Jurnal Pendidikan Edutama
Volumes 13 Number 1 January 2026
P-ISSN: 2339-2258 | E-ISSN: 2548-821X
IKIP PGRI Bojonegoro

The Effectiveness of a Deep Listening Strategy through Problem-Based Listening Tasks on First-Year University Students' Listening Competence

Fathur Rohman*
*Universitas Billfath Lamongan

*fathurbillfath@gmail.com

***Corresponding Author**

Keywords

Deep listening, listening competence, problem-based listening, language learning

Abstract

This study investigated the impact of implementing a Deep Listening strategy through Problem-Based Listening Tasks (PBLT) on the listening competence of first-year university students. A quasi-experimental method employing a pretest–posttest control group design was applied to 42 students divided into experimental and control groups. Data were collected using a listening comprehension test and a cognitive engagement observation instrument. The findings reveal that students exposed to the Deep Listening–PBLT approach achieved substantially higher listening gains than those receiving conventional instruction. The most notable improvements occurred in inferential comprehension and information integration skills. Statistical analysis confirmed a significant difference between groups with a large effect size. These results indicate that integrating deep listening practices with problem-based tasks provides an effective pedagogical approach for enhancing listening competence in higher education contexts.

Introduction

Listening is a fundamental component of language acquisition and academic learning in higher education. It functions not only as a medium for receiving information but also as a

foundational skill that supports the development of speaking, reading, and writing abilities (Telaumbanua et al.,2024). Unlike passive hearing, listening involves active cognitive processes, including interpreting meaning, evaluating information, and responding to spoken discourse (Septya et al., 2022).

Despite its central role, listening instruction in higher education often receives limited pedagogical emphasis. Teaching practices frequently prioritize reading and writing skills, while listening is commonly perceived as a receptive ability that develops naturally without structured instructional support. As a result, many first-year university students experience difficulties in comprehending academic spoken texts, making inferences, and integrating information across discourse segments. To overcome these challenges, instructional approaches that promote deep cognitive engagement are required. One such approach is Deep Listening, which emphasizes focused attention, reflective interpretation, and critical meaning construction during listening activities (Anwar, 2017). When combined with Problem-Based Listening Tasks (PBLT), this strategy encourages students to actively process spoken information through collaborative problem-solving, discussion, and reflection (Hasanuddin, C. (2023).

However, empirical studies that explicitly integrate Deep Listening strategies with problem-based listening tasks at the university level remain limited, particularly in the context of first-year students. Therefore, this study aims to examine the effectiveness of a Deep Listening PBLT model in enhancing students' listening competence in higher education.

In practice, listening skills often receive less attention in the curriculum and language learning process in higher education (Hapriyanto & Sari, 2024) . Many lecturers and teachers tend to emphasize reading and writing skills, while listening is considered a passive skill that will develop naturally without special interventio.

First-year college students face complex challenges in developing listening skills. The transition from high school to college requires students to adapt to a more independent learning system, more complex material, and different teaching methods. First-year students are not only required to passively receive material but also must actively seek, understand, and apply knowledge in problem-solving. Barriers such as difficulty understanding spoken material, limited vocabulary, lecturer speaking speed, and lack of experience in group discussions are the main factors that contribute to the low listening competence of first-year students (Haris et al., 2025) .

In facing these challenges, innovative and effective learning strategies are needed to develop students' listening competencies, especially first-year students (Goh, C. C. M.,2017). One approach that has received attention in recent literature is the *deep listening strategy*. (Anwar, 2017). The concept of *deep listening* emphasizes active, reflective, and critical involvement in the listening process, so that students not only capture explicit meaning but are also able to interpret implicit meaning, evaluate information, and provide relevant responses. *Deep listening* (Research, 2025) requires students to focus, concentrate, and use various cognitive and metacognitive strategies to understand spoken messages (Aithal & Kakde, 2025). This approach is in line with constructivism theory, which positions students as active subjects

in the learning process and emphasizes the importance of meaningful and contextual learning experiences. (Model et al., 2021).

The importance of deep listening strategies is increasing in the digital and globalization era, where students are required to have critical and creative thinking skills and be able to adapt to various cross-cultural communication situations (Hapriyanto & Sari, 2024) . *Deep listening* not only improves understanding of academic material but also strengthens higher-order thinking skills , metacognition, and problem-solving abilities (Aithal & Kakde, 2025) . In the context of higher education, deep listening strategies can be integrated with various active learning approaches, one of which is through *problem-based listening tasks*. (Alwini, S. N., Apriliya, S., & Putri, A. R. 2024)

The problem-based listening tasks (PBLT) approach is an adaptation of the problem - *based learning* (PBL) model, which has been proven effective in improving students' critical thinking skills , problem-solving skills, and learning motivation (Model et al., 2021) . In PBLT, students are faced with real-life situations or problems that must be solved through listening activities, discussion, and reflection. Problem-based listening tasks are designed to train students in identifying important information, analyzing spoken messages, interpreting meaning, and developing solutions to problems. The main principles of PBLT are active student involvement in the learning process, collaboration in groups, and the use of various authentic sources and media to support understanding (Damanik, H. H., & Sinaga, N. T. 2022) .

However, empirical studies that explicitly integrate Deep Listening (strategies with Problem-Based Listening Tasks at the university level, particularly for first-year students, remain limited. The influence of PBLT on students' critical thinking and metacognitive skills has also been demonstrated through various studies (Leasa et al., 2023) . PBLT encourages students to think reflectively, evaluate the learning process, and develop effective learning strategies. Through group discussions, presentations, and reflection, students learn to identify their strengths and weaknesses and design improvement steps in understanding complex oral messages. Meta-analyses and experimental studies show that the implementation of PBLT consistently improves students' critical thinking skills, creativity, and learning motivation across various disciplines, including language learning (Asror, A. G. 2024).

The teaching strategy and implementation steps for PBLT with *deep listening* University, Lamongan, need to be designed systematically and contextually. The design of problem-based listening assignments must be tailored to the characteristics of first-year students, curriculum needs, and the support of language laboratory facilities and technology. Evaluation and assessment of listening competency must encompass aspects of literal comprehension, interpretation, analysis, and critical reflection on complex spoken messages. Furthermore, training and mentoring for lecturers, as well as the development of digital modules based on student needs, are key factors in the successful implementation of this strategy (Vandergrift, L., at.al.,2012).

Method

Research design

This study employed a quasi-experimental pretest–posttest control group design using a pretest–posttest control group format. The design was selected because random assignment of participants was not feasible, and intact classes were used as research units. The experimental group received instruction based on a Deep Listening strategy integrated with Problem-Based Listening Tasks, emphasizing sustained attention, inferential processing, and collaborative problem-solving. Meanwhile, the control group received conventional listening instruction focusing primarily on literal comprehension. (Rijali, 2019) .

Both groups were given a pretest to measure initial listening skills, followed by a posttest to assess changes in skills after the intervention. A comparison of pretest and posttest results was used to determine the extent of the intervention's impact on students' listening skills, including aspects of global understanding, main idea identification, inferential ability, and information integration (Murdiyanto, 2020) .

Research sample

The participants consisted of 42 first-year students (21 in the experimental group and 21 in the control group). The sample was selected using a purposive sampling technique, with the consideration that both groups had relatively similar academic characteristics, took the Listening Skills course in the same semester, and were on a learning schedule that allowed for consistent implementation of interventions (Patel, 2012) . In addition, first-year students were considered relevant as respondents because they were in an academic transition period that required strengthening listening skills as a basis for language skills and critical thinking.

This sample selection also took into account participant readiness, time availability, and curriculum suitability, ensuring the research could run effectively without disrupting regular lectures. Therefore, the sample was deemed representative for assessing the effect of the *Deep Listening strategy* through *Problem-Based Listening Tasks* on improving students' listening skills.

Research procedures

This research procedure was carried out through several systematic stages, starting from preparation to reporting the results. The first stage was preparation, including the development of Deep Listening learning materials, the creation of test instruments, expert validation, and coordination with the lecturer in charge of the course. The second stage was a pretest to measure initial listening skills in both groups: the experimental and control groups.

The next stage was administering the treatment. The experimental group received Deep Listening-based learning through Problem-Based Listening Tasks for eight sessions, while the control group underwent conventional listening instruction. During this process, researchers also observed student engagement and collected assignment data.

The next stage is a posttest to determine improvements in listening skills following the intervention. After that, additional data collection is conducted, such as brief interviews and assignment documentation. The final stage is data analysis, summarizing the results, and compiling a comprehensive research report (Widyaningrum, at.al., 2024).

Instrument

The listening test was validated through expert judgment, and reliability was measured using Cronbach's Alpha.

Data analysis

Data analysis in this study was conducted using two approaches. First, quantitative analysis was used to analyze pretest and posttest scores using descriptive statistics and inferential tests. *paired t-tests* were used to assess improvements within each group, while *independent t-tests* were used to compare differences in improvement between the experimental and control groups. Effect sizes were also calculated to assess the strength of the treatment's influence. Second, qualitative analysis was conducted on observational data and interview results using thematic analysis techniques to understand patterns of student engagement and learning experiences during the intervention process.

Results and Discussion

Results

The findings demonstrate that the application of the Deep Listening strategy through Problem-Based Listening Tasks led to a substantial improvement in students' listening competence, particularly among those in the experimental group. The research findings are presented based on the main objectives, namely improving students' global understanding, main idea identification, inferential skills, and information integration. Based on pretest score analysis, both groups had relatively equal initial listening skills. The experimental group's average score was in the moderate category, as was the control group's, with the difference not statistically significant. This indicates that both groups were at the same starting point for receiving the learning treatment.

After eight intervention sessions, posttest results showed significant improvement in the experimental group. Students' average listening scores consistently increased across all competency indicators. In the global comprehension aspect, students demonstrated improved ability to accurately grasp the overall content of the text. In the main idea identification aspect, students' accuracy in recognizing the logical structure and main arguments in spoken texts increased. Inferential skills also experienced strong development; students were able to deduce implied information and connect messages that were not explicitly conveyed. Furthermore, the integration aspect of information showed significant improvement, as seen in

students' ability to construct cause-and-effect relationships and construct meaning more holistically.

In contrast, the control group that participated in conventional listening lessons also showed improvement, but not as significant as the experimental group. The control group's improvement was more focused on literal comprehension, while inferential and integrative skills remained relatively stagnant. This reinforces the hypothesis that conventional learning focuses more on repetition of material without encouraging in-depth processing of meaning.

Observational data supports these findings. Students in the experimental group appeared more active, focused, and exhibited higher cognitive engagement, particularly when completing problem-based assignments. They engaged in group discussions, asking questions about things they didn't understand, and offering interpretations of specific sections of the audio material. Meanwhile, students in the control group tended to be passive and simply awaited the lecturer's instructions.

Overall, the results of this study indicate that the implementation of the Deep Listening strategy through Problem-Based Listening Tasks effectively improves students' listening skills more comprehensively, particularly in their ability to understand, interpret, and integrate meaning in academic spoken texts. These findings align with the research objectives and confirm that this learning model is suitable for application in listening skills teaching in higher education.

Table 1. Pretest and Posttest Listening Scores of Experimental and Control Groups

Indicators / Groups	Pretest (M ± D)	Posttest (M ± SD)	Average Change (Gain)	within-group paired t-tes	between-group (gain) test
Listening Score - Total (0–100)					
Experimental Group (n=21)	56.0 ± 8.0	74.0 ± 9.0	**+18.0 ± 7.0**	t(20)=11.78, p < .001	
Control Group (n=21)	55.0 ± 7.0	62.0 ± 8.0	**+7.0 ± 6.0**	t(20)=5.35, p < .001	
Comparison between groups (gain)	—	—	**Mean diff = 11.0**	—	t(40)=5.47, p < .001, Cohen's d = 1.69

The results of the study, shown in the quantitative table, confirm a clear difference in improvement between the experimental and control groups. The experimental group experienced an average score increase from 56.0 to 74.0, a *gain* of 18 points. Meanwhile, the control group only increased from 55.0 to 62.0, a *gain of* 7 points. A *paired t-test* showed that both groups experienced significant improvement, but an *independent t-test* showed that the improvement in the experimental group was statistically significantly greater ($p < .001$) with a very strong effect size (Cohen's d = 1.69).

Based on the indicators, all aspects of listening competence global understanding, main idea identification, inferential ability, and information integration improved significantly in the experimental group compared to the control group. These results indicate that integrating problem-based listening activities with deep listening practices leads to more comprehensive development of students' listening competence than conventional approaches.

Table 2. Experimental Test

Special indicators	Pre → Post Experimental Group (M)	Pre → Post Control Group (M)
Global understanding	14.2 → 19.8	14.0 → 16.0
Identify the main idea	13.5 → 18.0	13.2 → 15.0
Inferential ability	12.8 → 17.5	12.6 → 13.8
Inter-information integration	15.5 → 18.7	15.2 → 16.2

The second table, which details each indicator, shows that the experimental group's listening comprehension skills improved consistently across all measured aspects. For the global comprehension indicator, scores increased from 14.2 to 19.8, indicating students' ability to grasp the general meaning of spoken texts more accurately. For the main idea identification indicator, scores increased from 13.5 to 18.0, indicating students' increased acuity in recognizing main ideas and argument structure.

The most significant improvement was seen in the inferential ability indicator, which rose from 12.8 to 17.5. This indicates that the *Deep Listening strategy* effectively developed students' ability to deduce implicit information. In the integration indicator, the score increased from 15.5 to 18.7, reflecting students' ability to connect information and build holistic understanding.

Discussion

The findings of this study demonstrate that the application of the *Deep Listening strategy* through *Problem-Based Listening Tasks* significantly improved the listening competence of first-year students at Billfath University, Lamongan. These findings suggest that effective listening extends beyond literal comprehension and is strongly influenced by higher-order cognitive processes, such as analysis, inference, and the integration of meaning. The significant increase in scores in the experimental group indicates that problem-solving activities combined with listening tasks can activate higher-order thinking skills, as confirmed in Hasanuddin's (2023) research that deep processing-based learning strategies can improve students' academic understanding.

Compared to previous research outlined in the introduction, previous studies tended to focus on the use of conventional media or strategies that emphasize literal comprehension exercises. While research based on *problem-based learning* has shown positive results, it rarely explicitly integrates *deep listening approaches* . This study makes a novel contribution by

combining both approaches into a single learning model that targets comprehensive listening skills.

The strength of this research is seen in the improvement of inferential and integrative abilities, which were often reported to stagnate with conventional methods. However, previous research has not examined how problem-based assignments can guide students to deeply interpret oral information, especially in the context of first-year students who are just adapting to the academic demands of higher education.

The novelty of this research lies in the integrative model of *Deep Listening–Problem-Based Tasks* , an approach that simultaneously combines the processes of focusing attention, constructing deep meaning, and solving problems. This model provides a new empirical framework for listening learning in higher education and has the potential to be further developed as an adaptive learning design in the era of competency-based learning. The novelty diagram can illustrate the integrative relationship between *deep listening* , problem-based tasks, and the improvement of high-level listening competencies. Despite its positive findings, this study was limited by a relatively small sample size and short intervention duration. Future research is encouraged to involve larger samples and longer instructional periods.

Conclusion

In conclusion, the implementation of a Deep Listening strategy through Problem-Based Listening Tasks significantly improves the listening competence of first-year university students at Billfath University, Lamongan. The experimental group demonstrated greater improvement across all listening indicators, particularly in inferential ability and information integration. These findings suggest that integrating deep listening activities with problem-based tasks can enhance higher-order comprehension skills and support more effective listening instruction in higher education contexts.

These findings demonstrate that listening instruction combined with deep processing and problem-solving can activate critical thinking skills and improve students' overall comprehension. In line with the research objectives, this model not only improves literal comprehension but also strengthens analytical skills in comprehending spoken texts. Therefore, the integration of Deep Listening strategies with Problem-Based Listening Tasks represents a pedagogically sound alternative for improving listening instruction in higher education settings. These findings suggest that lecturers are encouraged to incorporate deep listening activities combined with problem-based tasks as part of listening instruction to foster higher-order comprehension skills among university students.

Author Contribution Statement

Rohman: Generated ideas and conceptualization, developed the research design, translated, and managed the entire research process. Field research included data collection, writing the literature review, organizing the discussion and conclusions, as well as data analysis, data presentation, compilation of results, and final editing.

Funding Statement

The funding for this research is the author's own personal funds. The author funded the research from his own funds.

Reference

Aithal, S. C., & Kakde, P. R. (2025). Integrating listening skills into higher education curricula: A necessity in the age of technological distractions. *Journal of Higher Education Studies*, 5(1), 37–44.

Alwini, S. N., Apriliya, S., & Putri, A. R. (2024). Needs Analysis Development Teaching Materials Google Sites Appreciation Fairy Tales in Elementary Schools. Jurnal Pendidikan Edutama, 11(2), 70–83. https://doi.org/10.30734/jpe.v11i2.4466

Anwar, M. K. (2017). Deep learning to shape students' character as learners. *Tadris: Journal of Education*, 2(2), 97–104. https://doi.org/10.24042/tadris.v2i2.1559

Asror, A. G. (2024). Indonesian Language Learning at MI Najil Ummah, What Form of Spoken Discourse Formed?. Jurnal Pendidikan Edutama, 11(1), 28–35. https://doi.org/10.30734/jpe.v11i1.2971

Damanik, H. H., & Sinaga, N. T. (2022). English teacher performance in teaching and learning processes during the COVID-19 pandemic. *Jurnal Pendidikan Edutama*, 9(2), 89–98. https://doi.org/10.30734/jpe.v9i2.2365

Goh, C. C. M. (2017). Research into practice: Scaffolding listening instruction. *Language Teaching*, 50(2), 247–253. https://doi.org/10.1017/S026144481700003X

Hapriyanto, L. F., & Sari, S. P. (2024). The use of YouTube videos in listening instruction. *Jurnal Pendidikan Bahasa*, 11(2), 289–301.

Haris, MA, Hasanudin, C., Fitrianingsih, A., Language, I., & Author, C. (2025). Edutama Education Journal. 12 (2), 1–14. https://doi.org/10.31943/bi.v7i1.137

Hasanuddin, C. (2023). Deep processing-based learning strategies to enhance students' academic comprehension. *Edutama Education Journal*, 10(2), 145–156.

Leasa, M., Fenanlampir, A., Pelamonia, J., Talakua, M., & Education, P. (2023). Biosphere: Journal of Biology Education. 16 (2), 467–480. https://doi.org/10.23887/jppsh.v4i1.24389

Model, K., Berasasan, P., Hearing, MK, & Asing, KB (2021). Effectiveness of Problem-Based Learning Model to Improve Listening Skills in Foreign Language Courses 91, 131–142.

Murdiyanto, E. (2020). Qualitative Research Methods (Qualitative Research Systematics). In Bandung: Rosda Karya. http://www.academia.edu/download/35360663/METODE_PENELITIAN_KUALITAIF.docx

Patel. (2012). Qualitative Research: Qualitative Research Methods. In EQUILIBRIUM Journal (Vol. 5, Issue January). http://belajarpsikologi.com/metode-penelitian-kualitatif/

Researches, D. (2025). Review of the Ministry of Education and Culture's Deep Learning Approach from an Islamic Education Perspective. 5 (1), 75–85.

Rijali, A. (2019). Qualitative Data Analysis. Alhadharah: Journal of Islamic Propagation, 17 (33), 81. https://doi.org/10.18592/alhadharah.v17i33.2374

Septya, JD, Widyaningsih, A., Nur, I., Br, K., & Harahap, SH (2022). Character Education-Based Listening Learning. 1 (3), 365–368.

Telaumbanua, S., Zalukhu, N. M., & Nias, U. (2024). An analysis of students' low listening skills in higher education. *Jurnal Pendidikan Edutama*, 12(3), 441–444.

Vandergrift, L., & Goh, C. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.