, 2023; Dalman, 2025; Lee, 2024). Within the Simbara Model, reflection extends beyond monitoring comprehension by encouraging students to reconsider the meanings they have constructed through culturally situated listening activities.

The contribution of Simbara is to position this reflective process after culturally situated interpretation. Students first investigate the oral text, interpret its linguistic and cultural meanings, and subsequently reflect on the significance of those meanings in relation to their own experiences and social realities. Reflection therefore functions as an integral component of the learning process rather than as an additional activity conducted after listening comprehension has been completed.

This arrangement enables listening instruction to move beyond the identification and recall of information toward deeper interpretation and meaning-making. By connecting interpreted information with students' experiences and culturally relevant values, the model provides opportunities for learners to reconsider what they have understood and why the meanings embedded in the oral text may be significant within their social and cultural environment.

Importantly, the present study does not establish that the Simbara Model independently improved students' cultural awareness, critical thinking, or reflective capacity because these constructs were not separately measured. Instead, the evidence demonstrates that cultural interpretation and reflection were systematically incorporated into the instructional architecture of the model. This distinction is essential for maintaining an evidence-based interpretation of the findings and ensuring that the contribution of the study remains within the boundaries of the variables and outcomes that were actually examined.

4.6. From Six Learning Stages to Four Preliminary Design Principles

An important theoretical implication of the study is that the six instructional stages of the Simbara Model can be abstracted into four broader design principles: Cultural Situatedness, Inquiry through Listening, Dual Interpretation, and Reflective Internalization. These principles represent the underlying pedagogical logic that connects the individual stages into a coherent instructional architecture.

The first principle, Cultural Situatedness, emphasizes that listening instruction should be grounded in culturally meaningful contexts. Listening materials should provide learners with contexts that are sufficiently meaningful to activate prior knowledge, cultural experiences, and contextual understanding. In the Simbara Model, cultural context is therefore established at the beginning of the learning process and continues to inform subsequent interpretation. This principle is consistent with culturally responsive and culturally sustaining approaches that emphasize the role of learners' cultural and linguistic resources in the construction of knowledge (Kim, 2024; Foulis & Gillen, 2024; Herrera, 2023; Luna et al., 2023).

The second principle, Inquiry through Listening, positions listening as an investigative activity rather than solely as a comprehension exercise. Learners engage with oral texts to investigate questions, identify relevant information, examine evidence, and construct interpretations. This principle extends inquiry-based learning into the domain of listening by making spoken discourse an important source of evidence for knowledge construction. The approach is consistent with research emphasizing questioning, exploration, evidence interpretation, and active learner engagement in inquiry-oriented learning (Urdanivia Alarcon et al., 2023; Strata et al., 2024; Dah et al., 2024).

The third principle, Dual Interpretation, emphasizes that culturally situated listening requires attention to both linguistic and cultural meaning. Learners are expected not only to identify what is communicated in the oral text but also to examine how linguistic expressions, contextual information, cultural references, and values contribute to the construction of meaning. This principle extends conventional listening comprehension by explicitly incorporating cultural interpretation into the meaning-making process. It also reflects the broader view that language learning is closely connected with the social and cultural contexts in which language is used (Kim, 2024; Herrera, 2023).

The fourth principle, Reflective Internalization, emphasizes the importance of connecting interpreted meanings with learners' experiences, social realities, and understanding of cultural values. Reflection provides an opportunity for learners to reconsider the meanings they have constructed and examine their relevance beyond the immediate listening activity. In the Simbara Model, reflection is therefore not treated as an additional activity after listening but as an integral component through which comprehension and interpretation are connected with personal and social meaning-making. This orientation is compatible with contemporary perspectives on metacognitive listening, which emphasize learners' active monitoring and regulation of comprehension (In'nami, 2023; Dalman, 2025; Lee, 2024).

The distinction between the six learning stages and the four design principles is important for understanding the theoretical contribution of the Simbara Model. The six stages describe how the model is operationalized in classroom practice, whereas the four principles explain the pedagogical logic underlying the organization of those stages. This distinction is particularly relevant to Educational Design Research, in which the development of an educational intervention can generate design knowledge that extends beyond the specific instructional product and can subsequently be examined, adapted, and refined in other contexts (Tinoca et al., 2022; Lehrmann et al., 2022; Jacobsen & McKenney, 2024; van den Berg & Bozalek, 2024; Bisognin et al., 2025; McKenney & Reeves, 2025).

Accordingly, the contribution of the Simbara Model lies not only in its six-stage instructional syntax but also in the underlying design logic represented by these four principles. Cultural Situatedness establishes the context for learning, Inquiry through Listening organizes learners' engagement with spoken information, Dual Interpretation structures the construction of linguistic and cultural meaning, and Reflective Internalization extends that meaning-making process toward learners' experiences and culturally relevant values. Together, these principles provide a preliminary theoretical framework for designing culturally situated listening instruction and offer a basis for further empirical examination and adaptation across different educational and cultural contexts.

4.7. Validity, Practicality, and Preliminary Learning Gains

The validation and implementation findings provide preliminary evidence of the model's feasibility in the investigated higher-education context. Expert validation produced mean scores of 3.00 for the model, 2.70 for the learning materials, and 3.20 for OBE alignment. Model implementation reached 91.25%, while student and lecturer responses reached 92.09% and 98.00%, respectively.

Taken together, these findings suggest that the Simbara Model was sufficiently understandable, implementable, and positively received within the participating context.

The listening performance findings provide additional preliminary evidence. Students' mean scores increased from 66.71 to 91.55, representing an increase of 24.84 points. The N-Gain of 0.75 was categorized as high, and the paired-samples test indicated a statistically significant difference ($p < .001$).

The combination of high implementation, positive participant responses, and substantial pretest–posttest improvement suggests that the model has promising learning potential.

Nevertheless, statistical significance should not be equated with causal effectiveness. The extended trial involved only 26 students and employed a single-group pretest–posttest design without a randomized comparison group. Consequently, alternative explanations such as testing effects, maturation, familiarity with the assessment, or other learning experiences cannot be completely excluded.

The most defensible conclusion is therefore that the study provides preliminary evidence of substantial learning gains following implementation of the Simbara Model, rather than evidence that Simbara is superior to conventional listening instruction.

This interpretation is consistent with the methodological emphasis of Educational Design Research on iterative development, methodological fit, and the progressive refinement of design knowledge rather than premature claims of universal effectiveness (Jacobsen & McKenney, 2024; McKenney & Reeves, 2025).

4.8 Theoretical Contribution and Transferability

Taken together, the findings suggest that the Simbara Model provides an integrated pedagogical architecture in which different theoretical perspectives perform distinct but complementary functions:

Theoretical foundation	Function within Simbara
Ethnopedagogy	Provides culturally meaningful knowledge and context
Discovery Learning	Provides the inquiry mechanism
Listening pedagogy	Provides the central language competence
Reflective learning	Provides the mechanism for reflection and meaning-making
Social constructivism	Supports interaction and negotiation of meaning
Outcome-Based Education	Aligns learning activities, assessment, and intended outcomes

The contribution therefore lies not in the isolated application of any single theoretical approach but in the mechanism through which these perspectives are integrated into a coherent listening-learning sequence.

This distinction is important for international relevance. Although the empirical implementation was situated in Indonesian higher education and used culturally grounded materials, the underlying design logic is potentially adaptable to other contexts. Other educational settings may substitute their own oral traditions, narratives, community knowledge, cultural practices, or socially meaningful issues while retaining the four design principles.

However, transferability should currently be understood as a design proposition rather than an empirically established outcome. Further studies should examine the Simbara Model across institutions, learner populations, cultural settings, and language-learning contexts. Controlled or quasi-experimental designs would also be needed to determine whether the model produces greater learning gains than alternative listening approaches.

Overall, the study suggests that the Simbara Model can be conceptualized as a pedagogical framework that transforms listening from predominantly information-oriented processing into culturally situated inquiry, interpretation, reflection, and meaning construction.

CONCLUSION

This study developed and preliminarily evaluated the Simbara Model for culturally situated listening instruction in higher education. The model comprises six sequential stages: Cultural Orientation, Cultural Problem Identification, Cultural Listening Exploration, Linguistic and Cultural Interpretation, Cultural Reflection, and Cultural Value Internalization. The findings indicate that the model met the predefined validity criteria, demonstrated high levels of classroom implementation, and received positive responses from both students and lecturers.

The extended implementation showed an increase in students' listening performance, with the mean score rising from 66.71 to 91.55, an N-Gain of 0.75, and a statistically significant paired-samples difference ($p < .001$). However, because the study employed a single-group pretest-posttest design with a relatively small sample, these findings should be interpreted as preliminary evidence of learning gains rather than definitive evidence of causal effectiveness or superiority over alternative instructional approaches.

The principal contribution of the Simbara Model lies in its pedagogical mechanism for positioning culture as an integral component of listening instruction rather than as supplementary content. The model uses culturally meaningful contexts to initiate inquiry, guide listening exploration, support linguistic and cultural interpretation, facilitate reflection, and connect learning with culturally relevant values. On this basis, the study proposes four preliminary design principles: Cultural Situatedness, Inquiry through Listening, Dual Interpretation, and Reflective Internalization.

The Simbara Model is not restricted to Indonesian cultural materials. Its potential transferability lies in the pedagogical principles and sequence rather than in any particular cultural content. The model may therefore be adapted to other educational and cultural contexts using locally meaningful oral traditions, community knowledge, historical narratives, or contemporary social issues. Nevertheless, its

effectiveness and transferability require further examination through larger samples, controlled or quasi-experimental designs, multiple institutions, and diverse cultural contexts.

Limitations

Several limitations should be considered when interpreting the findings. First, the extended implementation involved only 26 students from a single higher-education context. The sample therefore limits the generalizability of the findings across institutions, disciplines, and learner populations.

Second, the study employed a one-group pretest-posttest design without a randomized comparison group. Although the significant pretest-posttest difference and high N-Gain provide encouraging evidence of learning progress, alternative explanations, including testing effects, maturation, familiarity with the assessment, and other learning experiences, cannot be completely excluded.

Third, the study primarily examined listening performance as the measurable learning outcome. Although the Simbara Model incorporates cultural interpretation, reflection, and value internalization, constructs such as cultural awareness, critical thinking, and metacognitive development were not independently measured as outcome variables. Consequently, claims regarding improvement in these competencies should be treated as theoretical or pedagogical propositions rather than empirically established effects.

Finally, the model was developed and implemented within a specific Indonesian cultural and institutional context. Although its underlying design principles may have potential for adaptation to other contexts, cross-cultural transferability has not yet been empirically established.

Future Research

Future research should examine the Simbara Model using larger and more diverse samples across multiple higher-education institutions and cultural settings. Controlled or quasi-experimental designs comparing the Simbara Model with established listening approaches would provide stronger evidence concerning its relative effectiveness.

Subsequent studies should also investigate the mechanisms proposed by the model more directly. In particular, future research could separately measure listening comprehension, metacognitive awareness, cultural awareness, critical thinking, and reflective learning to determine whether the six-stage instructional sequence is associated with changes across these theoretically related dimensions.

Longitudinal research would further help determine whether learning gains are sustained beyond the immediate intervention. Cross-cultural studies could also examine whether the four proposed design principles—Cultural Situatedness, Inquiry through Listening, Dual Interpretation, and Reflective Internalization—remain applicable when the model is adapted to different cultural communities and educational systems.

Such studies would allow the Simbara Model to progress from a context-specific instructional model toward a more generalizable, theory-informed framework for culturally situated listening pedagogy.

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Declarations

Ethics Approval and Consent to Participate

This article is derived from a doctoral dissertation research conducted within the Doctoral Study Program in Education at Universitas Muhammadiyah Makassar. The research underwent the institution's academic review procedures, including a research proposal examination, research results examination, and final dissertation examination. The study was conducted in accordance with the applicable institutional procedures and ethical principles for educational research. Participation was voluntary, and informed consent was obtained from all participants prior to data collection. Universitas Muhammadiyah Makassar does not have a separate institutional ethics committee or Institutional Review Board (IRB) specifically established for this type of educational research; therefore, no separate IRB or ethics committee approval number was issued for the study.

Consent for Publication

Not applicable.

Competing Interests

The authors declare that they have no competing interests.

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Authors' Contributions

Nur Hidayah Rusli: Conceptualization, methodology, investigation, data collection, formal analysis, development of the Simbara Model, and writing of the original manuscript.

Munirah: Conceptualization, theoretical framework, instructional design review, and critical revision of the manuscript.

Andi Tenri Ampa: Supervision, research design validation, academic guidance, and critical revision of the manuscript.

All authors read and approved the final manuscript.

Data Availability

The datasets generated and/or analyzed during the current study are not publicly available because they contain participant-related research data. Data may be made available from the corresponding author upon reasonable request, subject to applicable ethical and institutional restrictions.

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