Humanitatis: *Journal of Language and Literature*
SK Dirjen DIKTI Nomor 36/E/KPT/2019 ISSN (Print) : 2338-9362
Vol.10 No.1 December 2023 ISSN (Online) : 2477-2267

The Effect of Metacognitive Scaffolding Strategy in Improving English Writing Skill at Senior High School Students

Issyatul Mardiah [1)], Isnaini Sya'roin[2)], Muh Junaidi[3)]

[1]Universitas Nahdlatul Wathan Mataram, Mataram, Indonesia
mardiahissyatul@yahoo.com
[2]Universitas Nahdlatul Wathan Mataram, Mataram, Indonesia
Syaroinbintmansyur@gmail.com
[3]Universitas Nahdlatul Wathan Mataram, Mataram, Indonesia
muhjunaidi13@gmail.com

Received: 17th October 2023| Revised: 14th December 2023| Accepted: 18st December 2023
Email Correspondence: muhjunaidi13@gmail.com

Abstract

The research aims to determine whether metacognitive scaffolding strategy has an effect on improving the English writing skill of making argumentative paragraphs of academic writing and how metacognitive scaffolding strategy can improve the English writing skill of senior high school students at Madrasah Aliyah Mu'allimat Nahdlatul Wathan Anjani. The quantitative research method used was a true experiment with a pretest-posttest control group design. The research sample was 33 students from the school with 17 students in the experimental class using the metacognitive scaffolding strategy and 16 students in the control class using the conventional strategy, and the study lasted four weeks. The mean pre-test for the experimental class was 48.94 and 50.75 for the control class. Using the paired sample t-test, the mean post-test of the experimental class showed a significant improvement; the mean was 74, or 14 points more than the control class. By using this significant value, the researcher tested the effect size using Cohen's d test. The experimental class's Cohen's d value was 1.59, indicating that this learning strategy is very effective in improving students' writing, according to Cohen's d table for measuring variable effectiveness. Therefore, the metacognitive scaffolding strategy has an effect on improving writing skills in senior high school students. Furthermore, students showed positive results in their leadership, critical thinking, and problem-solving ability.

Keywords: Argumentative Paragraph, Metacognitive Scaffolding Strategy, Writing Skill

1. INTRODUCTION

Writing is a complex process to generate the symbols and signs required to express our emotions and thoughts (Cer, 2019). Writing can measure a person's ability to choose words, compose phrases, and elaborate sentence structures that can affect the meaning of their work. Academic writing is a type of writing that must be studied in high school to assess students' writing skills. In her book Teaching Academic L2 Writing, Hinkel (2020) mentioned how

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

important writing skills are for students. Hinkel strengthened his statement by mentioning the results of research conducted by Durrant (2014 and 2017), Leedham (2016), and several other researchers about it. Hinkel added that many students need to improve their writing skills, especially academic writing (Hinkel, 2020). Academic writing is one of the types of writing that is considered to contain clear opinions supported by evidence and facts, not just unfounded opinions (Murray, 2012: 17). Without good logic and critical thinking, someone will find it difficult to present impressive writing and there is no doubt that logical and critical thinking appears in the ideas of people who are willing to accept change.

Khasali (2017) mentioned that young people today, commonly called Gen Z or Strawberry generation, cannot be compelled to utter their arguments. Furthermore, he stated that the generation rarely wants to accept criticism and suggestions from others, lacks the courage to take action, and solve problems, and chooses to have a fixed mindset; a mindset that has been completed or is unable to change. Meanwhile, in his theory of child development, Vygotsky proposed that child development occurs through social situations that form self-regulation or problem-solving systems. In self-development, a child must be faced with reciprocal conversations or behaviors that trigger their cognition (Slavin, 2011). In preliminary observations made in MA (Islamic Senior High School) at Mu'allimat NW Anjani, the researcher found that not a few of the students were hesitant to express their opinions and share their ideas. The situation may be in line with the "Strawberry Generation" phenomenon mentioned by Khalili (2017) in that the generation lacks self-regulation skills in learning that are needed by students. In addition, when students argue using writing, students find it increasingly difficult to express their opinions. However, many studies show that most senior high school students still have difficulty expressing their arguments in writing, whereas writing is an essential skill for the 21st century, especially for thinking and arguing reasonably (UNESCO, 2022).

Several factors influence this problem, such as the lack of vocabulary, problems in choosing words and putting them into sentences, generating and developing ideas, and unifying the opinions that they want to convey logically. Students also find it difficult to identify their mistakes and how to solve the problems that occurred (Prabawanto, 2019). Those challenges

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

require teachers to be able to trigger students to argue, criticize, and understand how they learn or act, and teachers have to balance the learning material with the student's abilities.

Vygotsky, an educational psychologist who specialized in cognitive and social abilities, developed learning theories that have been modified to balance student ability. The advanced theory of Vygotsky is the scaffolding strategy, which bridges students' understanding. Scaffolding strategy requires not only students to learn but also teachers to understand their students because teachers act as adults who assist and direct student cognition development (Slavin, 2011: 59). The results of research conducted by DiFrancesca and Nietfeld Hidayah et al. have proven the effectiveness of the scaffolding strategy in improving students' thinking skills, or metacognitive ability so that it produced a positive impact on student learning outcomes and problem-solving ability. In addition, Murtadho has stated that metacognition and critical thinking are thought processes that can develop students' writing skills (DiFrancesca & Nietfeld, 2017; Hidayah et al., 2019; Murtadho, 2021).

2. RESEARCH METHOD

To determine the effect between the two research variables and get clear results from the collected data, the researcher used the quantitative method. The quantitative method is a research method that explains the problem formulation through trends or data in the field or the need for an explanation of why one variable can affect another (Creswell, 2015: 13). Experimental research with a true experimental design type was applied in this study. A true experimental design uses random sampling and a control group that is the same as the experimental group (Walliman, 2011, p. 106). This way, the data collection results can be used to make generalizations about population data.

The research population was MA Mu'allimat NW Anjani students who lived in the school dormitory, and the sample for this research was students who joined the extra English class offered in the school. The students were in their tenth, eleventh, and twelfth grades at the time of the study. A random sampling technique was applied to choose the participants. The total number of sample participants was divided into two classes: class A, or the experimental class, consisted of 17 students, and class B, or the control class, consisted of 16 students.

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

The instrument used by the researcher for this research was a test. In determining the validity of the instrument, the instrument needs to be tested for the validity and reliability of the instrument. The study also employed an analytic scoring assessment rubric. The researcher adapted the analytic scoring combination of Brown and Weigle (2002). Inferential statistics were used to discover correlations between two research variables. However, descriptive statistics was also applied to figure out the general trend of the data in terms of variables, and the score. It was also used to compare how the results of one variable can relate to other variables (Creswell, 2015: 15).

3. FINDINGS AND DISCUSSION

By adapting the scoring analysis from Weigle (2002), the researcher applied six aspects with details of each score that became the assessment of students' writing: content, organization, grammar, vocabulary, mechanics, and punctuation. The instrument applied to students had been tested for validity and reliability before. A validity test was conducted to determine the level of validity of the research instrument. The validity test used was Pearson's bivariate correlation test with the help of the SPSS application. This test was considered because the number of samples was fewer than 50 that were 18 respondents for this study. The requirement for making a decision in Pearson's bivariate correlation test is that if the r count is greater than the r table, the instrument is declared valid. Instead, if the r table is greater than the r count, the instrument is declared invalid. By using 18 samples to validate the instrument, the r table value is obtained by r person product moment table with df (degree of freedom) = n – 2, so 18 – 2 = 16, and if that number is drawn on table r, the decision-making value is 0.497. Therefore, the results of the validity test show that six of the six points that comprise the instrument are declared valid.

Table 1. The Result of Instrument Validity Test (N=6)

Assessment aspects	r table value	r count value	Result
Content	0.497	.846	Valid
Organization	0.497	.813	Valid
Grammar	0.497	.607	Valid
Vocabulary	0.497	.597	Valid
Mechanic	0.497	.803	Valid
Punctuation	0.497	.668	Valid

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

Using 18 students from Universitas Nahdlatul Wathan Mataram as respondents and a degree of freedom of 16 (18 - 2 = 16), the r table value for 16 respondents is found as 0.497. The table above shows that the six-point instrument has an r-value that is greater than 0,497. As a result, all of the point instruments that the researcher adapted from the Weigle instrument by adjusting the intended writing problem can be used in this study. The reliability test was conducted to determine the consistency of a good research measuring instrument in testing the answers of respondents or samples. The reliability test used is Cronbach's alpha with the help of the SPSS application. This test was used because of the limited research respondents. The decision-making requirements for the Cronbach Alpha test are that if the Cronbach Alpha value is greater than 0,6, the results are declared reliable, and if the Cronbach Alpha value is less than 0,6, the results are declared unreliable.

Table 2. The Result of Instrument Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of items
.807	**6**

The table 2 shows that the N of items (the number of items in the scoring analysis evaluation) is 6, with a Cronbach's alpha of 0.807. Because Cronbach's Alpha decision-making is considered reliable if it is greater than 0.6 and the reliability results show a value of 0.807, it can be concluded that the results of the instrument reliability test were declared reliable or consistent, allowing it to be used as a measure of students' writing ability.

The pre-test in this study was conducted on Monday, September 5, 2022, from 05:30 to 06:45 AM. The researcher asked students to convey their opinions through the writing they did. Before the pre-test was conducted, the researcher gave a topic that the students would write about: "Smoking affects the economy of Indonesia, consumer health, job field improvement, and scholarship availability; should it be banned?" After giving the topic, the researcher gave a little explanation or information about the topic and then asked the students to write what they thought without explaining anything related to writing technique or structure.The pre-test was carried out on the experimental class and the control class at the same time, with the same topic and duration of work. This is done to determine the level of students' writing skills. With the topic given, the

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

researcher has prepared six assessment items, adapted from Weigle (2002), for students with the following explanations.

3.1 Content

The student pre-test result showed that content was the lowest aspect of their writing, accounting for 45% of the total score. Only about 10 out of 33 students have writing with good writing detail and relevance. This may be triggered by students' limited knowledge of the issue discussed. Based on the results of the pre-test, the researcher concluded that the content or task response is the most difficult aspect of writing for the students.

3.2 Organization

Essay organization got the highest percentage among all the writing aspects which was 53 %. However, despite being the highest , this result was still a point below the standard in the scoring table. This point focuses on the arrangement of the writing structure and continuity between sentences to support the main topic of the writing. With little understanding of writing, this becomes a hard point for students. Many students freely express their ideas without considering the connection between existing sentences and the structure of writing.

3.3 Grammar

The level of students' grammar skills at the weak to moderate stage dominates all students; this was shown at the percentage level of 46% of student results. Even though they only used the simple present tense, the students made many mistakes in the basics of word formation and sentence formation.

3.4 Vocabulary

In this aspect, 53% of students still have difficulty in word choice. Many of them wrote multi-meaning sentences which were hard to understand.

3.5 Mechanic

The spelling of words also turned out to be a problem for some students. This is the only aspect with balanced results: 50%, which means that half number of the students have good spelling and the other ones still need improvement because the spelling presented in the text can change the perception and meaning conveyed by the author.

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

ISSN (Print) : 2338-9362
ISSN (Online) : 2477-2267

3.6 Punctuation

In fact, there were still many students who did not use the correct punctuation in their writing. Errors in the use of commas and periods still occur in both the placement and use of punctuation. After analyzing the results of the pre-test, the researcher concluded that many students at MA Mu'allimat NW Anjani had difficulties in writing. Their writing results show that basic writing was still poorly understood, either in terms of sentence composition, presentation of written content, or spelling and punctuation. Therefore, students' writing skills need improvement, and they need solutions for dealing with these problems because, basically, high school students must at least be able to compose and present good writing. To overcome this problem, the researcher took the initiative to apply the metacognitive scaffolding strategy as an innovation to improve writing skills in teaching and learning activities, especially in making argumentative paragraphs.

Table 3. The Pre-Test Scores of Experimental Class Student (A Class)

No.	Respondent	Result Percentage (%)	Category
1	X1	68	Good
2	X2	64	Good
3	X3	48	Poor
4	X4	28	Poor
5	X5	28	Poor
6	X6	28	Poor
7	X7	52	Good
8	X8	48	Poor
9	X9	76	Excellent
10	X10	52	Good
11	X11	40	Poor
12	X12	56	Good
13	X13	44	Poor
14	X14	48	Poor
15	X15	56	Good
16	X16	56	Good
17	X17	40	Poor
Mean		**48,94**	

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

Table 4. The Pre-Test Scores of Control Class Student (B Class)

No.	Respondent	Result Percentage (%)	Category
1	X18	28	Poor
2	X19	64	Good
3	X20	80	Excellent
4	X21	56	Good
5	X22	48	Poor
6	X23	28	Poor
7	X24	28	Poor
8	X25	56	Good
9	X26	60	Good
10	X27	52	Good
11	X28	44	Poor
12	X29	60	Good
13	X30	44	Poor
14	X31	80	Excellent
15	X32	48	Poor
16	X33	36	Poor
Mean		**50,75**	

From the results of the pre-test in table 4, it can be concluded that 48% of the students who achieved a score more than the existing standard got excellent, 9% got enough, and 39% got enough, or it could be said that in both the experimental class and the control class, there were 16 students who scored above the standard (from category enough to excellent), while the other 17 students still showed poor results because they were below the standard (category poor or 50). It means that many students still need to improve their English writing skills, particularly for argumentative paragraph material.

The post-test in this research was conducted on Friday, September 30th, 2022, starting at 4:00–5:30 PM. The topic of student writing was the same as the pre-test topic in order for the researcher to determine the improvement in students' writing (detailed material is attached in Table 5.). The researcher combined both classes at once to save time, considering the duration and the material given were the same.

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

ISSN (Print) : 2338-9362
ISSN (Online) : 2477-2267

Table 5. The Post-Test Scores of Experimental Class Student (A Class)

No.	Respondent	Result Percentage (%)	Category
1	X1	92	Excellent
2	X2	72	Good
3	X3	72	Good
4	X4	44	Poor
5	X5	56	Good
6	X6	64	Good
7	X7	96	Excellent
8	X8	84	Excellent
9	X9	92	Excellent
10	X10	64	Good
11	X11	44	Poor
12	X12	92	Excellent
13	X13	84	Excellent
14	X14	88	Excellent
15	X15	84	Excellent
16	X16	88	Excellent
17	X17	48	Poor
Mean		**74,35**	

Table 6. The Post-Test Scores of Control Class Student (B Class)

No.	Respondent	Result Percentage (%)	Category
1	X18	36	Poor
2	X19	64	Good
3	X20	84	Excellent
4	X21	56	Good
5	X22	48	Poor
6	X23	32	Poor
7	X24	52	Good
8	X25	84	Excellent
9	X26	60	Good
10	X27	52	Good
11	X28	48	Poor
12	X29	80	Excellent
13	X30	84	Excellent
14	X31	88	Excellent
15	X32	80	Excellent
16	X33	60	Good
Mean		**63,00**	

Based on the table 6, there was an upward movement in student scores in both the experimental and control classes. If accumulated in the achievement category of writing results, the following results are obtained:

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

Table 7. Student Result Categories

Category	Experimental Class		Control Class	
	Pre-test	Post-test	Pre-test	Post-test
Excellent (76 - 100)	1	9	2	6
Good (50 - 75)	7	5	6	6
Poor (1 - 49)	9	3	8	4
Total	**17**		**16**	

Despite using two different learning strategies, the post-test results showed that both classes indicated an improvement in their writing results. The following are the descriptive statistics for all the student results:

Table 8. Descriptive Statistics of Student Result

	N	**Min.**	**Max.**	**Mean**	**Std. Deviation**
Pre-test Experiment	17	28	76	48.94	13.677
Post-test Experiment	17	44	96	74.35	17.948
Pre-test Control	16	28	80	50.75	16.246
Post-test Control	16	32	88	63.00	18.214
Valid N (listwise)	16				

Metacognitive scaffolding is one of the appropriate strategies to be used in learning activities. This strategy is able to encourage students to improve their writing and critical thinking skills, act independently, and solve problems. In learning and teaching activities, teachers provide opportunities for students to be able to develop ways of thinking through short questions at the beginning of learning, help students who have not mastered the material, foster good responses to students, provide opportunities to act independently in identifying and solving problems and encourage students who understand more than others to take over the position of the teacher in explaining the material but still under the supervision of the teacher. Experimental classes became the benchmark for researchers to see the effect of metacognitive scaffolding strategies in improving students' writing skills. The researcher divided the experimental class consisting of 17 people into 4 groups containing 4 or 5 students per group. Each group contains a leader who had a higher pre-test score than other students and would provide assistance or scaffolding for her colleagues or classmates.

Before the metacognitive scaffolding strategy was implemented, the results of the students' pre-test showed that 50% of students from the control class and the experimental class scored in the poor category (25–49) and 40% in the good category (50–75). The results of the

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

data analysis showed that the average pre-test value of the experimental class was 48.94 and that of the control class was 50.75. This proves that the two classes have similar problems regarding writing items such as grammar, content, punctuation, and so on. However, the situation turned around after the treatment was carried out in the form of applying the metacognitive scaffolding strategy in the experimental class.

A significant improvement occurred in the post-test results of the experimental class. Although the post-test results for the control class increased from 50.75 to 63, the experimental class result also increased from 49 to 74. This means that the difference in scores between the two classes is 11 points. Furthermore, the paired sample t-test result was 0.001, indicating that the metacognitive scaffolding strategy has an effect on improving student writing skills. The results of Cohen's d test to prove the level of effectiveness of the treatment indicate that the application of the metacognitive scaffolding strategy is considered very effective because it obtains a value of 1.59. While in the control class, the value for the control class is 0.70, which indicates that conventional strategies are effective enough in improving students' writing skills.

One of the socially oriented learning strategies is metacognitive scaffolding. In Murtadho's research (2021), he asserts that intention, interaction, and cooperation between students are the main factors in implementing this strategy. The development of student knowledge is preceded by social development, which is influenced by the environment (Slavin, 2011). According to research conducted by Goctu (2017), the impact of metacognitive development has a positive social and emotional impact on improving students' academic writing and thinking skills. The findings of Goctu's research also show that this strategy has some drawbacks, such as the fact that it takes longer to provide material and that it is difficult to obtain results quickly. These issues arose in this study as well, but they were addressed by a structured learning plan.

Students demonstrate leadership skills in addition to thinking skills as a result of the use of metacognitive scaffolding in a grouping system, as evidenced by the findings of Jafarigohar and Mortazavi's (2016) research. Despite the use of a group system, students are still given individual assignments to observe the individual development of other students. In contrast to the findings of Ouyang et al. (2021), who discovered different goals and orientations in each group of students, the results of each group vary because the emphasis is on group management or student

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

feedback rather than improving students' abilities or understanding. Furthermore, students are encouraged to be able to evaluate their own and their classmates' writing, as well as think critically about the problems they face and understand the problem-solving process. According to Prabawanto's research findings, this technique is useful so that students can regulate their thinking techniques and find solutions or self-regulated solutions to problems encountered or even carried out (2019).

On the basis of the study's findings and various data processing procedures, the researcher concluded that the treatment led to a significant improvement among the students. This system allows students to become the focus of teaching and learning activities through the use of a scaffolding system or peer assistance, as well as the ability to solve problems and comprehend the process of problem-solving, or metacognition. This also encourages students to present their arguments with confidence and to appear engaged and critical of their situation. Through the application of the metacognitive scaffolding strategy, there is also effective interaction between teachers and students or between students and teachers. This is evident from the group system's level of cooperation. Consequently, based on the preceding explanation, a metacognitive scaffolding strategy may be the optimal solution for addressing language learner challenges and enhancing student writing skills.

4. CONCLUSION

The results of this study indicate that the use of a metacognitive scaffolding strategy has an effect on students' writing skills. This study proved that Ha (the alternative hypothesis) is accepted and Ho (the null hypothesis) is rejected, which means there is an effect of applying a metacognitive scaffolding strategy to improve students' writing skills at the senior high school level. From the series of studies that have been described, the following conclusions can be drawn: 1. Students are judged to be able to significantly improve writing skills by applying metacognitive scaffolding strategies. This is evidenced by the increase in students' pre-test and post-test mean scores, which increased by 14 points from the mean of 49 to 74. 2. The mean post-test result of the experimental class is 74 (from the mean pre-test value of 49). Meanwhile, the mean post-test result from the control class was 63 (from the mean pre-test value of 50). This demonstrates that there is a significant increase in the application of the metacognitive

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

scaffolding strategy and a difference in results between the class that received the treatment and the class that used the conventional strategy; 3. Students demonstrated a significant improvement in the post-test result, but the effectiveness of applying the metacognitive scaffolding strategy as measured by the N-Gain Score test, the effect size test, indicated less effectiveness. 4. Students show the other positive responses, such as leadership development, critical thinking skills, student confidence in conveying the argument, and good interaction between teacher and students or students and students, through the application of the metacognitive scaffolding strategy.

REFERENCES

Axelrod, R. B., & Copper, C. R. (2019). *The St. Martin's Guide to Writing (Vol. 2, Issue 1).* Boston, New York: Bedford/St. Martin's.

Bailey, S. (2003). *Academic Writing: A Practical Guide for Students.* London and New York: Nelson Thornes Ltd. Taylor and France e-Library (2004).

Brown, H. D. (2003). *Language Assessment Principles and Classroom Practices*. California: Longman.com.

Cer, E. (2019). *The Instruction of Writing Strategies: The Effect of the Metacognitive Strategy on the Writing Skills of Pupils in Secondary Education.* SAGE Open, 9(2).

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences. In Statistical Power Analysis for the Behavioral Sciences*. New York: Lawrence Erlbaum Associates, Publishers

Creswell, J. W. (2015). *Educational Research-Planning, Conducting, And Evaluating Quantitative and Qualitative Research - Fifth Edition*. New Jersey: Pearson Education.

Dabarera, C., Renandya, W. A., & Jun, L. (2014). *The impact of metacognitive scaffolding and monitoring on reading comprehension.* Journal Elsevier. System, 42, 462–473.

DiFrancesca, D., & Nietfeld, J. L. (2017). *Using metacognitive scaffolding to develop problem solving skills in k-12 computer-based learning environments.*In Factors Affecting Academic Performance (pp. 81–99). Nova Science Publishers, Inc.

Field, M. (2009). *Improve your written English*. Oxford: How to Content.

Goctu, R. (2017). *Metacognitive Strategies in Academic Writing*. Journal of Education in Black Sea Region, *2*(2).

Hamdani. (2011). *Strategi Belajar Mengajar*. Bandung: Pustaka Setia.

Hamzah, L. M., Awaluddin, I., & Maimunah, E. (2016). *Pengantar Statistika Ekonomi*. Lampung: Anugrah Utama Raharja.

ISSN (Print) : 2338-9362
ISSN (Online) : 2477-2267

Hidayah, I., Adji, T. B., & Setiawan, N. A. (2019). *Development and evaluation of adaptive metacognitive scaffolding for algorithm-learning system.* IEt Journals: The Institution of Engineering and Technology.

Hidayati, T., Handayani, I., & Ikasari, I. H. (2019). *Statistika Dasar*. Purwokerto: Pena Persada.

Hinkel, E. (2020). *In Teaching Academic L2 Writing: Practical Techniques in Vocabulary and Grammar*. Evanue, New York: Routledge Taylor and Francis Group.

Jafarigohar, M., & Mortazavi, M. (2016). *The Impact of Scaffolding Mechanisms on EFL Learners ' Individual and Socially Shared Metacognition in Writing*. Reading and Writing Quarterly: Routledge Taylor and Francis Group.

Johnson, R. B., & Cristensen, L. (2014). *Educational Research. Quantitative, Qualitative, and Mixed Approaches 5th Ed*. United State, America: Sage Publications.

Khasali, Renald. (2017). *Strawbery Generation*. Jakarta Selatan: Mizan Digital Publishing.

Mackenzie, J. (2007). *Essay Writing : Teaching the basics from the ground up (Vol. 55)*. Canada: Pembroke Publishers.

McLeod, S. (2019). The Zone of Proximal Development and Scaffolding. https://www.simplipsychology.org/Zone-of-Proximal-Development.html, accessed on June 11th 2022)

Mishra, S. B., & Alok, S. (2011). *Handbook of Research Methodology.* New Delhi, India: Educreation Publishing.

Murray, Neil. (2012). *Writing Essays in English Language and Linguistics*. New York: Cambridge University Press.

Murtadho, F. (2021). *Metacognitive and critical thinking practices in developing EFL students' argumentative writing skills.* Indonesian Journal of Applied Linguistics, 10(3).

Ouyang, F., Chen, S., Yang, Y., & Chen, Y. (2021). *Examining the Effects of Three Group-Level Metacognitive Scaffoldings on In-Service Teachers' Knowledge Building.* Journal of Educational Computing Research.

Oxford, R. L. (2017). *Teaching and Researching Language Learning Strategies*. Evanue, New York: Routledge Taylor and Francis Group.

Prabawanto, S. (2019). *Enhancement of Students' Mathematical Communication under Metacognitive Scaffolding Approach.* Infinity Journal of Mathematics Education, 8(2), 117.

Purwanto. (2018). *Teknik Penyusunan Instrumen Uji Validitas Dan Reliabilitas Penelitian Ekonomi Syariah*. Magelang: Staia Press.

Richards, J. C., & Rodgers, T. S. (1986). *Approaches and Methods in Language Teaching*. Cambridgde, New York: Cambridge University Press.

DOI : https://doi.org/10.30812/humanitatis.v10i1.3475

Slavin, R. E. (2012). *Educational Psychology Theory and Practice.* Boston: Pearson Education Inc.

Slavin, R. E. (2012). *Psikologi Pendidikan Teori dan Praktik.* Samosir, Marianto. (2019). Jakarta: Indeks.

Sugiyono. (2015). *Metode Penelitian dan Pengembangan Pendekatan Kualitatif, Kuantitatif, dan R&D.* Bandung: Alfabeta Press.

UNESCO. (2022). UNESCO Promotes Critical Thinking, Effective Communication, and Teamwork Through Debate. (https://www.unesco.org /en/articles/unesco-promotes-critical-thinking-effective-communication-and-teamwork-through-debate, accessed on April 11th 2022)

Valencia-vallejo, N., López-vargas, O., & Sanabria-rodríguez, L. (2019). *Effect of a metacognitive scaffolding on self-efficacy, metacognition, and achievement in e-learning environments*. Knowledge Management & E-Learning: An International Journal (KM&EL), 11.

Walliman, N. (2011). *Research Methods the Basics*. Evanue, New York: Routledge Taylor and Francis Group.

Weigle, S. C. (2002). *Assessing Writing*. Cambridge, New York: Cambridge University Press.

Zemach, D. E., & Rumisek, L. A. (2005). *Academic Writing from Paragraph to Essay.* Oxford: Macmillan Education.

"Citation" Def. 1e. Oxford Learner's Pocket Dictionary. 4th ed., 2008.

ISSN (Print) : 2338-9362
ISSN (Online) : 2477-2267

Online at https://journal.universitasbumigora.ac.id/index.php/humanitatis/
DOI : https://doi.org/10.30812/humanitatis.v10i1.3475