Plagiarism Checker - Report

Originality Assessment

5%

Overall Similarity

Date: May 6, 2023
Matches: 315 / 5933 words
Sources: 23

Remarks: Low similarity detected, check with your supervisor if changes are required.

Exploring the Effectiveness of Graphic Organizers on EFL Learners' Writing Performance across Different Learning Style Preference and Gender at Higher Education

Sabarun

Universitas Negeri Malang, Indonesia

IAIN Palangka Raya Indonesia

Corresponding Author: sabarun.2202219@students.um.ac.id

Utami 15 Widiati

Universitas Negeri Malang, Indonesia

Nunung Suryati

Universitas Negeri Malang, Indonesia

Hafizah Hajimia

Universiti Teknologi MARA, Perlis, Malaysia

Abstract: In EFL context, graphic organizers (GOs), learning style preference and gender difference were predicted to be the factors affecting learners' writing accuracy. The investigation investigated the interaction effect amongst types of writing strategy (x1), learning styles (x2), and gender (x3) on writing accuracy (y) at Islamic University Students. The investigation applied a posttest quasi-experiment design using a 2x3x2 analysis of variance. The 70 participants consisted of three groups based on types of writing strategy (x1): free writing (n= 34) versus graphic organizers (n=36); types of learning styles (x2) : visual (n=22) versus auditory (n=26) versus kinesthetic (n=22); and gender (x3): male (32), female (38). A three way ANOVA test was applied in the investigation. The study revealed that an interaction effect occurred amongst writing strategy, learning styles and gender

difference on average of writing accuracy at $F_{(2, 69)}$ =3.34, p=0.02, eta 0.10. Then, the interaction effect also occured between writing strategy and learning styles at $F_{(2, 69)}$ =7.40, p=0.01; and between learning styles and gender at $F_{(2, 69)}$ =6.56, p=0.03. On the contrary, the interaction effect did not occur between writing strategy and gender at $F_{(1, 69)}$ =1.79, p=0.19. Additionally, the simple main effect analysis confirmed that was a statistically significance effect of writing strategy at $F_{(1, 69)}$ = 9.70, p=0.03; learning style preference at $F_{(2, 69)}$ = 62.92, p=0.00; and gender at $F_{(1, 69)}$ = 14.81, p=0.00. Here, GOs were better than free writing; visual learners outperformed better than auditory and kinesthetic; and female had higher achievement than male on the learners' writing accuracy. The further investigation is needed to validate the finding.

Key words: writing strategy, gender, learning style, writing accuracy

Introduction

Composing argumentative essay is regarded to be the most difficult skills to learn (Suhartoyo et.al. 2015; Pablo & Lasaten, 2018; Liunokas, 2020; Rubiaee et al. 2020; Zarrabi & Bozorgian, 2020; Vahid, et.al. 2021). It is a complex matter that needs generating ideas and reviewing texts (Rethinasamy, 2021; Teng et al., 2022), since writing such essay needs critical thinking skills (Vögelinet al., 2019; Teng & Zhang, 2020; Zulaikha, et.al. 2021). Argumentative essay is the most essential genre learnt at higher education. It covers, claim, counterclaim, refutable and conclusion (Boykin et al., 2019; Setyowati, Sukmawan, El-Sulukiyyah, 2020). In higher academic setting, argumentative skills are useful instruments for learners to argue their stance. Therefore, it is clear that the skill to write argumentative essay is strongly needed for college students. However, learners still face many difficulties in composing argumentative essay. This is agreed upon by some scholars who have been investigating the learners' difficulties in composing argumentative essay such as Shahriari and Shadloo, 2019; Beckett & Kobayashi, 2020; Nindya & Widiati 2020; Ozfidan & Mitchell, 2020. Dang, et al., (2020) who confirmed that learners face problems with linguistic competence and critical thinking skills. Additionally,

learners also have anxiety while facing the written tests.

Prior investigations (Styati & Latief, 2018; Zakrajsek, 2018) recommended that more attention on thinking process should be given in teaching of second language (L2) writing. To cope such difficulties in writing, some scholars suggest to use writing strategy in L2 writing (Bailey, 2019; Cer, 2019; Dewi, Nurkamto, & Drajati, 2019; Fauziati, & Marmanto, 2019; Rahmawati; Zhang, Chen, & Yu, 2019; Khongput, 2020). Therefore, the study proposes graphic organizers (GOs) as a strategy to cope with the difficulties in L2 argumentative writing class. Relevant studies were conducted by some scholars such as (Anggraeni & Pentury, 2018; Lasaka et al., 2018; Maharani, et.al. 2018; Rahmat, 2020; Hafidz, 2021). In general, they believe that GOs help learners in the process of selecting, organizing, and developing ideas.

Another factor that contributes to successful learning is learning style. Learning style is the way to learn and process knowledge. Fleming (2001) states that it is a learner's way of gathering knowledge. Learners may use one of the following: visual auditory and kinesthetic one. Some scholars have been investigating on learning style in L2 writing such as (Şener & Çokçalışkan, 2018; Siregar, 2018). This study applies VAK model of learning style: visual (see), auditory (hear) and kinesthetic (move) learners (VAK). Learning style plays a vital role in learners' life. When they have awarenes with it, they can choose the best way to learn. Previous investigations found strong positive relationship between learners' learning style and writing achievement (Kusumawarti, Subiyantoro, & Rukayah, 2018; Rezeki, Sagala, & Damanik, 2018; Siregar, 2018; Alnujaidi, 2018).

Other variable assumed to affect the successful writing is gender difference (Coskun, 2014; Feery, 2008). Gender refers to the roles in society as performed by male and female (Anyanwu, 2015). Earlier investigation on gender difference was performed by Lakoff (1975). He found that girls and boys were not the same in language use. More specific focus of the present investigation, gender is assumed to influence writing accuracy. In the context of EFL/ESL, males are regarded to have lower competence than

females (Cornett, 2014). Then, Ng (2010) confirms that males do more grammatical errors than females. The similar studies are also performed by (Castro & Limpo, 2018; Zhang et al., 2019). They believed that girls gained better achievement in writing.

Despite the facts that there are many worthwhile investigations on the use of writing strategy, especially GOs, however, less attention has been given to the significance of GOs, learning style preference, and gender simultaneously in writing. Therefore, to fill the gap, this investigation is conducted. The purpose is to elaborate the effect of writing strategy, learning style, and gender difference simultaneously in writing accuracy.

Method

The design of the investigation is quasi-experiment using a 2x3x2 analysis of variance with participant's gender: male versus female (x1), learning styles: visual versus auditory versus kinesthetic (x2); and types of writing strategy: free writing versus graphic organizers (x3): as between-participants factors. The study involved 70 EFL participants. The three categorical independent variables were writing strategy (x1) and learning styles (x2) and gender (x3). Meanwhile the outcome variable was argumentative writing accuracy (y). A 2x3x2 interaction was applied to analysis data. It was a way of analysing the three-way interaction between variables and simple main-effects. In the present study, it was applied to determine if the interaction amongst writing strategy (x1) learning styles (x2) and gender (x3) differed significantly on the learners' argumentative writing accuracy (y). Here, writing strategy, learning styles and gender were factors that affected how well learners' writing accuracy. The criteria of participants are as follows:-

TABLE 1

THE PARTICIPANTS

Writing strategy

Learning styles

total

visual

auditory

kinesthetic

male

female

male

female

male

female

Free writing

5

3

5

3

8

10

34

Graphic organizers

6

8

6

12

2

2

36

11

11

11

15

10

12

70

Design of the study

This investigation used two groups pre-posttest experiment design. The pre-posttest design was performed to collect data on the learners' writing accuracy.

Data Analysis

The 2x3x2 three way analysis of variance meant that there were three categorical independent variables invloved in the study. There were a total of 12 conditions, 2x3x2 = 12.The three-way interaction examined for main effects, and interaction effects amongst all combinations of two factors and three factor on an outcome variable. In the present study, a significance level of 0.05 worked well. It indicated a 5% risk of concluding that a difference existed. The differences amongst the averages were considered to give effect significantly, if the p value is lower than 0.05. This meant that the levels in the corresponding factor differed significantly and conversely. In this investigation, the three factors contributing the learners' writing accuracy were factor A (writing strategy), factor B (learning styles), and factor C (gender), factor two interaction (AB), (AC), and (BC); and factor three (ABC). The null hypothesis was that there is no statistical significance difference in average on writing accuracy yield by writing strategy, learning styles, and gender simultaneously on average of writing accuracy. Answering the questions of

research; a three way interaction of ANOVA was conducted to analyze the interaction effect amongst writing strategy, learning styles, and gender on writing accuracy. The analysis also measured whether there was an effect partially of each writing strategy, learning styles, and gender.

Result

Data Presentation

The average score for each variable is shown below.

TABLE 2

MEAN SCORE

Writing strategy

Learning styles

gender

Mean

N

Free writing (FW)

Visual

male

64.80

5

Female

90.67

3

total

74.50

8

Auditory

male

64.80

5

Female

65.33

3

total

65.00

8

Kinesthetic

male

50.38

8

Female

54.10

10

total

52.44

18

total

male

58.39

18

Female

63.06

16

Total

60.59

34

Graphic Organizers (GOs)

Visual

male

76.17

6

Female

84.25

8

total

80.79

14

Auditory

male

78.67

6

Female

83.67

12

total

82.00

18

Kinesthetic

male

51.00

2

Female

52.50

2

total

51.75

4

total

male

73.64

14

Female

81.05

22

Total

78.17

36

Total

Visual

male

71.00

11

Female

86.00

11

total

78.50

22

Auditory

male

72.36

11

Female

80.00

15

total

76.77

26

Kinesthetic

male

50.50

10

Female

53.83

12

total

52.32

22

total

male

65.06

32

Female

73.47

38

Total

69.63

70

This table showed the outcome of the average score for each variables. The data shows that the average score for free writing group of male visual learners is 64.80 and female is 90.66; of male auditory learners is 64.80 and female is 65.33; of male kinesthetic learners is 50.38 and female is 54.10. Meanwhile, the average score for graphic organizer group of male visual learners is 76.17 and female is 84.25; of male auditory learners is 78.67 and female was 83.67; of male kinesthetic learners is 51.00 and female is 52.50. This indicated that the average score for graphic organizers is higher than free writing.

a. There was no statistical significance difference in average on writing accuracy yield by writing strategy.

The main effect of writing strategy is shown below.

TABLE 3
TESTS OF BETWEEN-SUBJECTS EFFECTS

Sources

df

Mean square

F value

P value

Partial Eta Squared

Corrected Model

11

1190.53

24.99

0.00

0.826

Intercept

1

235195.24

4.94

0.00

0.988

writing strategy

1

461.87

9.70

0.01

0.143

learning styles

2

2996.91

62.92

0.00

0.685

gender

1

705.47

14.81

0.00

0.203

Writing strategy * learning styles

2

352.60

7.40

0.00

0.203

Writing strategy * gender

1

85.25

1.79

0.19

0.030

learning styles * gender

2

312.56

6.56

0.01

0.185

Writing strategy * learning styles* gender

2

159.19

3.34

0.04

0.103

error

68

47.63

total

70

Corrected Total

69

a. R Squared = ,826 (Adjusted R Squared = ,793)

The table above shows that the average square (MS) of writing strategy is 461.87, F (1, 69) = 9.70, p=0.03, eta 0.14. As α is smaller than 0.05, this means that different writing strategy gave facilitative effect on writing accuracy. It means that writing strategy differed significantly in writing argumentative essay. Data shows that the average score for free writing (M= 65.01) is lower than graphic organizers (M= 71.04). This indicates that there is statistical significance difference in writing accuracy yield by writing strategy. The average score of FW is 65.01. Meanwhile, the average score for GOs is 71.04. As a result, it is evidenced that the average score for graphic organizers (M= 71.04) is higher than that the average score for free writing (M= 65.01).

b. There was no statistical significance difference in average on writing accuracy yield by learning style preference.

The main effect of learning style preference is shown in Table 3. The average square (MS) of learning style preference was 2996.91, $F_{(2, 69)} = 62.92$, p=0.00, eta 0.69. As α was smaller than 0.05, this meant that the different learning style preference gave facilitative effect on writing accuracy. It showed that learning style preference differed significantly in writing argumentative essay. It is noticed that the average score for visual is 78.97; auditory is 73.11, and kinesthetic is 51. 99, This indicates that the visual learners achieved better than auditory and kinesthetic learners. The post hoc tests of multiple comparison table below described the average difference amongst the three types of learning styles.

TABLE 4

MULTIPLE COMPARISONS

TUKEY HSD

I) learning styles

(J) learning styles

Mean Difference (I-J)

Std. Error

Sig.

Visual

Auditory

1.73

1.99

0.66

Kinesthetic

26.18*

2.08

0.00

Auditory

Visual

-1.73

1.99

0.66

Kinesthetic

24.45*

1.99

0.00

Kinesthetic

Visual

-26.18*

2.08

0.00

Auditory

-24.45*

1.99

0.00

The output indicates pairwise differences between (1) visual and auditory; (2) visual and kinesthetic; (3) auditory and kinesthetic. It shows the average differences amongst three types of learning styles. The average difference (MD) between visual and auditory learners is 1.73 (SE 1. 99, p= 0.66) indicating no significance between visual and auditory. It meant that both types of learning styles were equal. Then, the MD between

visual and kinesthetic learners is 26.18 (SE 2.08, p= 0.00), indicating a significance difference between visual and kinesthetic learners. Here, visual is higher than kinesthetic learners. Next, the MD between auditory and kinesthetic learners is 24.45 (SE 1. 99, p= 0.00) showing there is significant difference between auditory and kinaesthetic learners. To conclude, there is significance difference between visual and kinaesthetic learners; and between auditory and kinaesthetic learners. However, between visual and auditory learners did not differ. Therefore, the hypothesis stating that there is no statistical significance difference on writing accuracy yield by learning style preference is rejected.

c. There is no statistical significance difference in average on writing accuracy yield by gender difference.

The main effect of learning style preference is shown in Table 3. It indicates that the average square (MS) of gender difference was 705.47, F (1, 69) = 14.81, p=0.00, eta 0.20. As α is lower than 0.05, it means that gender difference differed significantly in writing argumentative essay. The mean score for male is 64.30; and female is 71.75, It indicates that there is statistical significance difference on writing accuracy yield by gender difference. The null hypothesis is rejected.

d. There is no interaction effect between writing strategy and learning styles on average of writing accuracy.

Table 3 states the average square (MS) of interaction effect between writing strategy and learning styles preference was 352.60, F (2, 69) =7.40, p=0.01, eta 0.20. As α is lower than 0.05, it means that there is an interactive effect between both variables, as described

below.

TABLE 5

WRITING STRATEGY * LEARNING STYLES

Writing strategy	learning styles	Mean	Std. Error
Free Writing (FW)	Visual	77.73	2.52
	Auditory	65.07	2.52
	Kinesthetic	52.24	1.64
Graphic Organizers (GOs)	Visual	80.21	1.86
	Auditory	81.17	

1.73

Kinesthetic

51.75

3.45

The average score of free writing group for visual is 77.73, auditory is 65.07, and kinesthetic is 52,24. While, the average score of graphic organizer group for visual is 80.21, auditory is 81.17, and kinesthetic is 51.75. This indicates that GOs of all types of learners' learning style got higher achievement than free writing group of all types of learners' learning style. The interaction effect between both variables is shown below.

FIGURE 1
THE INTERACTION EFFECT BETWEEN WRITING STRATEGY AND LEARNING STYLES

Figure above describes the interaction effect occurs between writing strategy and learning styles on average of writing accuracy. Therefore, the fourth null hypothesis was rejected.

e. There is no interaction effect between writing strategy and gender difference on average of writing accuracy.

The two interaction effect between writing strategy and gender difference on average of writing accuracy is shown in Table 3. The average square (MS) of interaction effect between writing strategy and gender difference is 85.25, $F_{(1, 69)}$ =1.79, p=0.19, eta 0.03. As α is higher than 0.05, this meant that both writing strategy and gender difference did not

effect writing accuracy, The average score of free writing group for boys is 59.99, and girls is 70.03. Meanwhile, the graphic organizer group for male is 68.61, and female is 73.42. The interaction effect between both variables is shown below.

FIGURE 2

THE INTERACTION EFFECT BETWEEN WRITING STRATEGY AND GENDER

Figure above indicates that there is no interaction effect on average of writing accuracy between writing strategy and gender. Therefore, the fifth null hypothesis is acccepted.

f. There is no interaction effect between learning styles and gender difference on average of writing accuracy.

The two interaction effect between learning styles and gender difference on average of writing accuracy is shown in Table 3. The average square (MS) of interaction effect between both variables is 312.56, $F_{(2, 69)} = 6.56$, $p = 0.03$, eta 0.19. As α is smaller than 0.05, it indicates there is an interaction effect between both in writing argumentative essay. It indicates that both learning styles and gender difference simultaneously affected writing accuracy, as described below.

TABLE 5

LEARNING STYLES * GENDER

learning styles	Gender	Mean	Std. Error
Visual	Male	70.48	2.09
	Female	87.46	2.34
Auditory	Male	71.73	2.09
	Female	74.50	2.23
Kinesthetic	Male	50.69	2.73

Female

53.30

2.67

The table shows the mean score of visual for male was 70.48, and female was 87.46. Meanwhile, the male auditory is 71.73, and female is 74.50. Then, the male kinesthetic is 50.69, and female is 53.30. The interaction effect between both variables is seen below.

FIGURE 3

THE INTERACTION EFFECT BETWEEN LEARNING STYLES AND GENDER DIFFERENCE

This indicates the interaction effect between learning styles and gender occurred difference on average of writing accuracy. Therefore, the sixth null hypothesis is rejected.

g. There is no interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy.

The third interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy is shown in Table 3. The average square (MS) of interaction effect amongst all variables is 159.186, $F_{(2, 69)} = 3.342$, $p = 0.042$, eta 0.103. As α was smaller than 0.05, it showed an interaction effect between writing strategy, learning styles and gender difference in writing argumentative essay. This indicates that, all predictor variables simultaneously affected writing accuracy, as described below.

TABLE 6

WRITINGSTRATEGY * LEARNINGSTYLES * GENDER

Writing strategy	Learning styles	gender	Mean	Std. Error
Free writing (FW)	Visual	male	64.80	3.09
		Female	90.67	3.99
	Auditory	male	64.80	3.09

Female

65.33

3.99

Kinesthetic

male

50.38

2.44

Female

54.10

2.18

Graphic Organizers (GOs)

Visual

male

76.17

2.82

Female

84.25

2.44

Auditory

male

78.67

2.82

Female

83.67

1.99

Kinesthetic

male

51.00

4.88

Female

52.50

4.88

Table above indicates that the average score for free writing group of male visual learners is 64.80 and female is 90.67; of male auditory learners is 64.80 and female is 65.33; of male kinesthetic learners learners is 50.38 and female is 54.10. In contrast, the average score for graphic organizer group of male visual learners is 76.17 and female is 84.25; of male auditory learners is 78.67 and female is 83.67; of male kinesthetic learners learners is 51.00 and female is 52.50. This indicates that graphic organiser is bigger than the average score of writing score at whole. The interaction effect amongst three variables is seen below.

FIGURE 4

THE INTERACTION EFFECT AMONGST THREE VARIABLES

This indicates that there is an interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy.

Discussion

To sum up, the three way interaction is used to see the interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy. The table can be summarized as follows:

1. The main effect of writing strategy on learners' writing accuracy was $F(1, 69) = 9.70$, p= 0.03; $\eta p2 = 0.14$. It showed that writing strategy differed significantly in writing argumentative essay. The average score for free writing (M= 65.01) was lower than graphic organizers (M= 71.04).

2. The main effect of learning styles on learners' writing accuracy was $F(2, 69) = 62.92$, p=0.00; $\eta p2 = 0.69$. It showed that learning style preference differed significantly in writing argumentative essay. The mean score for visual was 78.97; auditory was 73.11, and kinesthetic was 51. 99. Pos hoc analysis indicates that there were no significant difference between visual and auditory learners (p= 0.66) It meant that both types of learning styles were equal. Then, a significance difference occurred between visual and kinesthetic learners (p= 0.00), indicating visual was higher than kinesthetic learners. Next, there was a significance difference between auditory and kinaesthetic learners (p= 0.000) showing that auditory was higher than kinaesthetic learners.

3. The main effect of gender difference on learners' writing accuracy was $F(1, 69) = 14.81$, p=0.00. $\eta p2 = 0.20$. It showed that gender differed significantly in writing argumentative essay. Here, the average score for male was 64.30; and female was 71.75 indicating that

females outperformed better than males.

4. The two interaction effect between writing strategy and learning styles was $F_{(2, 69)}$ =7.40, p=0.01, ηp2 = 0.20. It meant there was an interaction effect between writing strategy and learning styles. It indicated that both writing strategy and learning styles preference simultaneously gave facilitative effect to writing accuracy.

5. The two interaction effect did not occur between writing strategy and gender at $F_{(1, 69)}$ =1.79, p=0.19, ηp2 = 0.03. Both writing strategy and gender simultaneously did not give facilitative effect to writing accuracy.

6. The two interaction effect occurred between between learning styles and gender at $F_{(2, 69)}$ =6.56, p=0.03, ηp2 = 0.19. It indicated that both learning styles and gender simultaneously gave facilitative effect to writing accuracy.

7. The three interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy was $F_{(2, 69)}$ =3.34, p=0.04, ηp2= 0.10. It revealed that there was an interaction effect amongst them. It showed that writing strategy (x1), learning style preference (x2) and gender (x3) simultaneously gave facilitative effect to writing accuracy (y). Here, GOs were better than free writing; visual learners outperformed better than auditory and kinesthetic; and female had higher achievement than male on the learners' writing accuracy.

The finding reveals that there is an interaction effect amongst writing strategy, learning styles and gender difference on average of writing accuracy at $F_{(2, 69)}$ =3.34, p=0.04, eta 0.10. It indicates that writing strategy, learning styles and gender difference give facilitative effect simultaneously on learners' writing accuracy. Dealing with the finding that writing strategy, (here, GOs) gives effect on writing accuracy, the study was supported by Lasaka et al., 2018; Hafidz, 2021. They find that GOs are powerful tool to teach writing. In additional, the finding reveals that the members of GOs class can interact and share their ideas. Additionally, in GOs class, learners learn with various activities during the class, such as searching related texts on argument essay, making argumentative organizers,

and composing argument essay based on the graphic organizers they made. This finding is consistent with Rahmat (2020) stating that GOs help learners in the process of writing. Learners can write more efficiently. To conclude, GOs are effective in argumentative writing class. The implementation of GOs in L2 writing class also creates social community in the classroom setting. They can share ideas amongst others. As the result has positive impact, it is recommended that GOs are applied in writing argumentative class, included as part in curriculum design.

Dealing with the finding that learning style preference, (here, visual learners) gives effect on writing accuracy, the study was in accordance with Alnujaidi, 2018; Kusumawarti, Subiyantoro, & Rukayah, 2018; Rezeki, Sagala, & Damanik, 2018; Şener & Çokçalışkan, 2018; Siregar, 2018; Sabarun, 2021. Therefore, it is recommended that teachers should introduce and classify learners about their learning styles preference. By knowing learning styles preference for each individual, teachers can provide precisely the teaching style addressed to learners.

Dealing with the finding that gender difference gives effect on writing accuracy, in this case, girls are better than boys. Female learners gain higher achievement than male learners. The finding is in accordance with (Cornett, 2014). Another investigation performed by Reynolds et al. (2015) stating that females significantly outperform better than males. The finding is also persistent with some other scholars, such as (Castro & Limpo, 2018; Zhang et al., 2019). They found that females gain better achievement.

Recommendation

The highest implication of the current study is that there is a gender difference in writing accuracy. As a result, the study recommends that writing teachers reduce the gender gap by strengthening writing instruction for male students. Here, language instructors need to increase males' writing performance. The result of this investigation is very important since some teachers do not consider the gender difference in writing instruction. It is, therefore, language instructors should give more attention to the gender gap in L2 writing class.

Additionally, language instructors should provide more conducive and constructive feedback to male learners to enhance their writing skills. Here, teachers need to throw far away an image that writing act is a female act in L2 writing class. There are some recommendations to arouse male's motivation to write better. Another technique to strengthen writing skills is reading. Learners need a lot of readings to enhance writing better, since reading utilizes good example of for writing texts. It is, therefore, teachers need to provide learners with a variety of reading texts serving a good example for writing activity. It is advisable that the teachers provide chance the learners to read not only inside but also outside the class. The study also recommends that the future researchers perform bigger sample size in order to generalize the result.

References

Adams, A. M., & Simmons, F. R. (2019). Exploring individual and gender differences in early writing performance. Reading and Writing, 32(2), 235–263. https://doi.org/10.1007/s11145-018-9859

Anyanwu, F. A. (2015). United Nations global standard for gender equity, equality and inequality compliance: A case study of Federal Polytechnic Nekede, Owerri, Nigeria (2000 – 2013). International Journal of Gender and Development Issues 11(4)1 – 10

Anggraeni, A. D., [1] & Pentury, H. J. (2018). Using Graphic Organizer as a Media in Students' Writing Project. Scope : Journal of English Language Teaching, 2(02), 105. https://doi.org/10.30998/scope.v2i02.2307

Allen, L. K., Likens, A. D., & McNamara, D. S. (2019). Writing flexibility in argumentative essays: A multidimensional analysis. Reading & Writing, 32(6), 1607-1634.

Alnujaidi, S. (2018). The relationship between EFL students' perceptual learning styles and their language learning strategies in Saudi Arabia. International Journal of English Linguistics, 9 (1), 69. https://doi.org/10.5539/ijel.v9n1p69

Beckett, G. H., & Kobayashi, M. (2020). A Meta-study of an Ethnographic Research in a Multicultural and Multilingual Community: Negotiations, Resources, and Dilemmas.

American Journal of Qualitative Research, 4(1), 85-106

Bailey, D. R. (2019). 13 Conceptualization of second language writing strategies and their relation to student characteristics. The Journal of Asia TEFL, 16(1), 135-148.

Boykin, A., Evmenova, A. S., Regan, K., & Mastropieri, M. (2019). The impact of a computer-based graphic organizer with embedded self-regulated learning strategies on the argumentative writing of students in inclusive cross-curricula settings. Computers & Education , 137 , 78–90. https://doi.org/https://doi.org/10.1016/j.compedu.2019.03.008

Bukhari, N., Jamal, J., Ismail, A., & Shamsuddin, J. (2021). 16 Assessment rubric for research report writing: A tool for supervision. Malaysian Journal of Learning and Instruction, 18(2), 1-43. https://doi.org/10.32890/mjli2021.18.2.1

Coskun, L. (2014). The girls are better at language learning: A comparative approach. Journal of Educational and Social Research, 4(2), 17.10.5901/jesr.2014.v4n2p17

Castro, S. L., & Limpo, T. (2018). Examining potential sources of gender differences in writing: The role of handwriting fluency and self-efficacy beliefs. Written Communication, 35(4), 448–473. https://doi.org/10.1177/0741088318788843

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). https://doi.org/10.1177/2158244019842681

Creswell, A. (2000). Self-monitoring in student writing: Developing responsibility. ELT Journal, 3, 235-244. https://doi.org/10.1093/elt/54.3.235

Cornett, H.E. (2014). Gender differences in syntactic development among English speaking adolescents,Inquiries,6(3). Retrieved from http://www.inquiriesjournal.com /articles/875/ gender-differencesin-syntactic-development-among-english-speaking-adolescents.

Dang, T.H., Chau T.H, Tra, T.Q. (2020) A Study on the Difficulties In Writing Argumentative Essays of English-Majored Sophomores At Tay Do University, Vietnam. European Journal of English Language Teaching - Volume 6 Issue 1 2020. ISSN: 2501-7136 ISSN-L: 2501-7136. www.oapub.org/edu DOI: 10.46827/ejel.v6i1.3389

Dewi, E. W., Nurkamto, J., & Drajati, N. A. (2019). Exploring Peer-Assessment Practice in Graduate Students '. LLT Journal: A Journal on Language and Language Teaching, 22(1), 58–56. https://doi.org/10.24071/llt.2019.220106

Fleming, N. D. (2006). V.A.R.K Visual, Aural/Auditory, Read/Write, Kinesthetic. New Zealand: Bonwell Green Mountain Falls.

Feery, K. (2008). Current perspectives on the role of gender in second language acquisition (SLA) research. The ITB Journal, 9(1).244.

Foroozandehfar, L., & Khalili, G. F. (2019). On the relationship between Iranian EFL learners' reading fluency, their personality types and learning styles. Cogent Arts & Humanities, 6(1), 1681347

Hafidz, M. (2021). The 7 graphic organizer's effect on the students' writing achievement in argumentative paragraph. EnJourMe (English Journal of Merdeka) : Culture, Language, and T eaching of English, 6 (1) 11-17. doi:https:// doi.org/10.26905/ enjourme.v6i1.5701

Ganapathy, M., Kaur, M., Jamal, M., & Phan, J. (2022). The effect of a genre-based pedagogical approach on Orang Asli students' EFL writing performance. Malaysian Journal of Learning & Instruction, 19(1), 85-113. https://doi.org/10.32890/mjli2022.19.1.4

Jeyaraj, J. J. (2020). Academic writing needs of postgraduate research students in Malaysia. Malaysian Journal of Learning and Instruction, 17(2), 1-23.https://doi.org/10.32890/mjli2020.17.2.1

Kusumawarti, E., Subiyantoro, S., & Rukayah. (2020). The Effectiveness of Visualization, Auditory, Kinesthetic (VAK) Model toward Writing Narrative: Linguistic Intelligence Perspective. International Journal of Instruction, 13(4), 677-694. https://doi.org/10.29333/iji.2020.13442a

Kusumawarti, E., Subiyantoro, S., & Rukayah. (2018). The use of visualization, auditory, kinesthetic (VAK) Model - based multimedia for story listening skill on fifth graders of elementary school. Edutech, 17(3), 351–365.

Khongput, S. (2020). Metastrategies Used by EFL Students in Learning English Writing :

LEARN 17 Journal : Language Education and Acquisition Research Network Journal, 13(2), 93–104. https://files.eric.ed.gov/fulltext/EJ1258799.pdf

Lakoff, R. (1975). Language and woman's place. New York: Colophon/Harper & Row.

Liunokas, 10 Y. (2020). Assessing Students' Ability in Writing Argumentative Essay at an Indonesian Senior High School, in: Proceedings of IDEAS: Journal of Language Teaching and Learning, Linguistics, and Literature, vol. 8, 2020, pp 284-296, doi:10.24256/ideasv8i1.1344

2 Lasaka, C. O., Jamiluddin, J., & Erniwati, E. (2018). Effect of using paragraph hamburger strategy on students writing achievements. E-Journal of ELTS (English Language Teaching Society), 6 (1)

Maharani, M. M. (2018). Graphic Organizers to Improve Students' Writing on Recount Paragraphs. Metathesis: Journal of English Language, Literature, and Teaching, 2(2), 211. https://doi.org/10.31002/metathesis.v2i2.942

Maharani, S., Fauziati, E., & Supriyadi, S. 4 (2018). An Investigation of Writing Strategies Used by the Students on the Perspective Language Proficiency and Gender. International Journal of Multicultural and Multireligious Understanding, 5(5), 185. https://doi.org/10.18415/ijmmu.v5i5.364

Nindya, M.A. & Widiati, U. (2020). 9 Cohesive devices in argumentative essays by Indonesian EFL learners, in: Proceedings of Journal on English as a Foreign Language, vol. 10, 2020, pp. 337–358, DOI. https://doi.org/10.23971/jefl.v10i2.1949

Ozfidan, B., & Mitchell, C. 8 (2020). Detected Difficulties in Argumentative Writing: The Case of Culturally and Linguistically Saudi Backgrounded Students. Journal of Ethnic and Cultural Studies, 7(2), 15–29. https://doi.org/10.29333/ejecs/382

Oshima, A., & Hogue, A. (2006). Writing Academic English (4th Ed.). New York: Pearson Education Inc.

Pablo, J. C., & Lasaten, R. C. (2018). Writing Difficulties and Quality of Academic Essays of Senior High School Students. Asia Pacific Journal of Multidisciplinary Research, 6(4), 46–57. http://www.apjmr.com/wp-content/uploads/2018/08/APJMR2018-6.4.06.pdf

Rahmat, N. H. (2020). Information Processing As Learning Strategy: the Case of Graphic

Organisers. European Journal of Education Studies, 7(4), 1–15.

https://doi.org/10.5281/zenodo.3762575

Rahmawati, F.S. Cahyono, B.Y. Anugerahwati, M. (2018) , Effect of story maps on EFL

students' achievement in writing narrative texts, in: Proceedings of Journal on English as a

Foreign Language, vol. 8, 2018, pp. 130-148. DOI: http://dx.doi.org/10.23971/jefl.v8i2.877

Rahmat, N. H. (2020). 11 Information Processing As Learning Strategy: the Case of

Graphic Organisers. European Journal of Education Studies, 7(4), 1–15.

https://doi.org/10.5281/zenodo.3762575

Rubiaee, M., Alkhalek, A., Darus, S., & Abu Bakar, N. (2020). The effect of writing

knowledge on EFL students' ability in composing argumentative essays. Arab World

English Journal (AWEJ). 10(2), 25-39

Rahmawati, N., Fauziati, E., & Marmanto, S. (2019). Writing Strategies Used By

Indonesian High. 4 International Journal of Social Sciences & Humanities, 4(2), 35–48.

Rambe, H. H., & Zainuddin. (2014). The effect of using visual, auditory, kinesthetic (VAK)

learning model on students' achievement in writing recount text. J. of Eng Lang. Teach. of

FBS Unimed, 3(4). https://doi.org/https://doi.org/10.24114/reg.v3i4.1385.

Rezeki, T. I., Sagala, R. W., & Damanik, R. (2018). The correlation between students'

learning styles and students' English linguistic intelligence. Jurnal Serunai Ilmu Pendidikan,

3(2), 1–6.

Rethinasamy. 6 S. (2021) The Effects of Different Rater Training Procedures on ESL

Essay Raters' Rating Accuracy. Souba Rethinasamy.2021. Pertanika Journal of Social

Science and Humanities, 29, (S3), DOI: https://doi.org/10.47836/pjssh.29.s3.21

Styati, E. W., & Irawati, L. (2020). 1 The Effect of Graphic Organizers on ELT Students'

Writing Quality. Indonesian Journal of EFL and Linguistics , 5 (2), 279–293.

https://doi.org/http://dx.doi.org/10.21462/ijefl.v5i2.283

Sabarun, S., Hamidah, H., & Marsiah, M. (2021). 12 The Effect of Gender and Learning

Styles on L2 Learners' Writing Performance at Higher Education. Presented in The

Southeast Asian Conference on Education 2021 Official Conference Proceedings. http://papers.iafor.org/wp-content/uploads/conference-proceedings/SEACE/SEACE2021_proceedings.pdf

[1] Styati, E.W., & Latief, M. A. (2018). Investigating dominant and passive students on pair work towards the students' writing performance. 3L: Language, Linguistics, Literature, 24(3). https://doi.org/10.17576/3L-2018-2403-11

Suhartoyo, E., Mukminatien, N., & Laksmi, E. D. (2015). The effect of Toulmin's model of argumentation within TWPS Strategy on students' critical thinking on argumentative essay. Jurnal Pendidikan Humaniora, 3(2), 143-153. Retrieved from http://journal.um.ac.id/index.php/jph

Şener, S., & Çokçalışkan, A. (2018). An Investigation between multiple intelligences and learning styles. Journal of Education and Training Studies, 6(2), 125. https://doi.org/10.11114/jets.v6i2.2643.

Siregar, R. (2018). Teaching model of visualisation, auditory and kinesthetic (VAK) to improve the economic education achievement. International Journal of Humanities and Social Science Research, 4(1), 6–10.

Setyowati, L. Sukmawan, S., & El-Sulukiyyah, A.A. (2020). Write Down Your Thought: Essay Writing for EFL Learners. Sidoarjo: Delta Pijar.

Shahriari, H., & Shadloo, F. (2019). Interaction argumentative essays: The case of engagement. Discourse & Interaction, 12(1), 96-110. https://doi.org/10.5817/DI2019-1-96

Teng, L. S., & Zhang, L. J. (2020). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference? Journal of Second Language Writing, 48, 100701

Toba, R., Noor, W. N., & Sanu, L.O. (2019). The Current Issues of Indonesian EFL Students' Writing Skills: Ability, Problem, and Reason in Writing Comparison and Contrast Essay. Dinamika Ilmu, Vol. 19 (1): 57-73

Vahid N., Jayakaran M., Shameem R. G. & Arshad A.S. (2021) Assessment of the Analytic Scale of Argumentative Writing (ASAW) Pertanika Journal of Social Science and

Humanities, 29, (S3). DOI: https://doi.org/10.47836/pjssh.29.S3.01

Vögelin, C., Jansen, J., Kellar, S. D., Machts, N., & Möller, J. (2019). The influence of lexical features on teacher judgements of ESL argumentative essays. Assessing Writing. 39, 50-63. https://doi.org/10.1016/j.asw.2018.12.003

Zakrajsek, T. (2018). 3 Reframing the lecture versus active learning debate: Suggestions for a new way forward. Education in the Health Professions, 1(1), 1-3. http://www.ehpjournal.com/text.asp?2018/1/1/1/242551

Zakrajsek, T. (2018). Reframing the lecture versus active learning debate: Suggestions for a new way forward. Education in the Health Professions, 1(1), 1-3. http://www.ehpjournal.com/text.asp?2018/1/1/1/242551ma

Zarrabi, F., & Bozorgian, H. (2020). 14 EFL students' cognitive performance during argumentative essay writing: A log-file data analysis. Computers and Composition, 55, 102546.

Zhang, Y., Chen, P., & Yu, T. (2019). 5 Reading and writing learning strategies for low English proficiency students at a private University in China. International Journal of Higher Education, 8(3), 214225

Zulaikha K, Noor H. R, Maizura M. Noor & Zurina K. 18 (2021). The Use of Rhetorical Strategies in Argumentative Essays/ Pertanika Journal of Social Science and Humanities, 29, (S3). DOI: https://doi.org/10.47836/pjssh.29.s3.14

Zhang, M., Bennett, R. E., Deane, P., & Rijn, P. W. (2019). Are there gender differences in how students write their essays? An analysis of writing processes. Educational Measurement: Issues and Practice, 38(2), 1–13. https://doi.org/10.1111/emip.12249

MAILING INFORMATION

Sabarun

Universitas Negeri Malang

IAIN Palangka Raya

E-mail: sabarun.2202219@students.um.ac.id

Utami Widiati

Universitas Negeri Malang

E-mail: utami.widiati@fs.um.ac.id

Nunung Suryati

Universitas Negeri Malang

E-mail: nunung.suryati@fs.um.ac.id

Hafizah Hajimia

Universiti Teknologi MARA, Perlis, Malaysia

1

Sources

1 https://www.researchgate.net/publication/348061370_The_Effect_of_Graphic_Organizers_on_ELT_Students'_Writing_Quality
   INTERNET
   1%

2 https://www.researchgate.net/publication/354316189_The_graphic_organizer's_effect_on_the_students'_writing_achievement_in_argumentative_paragraph
   INTERNET
   <1%

3 https://www.ehpjournal.com/article.asp?issn=2590-1761;year=2018;volume=1;issue=1;spage=1;epage=3;aulast=Zakrajsek
   INTERNET
   <1%

4 https://www.researchgate.net/publication/341903749_Investigating_the_L2_Writing_Strategies_Used_by_Skillful_English_Students
   INTERNET
   <1%

5 https://eric.ed.gov/?id=EJ1218957
   INTERNET
   <1%

6 https://expert.unimas.my/profile/721
   INTERNET
   <1%

7 https://www.sciencegate.app/document/10.26905/enjourme.v6i1.5701
   INTERNET
   <1%

8 https://www.jstor.org/stable/48710340
   INTERNET
   <1%

9 https://www.researchgate.net/publication/345961740_Cohesive_devices_in_argumentative_essays_by_Indonesian_EFL_learners
   INTERNET
   <1%

10 https://www.academia.edu/93707049/An_Analysis_of_Students_Ability_in_Writing_Cause_and_Effect_Essay_at_Sman_1_Kediri
   INTERNET
   <1%

11 https://www.researchgate.net/profile/Noor-Rahmat-2/publication/340850734_INFORMATION_PROCESSING_AS_LEARNING_STRATEGY_THE_CASE_OF_GRAPHIC_ORGANISERS/links/5ea0dafc299bf143893ffa7f/INFORMATION-PROCESSING-AS-LEARNING-STRATEGY-THE-CASE-OF-GRAPHIC-ORGANISERS.pdf?origin=publication_detail
   INTERNET
   <1%

12 http://digilib.iain-palangkaraya.ac.id/3251/
   INTERNET
   <1%

13 https://www.researchgate.net/publication/332171323_Conceptualization_of_Second_Language_Writing_Strategies_and_their_Relation_to_Student_Characteristics
   INTERNET
   <1%

14 https://www.semanticscholar.org/paper/EFL-Students'-Cognitive-Performance-during-Essay-A-Zarrabi-Bozorgian/ba9d55d9eb82123fc3a1c54e50a3b9b1472f44e1
INTERNET
<1%

15 https://ejournal.upi.edu/index.php/ijal/article/view/9824/6173
INTERNET
<1%

16 https://www.researchgate.net/publication/353955033_Assessment_rubric_for_research_report_writing_A_tool_for_supervision
INTERNET
<1%

17 https://files.eric.ed.gov/fulltext/EJ1258799.pdf
INTERNET
<1%

18 https://www.scribd.com/document/617026013/RhetoricalStrategiesinArgumentativeEssays
INTERNET
<1%

19 https://sci-hub.st/10.1177/2158244019842681
INTERNET
<1%

20 https://www.semanticscholar.org/paper/A-STUDY-ON-THE-DIFFICULTIES-IN-WRITING-ESSAYS-OF-AT-Dang-Châu/1bdd03d364de5bae03d1161816f0f2ad89f5a3db/figure/15
INTERNET
<1%

21 https://www.researchgate.net/publication/337169450_On_the_relationship_between_Iranian_EFL_learners'_reading_fluency_their_personality_types_and_learning_styles
INTERNET
<1%

22 https://scholar.google.com/citations?user=CjLblBsAAAAJ
INTERNET
<1%

23 https://journals.sagepub.com/doi/abs/10.1177/13621688221134967
INTERNET
<1%

EXCLUDE CUSTOM MATCHES   OFF

EXCLUDE QUOTES   OFF

EXCLUDE BIBLIOGRAPHY   OFF