

Students' Speaking Performance Using Logical Thinking Skill in Speaking for Debate Class State University of Surabaya

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Abstrak

Tujuan dari penelitian ini adalah untuk mendeskripsikan tingkat berpikir logis siswa di Kelas Debat Universitas Negeri Surabaya dan untuk mengetahui apakah ada hubungan antara perbedaan tingkat kemampuan berpikir logis terhadap performansi berbicara atau tidak. Penelitian ini menggunakan kuantitatif ex-post facto sebagai metodologi penelitian dikarenakan variable bebas yang sudah terjadi sekarang dan hasilnya akan diwujudkan dalam bentuk angka. Subjek dari penelitian ini adalah 32 siswa dari Kelas Debat Universitas Negeri Surabaya yang akan dikategorikan menjadi dua grup berdasarkan tingkat berpikir logis mereka; siswa dengan tingkat berpikir logis tinggi dan rendah. Instrumen yang digunakan dalam penelitian ini adalah tes berpikir logis dan tes berbicara. Tes berpikir logis diberikan untuk mengukur tingkat berpikir logis pada siswa dan tes berbicara diberikan untuk mengetahui hubungan antara perbedaan tingkat kemampuan berpikir logis terhadap performansi berbicara. Berdasarkan hasil data, terdapat 19 siswa yang memiliki tingkat berpikir logis tinggi atau sebesar 53% dari jumlah siswa keseluruhan. Sedangkan, terdapat 16 siswa yang memiliki tingkat berpikir logis rendah atau 47% dari jumlah siswa keseluruhan. Sementara itu, analisis menggunakan Person Koefisien Korelasi digunakan dalam menganalisis tes berbicara dan hasilnya mengindikasikan adanya hubungan antara tingkat berpikir logis dengan performansi berbicara pada siswa. Adanya hubungan ditunjukkan oleh nilai p .000 yang lebih rendah dari .05. Sementara itu, koefisien korelasinya .888 yang berarti hubungan antara tingkat berpikir logis dengan performansi berbicara pada siswa berada pada korelasi yang sangat kuat dengan arah yang positif.

Kata Kunci: Debat, Berpikir Logis, dan Performansi Berbicara

Abstract

The aim of this study is to describe logical thinking level of the students in Speaking for Debate State University of Surabaya and to find out the relationship between different level of logical thinking skill in term of speaking performance which used a quantitative ex-post facto as the research methodology since the independent variable has happened and the result would be in the form of number. The subject of this research were 32 students of Speaking for Debate Class which were categorized into two groups based on their level of logical thinking; high and low logical thinking level. The instruments used in this research were logical thinking test and speaking test. Logical thinking test was administered to measure students' logical thinking level and speaking test was used to find out the relationship between different levels of logical thinking skill in term of speaking performance. The result showed that there were 19 students who have high logical thinking level or as many as 53% of the total students. However, there were 16 students who have low logical thinking level or as many as 47% of the total students. Meanwhile, analysis of using Pearson Correlation Coefficient was administered on analyzing the speaking test and the result indicated there was a relationship between logical thinking level and speaking performance of the students. It was proven by the p -value .000 which is less than .05. The correlation coefficient (r) equals .888 meaning that the relationship was in very strong correlation in positive direction.

Keywords: Debate, Logical Thinking, and Speaking Performance.

INTRODUCTION

Speaking for debate class is set for the students in English Department State University of Surabaya which can help the students in knowing how to debate well. Even most of them are not familiar with English debate as well but in this class the lecturer will help them to understand it. Talking about English debate, there are two major elements which are considered as the important

parts; speaking performance and logical thinking construction. Itkonen (2010) stated that speaking is the articulatory system used and producing sound that result in speech. Moreover, there are several aspects of speaking such as speaking ability, speaking performance, speaking proficiency, and speaking competence. In this research the writer will focus on the speaking performance where there are some aspects of speaking performance. Based on American Council on The Teaching of Foreign Languages

(ACTFL), Performance Descriptors for Language Learners (2012), stated that performance is the competence in using the language that has been practiced and studied in an instructional setting guided by an instructor, it can be both in a classroom or online classes. It also refers to language ability that has been exercised within familiar content and context.

Tuan and Mai (2015) stated that there are some factors that affect students' speaking performance such as listening ability, motivation, anxiety, confidence, planning, time, standard performance, amount of support, and feedback during speaking activities. In line with Tuan and Mai, the research result from Husnawati (2017) stated that there are two factors that can affect students' speaking performance, those are internal factors and external factors. The internal factors are psychology, language competence, and topical knowledge. However, the external factors are performance and learning environment.

On the other hand, according to Quinn (2005) debate has three major categories that the students need to know and encompass their ability. Those are manner, matter, and method. Manner represents the way how the students deliver their speech, it includes their body language, hand gestures, eyes contact and tone during delivering their argument. Matter covers the ability of the students in giving the logical arguments or in the other hand it refers what we are going to say, it usually includes facts, statistic, and evidence. By using matter, the students usually show their support in every argument and develop it, it shows whether the students use relevant and reliable evidence or not. While method deals with the structure of the students' speech in debate, there are two parts that the students need to be considered, individual method and team method. In method the students need to focus on the structure such as introduction before giving their argument and closing with summarizing the point that they have already explained. If the students want to have the smooth and well-accepted debate, they have to pay attention on these elements.

Therefore, according to Austin & David (2009) debate is the way in providing a reasonable judgment of motion or issue. Krieger (2005) defines that debate is the interesting activity to be applied for language teaching and learning because it will improve the cognitive and linguistic skill of the students. According to Halvorsen (2005) by using debate, students can practice to think not only in single side but also in the multiple side on issue. It also helps them to practice respecting one other so that they do not focus on the argument only.

Moreover, logical thinking skill deals with the ability of students in observing and analyzing phenomenon that happens nowadays. By using that skill, the students who

join in speaking for debate class can analyze deeply a variety of issues which is being debated. Having the ability to understand the material or issue in debate is very important since it becomes a fundamental step to establish a sequence of logical thinking. According to Albrecht (1980) logical thinking is simply a matter of organizing and manipulating information. By looking that statement, situation or problems that involve logical thinking call for structure, for relationship between facts, and for chains of reasoning that make sense, thus, besides understanding the material related to logical thinking, they should also know how to practice in arranging the structure of logical thinking.

Based on the theory of constraint, logical thinking is the logic process that can be used to analyze an issue by determining what the problem, what the solution, and what the action plan. It is very useful for the students because by using logical thinking they can identify the problem easily. Moreover, identifying the problem by giving some ways to overcome them logically and acceptably is the purpose of logical thinking.

Many of the most important logical principles are embedded in language, and you learn them when you learn how to use such term as *and*, *or* and *not* (Salmon, 2013). Logic is the science of reasoning, it does not mean that it is concerned with the actual mental (or physic) process employed by a thinking being when it is reasoning (Hardegree, 2010). Being logical presupposes our having a sensitivity to language and a knack for its effective use, for logic and language are inseparable (McInerney, 2004).

Baso (2016) have conducted which reveals the implementation of debate technique to improve students' ability in speaking. He used experimental research where the researcher can give the treatment for the students. The instruments were speaking test and recording. The result showed that there was a significant difference between pre-test and post-test in p-value 6.35 was higher than t-value 1.729 at the level of significant 0.05 and degree of freedom 19.

Therefore, the issue of logical thinking in debate that can influence students' speaking performance brings the researcher to conduct this research with these two research questions as follows:

1. How is the logical thinking level of the students in Speaking for Debate Class at English Department State University of Surabaya?
2. Is there any relationship between different level of students' logical thinking and their speaking performance?

RESEARCH METHODOLOGY

The aim of the research was mainly to describe the use of logical thinking skill in speaking by the students in speaking for debate class and to find out the logical thinking in students' speaking performance. The researcher used ex-post facto research as the research design. Ary et al. (2010) state that ex-post facto design is conducted to identify and discover the relationship between two variables without manipulating them because the independent variable has happened in the past. In the case, logical thinking skill included as independent variable so that it could not be manipulated since logical thinking is skill that the students have in reasoning consistently to come to a conclusion

Table 1. Logical Thinking Category

Group	Trait	Speaking Test in Debate
Ex-Post Facto	High	T1
Control	Low	T2

The researcher divided the students into two groups based on their logical thinking level, those are; low logical thinker and high logical thinker. The category was obtained by the total score of test of logical thinking in order to examine each groups with the different level of logical thinking skill.

The researcher choose the students from speaking for debate class to be the population of this research. There are 4 classes of speaking for debate and the total students are 75 students. The researcher then examined which students are having high logical thinking level and low logical thinking level by using test of logical thinking as the instrument in order to be assessed on their speaking performance.

The researcher will use cluster sample in this research where there are 2 groups of classes that are going to take as sample. In this case, the researcher picked the sample in random way by using lottery. There were 2 class that were going to be the sample, those were A and B classes. The total of the students in those classes were 35 students. Therefore, the researcher did the try-out of logical thinking test in C and D classes in order to know the validity and reliability of test.

In this research, the researcher used non-experimental quantitative research so that the instruments used were logical thinking test and speaking performance test. The first instrument that was used was logical thinking test. This test was objective and consisted of 20 items. This test measured logical problem for the students with consisting two true statements. Therefore, they should

choose whether the last statement was true, false, or uncertain. The result will be scored in order to find out the logical thinking level of the students. The score of true answer was 1 and for the wrong answer 0. The test administered should be estimated the reliability and validity of the test. In order to estimate the reliability of the test, the researcher applied analysis using SPSS.

Table 2. Reliability of Logical Thinking Test

Cronbach's Alpha Based on		
Cronbach's Alpha	Rtable Sign	N of Items
.749	.339	20

Based on the data above, analysis using SPSS showed the reliability test that was .749. The table below showed the strength of reliability and the result should be in 0 to 1 values, which mean there was a consistent answer in the test.

Table 3. Strength of Reliability

Point	Strength
0.81 – 0.99	Very high reliability
0.61 – 0.80	High reliability
0.41 – 0.60	Moderate reliability
0.21 – 0.40	Low reliability
0.01 – 0.20	Very low reliability

According to the table, the researcher concluded that the test of logical thinking was in high reliability and it is indicated a high reliability in positive direction.

Furthermore, the validity of the test also was estimated from the try-out and the result was valid according to the table below.

Table 4. Validity of the Test

Items	R _{xy}	Items	R _{xy}
1	.340	11	.384
2	.406	12	.419
3	.494	13	.369
4	.342	14	.517
5	.340	15	.551
6	.467	16	.483
7	.441	17	.645
8	.374	18	.533
9	.576	19	.370
10	.342	20	.491

According to the data, each item of the test had the total score higher than R-table which was .339. Moreover, the all the items of the test were valid.

In order to estimate the reliability of speaking test, the researcher used a method named inter-rater reliability by using Pearson, when the test was administered once and the test would be scored by two people using speaking rubric assessment. In order to make it objective, the researcher asked a lecturer in the same university named Ma'am Bella (pseudonym) to be the second rater. Both raters assessed the same number of students and used the same rubric assessment. The final assessment would be collected to find out the reliability of the test.

Table 5. Inter-rater Reliability of the Test Correlation

		Rater1	Rater2
Rater1	Pearson Correlation	1	.998**
	Sig. (2-tailed)		.000
	N	32	32
Rater2	Pearson Correlation	.998**	1
	Sig. (2-tailed)	.000	
	N	32	32

** . Correlation is significant at the 0.01 level (2-tailed).

According to the table, the researcher noted that with 30 degrees of freedom (N-2), r at the .01 level was .463. Since the value .998 was higher than the value of .01 that was .463 so both raters have a significant correlation on scoring the speaking result.

The researcher started to collect the data by introducing the purpose of the study so that the researcher and the students had a good cooperation as well. Next, the researcher administered the test to the students then examined the result in order to divide them into the logical thinking level. The score between 1-12 belong to the low logical thinking level, however, the score between 13-20 belong to the high logical thinking level. It was based on the test developer where every correct answer has 1 score and for the wrong answer has 0 score. The researcher then examined which students have high and low logical thinking skill level by this logical thinking skill.

Second, the researcher asked the students to perform based on the motion given. There was no treatment given since the design of the research was ex-post facto

research which mean the data was obtained by only the current situation and could not be manipulated.

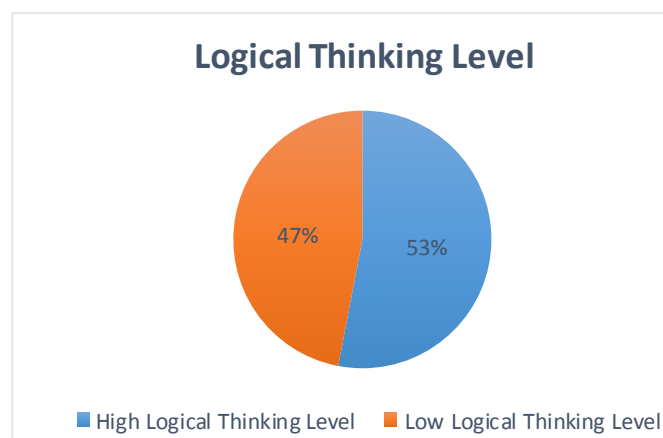
Third, the researcher as the first rater and the second rater assessed students' performance in order to make it reliable and correlate. Then, considering the speaking performance, those are respect for other team, information, rebuttal, use of facts/statistic, organization, and understanding of topic. After assessing and scoring the students' work, the research compared between the result of speaking performance and the students' level of logical thinking skill using Pearson Correlation Coefficient in order to find out the relationship between two variables.

RESULT AND DISCUSSION

The Level of Students' Logical Thinking

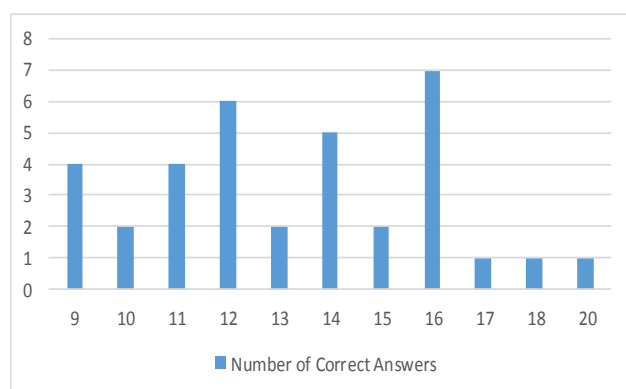
After collecting data through the logical thinking test, the result was 35 students who did the test. Therefore, there were for about 35 students who divided into two categories; high logical thinking and low logical thinking. This graphic below showed the level of students' logical thinking.

Graphic 1. Level of Students' Logical Thinking



There were 19 students who have high logical thinking level or as many as 53% of the total students. However, there were 16 students who have low logical thinking level or as many as 47% of the total students. The number of students who have high logical thinking level is higher than the students who have low logical thinking level. Even if the number of the students who have high logical thinking level is higher than the students who have low logical thinking level but the difference was not striking.

Graphic 2. Logical Thinking Test's Result



The logical thinking test given consisted of 20 questions. The questions are about the logical problem. There are 2 correct statements in each question then the students were asked to decide whether the third statement was true, false, or uncertain. The test was made to find out the logical thinking level of the students.

According to the test, the result can be showed based on the graphic above. There were 11% students who answered the logical thinking test with 9 correct answers. As same as the students who gave 9 correct answers, there were also 11% students who answered 11 correct numbers.

It is equal with the students who gave 10, 13, and 15 correct answers on their test. There were also 6% students who answered the test with 10 correct answers. Moreover, the students who gave 13 correct answers on their test were 6% students. In addition, there were also 6% students who got 15 correct answers in the test.

The number of the students who got 20, 17, and 18 correct answers are also similar. There were for about 3% students got 20 correct answers, 3% students got 17 correct answers, 3% students who had 18 correct answers in the test.

Furthermore, for the students who can answer with 16 were 20%. There were 17% students who got 12 correct answers. Then finally, for about 14% students who got 14 correct answers on their test.

The Correlation among Student who Have Different Logical Thinking Level in Speaking Performance

In order to reveal the second research question that was whether there is any correlation between high and low students' logical thinking in the speaking performance, the speaking test was needed to be administered. The speaking test was administered once with he certain topic given. Some topics or motion were provided in the speaking test. Those were THBT Death penalty is justified, THBT USA should eliminate their

nuclear arsenal, THBT Economic growth is more important than environment protection, THBT Women should quit their job after getting Married, THW Television is a bad influence, and last but not least THW Writing by hand is better than writing by computer. The result of speaking test would be used in order to find out the correlation between two groups; high and low logical thinking in speaking performance level using Pearson Correlation Coefficient.

Before doing an analysis using Pearson Correlation Coefficient, the table below shows the strength of the correlation using the guide that Evans (1996) suggests for the absolute value of r .

Table 6. Strength of Correlation

Point	Strength
0.00 - 0.19	Very weak correlation
0.20 - 0.39	Weak correlation
0.40 - 0.59	Moderate Correlation
0.60 - 0.79	Strong correlation
0.80 - 1.00	Very strong correlation

After knowing the strength of the correlation, an analysis using Pearson Correlation Coefficient in SPSS should be administered in order to know the relationship between logical thinking level and the speaking performance of the students.

Table 7. Analysis of Pearson Correlation Coefficient Correlations

		Logical Thinking	Speaking Performance
Logical Thinking	Pearson Correlation	1	.888**
	Sig. (2-tailed)		.000
	N	32	32
Speaking Performance	Pearson Correlation	.888**	1
	Sig. (2-tailed)	.000	
	N	32	32

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the data above, the researcher noted that there was a relationship between logical thinking and speaking performance of the students. It was proven by the p -value .000 which is less than .05. The correlation

coefficient (r) equals .888 meaning that the relationship was in very strong correlation in positive direction.

Since the result showed that there was relationship between two groups so the researcher would like to know which aspect was increased the most; whether respect for other team, information, rebuttal, use of facts/statistics, organization, or understanding of topic. In order to know it, the researcher took the result of students with high and low logical thinking skill level from the first rater and the second rater.

Table 8. Speaking Aspects' Mean

Group	N	Mean of					
		Re sp ect	Info rma tion	Reb uttal	Use of facts/ statis tics	Orga nizati on	Under standi ng of topic
High Logical Thinking	16	80	70	52.5	61	74.5	71
Low Logical Thinking	16	80	34.5	31.5	32.5	39.5	36

According to the table, among those speaking components, those were respect for other team, information, rebuttal, use of facts/statistics, organization, understanding of topic, the one with the highest mean was respect for other team. This meant that during the debate students gave the good respect for opposite team so that most of the students got the high score in this aspect both students who have high logical thinking level and low logical thinking level. Next, there was organization, meaning that the students had good understanding about the flow of the debate. The next aspect was understanding of the topic followed by information. That mean that the students who had good understanding of the topic will give the good information related to the topic. After that there was use of facts/statistics followed by rebuttal, meaning that the students still felt confused during giving the rebuttal because of the spontaneous condition.

The influential elements of debate that need to be put into consideration are speaking performance and logical thinking. Both aspects are having and playing different roles, they cannot be separated each other and taken alone, so that they should be executed in tandem. The success of debate, initially, is presented through convincing delivery which is determined by reliable speaking performance and logical thought that is sufficient which are represented by good logical thinking. As these aspects become the majority of debate

composition, students taking in Speaking for Debate class need to know their logical thinking skill level in order to help them build the argument. This finding was in line with McNerny, D. Q (2004) statement that there is a sufficient reason for everything. It states that everything that actually exists in this universe has an explanation. The implied meaning of this principle is no one thing in this universe can exist without any reason or even cause by itself. Furthermore, by using the logical thinking the students can build the arguments in strong reason.

According to the result that has been shown above, it revealed that the number of the students who had high and low logical thinking level were in the same portion. More than half student or for about 53% had high logical thinking level, however, there were 47% students had low logical thinking level. Moreover, based on the logical thinking test that have been given for the students, it showed that the logical thinking of the students can be measured and categorized in two level. This finding also in line with Othman et. al (2015) that logical thinking can be measured and categorized from the test given. It was proven by the result of this research where there were two level of logical thinking; those were high logical thinking level and low logical thinking level.

Moreover, the result of this research stated that logical thinking level affects students' speaking performance. It was proven by the speaking result of two groups had difference within group. In addition, the high logical thinking level had significant difference between low logical thinking levels. Thus, there was strong relationship between logical thinking level and speaking performance of the students. The result of this study supports the theory stated by Baidowi et. al (2012) that the students' level of thinking is the significant factor for students to achieve good result. It means that the students who have high logical thinking will easy to make argument with strong reason then it affects their speaking performance. It is because they already knew what they are going to say in their mind. It happens also when the students make the rebuttal of the opposite argument where they should think as quick as possible in spontaneous condition.

It also supports the theory from Setyawan (2016) that logical thinking and speaking performance are the major aspect if someone wants to have good ability in debate. It is because logical thinking affects the thought of debaters during the debate. Instead of the other factors that influence speaking performance such as practicing, environmental condition, joining some activities, etc.

CONCLUSION AND SUGGESTION

Conclusion

Speaking is the productive skill that can be observed and measured, it involves the process of constructing meaning such as receiving, processing information, and producing. There are some aspect of speaking such as speaking ability, speaking competence, speaking performance, speaking proficiency and many more. However, in this research, the researcher only focuses on the speaking performance of the students in speaking for debate class.

Talking about debate, it is a way to face an issue in society. During the debate, students need to provide the logic argument that consists of assertion, reason, evidence, and link back. In this case, the logical thinking of students is needed since it can help them in building the argument. Logical thinking also help the students in analyzing the issue during debate, therefore, they can give the clear and understandable arguments.

The aim of this study is to describe the logical thinking level of the students; whether it is high logical thinking level and low logical thinking level. Another aim of this research also to find out whether there is or not a relationship between different logical thinking of the students and their speaking performance. The researcher has administered logical thinking test and speaking performance test in order to obtain the data to all groups. From the logical thinking test, the result was 53% students have high logical thinking and 47% students have low logical thinking. This can be concluded that more than half students who became the sample of this research have high logical thinking level. Moreover, the analysis of using Pearson Correlation Coefficient showed that there was a relationship between logical thinking levels and the result of students' speaking performance since the p-value was .000 which less than .05.

Suggestions

Related to the conclusion stated previously, the researcher would like to give some recommendation for institution involved and further researchers. For the lecturer of speaking for debate class in English Department is suggested to divide the students into several groups so that they can practice debating outside the classroom. Since debate is different with a discussion so the students need to enhance their ability in debate. For the other researcher is suggested to have a look at the other factors that can influence the students' debate instead of logical thinking. They can use qualitative design to explore deeply.

REFERENCES

- Akerman, R. (2011). *Debating the evidence: an international issue of current situation and perception*. London: CBT Education Trust.
- Albrecht, K. (1980). *Brain Power: Learn to Improve Your Thinking Skills*. Englewood Cliffs, Prentice Hall, NJ.
- Atkinson, W. W. (2011). *The Art of Logical Thinking. The Laws of Reasoning*. NP: YOGeBooks.
- Atkinson, W. W. (2011). *The Laws of Reasoning*. Holiister: YOGeBooks.
- Azma. (2008). *Improving Students' skill Through Debate at Grade X II IS 2 of SMAN 1 Pasaman*. Thesis.
- Baso, F. A. (2016). *The Implementation of Debate Technique to Improve Students' Ability in Speaking*. Makassar: *English Education Department*, Faculty of Teacher Training and Education Muammadiyah University of Makassar.
- Brown, G. and Yule, G. (1994). *Teaching Spoken Language: An Approach Based on The Analysis of Conversational English*. Cambridge: Cambridge University Press.
- Brown, H. D. (2004). *Language Assessment (Principles and Classroom Practices)*. New York: Pearson Education, Inc.
- Bygate, M. (1998). *Theoretical Perspective on Speaking Annual Review of Applied Linguistics*, 18: 20-42.
- Byrnes, H. (1999). ACTFL Proficiency Guidelines Speaking. New York: Department of Education International Research and Studies Program United States, from <https://www.actfl.org/publications/guidelines-and-manuals/actfl-proficiency-guidelines-2012/English>
- Creswell, J. W. (2002). *Educational Research, Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. University of Netvaska: Merrill Prentice Hall.
- Dowden, B. H. (2011). *Logical Reasoning*. California: California State University Sacramento.
- Dowden, B. H. (2011). *Logical Reasoning*. California USA: Wadsworth Publishing Company.
- Flach, P. (1994). *Simply Logical*. Tilburg: University of Bristol, United Kingdom.

- Freely, A. J. & Steinberg, D. L. (2009). *Argumentation and Debate*. United State: Wadsworth Engage Learning.
- Halvorsen, A. (2005). *Incorporating thinking skills development into ESL/EFL course*. Retrieved from <http://iteslj.org/Techniques/Halvorsen-CriticalThinking.html>.
- Harris, D. P. (1974). *Testing English as a Second Language*. New York. Mc. Grow, hill. Hill
- Harvey, N. (2011). *British Parliamentary Style*. New York: International Debate Education Association.
- Hemerka, V. (2009). *Low Speaking Performance in Leaners of English*. University Masaryk Brno Brunensis.
- Hoge, A.J. (2005). *Powerful English Speaking*. Adelaide: King Ave Press.
- Hughes, R. (2010). *Teaching and Researching Speaking* (2nd ed.). United Kingdom: Pearson Education Limited.
- Husnawati. (2017). Students' Speaking Perfomance: Some Challenging Factors. *Department of English Language Education*. State University of Islamic Ar-Raniry. Banda Aceh.
- Itkonen, T. (2010). *Spoken Language Proficiency Assessment: Assessing Speaking or Evaluating Acting*. University of Helsinki: Department of Modern Languages.
- Iwashita, N. (2008). *Assessed Levels of Second Language*. Chicago: Oxford University Press.
- Johnson, S. L. (2009). *Winning Debates A guide to Debating in the Style of the World Universities Debating Championships*. New York: International Debate Association.
- Krieger, D. (2005). *Teaching Debate to ESL Students: A Six-Class Unit*. Retrieved from <http://iteslj.org/Techniques/Krieger-Debate.html>
- Linell, P. (2005). *Written Language Bias in Linguistics*. New York: Routledge. Retrieved from <https://academic.oup.com/fmls/article-abstract/43/1/103/553884>
- Mart, C. T. (2012). Developing speaking skills through reading. *International Journal of English Linguistics*, 6(2), 91-96.
- McInerny, D. Q. (2004). *Being Logical. A Guide to Good Thinking*. New York: Random House, Inc.
- McInerny, M. Q. (2004). *Being Logical. A Guide to Good Thinking*. New York: Random House, 2004. BC71.M37.
- Nunan, D. (2003). *Practical English Language Teaching*. New York: Mc Graw.
- Othman, Mahfudzah, et. Al. (2015). Enhancing Logical Thinking and Reasoning Skills Through Collaborative Learning in Programming. *CCMSE*, 2015.
- Pallant, J. (2010). *A step by step guide to data analysis using the SPSS program*. United State: Open University Press.
- Quinn, S. (2005). *DEBATING*. Brisbane: Gitlow The State of New York.
- Salmon, M. H. (2013). *Introduction to Logic and Critical Thinking*. Boston: Clark Bacter.
- Setyawan, D. D. (2016). *A Study on Speaking Proficiency and Logical Thinking Construction of ITS Debate Society Members (Unpublished Thesis)*. Surabaya: Faculty Language and Art UNESA
- Thompson, W. (1971). *Modern Argumentation and Debate: Principles and Practices*. New York: Harper & Row.
- Tuan & Mai. (2015). Factors Affecting Students' Speaking Performance at Le Thanh Hien High School. Vietnam: *Asian Journal of Education Research*.
- Utami, N. P. D. *Speaking Performance of the Students in SMPN 1 Kuta Utara*. NP.
- Virginia, S. A. A. (2016). *A Study on Logical Fallacies in Argumentation on Debate Made by English Debate Society Members of UNESA (Unpublished Thesis)*. Surabaya: Faculty Language and Art UNESA.