

THE EFFECTIVENESS OF USING MULTIMODAL APPROACH IN TEACHING ENGLISH SPEAKING: A CASE STUDY AT THE ELEVENTH GRADE STUDENTS OF SMKS PGRI 2 KEBUMEN IN THE ACADEMIC YEAR OF 2022/2023

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Abstract

English, the global lingua franca, plays a pivotal role in international communication. In Indonesia's curriculum, English is known as a foreign language that students should learn from four main skills such as reading, listening, writing, and speaking. However, many Indonesian students struggle with spoken English fluency due to various factors such as teaching approaches and lack of motivation. In order to find a solution to this problem, a study was conducted. The study aimed to identify the root cause of the issue and provide recommendations for addressing it at SMKS PGRI 2 Kebumen using a Multimodal Approach. Based on a quantitative pre-experimental design, the research focused on eleventh-grade students. Pre-tests revealed poor performance (mean score: 32.75), while post-tests showed improvement (mean score: 55.00), indicating the approach's efficacy. Utilizing a paired-sample t-test, the study confirmed the statistical significance ($p < 0.05$) of the approach in enhancing speaking skills. This study highlights the effectiveness of the Multimodal Approach in bolstering English-speaking skills among SMKS PGRI 2 students.

Keywords: Effectiveness, Speaking, Multimodal Approach

1 INTRODUCTION

In the era of globalization, foreign language proficiency has become a fundamental asset, vital for effective communication and socio-professional advancement. As a tool of connection across cultures, foreign languages facilitate international business, education, and interpersonal exchanges. English, as a global lingua franca, plays a pivotal role in transcending linguistic barriers and fostering cross-national communication. This study has provided valuable insights into the efficacy of the multimodal approach as a means of improving one's English-speaking skills. The findings reveal that this approach holds great promise for transforming language education. These results have significant implications for teachers and students alike and should be of interest to anyone involved in language education.

The contemporary relevance of English cannot be overstated. Its prevalence in both spoken and written communication underscores its significance in various domains, from international trade to educational institutions [1]. Recognizing the importance of foreign language skills, the Indonesian government has issued: *UU nomor 20 Tahun 2003* about the integration of English into the education system, from primary schools to universities. Among the essential language competencies, speaking skills stand out as a crucial medium of expression, enabling effective interpersonal communication [2].

Speaking is the capacity to talk fluently with the purpose of expressing the correct meaning of their thought within their idea through the creative building of communication [3]. In addition, there were also three fundamental conditions for speaking; purpose, involvement, and planning [4]. The first requirement is divided into two parts: transactional and interpersonal. Transactional aids the process of transacting or communicating information, whereas interpersonal promotes and maintains positive social interactions. The second requirement is participation, which might be interactive or non-interactive. The former occurs often in discourse and necessitates reciprocal engagement from the teachers. The third one relates to a circumstance that heavily relies on recording voice, such as leaving a voice mail. Speech might be planned or spontaneous.

Moreover, speaking exercises offer teachers data about students' levels and the types of challenges they have while speaking. Speaking assignments allow the learners to practice "actual" speaking. The more individuals participate in speaking, activating their understanding of language development and function, the more they learn to apply language elements automatically (parts of speech, word order, and tenses) [5].

Drawing on the insights from a preliminary study conducted at SMKS PGRI 2 Kebumen, challenges were identified in the Indonesian context despite the undeniable importance of proficient spoken English. Many students spend only minimal daily effort on developing this skill. This limitation undermines their potential to excel in various academic and professional pursuits [6]. Consequently, there is a pressing need to explore innovative teaching approaches that invigorate English-speaking instruction. It is evident that traditional language teaching approaches often fall short of fostering effective English-speaking skills. This study aims to address this gap by investigating the transformative potential of the multimodal approach in English language pedagogy. By integrating various modes of communication such as visual, auditory, and textual elements, the multimodal approach aligns with modern learners' preferences and offers a dynamic and engaging learning environment.

Furthermore, language learning is not confined to mere acquisition but extends to practical application and meaningful communication [5], [7]. Thus, the multimodal approach comes with a comprehensive understanding of communication that transcends traditional linguistic boundaries [8], [1]. This approach, embracing visual, audio, and tactile modalities, caters to diverse learning styles, enhances engagement, and promotes deeper comprehension [9]. It applies every category of suitable communication forms that humans apply.

Multimodal approach boosts learner engagement and self-esteem in and out of class [10]. Multimodal approach teaching and learning enhances students' autonomy and motivates self-directed and independent learning. It also helps students to employ unique learning styles through resources that are compatible with how they process information so that their skills, especially in English-speaking increase more effectively [11].

Engagement in using Multimodal Approach to teach English-speaking skills has been studied by several researchers [12],[13],[14],[15]. The results have dominantly shown that students prefer the use of multimodal approach rather than the existing standard approach because of its flexibility and a certain degree of freedom in their learning process. As a result, students felt way more accomplished and active in studying throughout the teaching-learning activities [16]. This signifies that students have positive engagement in multimodal approach learning environment for their learning achievements.

In short, multimodal refers to the combining of two or more modes in different ways, and it consists of the following five components: 1) Written or Linguistic, 2) Audio, 3) Visual, 4) Gestural, and 5) Spatial. Communication can be enhanced through the integration of various mediums such as text, images, audio, and video. This approach goes beyond the standard approach which uses a single medium and allows for a more comprehensive and effective means of conveying information [13],[17],[18]. This approach acknowledges that humans naturally process information from different sources simultaneously, thus offering a more holistic and immersive experience.

From the previous explanations, it is clear that speaking skills are important for students in this globalization era. By adapting to the correct approach in a teaching-learning process, multimodal approach is proven to be one of the appropriate solutions that can be an effective key to communication between teachers and students. This research is motivated by the recognition that language learning is not confined to mere acquisition but extends to practical application and meaningful communication. This study also seeks to unravel the potential of the multimodal approach in reshaping English-speaking education, emphasizing the significance of holistic language proficiency especially at SMKS PGRI 2 Kebumen. By aligning teaching approaches with learners' preferences and integrating varied modes of communication, this research endeavors to pave the way for more effective language instruction, ultimately preparing students to thrive in the globalized world.

2 METHODOLOGY

This pre-experimental research is a quantitative case study, the researcher needs to establish possible cause and effect between dependent and independent variables. Because there is no control variable, this study relies on one group pretest-posttest design. It does not use random assignment of participants to groups or other techniques to control for extraneous factors. The population of this study is eleventh-grade students from SMKS PGRI 2 Kebumen in the academic year of 2022/2023. There are a total of 55 students in the class which is divided into four classes. The sample of this study is Class XI TKJ which comprised of 16 students, it was suggested by the headmaster and the English teacher of SMKS PGRI 2 Kebumen. In accordance to clarify the authenticity of this research, data is extremely crucial to be collected and processed. The necessary tools and appropriate data-collecting technique needs to be applied to answer the corresponding research questions.

Data were collected by using oral pretest and posttest that have been validated by experts' judgment. The same set of participants is examined twice in this design: once before the treatment began (pre-test) and once after the treatment (post-test). The treatment itself used multimodal media by adapting with the use of visual, sound, and text that have been adjusted with the level of student's comprehension through the recommendation from their English teacher.

The goal of this design is to see if the changes in the participants' scores between the pre-test and post-test can be determined through the treatment. By using the rating scales and oral proficiency categories, the researcher can determine students' achievement to know students' performance in English speaking proficiency through the following aspects: grammar, vocabulary, comprehension, fluency, and pronunciation [19],[5]. In this case, the researcher should be objective in categorizing the students' performance, so the researcher also asks help from the English teacher to observe the student's performance by using the aforementioned aspects to assess their English-speaking skills to gather valuable insight from the data.

To obtain insights into the research questions, the researcher utilized a range of data analysis methods. Among these methods were descriptive analysis and inferential analysis. Additionally, the researcher leveraged SPSS to compute and validate the data's precision when assessing the efficacy of the multimodal approach in English language teaching. This approach facilitated the drawing of significant conclusions from the data.

3 FINDING AND DISCUSSION

Findings are presented according to the research purposes of the study; the first objective is to discover the English-speaking skills of the eleventh-grade students at SMKS PGRI 2 Kebumen and the second objective is to find out whether using Multimodal Approach is effective in teaching English-speaking to the eleventh-grade students of SMKS PGRI 2 Kebumen.

3.1 Data Description

As part of a research study, the speaking skills of students were analyzed by comparing their scores before and after the study. The evaluation of their skills was based on the Oral Proficiency Scoring Categories, which are outlined in detail in Table 4. To determine the raw data score, five aspects were assessed: grammar, vocabulary, comprehension, fluency, and pronunciation. Each aspect was assigned a weightage of 20%, and the highest score for each aspect was 20, resulting in a total assessment score of 100%. For more information, please refer to Tables 4.1 and 4.2.

Table 4.1. Pre-Test Raw Data Scores.

Pre-Test Raw Data Scores							
No	Name	Aspects					Scores
		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation	
1	Student x1	5	12	7	6	9	39
2	Student x2	4	10	7	5	7	33
3	Student x3	2	9	6	6	7	30
4	Student x4	7	13	8	9	8	45
5	Student x5	3	5	4	3	5	20

6	Student x6	4	6	4	4	5	23
7	Student x7	4	8	6	4	7	29
8	Student x8	6	10	8	8	8	40
9	Student x9	5	10	5	4	8	32
10	Student x10	4	12	4	6	6	32
11	Student x11	6	14	7	7	10	44
12	Student x12	3	6	5	5	5	24
13	Student x13	3	8	4	5	5	25
14	Student x14	6	9	6	7	8	36
15	Student x15	7	11	7	8	9	42
16	Student x16	4	9	6	5	6	30
Lowest		2	5	4	3	5	20
Highest		7	14	8	9	10	45
Mean		4.56	9.5	5.88	5.75	7.06	32.75
Median		4	9.5	6	5.5	7	32
Mode		4	10	7	5	8	30
Standard Deviation		1.5	2.56	1.41	1.69	1.61	7.7
Variance		2.26	6.53	1.98	2.87	2.6	59.27
Range		5	9	4	6	5	25
Total		73	152	94	92	113	524

Table 4.2. Post-Test Raw Data Scores.

Post-Test Raw Data Scores							
No	Name	Aspects					Scores
		Grammar	Vocabulary	Comprehension	Fluency	Pronunciation	
1	Student x1	8	15	11	9	14	57
2	Student x2	8	14	13	10	11	56
3	Student x3	9	14	12	9	12	56
4	Student x4	11	16	15	11	14	67
5	Student x5	8	12	10	6	10	46
6	Student x6	5	13	7	6	9	40
7	Student x7	6	14	8	7	11	46
8	Student x8	10	17	13	12	14	66
9	Student x9	9	16	10	8	12	55
10	Student x10	8	16	11	8	10	53
11	Student x11	11	17	14	11	14	67
12	Student x12	6	14	10	6	8	44
13	Student x13	7	12	8	9	11	47
14	Student x14	8	15	10	12	13	58
15	Student x15	9	16	13	14	14	66
16	Student x16	6	15	11	12	12	56
Lowest		5	12	7	6	8	40
Highest		11	17	15	14	14	67
Mean		8.06	14.75	11	9.38	11.81	55
Median		8	15	11	9	12	56
Mode		8	14	10	9	14	56
Standard Deviation		1.77	1.57	2.25	2.47	1.94	8.65
Variance		3.13	2.47	5.07	6.12	3.76	74.8
Range		6	5	8	8	6	27

Total	129	236	176	150	189	880
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3.2 Descriptive Analysis

In this stage, the researcher would thoroughly review the descriptive data from the respondents. The central symptoms tendency and measurement of the variation group were calculated using IBM SPSS 25 [20]. The results of the SPSS computation were described as follows:

Table 4.5. *The Descriptive Analysis of SPSS Computation.*

	Descriptive Statistics									
	N	Range	Minimum	Maximum	Sum	Mean	Deviation	Variance	Median	Mode
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic
Pre-Test Score	16	25	20	45	524	32.75	1.92	7.70	59.27	59.27
Post-Test Score	16	27	40	67	880	55.00	2.16	8.65	74.80	74.80
Valid N	16									

Based on the data presented in Table 4.5, it can be observed that the average score increased from 32.75 to 55.00 after the test. The median score also showed improvement, increasing from 59.27 to 74.80. Similarly, the mode shifted from 59.27 to 74.80 after the test. The standard deviation increased from 7.70 to 8.65, and the variance also showed an increased value from 59.27 to 74.80. In terms of range, there was an increase of 2 points from 25 before the test to 27 after the test.

3.3 Inferential Analysis

Normality test was used to see whether the distribution of the data was normal or not. In testing the normality of the data, the researcher used IBM SPSS 25 by applying the Kolmogorov-Smirnov normality test [20]. The computation of normality test can be seen in the table below.

Table 4.6. *Test of Normality Kolmogorov-Smirnov.*

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		16
Normal Parameters ^{a,b}	Mean	0.000000
	Std. Deviation	3.03995392
Most Extreme Differences	Absolute	0.121
	Positive	0.121
	Negative	-0.117
Test Statistic		0.121
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

In order to determine whether the data can be considered normal, it is important to analyze the significance value. Specifically, the data can be deemed normal only if the significance value is greater than the significance level, which is typically set at 0.05 [21]. The data is considered abnormal if the significance value is less than 0.05 [21]. According to the computations performed, it was observed that both pre-test and post-test data exhibited a normal distribution, with a significance value of 0.20, which is greater than the commonly accepted threshold of 0.05.

Furthermore, the researcher has also conducted a hypothesis test. The researcher obtained 32.58 as the pretest mean and 54.42 as the posttest mean by computing the tests using IBM SPSS 25. When the two means are compared, it is evident that the mean of the posttest is greater than the mean of

the pretest. Then, the paired-sample test can be used to calculate the treatment's effectiveness. The result of the SPSS computation to find out the paired-sample test can be seen in Table 4.7:

Table 4.7. Result of Paired Samples Test.

		Paired Differences							
		Paired Differences		Std. Error Mean	90% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation		Lower	Upper			
Pair 1	Pre-Test Score - Post-Test Score	-22.25	3.07	0.77	-23.59	-20.91	-29.03	15	0.00

From the SPSS computation, the difference between the two means is -22.25. It shows that the treatment is effective. Moreover, it shows that the Sig. (2-tailed) is $0.00 < 0.05$. If the p-value (two-tailed) is less than 0.05, this indicates that there is a statistically significant difference in the data [21]. Based on an analysis of the pretest and posttest data, it is evident that there exists a considerable disparity between the two. Consequently, the null hypothesis (H_0) has been dismissed, and the alternative hypothesis (H_a) has been upheld. Therefore, one can deduce that the Multimodal Approach proves to be a successful approach for teaching English speaking skills to the eleventh-grade students of SMKS PGRI 2 Kebumen in the academic year 2022/2023, as per the researcher's findings.

3.4 Discussion

In this section, the researcher is going to discuss the result of the research according to the data description, descriptive analysis, and inferential analysis. The details of the discussion from the pretest-posttest scores were as follows:

1. The speaking skills of the eleventh-grade students SMKS PGRI 2 Kebumen in the academic year of 2022/2023.

According to the provided data description, the pretest-posttest mean scores for grammar, vocabulary, comprehension, fluency, and pronunciation were 4.56, 9.50, 5.88, 5.75, and 7.06 respectively. Posttest results showed a significant improvement in all five aspects of oral proficiency, with vocabulary having the most impact on students' speaking skills and grammar having the least. These findings suggest that the implementation of a multimodal approach in the teaching-learning process was beneficial in enhancing students' oral proficiency.

The pretest results of XI TKJ SMKS PGRI 2 Kebumen revealed a range of scores from 20 to 45, with a mean of 32.75 and a standard deviation of 7.70. The posttest results showed a range of scores from 40 to 67, with a mean of 55.00 and a standard deviation of 8.65. The posttest mean score was significantly higher than the pretest mean score.

Prior to implementing the Multimodal Approach in the teaching-learning process, none of the 16 students scored at the sufficient, good, or excellent level in the pretest. 75% of them scored poor, and only 25% scored fairly sufficient. This indicates a lack of English-speaking skills among the majority of the students.

After the implementation of the Multimodal Approach, none of the 16 students scored at the excellent level in the posttest. However, 25% scored good, 31% scored sufficient, and 44% scored fairly sufficient. None of the students scored poor in the posttest, indicating significant improvement in their English-speaking skills. As a result, all students were able to achieve at least a fairly sufficient level of English-speaking proficiency.

These findings are in line with prior research conducted by several researchers [12],[13],[14],[15]. Multimodal is proven that students appeared to be engaged and at ease during the session. The aforementioned researches had shown that incorporating multimodal learning material into English speaking instruction can have a positive effect on students' academic performance. This approach exposes students to a variety of media, including visual, audio, and technology, which helps them better communicate their thoughts, ideas, feelings, and opinions. Multimodal learning is highly engaging and has been shown to result in more effective learning outcomes, particularly in the context of learning English. In fact, teaching techniques that utilize a multimodal approach, such as focusing on the creation of verbal and visual texts in digital interaction, can play a significant role in the teaching-learning process.

2. The effectiveness of using Multimodal Approach in teaching English – Speaking Skills at the eleventh-grade students of SMKS PGRI 2 Kebumen in the academic year of 2022/2023. Based on the presented data in Table 4.7, the difference between the two means is -22.25. It shows that the treatment is effective. Furthermore, it was shown that the result of the computation of the two-tailed significance value was 0.00. If the Sig. (2- tailed) is less than 0.05, the data is significantly different. It can be concluded that there is a significant difference between the pretest and posttest data. It means that the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted.

This finding is in line with the prior research that found ($p = 0.05$) which indicates a significant difference between groups of children who get treatment by using multimodal approach was effective in the learning process [13]. Students also experience outstanding performance by using the multimodal approach in interactive learning [22]. A study has stated that adopting the Multimodal Approach which involves the combination of images, words, sounds, and videos made learning interesting in the teaching process [23]. Additionally, a study revealed that using a Multimodal Approach in education encourages learners to engage in the learning process more fully, leading to greater involvement and self-esteem, particularly outside of the classroom environment [10].

Therefore, the researcher concluded that using Multimodal Approach is effective in teaching English speaking skills to the eleventh-grade students SMKS PGRI 2 Kebumen in the academic year of 2022/2023.

4 CONCLUSIONS

According to the results of the discussion, it was found that the students' English-speaking skills experienced a significant improvement after only four teaching sessions. This is noteworthy considering that most of the students had poor English-speaking skills prior to the sessions. The findings suggest that the Multimodal Approach can have a substantial effect on students' English-speaking abilities. These conclusions are supported by the pre-test and post-test results of the students' English-speaking skills, as presented in Table 4.7. The computed difference between the two means is -22.25, and the paired test produced a two-tailed significance value of 0.00. This value is lower than the 5% significance level (0.05), indicating that the alternative hypothesis (H_a) is accepted. Hence, it can be inferred that employing the Multimodal Approach to teach English-speaking skills to eleventh-grade students at SMKS PGRI 2 Kebumen in the academic year of 2022/2023 is an effective approach.

REFERENCES

- [1] S. Wu, "Multimodal Approach to Teaching English in Higher Education," *J. Contemp. Educ. Res.*, 2020, Accessed: May 14, 2023. [Online]. Available: <https://doi.org/10.26689/jcer.v4i7.1374>
- [2] L. Karpovich, I., Sheredekina, O., Krepkaiya, T., & Voronova, "The use of monologue speaking tasks to improve first-year students' english-speaking skills," *Educ. Sci.*, 2021, Accessed: Apr. 14, 2023. [Online]. Available: <https://doi.org/10.3390/educsci11060298>

- [3] E. Sihotang, A. M., Sitanggang, F., Hasugian, N., & Saragih, “The Effective Way to Develop Speaking Skills.,” *IDEAS J. Lang. Teach. Learn. Linguist. Lit.* 9(1), 188–196., 2021.
- [4] B. Guebba, “The Nature of Speaking in the Classroom: An Overview,” *Br. J. Philos. Sociol. Hist.*, pp. 37–41, 2021, Accessed: Mar. 14, 2023. [Online]. Available: <https://doi.org/10.32996/bjps.2021.1.1.4>
- [5] H. Brown, H. D., & Lee, “Teaching by principles: an interactive approach to language pedagogy (Fourth edition),” *Pearson Educ.*, pp. 1–668, 2015, Accessed: May 14, 2023. [Online]. Available: <https://s1.papyruspub.com/files/demos/products/ebooks/academicbooks/>
- [6] A. Akhter, S., Haidov, R., Majeed Rana, A., & Hussain Qureshi, “Exploring The Significance of Speaking Skill for EFL Learners,” 2020, Accessed: May 14, 2023. [Online]. Available: <https://archives.palarch.nl/index.php/jae/article/view/5149>
- [7] H. D. Brown, “Principles of language learning and teaching: a course in second language acquisition.,” USA: Pearson Education, 2014.
- [8] Q. Wang, “Study on the New Model of College English Teaching under the Setting of Multimodality,” *Univers. J. Educ. Res.*, pp. 473–477, 2015, Accessed: May 14, 2023. [Online]. Available: <https://doi.org/10.13189/ujer.2015.030801>
- [9] P. Marchetti, L., & Cullen, “A Multimodal Approach in the Classroom for Creative Learning and Teaching,” *Czech Slovak Assoc. Lang. Centres*, pp. 39–51, 2015, Accessed: May 14, 2023. [Online]. Available: <https://journals.muni.cz/casalc-review/article/view/20569>
- [10] L. L. Johnson and P. Smagorinsky, “Writing Remixed Mapping: Mapping multimodal composition of one preservice english education teacher,” in *Exploring Multimodal Composition and Digital Writing*, IGI Global, 2014, pp. 263–281. doi: 10.4018/978-1-4666-4345-1.ch016.
- [11] F. Prinsloo, M., & Sesman, “Literacy and Language Teaching and Learning with Interactive Whiteboards in Early Schooling,” *TESOL Q.*, pp. 533–544, 2015.
- [12] F. Yuliani, “Multimodal Learning Material in An English-Speaking Class in Kampung Baluwarti,” *J. English Lang. Teach. Learn. (Vol. 3, Issue 2)*, 2022, Accessed: May 14, 2023. [Online]. Available: <http://ejournal.uin-malang.ac.id/index.php/JETLe>
- [13] B. Firmansyah, “The Effectiveness of Multimodal Approaches in Learning,” *Eduotec J. Educ. Technol.*, pp. 469– 479, 2021, Accessed: May 14, 2023. [Online]. Available: <https://doi.org/10.29062/edu.v4i3.194>
- [14] U. Djamdjuri, D. S., Suseno, M., Tajuddin, S., Lustyantie, N., & Chaeruman and A, “Multimodal Approach in Online EFL Class Using Islamic Learning Materials: Students’ Perspective,” *Int. J. Lang. Educ.*, pp. 5(4), 337–355, 2021.
- [15] U. Sidabutar, “Students’ Perception toward English Speaking Motivation during Online Learning System through Multimodal Approach,” *Edukatif J. Ilmu Pendidik.*, 2021, Accessed: Mar. 15, 2023. [Online]. Available: <https://doi.org/10.31004/edukatif.v3i6.1390>
- [16] M. Alqahtani, “The importance of vocabulary in language learning and how to be taught,” *Int. J. Teach. Educ.*, vol. III(3), pp. 21–34, 2015, Accessed: May 14, 2023. [Online]. Available: <https://doi.org/10.20472/te.2015.3.3.002>
- [17] M. Bassachs, T. Serra, R. Bubnys, D. Cañabate, and J. Colomer, “Multimodal Approaches to Math and Physical Education within Cooperative Learning to Enhance Social Attitudes,” *Sustainability*, vol. 14, no. 24, pp. 1–16, Dec. 2022, doi: 10.3390/su142416961.
- [18] G. Ryu, J., & Boggs, “Teachers’ Perceptions about Teaching Multimodal Composition: The Case Study of Korean English Teachers at Secondary Schools,” *English Lang. Teach.*, pp. 52–60, 2016, Accessed: May 14, 2023. [Online]. Available: <https://doi.org/10.5539/elt.v9n6p52>

- [19] Arikunto., “Prosedur Penelitian Suatu Pendekatan Praktik (VI.). Jakarta: Rineka Cipta,” 2013.
- [20] A. Ngafif, *Statistics A Students' Handbook*, 4th ed. Purworejo: English Language Education, 2017. Accessed: Apr. 20, 2023. [Online]. Available: <https://umpppi.com/>
- [21] A. Field, *Discovering Statistics Using Ibm Spss Statistics (5th ed.)*, 5th ed. SAGE Publications Ltd, 2017.
- [22] C. Jraidi, I., Chaouachi, M., & Frasson, “A dynamic multimodal approach for assessing learners' interaction experience,” *ICMI 2013 - Proc. 2013 ACM Int. Conf. Multimodal Interact.*, pp. 271–278, 2013, Accessed: Apr. 14, 2023. [Online]. Available: <https://doi.org/10.1145/2522848.2522896>
- [23] A. Malini, G., & Saundravalli, “The Effects of Using Multimodal Approaches in Meaning-Making of 21st Century Literacy Texts Among ESL Students in a Private School in Malaysia,” *Adv. Lang. Lit. Stud.*, vol. 7, no. 2, pp. 143–155, Feb. 2016, doi: 10.7575/aiac.all.v.7n.2p.143.