THE APPLICATION OF AUDITORY, INTELLECTUALLY, REPETITION (AIR) LEARNING MODEL TO IMPROVE LISTENING SKILLS OF STUDENTS IN CLASS XII 1 MADRASAH ALIYAH NEGERI 1 MAMUJU

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ABSTRACT

This study aimed to examine the effectiveness of the Auditory, Intellectually, Repetition (AIR) learning model in improving students' listening skills. A quantitative pre-experimental method with a one-group pre-test and post-test design was employed. The sample consisted of 32 twelfth-grade students selected through purposive sampling. Data were collected using a listening test administered before and after the treatment. The treatment was conducted in three sessions using the AIR learning model, emphasizing auditory input, intellectual engagement, and repetition activities. The results showed a significant improvement in students' listening performance. The mean score increased from 47.15 in the pre-test to 71 in the post-test. Statistical analysis using a paired sample t-test revealed a significance value of 0.000 ($p < 0.05$), indicating that the improvement was statistically significant. These findings suggest that the AIR learning model is effective in enhancing students' listening skills. Therefore, it can be considered as an alternative instructional strategy for English teachers to create more engaging and effective listening activities in the classroom.

Keywords: Listening, Auditory Intellectually Repetition (AIR), Learning model

INTRODUCTION

Listening is one of the essential skills in learning English and plays an important role in effective communication. It is not merely the process of hearing sounds, but involves understanding, interpreting, and responding to spoken language (Rost in Ha, 2021). Therefore, listening requires continuous practice supported by appropriate teaching strategies (Sihombing et al., 2022). However, listening is still considered one of the most difficult skills for students to master, as it is influenced by factors such as vocabulary mastery, pronunciation, and exposure to different accents. Many learners still misunderstand listening as simply hearing sounds, whereas listening requires deeper comprehension and interpretation (Sadiku in Syakur, 2020).

In practice, the teaching of English often focuses more on vocabulary and grammar, while listening receives less attention. Based on preliminary

observation conducted on December 12, 2024, at Madrasah Aliyah Negeri 1 Mamuju, students in class XII 1 showed low listening proficiency. They experienced difficulties in understanding oral instructions and identifying important information. This problem is influenced by limited vocabulary, lack of structured listening exercises, and the absence of effective and interactive teaching methods. As a result, students often feel unprepared when asked to listen and respond to English input.

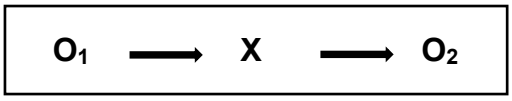
To address this problem, the researcher proposes the use of the Auditory, Intellectually, Repetition (AIR) learning model as an alternative teaching strategy. The auditory aspect emphasizes learning through listening and speaking activities (Rambe, 2023). The intellectual aspect involves developing students' thinking and problem-solving abilities through reflection and discussion (Maghfuroh, 2022). Meanwhile, repetition refers to reinforcing students' understanding through repeated practice with varied forms of material (Widianti, 2020). Although interactive learning models have been widely discussed, the application of the AIR model in improving students' listening skills has received limited attention. Therefore, this study aims to apply the AIR learning model to improve the listening skills of students in class XII 1 at Madrasah Aliyah Negeri 1 Mamuju.

RESEARCH METHOD

Research Design

This study employed a quantitative approach using a pre-experimental one-group pre-test and post-test design (Sugiyono, 2023). In this design, students were given a pre-test (O1) to measure their initial listening ability, followed by treatment using the Auditory, Intellectually, Repetition (AIR) learning model (X), and a post-test (O2) to measure improvement. The results of the pre-test and post-test were compared to determine the effectiveness of the treatment.

Figure 1. Design of the Research



One group pre-test and post-test

O_1 : Pre-test score (before treatment)

X : Treatment

O_2 : Post-test score (after treatment)

Participants

The participants of this study were 32 students of class XII 1 at Madrasah Aliyah Negeri 1 Mamuju. The sample was selected using purposive sampling,

considering that the class had relatively low listening proficiency based on preliminary observation.

Instrument

The main instrument used in this study was a listening test. The test consisted of audio recordings in the form of short conversations, narrative texts, and descriptive texts. The types of questions included multiple-choice, true-false, and fill-in-the-blank items. For example, students were asked to identify the main idea of a conversation, determine specific information, or complete missing words based on the audio they heard.

To ensure the quality of the instrument, the test was reviewed and adjusted based on the learning objectives. The validity of the instrument was established through content validity by aligning the test items with listening indicators. Meanwhile, the reliability of the instrument was ensured through consistency of the test format and instructions during the administration.

Procedure

The research was conducted in five meetings. The first meeting was used to administer the pre-test. The second to fourth meetings were used for treatment by applying the AIR learning model. During the treatment, students engaged in auditory activities (listening to audio), intellectual activities (discussion and problem-solving), and repetition activities (quizzes and exercises). The fifth meeting was used to administer the post-test.

Data Analysis

The data were analyzed using descriptive and inferential statistics. The researcher calculated the mean score, standard deviation, and percentage to describe students' performance. To determine the significance of the difference between pre-test and post-test scores, a paired sample t-test was conducted using SPSS 22. The results were used to identify whether the AIR learning model significantly improved students' listening skills.

RESULTS

The results of this study were obtained from the students' pre-test and post-test scores, administered before and after the implementation of the Auditory, Intellectually, Repetition (AIR) learning model.

Table 1. Comparison of Scores, Frequency and Percentage in Pre-Test and Post Test

No	Classification	Score	Pre-Test		Post-Test	
			F	P	F	P
1	Excellent	81-100	-	-	4	12.5%
2	Good	61-80	3	9.4%	27	84.4%
3	Average	41-60	20	62.5%	1	3.1%
4	Fair	21-40	9	28.1%	-	-
5	Poor	0-20	-	-	-	-
Total Score			**32**	**100%**	**32**	**100%**
Mean			**47.15%**		**71%**	

In the pre-test, most students were in the Average category (62.5%), followed by Fair (28.1%) and Good (9.4%), with no students achieving Excellent or Poor levels. The mean score of the pre-test was 47.15 with a standard deviation of 7.78.

After the treatment, the post-test results showed a significant improvement. A total of 27 students (84.4%) were in the Good category and 4 students (12.5%) reached Excellent, while only 1 student (3.1%) remained in the Average category. No students were in the Fair or Poor categories. The mean score increased to 71 with a standard deviation of 6.89.

Table 2. T-Test Value of the Students

Variable	T-Test Value	T-Table Value	Sig. (2 tailed)
X2 - X1	32.311	2.040	.000

In addition, the range of scores decreased from 27.00 in the pre-test to 23.00 in the post-test, indicating a more consistent distribution of scores after the treatment.

The result of the paired sample t-test showed that the significance value was 0.000 ($p < 0.05$), and the t-test value (32.311) was higher than the t-table value (2.040). This indicates that there was a statistically significant difference between the pre-test and post-test scores.

DISCUSSION

The findings of this study indicate that the implementation of the Auditory, Intellectually, Repetition (AIR) learning model significantly improved students' listening skills. This improvement is reflected not only in the increase in mean scores but also in the distribution of students' performance, which shifted from

lower to higher achievement categories after the treatment. The results suggest that the AIR model provides an effective framework for enhancing listening comprehension through structured and interactive learning activities.

From the auditory perspective, the use of repeated listening activities played a crucial role in improving students' ability to process spoken English. During the treatment sessions, students were exposed to various audio materials, including conversations, narrative texts, and descriptive texts. The opportunity to listen to the same audio multiple times allowed students to gradually build their understanding of the content. This repeated exposure helped them become more familiar with pronunciation, intonation, and commonly used expressions in English. As a result, students were better able to identify key information and understand the overall meaning of the audio. This finding supports the idea that listening skills develop through continuous exposure and meaningful auditory input.

From the intellectual aspect, the AIR model encouraged students to actively engage in thinking processes while listening. After listening to the audio materials, students participated in group discussions, where they analyzed the content, shared their interpretations, and answered related questions. This process required students to go beyond simply hearing the audio and instead construct meaning based on their understanding. Such activities reflect the nature of listening as an active cognitive process, in which learners interpret and evaluate information rather than passively receive it. The involvement of intellectual engagement in the learning process helped students develop deeper comprehension and improved their ability to respond accurately to listening tasks.

Meanwhile, the repetition aspect of the AIR model contributed significantly to strengthening students' understanding. Through repeated listening, quizzes, and practice exercises, students were given multiple opportunities to reinforce what they had learned. Repetition not only helped students remember information more effectively but also increased their confidence in handling listening tasks. When students are repeatedly exposed to similar types of input, they become more familiar with patterns and structures, which makes it easier for them to process new information. In this study, repetition served as a key factor in helping students retain information and improve their overall listening performance.

The improvement observed in this study is also supported by cognitive theories of listening. According to Nazarieh (2022), listening involves three main processes: perceptual processing, parsing, and utilization. Perceptual processing refers to the ability to recognize sounds and words, parsing involves organizing the information into meaningful units, and utilization refers to

interpreting the meaning based on prior knowledge. In this study, these processes were facilitated through the structured stages of the AIR model. Repeated listening supported perceptual processing, while group discussions and problem-solving activities supported parsing and utilization.

Furthermore, Sendağ (2024) emphasizes the importance of both bottom-up and top-down processes in listening comprehension. Bottom-up processing involves understanding linguistic elements such as sounds, words, and sentence structures, while top-down processing involves using background knowledge and context to interpret meaning. The AIR model effectively integrates these two processes. The auditory stage supports bottom-up processing by exposing students to spoken language, while the intellectual stage supports top-down processing by encouraging students to connect what they hear with their prior knowledge. This combination enhances students' ability to comprehend spoken English more effectively.

In addition, Vandergrift and Goh (2012) highlight that repeated auditory exposure helps learners recognize patterns and internalize vocabulary. This is consistent with the findings of this study, where students showed improvement after being exposed to repeated listening activities. The repetition stage of the AIR model allowed students to revisit the same material, which strengthened their understanding and improved their ability to recall information during the post-test.

The statistical results further confirm the effectiveness of the AIR learning model. The significant increase in the mean score from 47.15 in the pre-test to 71 in the post-test indicates a substantial improvement in students' listening skills. Moreover, the decrease in standard deviation suggests that students' performance became more consistent after the treatment. This means that the improvement was not limited to a few students but was experienced by most of the participants. The reduction in score range also indicates that the gap between high and low achievers decreased, reflecting a more balanced level of achievement across the class.

The results of the paired sample t-test provide strong statistical evidence of this improvement. The t-test value (32.311), which is significantly higher than the t-table value (2.040), and the significance value of 0.000 ($p < 0.05$) indicate that the difference between the pre-test and post-test scores is statistically significant. This means that the improvement in students' listening skills was not due to chance but was influenced by the implementation of the AIR learning model.

These findings are consistent with previous studies. Manurung and Sagita (2019) found that the AIR learning model could improve students' listening

outcomes, particularly in procedural texts. Similarly, Pramaisheila (2020) reported that the AIR method increased student engagement and reduced difficulties in listening activities. Fadhillah (2020) also emphasized that the AIR model enhances students' understanding by integrating listening, thinking, and repetition processes. The consistency between this study and previous research strengthens the evidence that the AIR learning model is effective in improving listening skills.

However, it is important to acknowledge that several external factors may have influenced the results of this study. Students' motivation, classroom interaction, and familiarity with the test format may have contributed to their improved performance. In addition, the use of group discussions may have created a supportive learning environment that encouraged students to participate more actively. Despite these factors, the overall improvement observed in this study indicates that the AIR learning model played a significant role in enhancing students' listening skills.

CONCLUSION

This study concludes that the implementation of the Auditory, Intellectually, Repetition (AIR) learning model was effective in improving students' listening skills. The improvement was reflected in the overall enhancement of students' performance after the treatment, indicating that structured listening activities combined with intellectual engagement and repetition can support better comprehension.

The findings imply that English teachers can adopt the AIR learning model as an alternative instructional strategy to create more interactive and effective listening activities. By integrating auditory exposure, discussion, and repeated practice, teachers can help students develop both their comprehension and confidence in listening. This approach also encourages active participation and collaborative learning in the classroom.

However, this study has several limitations. It applied a pre-experimental design without a control group, which limits the ability to compare the effectiveness of the model with other teaching methods. In addition, the duration of the treatment was relatively short, consisting of only three sessions, which may not fully capture long-term learning effects.

Therefore, future research is recommended to involve a control group, apply the AIR model over a longer period, and explore its effectiveness in different contexts or language skills. Such studies may provide more comprehensive evidence regarding the impact of the AIR learning model on students' learning outcomes.

REFERENCES

Adiani, N. P., Goreti, M., & Kristiantari, R. (2020). The positive impact of auditory intellectually repetition learning model assisted by domino card. *International Journal of Elementary Education, 4*(3), 270–280.

Each, N., & Suppasetseree, S. (2021). The effects of mobile-blended cooperative learning on EFL students' listening comprehension. *LEARN Journal, 14*(2), 143–170.

Fadhillah, D. (2020). Listening team method and auditory intellectually repetition (AIR) model in teaching listening. *Lingua Rima: Jurnal Pendidikan Bahasa dan Sastra Indonesia, 9*(1), 7–14.

Ha, G. L., & Ngo, T. C. T. (2021). Challenges in learning listening comprehension via Microsoft Teams among English majors. *International Journal of TESOL & Education, 1*(3), 142–175.

Harmer, J. (2001). The practice of English language teaching (3rd ed.). Longman.

Maghfuroh, N. W. (2022). Efforts to increase student learning activeness through the auditory intellectually repetition method. *Ta'lim Diniyah: Journal of Islamic Education Studies, 3*(1), 178–190.

Manurung, I. D., & Sagita, R. (2019). Auditory, intellectually, and repetition (AIR) learning model in listening procedural text. *Multi-Disciplinary International Conference University of Asahan*.

Nazarieh, M., Razmi, M. H., Azizian, M., & Ghani, M. U. (2022). A brief history of listening comprehension in second language teaching and learning. *Education Research International, 2022*(1), 3894457.

Pamungkas, D., Hamdandi, Z., & Prihatini, C. (2024). Interactive video aided interactional on students' listening skill. *Syntax Idea, 6*(2), 642–652.

Pramaisheila, G., & Arianto, P. (2020). The implementation of auditory-intellectually-repetition in listening activities. Undergraduate thesis, IAIN Surakarta.

Pratama, H. (2019). Statistik pada bidang pendidikan bahasa.

Rambe, A. H., & Aisyah, S. (2023). Correlation of auditory intellectually repetition (AIR) learning model on student achievement. *Molang: Journal Islamic Education, 1*(1), 1–10.

Sendağ, S., Caner, M., Gedik, N., & Toker, S. (2024). Enhancing language proficiency through mobile extensive listening and podcasting: A multifaceted approach to metacognition and critical thinking. *Thinking Skills and Creativity, 54*, 101656.

Sihombing, R. E., Silalahi, Y. A., Sianturi, T. T., Panjaitan, K., & Napitupulu, S. (2022). Using audio-lingual method to overcome students' listening

problems. *International Journal of Education and Humanities, 2*(2), 42–47.

Sugiyono. (2023). Metode penelitian pendidikan (3rd ed.). Alfabeta.

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

Widianti, K. (2020). The effect of auditory intellectually repetition (AIR) learning model on students' cognitive outcomes. Undergraduate thesis, UIN Raden Intan Lampung.