

# The Effectiveness of Discovery Listening to Improve Listening Competence in Higher Education

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Abstract. The aim of the research is to investigate the implementation of Discovery Listening. This study focused on the use of the Discovery Listening technique as well as the perception of the students after using Discovery Listening technique. To a great extent, this study wanted to give an account of the study conducted by Ardini, et al. (2020) who applied Wilson's theory. It was achieved using explanatory sequential mixed-methods research design within 30 students of the 1st semester of Universitas PGRI Semarang. Tests and questionnaire were employed to collect the data which then analyzed using SPSS version 27 and supported by descriptive qualitative data. The result shows the mean score of pre-test was 55.17 and post-test was 72.20. The findings of this study indicated that the implementation of the Discovery Listening technique has improved students' performance by showing 74% of the students' score was upgraded and 2 respondents got outstanding achievement from Low to High. Additionally, it can alter the environment of educational activities, transforming a passive class into an active one. The group work also helped the students to overcome their listening problem. Those indicated that it gave positive perceptions from the students, most importantly, the students can learn a new thing. The results of this study can support the previous study from Ardini, et al. (2020) that Discovery Listening is very effective to be applied in higher education as well as increasing students' critical thinking.

**Keywords**: effectiveness; Discovery Listening technique; higher education; listening competence

Abstrak. Tujuan dari penelitian ini adalah untuk menyelidiki implementasi Discovery Listening. Studi ini berfokus pada penggunaan teknik Discovery Listening serta persepsi siswa setelah menggunakan teknik Discovery Listening. Secara garis besar, penelitian ini ingin memberikan penjelasan tentang penelitian yang dilakukan oleh Ardini, dkk. (2020) yang menerapkan teori Wilson. Penelitian ini dilaksanakan dengan menggunakan desain penelitian metode campuran sekuensial melalui 30 siswa semester 1 Universitas PGRI Semarang. Tes dan kuesioner digunakan untuk mengumpulkan data yang kemudian dianalisis menggunakan SPSS versi 27 dan didukung oleh data kualitatif deskriptif. Hasil penelitian menunjukkan nilai rata-rata pre-test adalah 55,17 dan post-test adalah 72,20. Temuan penelitian ini menunjukkan bahwa penerapan teknik Discovery Listening telah meningkatkan kinerja siswa sebanyak 74% nilai siswa meningkat dan 2 siswa berhasil melompat dari kriteria rendah ke tinggi. Selain itu, dapat mengubah lingkungan kegiatan pendidikan, mengubah kelas pasif menjadi kelas aktif. Kerja kelompok juga membantu siswa untuk mengatasi masalah mendengarkan mereka. Hasil tersebut mengindikasikan adanya persepsi positif dari siswa, yang paling penting, para siswa dapat mempelajari hal baru. Hasil penelitian ini dapat mendukung penelitian sebelumnya dari Ardini, dkk. (2020), bahwa Discovery Listening sangat efektif diterapkan di perguruan tinggi serta meningkatkan berpikir kritis mahasiswa. Oleh karena itu, disarankan kepada peneliti selanjutnya untuk menerapkan Discovery Listening pada jenjang pendidikan yang lebih rendah seperti SMA atau bahkan SD.

Kata kunci: efektivitas; keterampilan mendengarkan; pendidikan tinggi; teknik Discovery Listening

#### INTRODUCTION

Language learning is a communication that is intertwined internationally, consequently focusing on learning language and cultural elements of the language is needed, by doing so it is easy to have bilingual communication (Ardini, 2022; Ghasimov, 2023). Further, it has been discovered that listening is an essential skill for language learners, particularly for those learning English as a foreign language (EFL) (Field, 1998). Many different approaches have been used in the teaching and learning process, particularly when it comes to training listening skills. However, the approaches taken by educators and students are now outdated, for instance the teacher stays in front of the class and gives instructions then plays the audio and discusses the exercises monotonously. The improvement of teaching learning is needed in order to develop the listening skill.

A listening skill is the ability to actively identify and understand what others are saying. We listen to a variety of things, such as what is said during a face-to-face or telephone conversation, announcements that provide information, like those heard at an airport or train station, the radio's weather forecast, a play that is being broadcast, music, eavesdrop on another person's conversation, a lecture, professional advice, like that given at a doctor's office or in a bank, instructions, like those on how to operate a photocopier or other machinery (Wibowo, 2006). To consider, when speaking with people, your ability to effectively take in information depends on your listening abilities. These abilities are crucial for efficient workplace communication. Having effective listening skills may ensure that you comprehend information correctly, interpret messages correctly, and maximize the efficiency of your conversations and communications.

In addition, Brown (2004) stated that listening is a skill in receiving information, which includes several processes that are invisible but have meaning so that they can be analyzed in depth, from hearing in the ear to the brain. Further, Robin & Gou (2006) argued that listening has a strategy as a technique or activity that directly understands and has metacognitive, cognitive, and social affective strategies to facilitate understanding and make learning more effective. Listening is usually treated as a silent activity. The teachers usually ask the students to listen to dialogues or monologues and then follow some questions or some individual activities, such as; checking true or false, ticking, following map, choosing pictures, etc. These activities are conducted in "silent" activities, without discussion or sharing with others. In fact, the students face some difficulties in understanding the monologue or dialogue and they left behind in their "not understanding". Although there "a classroom" discussion related to the "correct answer" and why those are correct related to the tasks given, it does not share the ways the find the correct answer. In fact, the way of teaching listening seems to be stressful. The students sit and listen to the text and fill the blanks or answer the question. It is merely like a test. In sum, the listening classroom is well-known for monotonous learning activities.

Teaching listening has long been a top priority in EFL learning and teaching because of its crucial role. Yet, it used to be an underrated skill since the listener's ears, when doing listening, just received information and passively registered the message. As a result, listening was regarded as a passive skill (Osada, 2004). More crucial than that, listening was also a neglected and poorly taught aspect of English. Morley (2011) stated that listening was one of the most neglected skills in second and foreign language classrooms, especially until the late 1960s. Both researchers and language teachers paid more attention to reading and grammar, and teaching listening was not accepted as a significant feature of language teaching (Richard & Rodgers, 2001). By utilizing the best strategies and methods, teachers can enhance their listening lessons and give students the confidence to listen. Discovery

learning is one of the most effective ways to improve listening abilities (Burner, 2006). In addition, discovery learning used of observation, classification, measurement, prediction, determination, and inference, students were encouraged to fully participate in the learning process until they discovered their concept. Because the teacher will allow the pupils to learn independently while using this technique, they will be able to learn new information by interpreting, analyzing, and summarizing the materials (Rahmi, 2014). The technique is a kind of realization of the 21<sup>st</sup> century and the revolution industry 4.0. (Ardini et al., 2020).

Teaching listening is one of the most challenging tasks that a teacher faces, it was also never a primary concern, and the teachers did not have any training in teaching listening (Flowerdew & Miller, 2005; Larsen-Freeman, 2000; Walker, 2014). Nunan (2003) says that listening as one of the language skills is essential not only as a receptive skill but also to the development of spoken language proficiency. In line with that, Mundhe (2015) explained that language skills are of two types: receptive and productive language skills. Receptive language skills include listening and reading because there is an input received by the learners, while productive language skills include speaking and writing because there is an output as the product of their language learning. Most people think that productive language skills are more difficult than receptive language skills since they are product-oriented in written and spoken form. As a result, researchers and language learners pay more attention to writing and speaking skills rather than listening and reading skills. Furthermore, the difficulties of teaching listening can also be determined through the process of itself which includes top-down processing, bottom-up processing, and metacognitive processing (Vandergrift & Goh, 2012; Miliner & Dimoski, 2019).

Nowadays lecturers have already implemented discovery learning in their learning process. The application of discovery learning in listening classes have been carried out. The researchers found out the difficulties faced by the student to improve their listening skills. To a great extent, this study wanted to give an account of the study conducted by Ardini, et. al (2020) who applied Wilson's theory (2003) about Discovery Listening which tried to retain a learner-centered, task-based format that is compatible with current teaching methodology. Further, Marzban & Isazadeh (2012) stated that Discovery Listening tries to achieve a focus on sound and word recognition by adapting the dictogloss approach, making it as the 'task' of listening for enhancing the listeners 'noticing'.

Language learning is based on the task of concentrating on the learning process, not on the nature but on the input of language (Harmer, 1991). In Discovery Listening, students are expected to do several tasks to find out beforehand what their problems are and the causes of these problems in understanding them. According to Nunan (1999), task-based language teaching is a specific strategic approach to a language course, in which the ordered list of linguistic items is not the most important part but the set of tasks is the most important part.

The Discovery Listening technique emphasizes task-based learning and learner-centered instruction. This technique's activity focuses on a number of tasks before discovering the issues and reasons of those issues. By asking students to identify and then prioritize their individual hearing challenges after reconstructing a text, it demonstrates the case for noticing as a technique of increasing listening skill. According to Baehaqi (2016), students can see the mental processes they go through to build their grasp of hearing materials by using Discovery Listening. Wilson's (2003) Discovery Listening technique (DL) is a process-based technique that enables students to learn how to listen by identifying the sources of their listening challenges as they go along and, in the end, raising awareness of strategies for overcoming these difficulties. This technique requires students to reconstruct the texts they hear in order to balance attention on meaning and form, and it also increases students' awareness

of perceptual challenges during the comprehension process. Listening, reconstructing, and discovering are the three stages of the work in Discovery Listening. The listening phase consists of three steps, namely 1) Students listen to a brief text read at a normal pace, 2) They rate their own comprehension thereafter, and 3) They listen twice more while taking notes. Additionally, during the reconstructing phase, the listeners must work in small groups, use their notes, and attempt to piece together the original text. Following that, there are three stages in the discovering phase. First, students compare their reconstructed text with the original and attempt to categorize the reasons for their errors; second, they evaluate the relative importance of their errors; and third, they listen to the text again without reading it and evaluate their performance.

The research about the influence and impression of Discovery Listening to enhance listening skills in preventing students' critical thinking in Indonesia uncovered Indonesian students' problems in listening. Sound and word recognition remained the most difficult exercises as indicated by their item scores; the speed of the native speaker's speech felt too fast and they could not catch what was said. A lack of vocabulary remained a problematic element in learning English including single words, phrases, and idiomatic expressions, and a lack of audio facilities was another external factor related to the learning of listening in Indonesia. These findings might have implications for the development of the 21 century skills which must be implemented in listening competence as soon as possible. As such and in doing so, educators and students saw listening as a challenging and interesting subject, not as a subject that can be neglected and underrated (Ardini, et al., 2020).

With the backdrop in mind, this study aims to investigate the implementation of Discovery Listening whom the students of the 1<sup>st</sup> semester of English Education Study Program in Universitas PGRI Semarang had never experienced before. This study as well as explores the perception of the students after using Discovery Listening technique. Qiong (2017) explained that the student's perception is the response of a process someone knows several things from the senses. Perception is the process of assessing and giving a concept's meaning using one's senses (hear, see, smell, touch, and feel). According to the perception, it will result in particular attitudes and behaviors appropriate to the circumstance experienced, and will cause different responses to each individual. The results were expected to be useful to vary the strategies in teaching listening mostly in higher education.

#### **METHOD**

The experimental research design by Creswell (2012); Creswell & Creswell (2018) were run since the researchers wanted to analyze the implementation of Discovery Listening technique. This research focused on the application of the Discovery Listening technique within listening class on the 1<sup>st</sup> semester of English Education Study Program of Universitas PGRI Semarang in the academic year 2021/2022 with total number of populations is 189 students. This research used technique random sampling to take the sample and B class was chosen with 30 sample of students.

The experiment was conducted using pre-test, 9 times of treatments using the Discovery Listening technique. The treatments were employed to see how they affect the dependent variable that is listening comprehension. The other instrument was a questionnaire used to gather data on the students' perception after they were taught using Discover Listening technique. Therefore, the instruments used in this study were tests and questionnaire to gather the data. Quantitative data were obtained from tests including pre-test and post-test, while the qualitative data were from questionnaire.

The data collected in this study were analyzed using statistical computation SPSS (Statistical Program for Social Science) 27 version. The quantitative data were then supported by questionnaire to get deeper information from some of the respondents about their perception. A theory from Qiong (2017) was employed. First, there is an object that is perceived. Second, there is attention which is the initial stage in becoming ready to perceive. The presence of sense organs and receptors, or equipment for receiving inputs, comes in third. Fourth, the brain uses sensory nerves as a tool to develop responses by sending stimuli to them.

#### RESULTS AND DISCUSSION

## The Implementation of Discovery Listening Technique

The results of the finding reveal the exact data on the listening skill using Discovery Listening technique. To see the effectiveness, the researchers presented the scoring of pre-test and post-test from 30 respondents as the first data display in this study, as the following.

Table 1 Criteria of High, Mid, and Low Classification

Criteria	The Interval Score
High	81≥100
Mid	61≥80
Low	0 ≤60

This classification is made to determine the competency of each individual in listening. This data is created to support quantitative calculations and provide an overview of student abilities.

Table 2 Classification Based on Criteria

Respondent	Pre-Test	Criteria	Post-Test	Criteria
R-5	73	Mid	82	High
R-17	61	Mid	74	Mid
R-20	76	Mid	86	High
R-21	73	Mid	83	High
R-22	64	Mid	78	Mid
R-23	64	Mid	75	Mid
R-26	74	Mid	86	High
R-29	70	Mid	80	Mid
R-1	50	Low	70	Mid
R-2	45	Low	48	Low
R-3	40	Low	77	Mid
R-4	55	Low	61	Mid
R-6	57	57 Low 67		Mid
R-7			56	Low
R-8	51	Low	73	Mid
R-9	54	Low	77	Mid
R-10	50	Low	35	Low
R-11	45	Low	74	Mid
R-12	40	Low	69	Mid
R-13	54	Low	70	Mid
R-14	59	Low	82	High

AVERAGE	53.17		72.20	
R-30	53	Low	72	Mid
R-28	48	Low	78	Mid
R-27	51	Low	85	High
R-25	50	Low	78	Mid
R-24	49	Low	79	Mid
R-19	47	Low	67	Mid
R-18	52	Low	75	Mid
R-16	45	Low	55	Low
R-15	58	Low	74	Mid

The data listed in Table 2 were from the experimental class which both of pre-test and post-test were administered prior to the start of the treatment. Table 2 showed that the average of the pre-test was 53.9, while the average of the post-test was 72.2.

After finding out the average, the next phase done by the researchers was figured out the effectiveness of Discovery Listening using SPPS 27 version. The analysis was displayed in Table 3.

**Table 3** SPSS Analysis

#### **Model Summary**

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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.509ª	.259	.232	8.892

a. Predictors: (Constant), Posttest

It is known that the R Square value is 0.259, so it can be concluded that the magnitude of the influence of the pre-test value on the post-test value is 25.9%.

ANOVA

M	lodel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	772.516	1	772.516	9.771	.004⁵
	Residual	2213.651	28	79.059		
	Total	2986.167	29			

#### Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	22.870	10.459		2.187	.037
Posttest	.447	.143	.509	3.126	.004

a. Dependent Variable: Pretest

### Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	40.295	10.372		3.885	.001
Pretest	.578	.185	.509	3.126	.004

a. Dependent Variable: Posttest

In Table 3 of coefficients, it can be concluded that if there are positive results or there is an increase from the pre-test value to the post-test value, it can be seen that based on the pre-test determination coefficient of 44.7%, it increases to 57.8% of the post-test determination coefficient that has been carried out and the final result of significance shows less than (0.05) which means it has a high significance.

## The Students' Perception

The second data in this study were dealing with the perception of using Discovery Listening technique taken from the 1<sup>st</sup> semester English Education Study Program Universitas PGRI Semarang. They were revealed by the open questionnaire that has been given to the respondents. In conducting the questionnaire, the researchers allowed the respondents to ask and clarify the question they did not understand. The detailed data were presented by the researchers as follows:

**Table 4** The Data Excerpt from the Respondents from High, Mid, and Low

Q1	Criteria	Do you like or dislike learning listening using DL?
R26	Mid to High	It helps me be more concentrate in listening through the audio.
R23	Mid to Mid	In my opinion, it's enjoying but the audio is so fast.
R22	Low to Mid	Yes, I like because listening makes me more careful when listening.
R7	Low to Low	Everything was so easy at the first time, then it turned into difficult. I
		could not follow.
R27	Low to High	Yes, I like it because listening is challenging for me who less listening
		skill.
Q2		What obstacles you got in learning listening using DL?
R26	Mid to High	Sometimes, I don't understand the accent.
R23	Mid to Mid	Sometimes, I cannot focus on the listening because of the environment
		voice is louder than the audio.
R22	Low to Mid	Usually what the native speaker say is hard to understand.
R7	Low to Low	I think the audio too fast and the pronunciation is difficult to understand.
R27	Low to High	The question from native speaker is different from the audio delivered.
		So, I need to guess much what the answer probably can be.
Q3		What you know about the technique that your lecturer used?
R26	Mid to High	She did her techniques in teaching us depends on the handbook
		meanwhile she often shares her experience of her story.
R23	Mid to Mid	It was fun.
R22	Low to Mid	I don't feel bored.
R7	Low to Low	Not bad.
R27	Low to High	Not always answering the exercises by writing down. Love the
		activities!
Q4		What strategy you used to find out the clue in learning listening?
R26	Mid to High	If I need to listen something important, I write down the clues carefully.
R23	Mid to Mid	As said by the lecturer, to catch the wh-questions.
R22	Low to Mid	Through pictures provided.
R7	Low to Low	Focus on the audio.
R27	Low to High	Trying to listen the audio carefully so I can guess the correct answer.

Table 4 is the data taken from students' perception who got the treatments using Discovery Listening technique. There were kinds of opinion about it. From that table, it can be seen the information coming from respondents from high, Mid, and low. The researchers put the criteria from Table 2 with the classification as follows:

**Table 5** The Criteria of the Interviewed Respondents

R26	Mid to High
R23	Mid to Mid
R22	Low to Mid
R7	Low to Low
R27	Low to High

In providing answer about like or dislike learning listening using Discovery Listening, R26 who was a Mid to High respondent said that it was enjoyable even though the audio was very fast. On the second question, which was about the obstacles in learning listening using Discovery Listening, R26 replied that accent was the big obstacle. The third question was asking opinion about the Discovery Listening technique that had been used by the lecturer. The answer was the lecturer used handbook and sharing knowledge and personal experience that can relate the materials. The last question was asking about strategy used by the student to find out clue in learning listening, so that the grade can be improved. Writing down note was the strategy used by R26 to avoid missed memorizing or to help him/her in memorizing the flow of the audio.

The next respondent was R23 (Mid to Mid) who provided answer about like or dislike learning listening using Discovery Listening, and s/he answered that it helped him/her be more concentrate in doing listening through the audio. It relates to the phases used in the technique which made him/her more focus or concentrate. The question about the obstacles in learning listening using Discovery Listening, R23 said that the audio was way too fast and the pronunciation of the speaker was very difficult to understand. The third question was asking opinion about the Discovery Listening technique that had been used by the lecturer. The answer was very short but not clear, that s/he said the learning process was not bad. The last question was asking about strategy used by the student to find out clue in learning listening, so that the grade can be improved. Focus on the audio was the strategy used by R23 to improve him/her listening competence.

R22 was the second respondent with Low to Mid respondent who answered that s/he likes learning listening using Discovery Listening since it made him/her be more careful. The question about the obstacles in learning listening using Discovery Listening, R22 said that s/he was disturbed by the voice from outside the classroom that even louder than the audio. It can be said that the environment was not supporting the learning process. The third question was asking opinion about the Discovery Listening technique that had been used by the lecturer. The answer was very short yet positive, that s/he said the learning process was very fun. The last question was asking about strategy used by the student to find out clue in learning listening, so that the grade can be improved. Trying to catch any information coming from WH-questions was the strategy used by R22 to improve him/her listening competence.

The first question was about like or dislike learning listening using Discovery Listening, R7 who was a Low-to-Low respondent said that it was under control at the beginning but then it turned into difficult, so s/he could not follow the further instructions. The second question, which was about the obstacles in learning listening using Discovery Listening, R7 replied that what the native speaker has said was the big obstacle. S/he sometimes could not catch the vocabularies clearly. The third question was asking opinion about the Discovery Listening technique that had been used by the lecturer. The answer was as short as R7 yet positive as well, that was s/he said that the eyes did not want to close during the class. It means s/he did not fell bored whole time when learning using Discovery Listening technique. The last question was asking about strategy used by the student to find out clue in learning

listening, so that the grade can be improved. Guessing the answer via picture was the strategy used by R7. It helped him/her guessing what was meant by the speaker in the audio.

The first question was about like or dislike learning listening using Discovery Listening, R27 realized that his/her listening skill was low yet s/he was kind of challenge lover including the use of Discovery Listening technique by the lecturer. The second question, which was about the obstacles in learning listening using Discovery Listening, R27 replied that the difference vocabulary between the audio and the questions following it was the big obstacle. The third question was asking opinion about the Discovery Listening technique that had been used by the lecturer. The answer was surprising that s/he love the technique because of it did not always using hand writing in doing the exercises. The last question was asking about strategy used by the student to find out clue in learning listening, so that the grade can be improved. Trying to listen the audio carefully was the strategy used by R27. It helped him/her guessing what was meant by the speaker in the audio.

#### **Discussion**

This study aims to investigate the implementation of Discovery Listening. The focus was on the use of the Discovery Listening technique in listening class in the 1<sup>st</sup> semester of English Education Study Program in Universitas PGRI Semarang as well as the perception of the students after using Discovery Listening technique.

The first result revealed that the mean pre-test score was 55.17, which was higher than the average of 55.1667, and the mean post-test score was 72.20, which was higher than the average of 72.20000. As can be observed, it can be said that using Discovery Listening can help teaching and developing listening skills more effectively. Then the quantitative analysis using SPSS presented that the significance difference was 0.04 which was less than 0.05. It means Discovery Listening technique gave significant effect in improving listening competence on the 1<sup>st</sup> semester of English Education Study Program Universitas PGRI Semarang. It also can be seen from the increasing criteria which were most of them enhanced. Only 4 respondents out of 30 who did not have any improvement (Low to Low); R2, R7, R10, R16. Also, 4 respondents out of 30 who did not have any improvement at Midlevel (Mid to Mid); R17, R22, R23, R29. On the other hand, there were 2 respondents who got outstanding upgraded score from Low to High; R16 and R27.

The quantitative data were supported by the qualitative ones which were collected using open questionnaire. Then, they were displayed by the researchers starting from respondents whose grades were from high, Mid, to low. R26 was categorized Mid to High grade since s/he got 74 for pre-test and 86 for post-test. Those quantitative data were in line with the qualitative ones that the learning process was enjoyable even though accent was the main obstacle. R23 was categorized Mid to Mid since 64 was the pre-test and 75 was the post-test grade. It supported the thought that Discovery Listening technique made him/her be more careful in doing the listening exercises even though the environment was less supportive. The questionnaire told the researchers that initially everything was oh his/her hand but then everything became unpredictable. Then, R7 got 47 for the pre-test and 56 for the post-test, it was assumed by the researchers that "not bad" answer might proof the reason why R7 was categorized low even the ability of being more focus and concentrate had already in him/her. The last respondent was R22 whose grade was 64 for pre-test and 78 for post-test even the learning style of R22 was a challenging lover and love on the spot activities which was not always written-based. At last, the outstanding improvement was done by R27. S/he was a Mid to High respondent. The way s/he improved was by writing down any information to help him/her improve listening

competence. S/he used the strategy of guessing the answer via picture prior to what was meant by the speaker in the audio which means R27 was actually had critical thinking ability. With that effort, s/he got 51 for the pre-test and 85 as the post-test.

#### **CONCLUSION**

The study uncovered that Discovery Listening technique can engage the students on the learning process. The findings of this study indicated that the implementation of Discovery Listening technique has improved students' performance. Seventy four percent of the students' score was upgraded and 2 respondents got outstanding achievement from Low to High. Additionally, it can alter the environment of educational activities, transforming a passive class into an active one. The group work also helped the students to overcome their listening problem. And most important is, the students can learn a new thing.

The results of this study can support the previous study from Ardini, et.al, (2020; 2022) that Discovery Listening is very effective to be applied in higher education as well as increasing students' critical thinking. Therefore, it is suggested to further researcher to apply Discovery Listening to lower level of education such as high schools or even elementary ones.

#### **REFERENCES**

- Ardini, S. N. (2020). The effectiveness of problem-based learning, project-based learning, and discovery learning techniques in teaching listening to students with high and low critical thinking (Unpublished doctoral dissertation). Universitas Negeri Semarang, Semarang, Central Java, Indonesia.
- Ardini, S. N. (2022). Digital technologies to demote the interference of phonological and orthographic system of L1 Javanese. In *Proceeding of English Teaching, Literature and Linguistics* (ETERNAL) Conference (Vol. 2, No. 1, pp. 12-21).
- Ardini, S. N., Rukmini, D., & Warsono. (2020). Discovery listening to improve listening competence in fostering students' critical thinking in Indonesia: Effect and perception. *Journal of Asia TEFL*, 17(2), 463–478. <a href="https://doi.org/10.18823/asiatefl.2020.17.2.10.463">https://doi.org/10.18823/asiatefl.2020.17.2.10.463</a>
- Ardini, S., Rukmini, D., Warsono, W., & Bharati, D. A. (2020). Assessing listening using 21st century skill perspective in higher education. In *Proceedings of the 5th International Conference on Science, Education and Technology, ISET 2019*, 29th June 2019, Semarang, Central Java, Indonesia.
- Baehaqi, L., Qodir, A., & Miftah, M. Z. (2016). Developing materials of listening comprehension for the English department students. *Journal on English as a Foreign Language*, 6(1), 1. <a href="https://doi.org/10.23971/jefl.v6i1.379">https://doi.org/10.23971/jefl.v6i1.379</a>
- Brown, H. D. (2004). *Language assessment principles and classroom practices*. USA: Pearson Education, Inc.

- Burner. (2006). Promoting discovery learning method for EFL students in reading comprehension. Exposure: *Jurnal Pendidikan Bahasa Inggris*, 9(2), 370–382. https://doi.org/10.26618/exposure.v9i2.4083
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson.
- Creswell, J.W. and Creswell, J.D. (2018) Research Design: Qualitative, quantitative, and mixed methods approaches. Los Angeles: Sage.
- Field, M. (1998). A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement. *Journal of Language Teaching and Research*, 2(5), 111. https://doi.org/10.4304/jltr.2.5.977-988
- Flowerdew, J., & Miller, L. (2005). Second language listening: Theory and practice. Cambridge University Press.
- Gashimov, E. (2023). Interference in a language and culture communication. *ALLURE Journal*, 3(1), p. 56-63. DOI: <a href="https://doi.org/10.26877/allure.v3i1.14156">https://doi.org/10.26877/allure.v3i1.14156</a>
- Gou, N., & Robin, W. (2005). An investigation of factors influencing English listening comprehension and possible measures for improvement. *The AARE Annual Conference*. *Paramatta*. http://www.aare.edu.au/05pap/guo05088.pdf
- Harmer, J. (1991). The practice of English language teaching. London: Longman Group UK Limited.
- Larsen-Freeman, D. (2000). *Techniques and principles in language teaching* (2<sup>nd</sup> ed.). Oxford University Press.
- Milliner, B., & Dimoski, B. (2019). Explicit listening strategy training for EFL learners. *Journal of Asia TEFL*, 16(3), 833.
- Morley, L. (2011). Imagining the university of the future, in Barnett, R. (Ed.) *The Future University: ideas and possibilities*. Taylor & Francis.
- Mundhe, G. B. (2015). Teaching receptive and productive language skills with the help of techniques. *An International Journal in English*, 1 (2).
- Nunan, D. (1999). Second language teaching and learning. Boston, Massachusetts: Heinle&Heinle Publishers.
- Nunan, D. (2003). Practical English language teaching. McGraw Hill.
- Osada, N. (2004). Listening comprehension research: A brief review of the last thirty years. Japan: TALK.
- Qiong, Ou. (2017). A brief introduction to perception. Studies in literature and language, 15: 18–28.

- Rahmi, R. (2014). The implementation of media in English language teaching. *Visipena*, 5(1), 1-17. https://doi.org/10.46244/visipena.v5i1.220
- Rahmi, Y., & Ratmaida. (2014). The use of discovery learning strategy in teaching reading report texts to senior high school. *Journal of English Language Teaching*, 3(1), p.179-188. DOI: https://doi.org/10.24036/jelt.v3i1.4374
- Richards, J., & Rodgers, T. (2001). *Approaches and methods in language teaching*. Cambridge University Press. <a href="http://dx.doi.org/10.1017/CBO9780511667305.021">http://dx.doi.org/10.1017/CBO9780511667305.021</a>
- Robin, W. & Gou, N. (2006). An investigation of factors influencing English listening comprehension and possible measures for improvement. <a href="http://www.aare.edu.au/05pap/guo05088.pdf">http://www.aare.edu.au/05pap/guo05088.pdf</a>
- Vandergrift, L., & Goh, C. M. (2012). Teaching and learning second language listening: metacognition in action. Routledge.
- Walker, N. (2014). Listening: the most difficult skill to teach. *Encuentro*, 23, 167-175.
- Wibowo, J. A. (2016). Converting e-book into audiobook to enhance English receptive skill. *English Education: Journal of English Teaching and Research*, 1(2), 11-11.
- Wilson, M. (2003). Discovery listening: Improving perceptual processing. *ELT Journal*, 57, 335-343. http://dx.doi.org/10.1093/elt/57.4.335