

The Experimentation of HOTS Vs ALM in the Intermediate Listening Class of EFL Learners

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Abstract

Listening is a receptive skill which plays important role for most of English Department Students in Politeknik Negeri Madiun. All students or EFL Learners in the third year must take English Proficiency test (EPT) as a prerequisite for graduation administration. Meanwhile most of students based on the previous study still have problems with listening skills, so it needs effective teaching methods to enhance students' listening skills. This article aimed to investigate the difference in the result of teaching listening using HOTS and ALM. The research method used was quasi experimental research. Data collecting method by using two instrument, listening test and questionnaire. Technique of analyzing data used multifactor of variance (ANOVA) 2x2 and Tukey Test. Before conducting ANOVA test, pre-requisite test namely normality and homogeneity test were done. Finally, the findings showed that the integrating High Order Thinking Skills into teaching listening was more effective than those who have low creativity. The second finding revealed that the students with high creativity have better listening skills than those who have low creativity. The last finding showed that there was an interaction between teaching methods and students' creativity in teaching listening.

Keywords: High Order Thinking Skills, Audio Lingual Method, Listening skills

Introduction

Listening skill plays important role in the process of language teaching and learning. It also provides language input. The development of listening skills has long been neglected in language acquisition as listening was considered as an ability that would develop without assistance (Mart, 2020). Listening can enrich the learners' spoken competence with syntactic, lexical, phonological and pragmatic information (McKinley & Rose, 2019). It is a receptive skills which will develop the other skills. Students in the vocational school should master both productive skills and receptive skills but in fact based on the observation showed that most of students especially in the English department in PNM had problem in mastering listening skills tested in the English Proficiency Test (EPT). So, It needs effective teaching method to enhance listening skills and solve the students' problems. The problem in listening is that listening requires the listener to respond quickly and instantly. Because in listening there is no much time to think as in the writing class. Students should respond as soon as possible. When the part of phrases or sentence are not listened and understood clearly, it is hard to recall it in the memory. It can be like a dropped barrier causing them to stop thinking about the meaning of word, phrase, or sentence. It made them miss the next part of speech (Harmer, 1998). Failure at basic level often leads to

lose of confidence and to belief that listening is very hard for students to understand because native speaker usually speak very fast.

However a creative learner or listener will try some methods to face failure. Meanwhile, students who have low creativity need to have explicit instruction in the comprehension method. The need for explicit instruction in enhancing listening skills is acute in the slow learning students (Brown, et al). Therefore students need teaching method provides strategy to enhance listening skills. Lecture ought to offer instructional outlines which incorporate exercise promoting analytical, practical and innovative thinking as Steinberg research which discovered the successful adults utilize three kinds of High Order Thinking Skills, such as; (1) analytical (for example, how to evaluate, compare and contrast, analyze, then criticize), (2) practical (for example, show how to use demonstrate, how to apply something in the real world, utilize apply and implement, etc), and (3) creative (for instance, design, show how, what should happen if) (Ali, 2020).

Integrating HOTS in teaching listening become a demand in English Department of PNM because students are willing to be an out of the box thinker and creative students in order that can win the workforce competition (Iriani et al., 2022). Today's curriculum is focused on High Order Thinking Skills to increase the learning quality and the graduates (Hikmah & Wibowo, 2020). So that, today the teaching and learning materials and activities for the students are recommended to be implemented. According to Bloom's taxonomy review (Abdul Aziz et al., 2020), HOTS was referred four stages of higher thinking, which were the level of apply, analyze evaluate and create thought while Low Order Thinking included the level understanding and remembering. HOTS will drive students to be able thinkcritically and innovatively, solving problems, making decisions in daily or non-daily activity, and understanding, analyzing and manipulating information in detail. Meanwhile LOT is involved the dailyactivity only.

On the other hand, ALM is an approach which highlights the repetition of words to enable learners to effectively utilize the target language for communication purposes (Brown, 2000). The aim of the repetition is to break down the troublesome sentences into smaller part. The keyfeature of ALM is drilling to language teaching which placed emphasizes on repeating structural patterns through spoken practice. According to Ali (2020) the ALM is characterized by initially focusing on teaching phonemic units and patterns of a foreign language before introducing reading and writing instruction. It can also be defined as the army method or oral approach (Rahman & Melhim, 2009).

The research questions in this study was: (1) is there any difference between the result of teaching listening using HOTS and ALM? (2) Is there discernible distinctions between students with high and low levels of creativity following the implementation of HOTS and ALM? (3) Is there any significant influence of interaction between teaching-learning methods toward the result of listening comprehension?

The objective of the study was: (1) to investigate the difference in the result of teaching listening using HOTS and ALM? (2) To investigate the difference between students who have high creativity and those who have low creativity after implementing HOTS and ALM and the third (3) was to investigate the influence of interaction between the teaching-learning method (HOTS and ALM) on the result of students' listening comprehension?

Methods

The research approach used in the research is experimental design. It is a method which attempts to ferret out cause and effect relationships can be isolated (Christensen et al., 2014). By implementing experimental, there was three variables involved in this research. HOTS in teaching listening as the first variable. The students' level of creativity is used as the second independent variable. The dependent variable of this study students' listening skill. Quasi experimental research method was used in conducting this research. It used a simple factorial design 2x2. This research allows a researcher to study the interaction of an independent variable with one or more variables. (Back & Hwang, 2005). It was possible to assess the effect or interaction (Tuckman et al., 2012).

The population of this study was the students of English Department in the intermediate listening class (2021-2022 academic year). A sample of elements taken from a larger population according to certain rules (Christensen, 2000:158). The sample used in this research was two classes namely 2A and 2B classes. 2A was used as the experimental class, then 2B was used as the control class. (Rogers & Medley, 1988) provided an explanation that in experimental research, participants are divided into

two groups: the experimental group which undergoes specific treatments or intervention and the control group which does not receive any treatment (Mcnamara et al., 2020). The sampling taken was cluster random sampling. The procedure to choose sampling is as follows: (a) formulate the population, (b) make a list of all the members in the population, (c) classify the population, (d) select two classes as the sample randomly to choose which class was used as the sample, (e) select one class randomly from chosen sample as the experimental class and the other was as the control class. Subsequently, each class was split into two distinct groups: students exhibiting a high level of creativity and students demonstrating a low level of creativity. The experimental research class was taught using HOTS and the control group was ALM.

Two instruments were employed to gather the data: a test and a questionnaire. The test, in the form of an objective assessment, was administered to assess the students' listening skills. Meanwhile, the questionnaire was employed to collect data on the students' level of creativity. The technique of analyzing data was descriptive analysis and inferential analysis. Descriptive analysis was applied to find the mean, mode and median and standard deviation of the listening test. Normality and homogeneity test was conducted to find the data normality and homogeneity. They were done before testing hypothesis. Then the next was the use of ANOVA or multifactor analysis of variance 2x2 and Tuckey test.

Result and Discussion

In this part discussed about some aspects, first about the initial stage then followed by the implementation stage. In the initial stage the lecturer prepared lesson plans for teaching learning process, preparing research instruments (listening test and creating questionnaire), conducting the try out of research instrument then analyse the result. For the implementation stage; lecturer conducted teaching learning process by using HOTS for experimental class then ALM for control class. The next step was evaluation (post test), distributing creativity questionnaire to the EFL Learners hen analyze the questionnaire. In this part alos explains the description of the data, normality, and homogeneity test, hypothesis test, and the discussion of the result of the study.

1. The data of listening test of the students who are taught by using HOTS (A_1)

55	60	60	63	65	65	65	65	68	68
70	70	70	70	70	70	73	73	73	75
75	78	78	78	78	78	80	83	85	88
88	93								

Descriptive analysis of the data of (A_1) shows that the scores are 55 up to 93. The mean is 72.88, the mode is 71.61, the median is 72.32 and the standard deviation is 8.84.

2. The listening test data which was taken from teaching learning process in the class which was taught by using ALM (A_2)

53	55	58	60	60	60	63	65	65	65
65	65	68	68	68	68	70	70	70	70
70	73	73	73	73	73	73	75	75	75
75	80								

Descriptive analysis of the data of (A_2) shows that the scores are 53 up to 80. The mean is 68.75, the mode is 73, the median is 69.72 and the standard deviation 6.47.

3. Listening test data from high creativity students (B_1)

53	55	58	60	60	65	65	65	65	65
65	70	70	70	73	73	73	73	75	75

75 75 78 78 78 78 80 83 85 88
88 93

Descriptive analysis of the data of (B_1) shows that the scores are 53 up to 93. The mean is 71.75, the mode is 75.06, the median is 71.50 and the standard 9.89.

4. The data from students who have low creativity (B_2)

55 60 60 60 63 63 65 65 65 68
68 68 68 68 68 70 70 70 70 70
70 70 70 73 73 73 73 73 75 75
78 80

Descriptive analysis of the data of (B_2) shows that the scores are 55 up to 80. The mean is 69.34, the mode is 70.93, the median is 69.88 and the standard 5.38.

5. The data of listening test from students who have high creativity whom were taught by using HOTS (A_1B_1)

65 65 70 73 75 75 78 78
78 78 80 83 85 88 88 93

Descriptive analysis of the data of (A_1B_1) shows that the scores are 65 up to 93. The mean is 78.38, the mode is 80.50, the median is 78.90 and the standard deviation is 7.33.

6. The data of listening test from students who have low creativity whom were taught by using HOTS (A_1B_2)

55 60 60 63 65 65 68 68
70 70 70 70 70 73 73 78

Descriptive analysis of the data of (A_1B_2) shows that the scores are 55 up to 78. The mean is 68.25, the mode is 71.17, the median is 69.50 and the standard deviation is 5.32.

7. The data of listening test from students who have high creativity whom were taught by using ALM (A_2B_1)

53 55 58 60 60 65 65 65
65 70 70 73 73 73 75 75

Descriptive analysis of the data of (A_2B_1) shows that the scores are 53 up to 75. The mean is 66.56, the mode is 64.17, the median is 66.25 and the standard deviation is 7.23.

8. The data of listening test of the students having low creativity who are taught by using ALM (A_2B_2)

60 63 65 68 68 68 68 70
70 70 73 73 73 75 75 80

Descriptive analysis of the data of (A₂B₂) shows that the scores are 60 up to 80. The mean is 70.44, the mode is 70.50, the median is 70.33 and the standard deviation is 5.39.

Normality and Homogeneity test

Normality test was conducted to determine whether the sample followed a normal distribution, while the homogeneity test aimed to assess whether the data exhibited homogeneity. This information can be observed in the provided data table 1.

Table 1. Normality and Homogeneity Test Result

No	Data	The Number of Sample	L obtained (L _o)	L Table (L _t)	Alfa (a)	Distribution of Sample
1	A ₁	32	0.1217	0.157	0.5	Normal
2	A ₂	32	0.1045	0.157	0.5	Normal
3	B ₁	32	0.1080	0.157	0.5	Normal
4	B ₂	32	0.1397	0.157	0.5	Normal
5	A ₁ B ₁	16	0.1370	0.213	0.5	Normal
6	A ₁ B ₂	16	0.1389	0.213	0.5	Normal
7	A ₂ B ₁	16	0.1142	0.213	0.5	Normal
8	A ₂ B ₂	16	0.1210	0.213	0.5	Normal

From those summary of Normality Test at table 1, it shows that all the result of L obtain(L_o) is lower than L table (L_t). So it can be concluded that all of the data are in normal distribution.

Table 2. Summary of homogeneity test

Sample	DF	1/(df)	2 <i>si</i>	2 <i>Log si</i>	2 <i>(df) Log si</i>
1	15	0,066667	53,4	1,727541	25,91311886
2	15	0,066667	38,4	1,584331	23,76496837
3	15	0,066667	25,85	1,412461	21,18690821
4	15	0,066667	26,66667	1,425969	21,38953098
Σ	60	0,266667			92,25452642
x^2				x_t^2	7,81
	2,719				
Result					HOMOGENEOUS

After conducting the normality and the homogeneity test, the writer proceeded to analyze the data by using multifactor analysis of variance (ANOVA) with 2 x 2 design. In ANOVA, the null hypothesis or H₀ is rejected if F_o is higher than F_t. This outcome indicates a noteworthy disparity and interaction between the variables.

Table 3. Summary of a 2x2 Multifactor Analysis of Variance

Source of variance	SS	df	MS	F _o	F _t (.05)	F _t (.01)
Between columns	297,563	1	297,563	8,24749	3.33	5.42
Between rows	315,063	1	315,063	8,73253	3.33	5.42
Columns by rows (interaction)	637,563	1	637,563	17,6712	3.81	6.70

Between groups	1250,19	3	416,729
Within groups	2164,75	60	36,0792
Total	3414,94	63	

Hypothesis 1: Based on the data above it can be showed F_0 between columns (8, 24749) is higher than $F_t (.05)=4.0$, the difference between columns is significant. It can be concluded the teaching techniques differ significantly from one another in their effect on the performance of the subjects in the experiment.

Hypothesis 2: Then, F_0 between rows (8, 73253) is higher than $F_t (.05) = 4.00$, the difference between rows is significant. It can be said that the difference between the performance of those subjects with high creativity and those with low creativity is significant.

Hypothesis 3: The fact showed that F_0 interaction (17, 6712) is higher than $F_t (.05) = 3.81$ and F_t at the level of significance $\alpha = 0,001$ or $F_t (.01)$ is 6,70. It means there is an interaction effect between the two variables, teaching techniques and creativity. It can be concluded that the effect of teaching techniques on listening skill depends on the degree of creativity.

Discussion

Based on the finding the integration of HOTS in teaching listening give different effects on the students listening skills. It develops listening skills which students becomes able to apply the materials given to improve their skills, analyze the problems, and evaluate the teaching learning process (Alsowat, 2016). In contrast in certain instances, the utilization of ALM inadvertently caused students to become distracted. For instance an engaging video could divert their attention away from the speaker and the presentation, they more concentrate in watching the video on the slide than actively listening to the content of the given material, sometimes the audio and visual may not match up so it makes them confused and it could break their concentration in joining the class. Therefore, from this case, it can be said that the integrating HOTS into teaching listening is more effective than ALM to teach listening.

The listening comprehension abilities of students with high creativity surpass those of students with low creativity, as their level of creativity directly impacts their comprehension in the process of learning English. Each student possesses distinctive characteristics when engaging in learning activities. Students with high English creativity tend to exhibit greater engagement in both teaching and learning processes. This can be observed through their proactive efforts in seeking additional relevant learning resources to enhance their understanding of the topics covered in class. They employ unique approaches when presenting materials and exhibit a positive attitudes when actively participating in the learning process. During classroom activities students with high creativity often excel in providing suggestions and sharing ideas, demonstrating their willingness to consult with their instructor regarding any learning difficulties they may encounter. This open communication contributes to their enhanced comprehension of the subject matter.

On the contrary, students with low learning creativity usually have no creativity in joining the learning process. They are usually not enthusiastic to get more than what their teacher taught (Seman et al., 2017). They prefer being passive than being active in a learning process because they lazily involve in the class discussion, they seem to be individualistic, unconfident, irresponsible and subjective thinking, that's why they can not reach the listening comprehension optimally. Thus, it can be concluded that the students having high creativity have better listening comprehension than that of those having low creativity.

There is no denying that the teaching technique employed by the lecturer in the classroom significantly impact the effectiveness of teaching and learning process. The integration of HOTS is one of teaching techniques that focuses on the analyzing, reflecting, arguing, applying a concept in a different situation, developing, and creating. It is also based on contextual problems. The developed questions are based on daily life problems.

The integration of HOTS into the teaching of listening effectively encourages students to actively engage with academic content while also fostering their social and interpersonal connections with their peers, often without their conscious awareness (Irianti et al., 2022). This is evident when students are prompted to provide brief reports to the entire class, sharing their approach to a given task and presenting

their outcomes. This practice enables everyone to compare findings, initiate surveys with a purpose for others to listen, and allows other students to provide comments or contribute additional points. This viewpoint aligns with Sesmiyanti, (2021) assertion which integrating HOTS into learning is essential, as it extends beyond merely generating assessment questions. Integrating HOTS in learning signifies the cultivation of critical thinking, logical reasoning, reflective thinking and metacognitive abilities (Hariadi et al., 2023).

EFL Learners exhibiting high levels of creativity display increased levels of engagement, courage, and individualized approaches with the learning process. This is evident in their proactive efforts to attentively grasp their lecturer's explanations and instructions, subsequently establishing connections with their existing knowledge base.

On the other hand, EFL learners characterized by low levels of learning creativity typically lack creativity when participating in the learning process (Seman et al., 2017). They often lack enthusiasm to explore beyond the content presented by their lecturers and exhibit a preference for passive rather than active engagement. These learners tend to display individualistic tendencies, lack confidence, demonstrate irresponsibility and engage in subjective thinking. Consequently, they struggle to achieve optimal levels of listening comprehension. The findings indicate that the use of ALM can sometimes be distracting for students with low learning creativity. Therefore, in the case of students with low creativity, the utilization of ALM did not yield a significant impact on their listening comprehension.

Conclusion

The efficacy of integrating HOTS in comparison to ALM for teaching listening was investigated in the intermediate listening class of EFL learners at the English Department of PNM. The results showed that HOTS is more effective than ALM in teaching listening skills. HOTS develops listening which makes EFL Learners become active listeners. The more active students joined the class, the more understand they can get the lesson. Then it was also observed that EFL learners with high levels of creativity exhibited superior listening comprehension compared to those with lower levels of creativity. Furthermore, there was a fact that showed an interaction between teaching techniques and learners' creativity in the context of teaching listening in the intermediate listening class. EFL Learners who have high creativity tend to be more active in the teaching process, meanwhile the learners who have low level of creativity did not have creativity in the teaching learning process. They tend to be passive.

The results of this study suggest that HOTS have a significant impact on EFL learners' listening comprehension. The findings provide evidence that integrating HOTS into the teaching of listening is more effective compared to ALM. To enhance EFL Learners' creativity, lecturer can employ novel teaching techniques that encourage active student engagement in the teaching and learning process, thereby fostering a positive classroom environment.

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