

# Collaborative Writing Strategy in EFL Classes: Comparing Individual and Pair Writing Ability Reviewed from Cognitive Learning Styles

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## Abstract

This study intended to observe which appropriate methods to be implemented in writing class seen from the students' cognitive style; field-independent and field-dependent. This study used quasi experimental research. The population of the research was the first-year students of English Language and Literature Department of Universitas Negeri Padang. These students were taught using two different strategies: collaborative writing strategy (CWS) and metacognitive writing strategy (MWS) or individual writing. The study revealed three findings. First, learning achievement of the students taught using CWS was higher than the students taught using MWS. Second, the writing ability of the students having field-Independent (FI) learning style was higher than the writing ability of the students with field-dependent (FD) learning style. Third, there was a significant interaction between the different writing strategies with the students' learning style towards writing score. Thus, these findings signifies that it is better for the teachers to apply CWS in teaching and learning process of writing, to improve the students' writing ability.

**Keywords:** *collaborative writing strategy, individual, field-dependent, metacognitive writing strategy*

## Introduction

Writing is undeniably exceedingly complicated process in which a lot of aspects need to be taken into consideration. In fact, writing is not only the expression of language in the form of letters, symbols or words, but it is also the expression of the idea or feeling which has a purpose to clarify. In order to succeed, the writer needs to consider some aspects of written text production such as the organization, the content, vocabulary use, grammatical use to communicate his/her ideas in the form of a written text (Brown, 2004). It means that not only do the students deal with writing skill, but they also need to understand vocabulary, writing organization, sentence structure and grammar. Thus, writing is always demanding for the students to do. However, despite its challenge, Graham and Perin (2007) argue that writing skill is one of indicators of academic success and the main requirement for participation in civic life and in global economy. Thus, writing has fundamentally become the foundation of education and vital part of English language learning.

To deal with the complexity of writing, seemingly there has been much research done to find out strategies and technique that may work best. One of the most anticipated strategies is Collaborative Writing Strategy (CWS). Collaborative writing strategy provides an authentic learning environment where students develop their writing skill, critical thinking and decision making skills. Besides, CWS is believed to be affective in minimizing their weakness and is able to maximize their strength due to the opportunity given to work together in which they are able to discuss, give suggestions or criticize the results of each other's writing (Srinivas, 2011).

Moreover, Soraya (2016) conducted a study on CWS aiming at finding out the appropriate strategy to teach highly creative and less creative students. Two strategies CWS and individual writing / Metacognitive Writing Strategy (MWS) were implemented. Students taught using CWS had more freedom to discuss the problems that appeared in constructing a text, while students taught using MWS had to resolve it by themselves. Given this freedom, the students taught using CWS became less dependent on teacher. The results also unveiled that students taught using CWS outperformed the students taught using MWS. Further, CWS works effectively on highly creative students proved by their higher scores.

Moreover, implementing CWS has brought greater effect on students' motivation (Chen, Xie, & Looi, 2012; Ong & Maarof, 2013). Based on the results of these studies, the students who participated in collaborative writing are motivated in writing. Additionally, Talib and Cheung (2017) did a synthesis published research on CWS. They reviewed approximately 65 research articles on CWS that published in

2006-2016. There are 3 major findings of this synthesis. First, CWS improved students writing competence and performance as well as the accuracy of students' writing. It also develops students' critical thinking and motivates students in writing. Last but not least, CWS can be facilitated by technology. Besides, CWS triggers the students to be more implicated in the writing activities and facilitates them to comprehend the organization of the passages. In other words, CWS provides enjoyable learning, systematic creativity and thinking skills, and enables students to play an active role without feeling anxious.

In addition to learning strategies, learning style is also has a pivotal role. Learning style is an innate characteristic of a person in receiving, thinking, understanding, memorizing or in solving problems. It means that every person has their own learning style which is different from one to other. It also could be said that learning styles are related to intellectual ability. The cognitive aspect reflects the way a person processes and transforms the information he/she receives, by categorizing new knowledge, then integrating it with memory. It could be said that it refers to how people understand and memorize information so that cognitive aspects also contribute to students' learning abilities.

Cognitive aspect itself can be classified into two, Field-Independent (FI) and Field-Dependent (FD). Lightbown and Spada (2001) define that both field-independent (FI) and field-dependent (FD) refer to whether a person's thoughts tend to separate details from their general knowledge or see things more holistically. Meanwhile, Summerville (in Maghsudi, 2007) explains the definition of the dimension of individual thought lies in their independence or dependence in reflecting the knowledge and processing information when influenced by contextual fields. The FI group tends to think analytically, in detail, left brain, sequential, inductive, competitive and intrinsically motivated, individualistic, task oriented, likes to test hypotheses, independent in self-organization, linear, oriented to details, visual perception, sequential and inductive. Meanwhile, FD group has a way of thinking that requires stimulus, right brain, deductive and tends to be oriented towards cooperation or group oriented, sensitive to interaction and social criticism, extrinsically motivated, external references, not visual perceptible, non-verbal, right brain, need simultaneous and deductive, tend to be passive learners who need information stimulus (Hall, 2000).

The specific purpose of this study aims to find out whether the CWS learning strategy has an effect on improving students' writing abilities especially for FD groups in terms of cognitive aspects. The experimental group was taught using CWS. As a comparison, MWS was implemented for students in control group who work individually. MWS is aligned with cognitive thinking that requires students to work individually. This research is considered necessary because one objective of writing class for freshmen is to conceptualize their thought on topic into a well written paragraph. Thus, giving the right strategy from the first-year is recognized as a way to improve their writing skill. They become more critical as they read, and give comments simultaneously. Hopefully, when they become sophomore and senior, they would have been a better writer, especially in writing undergraduate thesis. Based on above-mentioned problems, this research can be formulated in the form of research questions as follows: (1) Do students taught using CMW have higher score that students taught using MWS?, (2) Does CWS have an impact on students' writing abilities that have differences in cognitive learning Styles?

## **Method**

The type of research deemed appropriate for this purpose is Quasy-experimental research. According to Latief (2010), experimental research is the most powerful method of examining causal relationships. In essence, this experimental study is examining the effect of a treatment on the effects that arise. In this experimental research there were three variables involved, independent, dependent and attributive variables (Ary, et al, 2010). The active independent variables were Collaborative Writing Strategy (CWS) and Metacognitive Writing Strategy (MWS), while the dependent variable in this study is the students' writing ability. Because of the engagement of attributive variable; which were classified into two; Field-Independent (FI) and Field-Dependent (FD), 2X2 Factorial design was used.

Experimental Research is applied without changing class settings and only one class is taken. Each class that involved in this study will be divided into two groups, namely the FI group and the FD group. These groups were taught by the same lecturer using the same teaching procedures. The difference only lied on the treatment that was applied for 12 weeks. This research was conducted at the English Department of Universitas Negeri Padang. The population of this study was the freshmen taking Paragraph Writing course in the 2018/2019 academic year. The population in this study amounted to 260 students who were divided into 8 classes. From these 8 classes, 2 classes were randomly selected to participate in this study. The selected classes consist of 33 and 34 students, divided into 2 groups of FI and FD and were given two different learning strategies.

Argumentative paragraph was chosen as text that was tested during the initial test (pretest) and final test (posttest). The argumentative paragraph was chosen because this type of paragraph requires students to

have an opinion on an issue that is being discussed hotly based on their point of view. Students wrote argumentative texts based on the given topics.

To classify the students into FI group or FD group, a GEFT (Group Embedded Figure Test) was given as an instrument at the first meeting after the two classes were formed. This test required students to locate simple geometric shapes in geometric designs that are more complicated with a set of time limit. For the scores, it ranges from 0 (the lowest FD) to 18 (the highest FI). Those who score 12 up to 18 are labeled as FI person and those who score 11 or below 11 are considered as FD person. After the pretest was done, students in the experimental class were taught using Collaborative Writing Strategy (CWS) by dividing them in pairs. While students in the control class worked individually. The posttest score was done for two classes and the results were compared to see the measurement of students' ability in writing argumentative texts.

The results of the pretest and posttest were assessed by two lecturers supporting the writing subject to see the validity of the score. After the calculation of the pretest and posttest scores was completed, the two sets of scores were then compared to see an improvement in the ability to write argumentative texts by using ANOVA. ANOVA is designed to answer research questions and hypotheses that proposed in this study.

**Results and Discussion**

Based on the analysis on the students' GEFT score, it was showed that FI students in the experimental class were 17 students and there were 16 FD students. Besides, in control group there were 18 FI students and 16 FD students (Table. 1). The total described that 35 students were considered as FI and 32 students as FD.

**Table 1. Descriptive Statistics**

Writing strategy	Cognitive style	Mean	Std. Deviation	N
CWS	FD	79.56	5.391	16
	FI	79.76	4.161	17
	Total	79.67	4.721	33
MWS	FD	73.63	3.423	16
	FI	78.39	4.340	18
	Total	76.15	4.567	34
Total	FD	76.59	5.369	32
	FI	79.06	4.249	35
	Total	77.88	4.938	67

The analysis purpose of this part is to identify whether there is any significant effect of conducting CWS and MWS on students' learning achievement across different cognitive learning styles. To fulfill the assumption of homogeneity, *Levene* test was used ( $0.591 > 0.05$ ).

**Table 2. Levene's Test of Equality of Error Variances<sup>a</sup>**

F	df1	df2	Sig.
.641	3	63	.591

The data analysis was conducted by using ANOVA 2x2. The F-ratio for writing strategy was 11.643 with the degrees of freedom 1 are presented in table 3. The P-value was .001 with significance level .05 ( $\alpha = .05$ ). The result shows that P-value was lower than the significant level ( $.001 < .005$ ). It means that there was significant different mean score of the students' writing ability after being taught using CWS and MWS. From the result of analysis in Table 4 which provides the estimated marginal means, the experimental class which was taught by CWS had higher mean score than the control class which was taught by MWS. Thus, it could be concluded that CWS gives more significant effect on students' writing ability.

The result of this study showed that CWS was more effective in improving students' writing ability. CWS is able to give many advantages and can be confirmed as an effective writing strategy. It was in line with Soraya's (2016) and Abbas & Herdi' studies (2018). Based on the results of this research, it was proven that the implementation of CWS in the learning process could improve the students' writing ability. Moreover, the researcher found two advantages during the implementation of CWS. They are forming discussion groups in the classroom, and building better motivation and creativity. CWS formed a discussion community in the classroom. When the students exchanged and shared their ideas with their partner about the topic that they were going to write, the students spoke to each other and told about their opinion. Almost

all of them were courageous to share their ideas even some of them spoke in Bahasa Indonesia. Some of them could tell their opinions beyond the expectation and become more critical. Because of this atmosphere, the students' motivation constructing a better writing is increasing. Not only motivation, the students became more critical. Even though, the topic that they discussed was same, the vocabulary used and the way of delivering the ideas were different from their pair.

**Table 3. Tests of Between-Subjects Effects**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	400.021 <sup>a</sup>	3	133.340	6.948	.000
Intercept	404936.285	1	404936.285	21100.478	.000
Writing strategy	223.431	1	223.431	11.643	.001
Cognitive styles	103.025	1	103.025	5.368	.024
Writing strategy *cognitive styles	86.929	1	86.929	4.530	.037
Error	1209.024	63	19.191		
Total	407990.000	67			
Corrected Total	1609.045	66			

R Squared = .249 (Adjusted R Squared = .213)

To answer the research question related to the interaction between writing strategies with the students' learning style, the data were analyzed by using ANOVA. Based on the result of the analysis showed in Table 3 the significant value of the interaction between writing strategies and cognitive learning styles is .037 which means that it was lower than the level of significant .05. This significant level was lower than .05 (sig .037 < sig .05). It means that there was any interaction between the independent variables (Gay, 2009)

**Table 4. Estimated marginal means of writing strategy**

Writing strategy	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
CWS	79.664	.763	78.139	81.188
MWS	76.007	.753	74.503	77.511

As shown in Table 5, the result of analysis of estimated marginal means revealed that the FI group has the higher mean score rather than FD group in experimental class which taught by CWS and the mean score of FI group of control class which taught by MWS is also higher than FD group so that it could be concluded that CWS gives more significant effect rather than MWS on students' writing ability. It was also in line with Nosratinia and Adibifar (2014) in their research revealed that FI students showed more improvement in their writing post-tests than FD ones. Addinna, et al (2019) also showed that FI students had more benefits than the FD learners taught by using visualization strategy. It can be concluded that FI groups is benefited by these two strategies. Even though, FI group is benefited by these two strategies, it can be stated that CWS has better role in students' writing ability.

**Table 5. Estimated marginal means of writing strategy across cognitive learning style**

Writing strategy	Cognitive style	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
CWS	FD	79.563	1.095	77.374	81.751
	FI	79.765	1.062	77.641	81.888
MWS	FD	73.625	1.095	71.436	75.814
	FI	78.389	1.033	76.326	80.452

**Conclusions**

Based on the research findings, it can be concluded that Collaborative Writing Strategy (CWS) is an effective writing strategy to master writing skill. It is implied that the students taught using Collaborative Writing Strategy (CWS) have better writing ability than students taught using Metacognitive Writing Strategy (MWS). Collaborative Writing Strategy (CWS) can encourage and motivate the students to write actively in the classroom. CWS does not only improve writing ability, but it also could form a discussion community in the classroom, and built better motivation and creativity.

Furthermore, the findings of this study have both theoretical and practical contributions to be considered as the alternative strategies for developing the teaching and learning in English classroom setting.

Theoretically, this research gives insight to the theories on language teaching and learning especially those related to teaching writing. This will give contributions as it hopefully can add the knowledge about the implementation, strengths, and weaknesses of CWS.

Moreover, analyzing the results of this research and identifying research can be used as a resource or guidance for conducting better further research. For other researchers who intend to carry out further research in the relation with research's findings, further experimental studies can be applied in the different skills and viewed from different psychological aspects.

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### **References**

- Abbas, M. F. F., & Herdi, H. (2018). Solving the students' problems in writing argumentative essay through collaborative writing strategy. *English Review: Journal of English Education*, 7(1), 105-114.
- A. Addinna, R. Ovilia, & R. Asfina. (2019). The Effect of Visualization Observed from Students' Cognitive Learning Styles. *Lingua Didaktika*, 13(1), 26-34.
- Ary, D. Jacobs, L.C., Razavieh, A., & Sorensen, C. (2010). *Introduction to Research in Education (8<sup>th</sup>ed)*. California: The Thompson Corporation. s
- Bahar, M., dan Hansell, M.H. (2000). The Relationship Between Some Psychological Factors and their Effect on the Performance of Grid Questions and Word Association Tests. *Educational Psychology*, 20 (3): 349-364.
- Brown, H. Douglas (2004). *Language assessment: Principles and classroom practices*. White Plains, NY: Pearson Education.
- Chen, W., Xie, W., & Looi, C.-K. (2012). Collaborative languaging for L1 learning in a CSCL classroom via Group Scribbles: An exploratory case study. In G. Biswas, L. -H. Wong, T. Hirashima & W. Chen (Eds.), *Proceedings of the 20th International Conference on Computers in Education* (pp. 579-583). Singapore: Asia-Pacific Society for Computers in Education
- Gay, L.R. (2009). *Educational Research (9<sup>th</sup>ed)*. Columbus: Merrill Publishing Company.
- Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools – A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education. P. 11
- Hall, J.K. (2000). *Field Dependence-Independence and Computer-based Instruction in Geography*. Blacksburg: Unpublished PhD thesis.
- Kahtz, A. W., dan Kling, G. J. (1999). Field-Dependent and field-Independent Conceptualization of Various Instructional Methods with an Emphasis on CAI: a Qualitative Analysis. *Educational Psychology* 19: 413-428.
- Latief, M. (2010). *Metode Penelitian Pembelajaran Bahasa*. Malang: UM Press.
- Lightbown, P.M. and Spada, N. (2006). *How Language are Learned (3<sup>rd</sup>ed)*. Oxford: Oxford University Press.
- Maghsudi, M. (2007). The Interaction Between Field-Dependent/Independent Learning Styles and Learners' Linguality in Third Language Acquisition. *Language in India*, (online) retrieved on July 15, 2015 from <http://bibliotecavirtualut.suagm.edu>.
- Nosratinia, M and Adibifar, S. (2014). The Effect of Teaching Metacognitive Strategies on Field dependent and Independent Learners' Writing. *Procedia-Social and Behavioral Sciences* 98 (2014), 1390-1399.
- Ong, P. L., & Maarof, N. (2013). Collaborative writing in summary writing: Student perceptions and problems. *Procedia – Social Behavioral Sciences Journal*, 90, 43-56
- Srinivas, H. (2011). What is Collaborative Learning? *The Global Development Research Center*, 2(12), 491495.
- Soraya, K. (2016). The Effectiveness of Collaborative Writing Strategy (CWS) in Writing Lesson Regarded to The Students' Creativity. *Lingua Cultura*, 10(2). 63-67.
- Talib, T. dan Cheung, Y. L. (2017). Collaborative Writing in Classroom Instruction: A Synthesis of Recent Research. *The English Teacher*, 46(2), 43 - 57.