

# Incorporating Strategy Instruction (SI) and Strategy-Based Writing Instruction (SBI) to Enhancing Students' Writing Abilities

Masrul

English Language Education Department, Universitas Pahlawan Tuanku Tambusai, Riau, Indonesia

R. Andi Ahmad Gunadi

English Language Education Department, Universitas Muhammadiyah Jakarta, Jakarta, Indonesia

Aswir

English Language Education Department, Universitas Muhammadiyah Jakarta, Jakarta, Indonesia

Beny Hamdani

English Language Education Department, Universitas Islam Zainul Hasan Genggong, Jawa Timur, Indonesia

Ummi Rasyidah

English Language Education Department, Universitas Pasir Pengaraian, Riau, Indonesia

Sri Yuliani

English Language Education Department, Universitas Islam Riau, Riau, Indonesia

**Abstract**—Strategy instruction (SI) and strategy-based writing instruction (SBI) in English in recent years have obtained great attention for having considerable educational and evaluation usefulness. Studies on how strategic teaching improves students' writing ability were limited, resulting in significant gaps in the declarative and procedural knowledge of writing among university freshmen. To address this gap, this study was conducted to examine the effects of strategy instruction and strategy-based writing instruction on students' writing based on several parameters: content, organization, language, citation, idea, revision, modification, replacement, plagiarism, and creativity on students' writing ability. This experimental study involved 100 students majoring English Education at the State University of Malang. The results of the ANCOVA test on all dependent variables showed a significant effect on idea construction in both control and experimental group. This study revealed that SBI and SI positively affected students' writing ability, making them regarded as effective methods in teaching writing.

**Index Terms**—strategy instruction (SI), strategy-based writing instruction (SBI), writing ability

## I. INTRODUCTION

Writing is an important component of life, including in educational and job environments. Today, everyone frequently communicates via email, text messaging, and social media. Those without sufficient basic writing skills may find it difficult to engage in daily activities involving school communication (Finlayson & McCrudden, 2019). Some people show little or no improvement in their writing skills when they learn to compose simple sentences (Salahu-Din et al., 2008). Therefore, in recent years, language instructors have paid special attention to language acquisition processes and considered ways to better support that endeavor (Cohen, 2002).

However, the integrated writing task assigns tasks to both first-and second-language students (L1, L2). Therefore, students must struggle to develop the sophisticated cognitive and metacognitive abilities necessary for effective interaction with them. Language learners in both second and foreign language situations might benefit from utilizing learning techniques, although their learning objectives may need distinct strategies. In the beginning, the primary task for foreign language learners is to develop their social languages; nevertheless, at a higher level, they must read, discuss, and produce literary and informative materials in the target language and create an academic language.

This study discusses how explicit strategic training impacts students' metacognitive understanding and helps SRL develop in EFL writing. A cyclical writing process was used to construct a 15-week process-oriented writing course focusing on specific writing methods (i.e., prewriting, planning, redrafting, evaluating, revising, and editing) (Lam, 2015). The findings indicated that participants increased their metacognitive knowledge of planning, restructuring, and problem-solving procedures and their motivation and confidence during the writing process (Lam, 2015). Another study

by Zhang (2013) discovered that instruction has a beneficial effect on the writing of discourse synthesis. More importantly, the study indicates how synthesis writing instructions may be included in an ESL course without considerably disturbing the curriculum.

This article continues the literature review on the strategies used in strategy instruction and strategy-based writing instruction of EFL students to enhance their ability to write in an integrated approach.

## A. Literature Review

### (a). *Integrated Writing Strategies*

Writing strategies are distinct processes or techniques writers employ to enhance their work. In the context of English as a Second Language or Foreign Language, intervention studies have shown that strategy-based education provides Second Language or Foreign Language students with both quantitative and qualitative writing strategies found to include skills. This is a concern, as writing is necessary for achievement in high schools, universities, and future jobs (Finlayson & McCrudden, 2019). Due to the critical nature of writing, it is critical to foster the early development of writing skills, especially for students who struggle with or dislike writing. English writing techniques are essential and critical for English language learners.

However, many students find the learning process challenging. One reason is that they need to learn many customs for writing, including how to develop ideas and put them together in well-written paragraphs. As a result, their writing skills were low. Therefore, strategy instruction providing explicit, step-by-step tools to assist students in approaching various aspects of the writing process is needed to improve their writing. Researchers have demonstrated that students meet these requirements through various writing techniques and that their use of these techniques is associated with fluctuations in their integrated writing performance and their English as a Second Language (ESL) competence level (Yang & Plakans, 2012).

As a result, it is indeed important to note that researchers are required to pay scant attention to the effect on strategy instruction and integrated writing ability. Despite the exception of Zhang (2013), those who have studied the effects of strategy instruction on the overall writing of intermediate English Second Language (ESL) students have significantly underestimated the feasibility and efficacy of tasks incorporating strategy instruction at the higher education level. The representativeness of test content is critical once performance tasks are developed. Traditionally, writing is assessed independently of other skills, and examinees respond to a prompt by writing about their general knowledge and personal experiences. However, in most academic contexts, writing assignments are frequently integrated with reading, listening, and speaking (Hinkel, 2006). The content of a piece of writing is critical. Graham and Harris (2009) argued that strategy instruction also addresses self-regulation for managing strategies and behaviors. Additionally, Graham et al. (2012) combined strategic education and self-regulation to be more effective.

### (b). *Strategy-Based Writing Instruction*

For more than three decades, applied linguists have studied language learner strategies. One such effort is strategy-based writing instruction (SBI), a collaborative effort between teachers and students to integrate strategy into the core language curriculum. However, there are some issues with creating a strategy-based writing instruction (SBI) survey. Cohen and Weaver (2006) investigated the effect of strategy-based writing instruction on foreign language students' improvements in speaking over ten weeks. Their findings demonstrated the importance of strategy integration in traditional language classrooms. They previously excluded a potentially influential variable (i.e., reading comprehension) associated with English Foreign Language (EFL) students' writing performance from previous writing instruction in English Foreign Language (EFL) writing achievement (Lee, 2019).

Gu (2019) described the experiment using a five-step strategy-based writing instruction (SBI) model, including 1) Awareness-raising and preparation, 2) Teachers' presentations and modeling, 3) Multiple practice opportunities, 4) Strategy effectiveness evaluation, and 5) Strategy transfer to new tasks. Most of the previous studies focused on adult (young) students. Current findings on writing instruction in English as a second language have shifted from text-based studies to studies of multilingual students' writing as a socially situated practice (Beiler, 2019). As per Baghbadorani and Roohani's (2014) research, the instruction effectively improved the persuasive writing performance of EFL participants. In other studies, it was found that writing interventions performed by teachers generally improved student writing performance, although there were varying degrees of improvement in the studies (Finlayson & McCrudden, 2019). These research results, in line with the study by Azin et al. (2021), demonstrated that strategy-based instruction has a significant positive effect on EFL learners' writing achievement when using various modes of writing. Despite the emphasis on writing strategies (e.g., idea construction, organization, and revision), little research has been conducted on the effects of strategy-based writing instruction (SBI).

### (c). *Integrated Writing (Strategy) Instruction Effectiveness*

One effective strategy for determining which strategies students are already employing is simply asking them and the class how many students use each strategy to motivate them to try new strategies. Stated Strategy Instruction typically entails increasing awareness of the strategy to be learned, modeling/demonstrating it, conducting multiple training sessions, evaluating the strategy's effectiveness, and transitioning to new tasks (Rubin et al., 2007). It is frequently beneficial to have students complete a learning task initially and then discuss the techniques they used to complete it

while their minds are fresh. This was proven to be more efficient than other instructional methods in students in primary and secondary education, and strategy instruction (SI) improved students' writing quality (Graham et al., 2012). However, studies on the effectiveness of strategy instruction (SI) in synthetic descriptions are extremely rare.

The process-oriented approach to writing enhanced the overall quality of text produced by average and, in many cases, troubled writers (Graham & Sandmel, 2011). Other reviews were broader in scope, examining the efficacy of multiple writing treatments at various grade levels. Several treatments evaluated were created specifically to help you enhance your writing strategy, knowledge, or skills.

In the L2 context, Machili et al. (2020) examined the effects of strategy instruction (SI) on students' synthesized written form as measured by their performance on an overall writing test in three major areas: financial reporting and funding, business management, and the economy. The sample was divided into two groups: experimental (56.8%) and control (43.2%). The results showed that although the difference in scores between the experimental and control groups appears to be insignificant numerically, the comparison showed statistical significance, with SI improving the synthetic performance of the experimental group over that of the control group. The experimental group improved significantly more than the control group after receiving instruction and practice in synthesis strategies, indicating that strategy instruction (SI) intervention was effective. Similarly, Kirkpatrick and Klein (2009) found L1 students taught in synthetic strategies to perform better than students who did not receive such guidance on integrated R2W tasks at a later stage. A further study by Al-Jarrah and Al-Ahmad (2013) in Jordan found that not all schools paid attention to their language skills. Almost all English textbooks used in Jordan are aimed at helping students understand, read and write English.

One of the most important aspects of written text is its structure. The use of text structures suitable for global organizations and genders is an overall indication of writing results. The problem that students with low L2 proficiency may have with integrated writing is that the integrated writing task is appropriate only for students with a certain level of language competence; below that, it is ineffective. It may indicate that it may not be possible (Cumming et al., 2016).

The researchers believe explicit strategy instruction in complicated and impossible built-in written assignments holds great promise. This study is a component of a larger project examining integrated writing techniques, the effect of strategy instruction on achievement and the use of informed strategies, and the effect of encouragement on integrated task performance. As a result, this study discusses the explicit strategy instruction interventions conducted and their observed effects on EFL writing abilities.

## II. METHOD

### A. *The Participants*

To assist in understanding the research findings, this section briefly outlines the educational backgrounds of our participants. Students have little information on citation requirements and how to use sources properly. Plagiarism is seldom mentioned, and there is minimal guidance on taking an origin and incorporating it into a current project. Postsecondary education followed a similar pattern for a long time: excessive class size, limited opportunities for collaborative and research work, and a single final exam that typically requires reproducing true information from the assigned curriculum guide. As a result, it is reasonable to expect that students entering university will have significant gaps in their declarative and procedural writing knowledge.

Therefore, an experimental design was chosen because it was the best option available given the circumstances. Creswell (2015) argued that experimental designs (also known as intervention studies or group comparison studies) are processes used in quantitative research to determine whether a particular activity or set of materials affects the outcomes of participants. Giving one group a set of activities (referred to as an intervention) and withholding them from another group is one way to quantify this effect.

The sample consisted of 100 students (50% males, 50% females) from the first semester of the English Education Department at the State University of Malang, aged between 19 and 23. The TOEFL ITP scores of the students were converted to levels of competence. Most participants (61.9%) were proficient at the intermediate B level, followed by 38.2% of advanced C-level students.

### B. *Research Question and Design*

This study aimed to investigate how strategy and strategy-based writing instruction affect students' writing abilities, specifically to address the following research questions.

RQ1: Does strategy instruction and strategy-based writing instruction affect students' writing ability in the control group?

RQ2: Does strategy instruction and strategy-based writing instruction affect students' writing ability in the experimental group?

RQ3: Is there a difference in the effects produced by strategy instruction and strategy-based writing instruction on students' writing ability in the control and experimental groups?

To answer the research questions, researchers used an experimental approach in which students from the English Education Department were randomly assigned to the experimental and control groups. Both groups used identical materials and followed the same procedures regarding attendance, tasks, and grades. All participants took the TOEFL

ITP test to assess their general academic English competence. Utilizing Yang and Plakans (2012), a conceptual framework devoted to the selection, organization, and connection of strategies.

*(a). The Strategy Instruction Intervention*

The intervention taught four writing strategies: preparation, text generation, feedback processing, and revision. The following are the writing strategies that were chosen. First, a preliminary list of writing strategies was compiled based on a thorough literature review. Many of these tactics were found to be strongly linked to pupils' linguistic abilities (Victori, 1999). The research group then sifted through methodologies that describe the writing process (Flower & Hayes, 1981), involving planning, writing, and revising. It is also worth noting that each group of techniques is made up of multiple sub-strategies that work together to make the writing process easier (Flower & Hayes, 1981). Setting goals, creating ideas, and organizing ideas into a writing plan, for example, are all part of the planning process.

The intervention took place throughout seven two-hour sessions. The researchers focused on selecting, arranging, and connecting methods using the conceptual structure of Yang and Plakans (2012). Each session was conducted according to the five stages outlined in the international strategy instruction literature (Rubin et al., 2007): (1) stirring up students' consciousness by asking them to consider strategies they already use for similar tasks; (2) describing and designing how the tactic worked; (3) practicing the strategy in class; (4) evaluating the strategy's efficacy; and (5) analyzing the strategies taught through the use of prior and successive meetings.

The control group content included: writing a synthesis from various reference sources. The schedule is fixed according to typical course content to cause as less distraction as possible. Students are given worksheets with content outlines to help them understand the structure of their writing synthesis. In the third week, students are also asked to write paragraphs that compare and contrast the contents of the two syntheses they have learned. Teachers also focus on language problems, providing students with practice on lexical and grammatical topics that arise during presentations.

The experimental group received training in various tactics at each session. The first sessions focus on developing selection methods, such as selecting task-relevant information and collecting selective notes from reading sources based on job requirements. Two organizing strategies are highlighted: text-based organization for comprehension and mental organization of selected information in the form of outlines and mind maps from readings. During the writing process, the teacher demonstrates two techniques for juxtaposing material to students: comparing and contrasting and bullet points. The following two sessions model and practice strategies for producing coherent writing, such as constructing topic sentences that convey the relationship between two sources for further investigation and using appropriate linking devices. The next session provided an overview of the tactics covered thus far and a sample assessment using the rubric parameters for evaluating substance (information), organization (the presence of introductory sentences and cohesive devices), language, and verbatim sources (references to sources and quality of paraphrasing). Students complete a synthesis writing and two strategy inventories in the last session.

*(b). The Scoring Rubric*

The following content, organization, and language scales were retained and scored on a scale of 0–5 using the integrated writing scoring rubrics (Yang & Plakans, 2012). However, verbatim use has been replaced by two scales: verbatim language use, rated 0–2 (indicating the extent to which plagiarism was avoided), and citation inventiveness, rated 0–3 (reflecting the variety of methods used by students to refer to the sources). During the marking process, papers were anonymized and assigned code numbers rather than names.

To ensure consistency in scoring, the researchers and raters met several times to clarify and agree on the rating criteria. Prior to scoring, all raters rated batches of ten papers from each department to ascertain any differences in their perceptions of the rating scale and inter-rater reliability. Two raters combined through all of the submissions. The paper's assessments were consistent to the extent of 85 percent, which was comparable to other relevant studies (Cumming et al., 2005). Unless the average of the two scores was used, no difference greater than 0.5 was observed (Nguyen & Gu, 2013).

### III. RESULT

#### *A. Descriptive Statistics*

Table 1 presents the descriptive statistics for providing an overview of the measured variables, including the mean and standard deviation of each variable.

TABLE 1  
DESCRIPTIVE STATISTICS RESEARCH VARIABLES

variable	Control						Experimental					
	Pre		Post		Delayed		Pre		Post		Delayed	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Idea construction	12.07	1.26	12.13	1.33	12.02	1.18	17.94	1.10	17.39	1.23	17.17	1.43
Revision	12.35	1.35	12.00	1.27	12.27	1.35	17.24	1.35	16.82	1.46	16.83	1.38
Content	1.53	0.60	1.25	0.65	1.62	0.65	4.28	0.62	3.82	0.81	4.27	0.66
Organization	1.40	0.67	1.13	0.63	1.23	0.67	4.19	0.76	3.89	0.70	3.82	0.81
Language	1.61	0.67	1.32	0.62	1.53	0.59	4.27	0.66	3.90	0.76	4.28	0.62
Citation	0.86	0.38	0.70	0.40	0.62	0.43	2.45	0.39	2.18	0.45	2.19	0.43
Modified	0.49	0.29	0.50	0.29	0.49	0.29	1.52	0.29	1.50	0.29	1.50	0.29
Replacement	0.50	0.29	0.49	0.29	0.53	0.29	1.48	0.30	1.52	0.29	1.51	0.30
Plagiarism	0.49	0.29	0.50	0.29	0.43	0.29	1.49	0.29	1.51	0.29	1.43	0.30
Creativity	0.50	0.29	0.62	0.42	0.69	0.39	2.47	0.35	2.20	0.45	2.17	0.45

Table 1 presents the mean and standard deviation of the control and experimental groups. It also illustrates the mean and standard deviation changes between the pre-test, post-test, and delayed tests for both categories.

Out of the ten calculated variables in the control group, four variables have an increasing mean from the pre-test to the post-test: idea construction, modified, plagiarism, and creativity. On the other hand, the means of another six variables decreased from the pre-test to the post-test, including revision, content, organization, language, citation, and replacement and creativity variables increased in the pre-test to delayed test.

Furthermore, of the ten calculated variables in the experimental group, the mean of two variables has increased from the Pre-test group to the Post-test: replacement and plagiarism. In contrast, for eight variables, the mean decreases from the pre-test to the post-test: idea construction, revision, content, organization, language, citation, modified, and creativity. Meanwhile, replacement and language variables increased from the pre-test to the delayed test.

The comparison of the mean of each variable indicates the effect of the treatment on the post-test. ANOVA test will reveal the extent of the effect and the significance of the difference.

*B. ANOVA Analysis*

ANOVA (Analysis of Variance) is one of the comparative tests used to test mean differences between more than two groups of data. The ANOVA test principle analyzes data variability into two sources of variation: within the group and variations between groups. If variations within and between them are the same (comparison value of the two variants approaches one), and the intervention shows no effect. In other words, the mean comparison shows no difference. Conversely, if the variation between groups is greater than the variation within the group, the intervention provides a different effect. ANOVA test results are displayed in Table 2.

TABLE 2  
ANOVA TEST RESULTS ALL VARIABLES MEAN (SD)

Variable	Control		Experimental	
	Pre	Post	Pre	Post
Idea	12.07	12.14	17.95*	17.40*
	1.26	1.34	1.11	1.23
Revision	12.35	12.01	17.25	16.83
	1.36	1.28	1.35	1.47
Content	1.53*	1.25*	4.29*	3.82*
	0.60	0.65	0.62	0.81
Organization	1.40*	1.14*	4.19*	3.89*
	0.68	0.63	0.77	0.71
Language	1.62*	1.33*	4.27*	3.90*
	0.67	0.63	0.67	0.76
Citation	0.87*	0.70*	2.46*	2.18*
	0.38	0.40	0.40	0.45
Modified	0.49	0.50	1.52	1.50
	0.30	0.30	0.29	0.30
Replacement	0.50	0.49	1.49	1.52
	0.30	0.30	0.30	0.30
Plagiarism	0.49	0.50	1.49	1.52
	0.30	0.30	0.30	0.30
Creativity	0.50	0.62	2.48*	2.21*
	0.30	0.42	0.36	0.45

\* : Significant P value <0.05

In the control group, four variables show a significant difference between the pre-test and post-test groups (p<0.05). The strategic instruction and strategy-based writing instruction treatment before and after the post-test significantly provide an effect of change in the mean of the four variables (content, organization, language, and citation). Whereas for another six variables: idea construction, revision, modified, replacement, plagiarism, and creativity, the strategic instruction control before the post-test had no significant effect on the mean (p>0.05).

In the experimental group, six variables show significantly different means between the pre-test and post-test groups ( $p < 0.005$ ). This means that the treatment instruction before the posttest significantly changed the mean of the six variables: idea construction, content, organization, language, citation, and creativity. On the other hand, for the remaining four variables: revision, modified, replacement, and plagiarism, the strategic instruction, the treatment does not have a significant effect on the mean of the post-test ( $p > 0.05$ ).

The difference in the results of the ANOVA test indicates that the data in the experimental group was better than the control group.

### C. ANCOVA Analysis

ANCOVA analysis is useful for increasing the precision of an experiment because it is carried out by regulations on the influence of other free-controlled changes. The results of the ANCOVA test in this study are displayed in Table 3.

TABLE 3  
TEST RESULTS ANCOVA ALL DEPENDENT VARIABLES  
IDEA CONSTRUCTION

Variable	Control		Experimental	
	F	Sig	F	Sig
Content	8,851.50	0.01	3,073.43	0.01
Organization	407.92	0.01	96.14	0.01
Language	71.12	0.01	46.26	0.01
Citation	8.73	0.01	6.00	0.02
Modified	599.35	0.01	3.91	0.06
Replacement	1.63	0.21	0.08*	0.79
Plagiarism	31.02	0.01	6.33	0.02
Creativity	1.38	0.25	6.65	0.02
Corrected Model	1,246.58	0.01	360.33	0.01
Intercept	892,796.58	0.01	739,176.85	0.01
Category	0.01	0.01	4.16	0.05
R-Square	0.99		0.98	

\* : Not Significant  $p > 0.05$

Data analysis results show that some variables: content, organization, language, citation, creativity, modified, replacement, and plagiarism, have a significant effect on the increase in idea construction both in the control and experimental groups. Strategy instruction (SI) and strategy-based writing instruction (SBI) treatment effects are seen in the value of the effect category, with  $p < 0.05$  both for the experimental and control groups. This means that strategy instruction and strategy-based writing instruction treatment significantly affect changes in the value of idea construction in both groups. The value of the model is also quite large in both categories, as indicated by the  $R^2$  in the model control of 0.99 (99%) and in the experimental model of 0.98 (98%).

TABLE 4  
TEST RESULTS ANCOVA ALL DEPENDENT VARIABLES REVISION

Revision				
Variable	Control		Experimental	
	Pre	Post	Pre	Post
Content	6,895.42	0.01	5,089.71	0.01
Organization	321.66	0.01	163.74	0.01
Language	1.35	0.25	1.07	0.31
Citation	7.82	0.01	27.01	0.01
Modified	67.51	0.01	171.22	0.01
Replacement	16.22	0.01	0.02*	0.89
Plagiarism	0.59	0.45	10.12	0.01
Creativity	0.11*	0.75	6.01	0.02
Corrected Model	913.83	0.01	608.01	0.01
Intercept	639,424.24	0.01	814,492.88	0.01
Category	0.01	0.01	3.16	0.08
R-Sq	0.99		0.99	

\*: Not Significant P value  $> 0.05$

The results of partial data analysis show that content, organization, language, citations, creativity, modified, replacement, and plagiarism variables significantly increase revision, both in the control and experimental groups ( $p < 0.05$ ). The creativity variable in the control group has no significant effect on revitalization, and the experimental group variable has no significant effect on revision ( $p > 0.05$ ).

## IV. DISCUSSION

The purpose of this study is to determine the effect of strategy instruction and strategy-based writing instruction on students' writing abilities. Students with and without learning difficulties are explicitly taught pre-validated writing strategies and procedures for managing writing strategies and processes during writing class. Additionally, researchers

examined changes in student performance during instruction to ascertain the contribution of specific instructional components.

*A. RQ1: The Effect of Strategic Instruction and Strategy-Based Writing Instruction on Students' Writing Abilities in the Control Group*

The results of our study indicate that the strategy instruction and strategy-based writing instruction on students' abilities in the control category have a less effective effect. The control of strategic instructions and strategy-based writing instruction for six variables in the control group (idea construction, revision, modified, replacement, plagiarism, and creativity) were not significantly different between the pre-test and the post-test ( $p > 0.05$ ). There were four other variables (content, organization, language, and citation) whose mean was significantly different between the pre-test and post-test ( $p < 0.05$ ). Therefore, in developing performance tasks, the representativeness of the test content is an important issue. This is supported by Zhang (2013), who studied the influence of strategy instruction on the overall writing of secondary school ESL students. They have significantly underestimated the feasibility and effectiveness of integrated strategy instruction assignments at the higher education level. Additional research is needed to determine the effectiveness of strategy instruction for students in inclusive settings where content instruction (e.g., social studies) takes precedence over process instruction. Conferences and mini-lessons integrated into the author's class make it relatively simple to provide the clarity and support necessary for individual students to develop and personalize composition strategies.

*B. RQ2: The Effect of Strategic Instruction and Strategy-Based Writing Instruction on Students' Writing Abilities in the Experimental Group*

Our findings show that the effect of strategic instruction and strategy-based writing instruction on students' writing abilities in the experimental group is effective. In the experimental group, four variables (revision, modified, replacement, and plagiarism) showed significant differences between the pre-test and post-test ( $p > 0.05$ ). However, the other six variables significantly differed between the pre-test and post-test ( $p < 0.05$ ). This suggests that the treatment of strategic instruction before the pre-test and after the post-test significantly changes the mean of the six variables (idea construction, content, organization, language, citation, and creativity). The results of this study are supported by the findings of Graham et al. (2012). They showed that the use of strategic instruction was more effective than other educational approaches for primary and secondary-level students and that strategic instruction improved the quality of students' writing. Another study by Zhang (2013) discovered that instruction positively affects discourse synthesis writing. More importantly, the study demonstrated the feasibility of incorporating synthesis writing instruction into an EFL course without significantly disrupting the curriculum. Additionally, the strategy instruction and strategy-based writing instruction procedures were effective for college students in this study because there was a significant difference in students' writing abilities before and after treatment. While pre-treatment students performed within the normal range on standardized achievement tests and were described as "average" writers by their teachers, there was a significant difference in their schema structure and writing quality. Thus, this study shows that this strategy instruction and strategy-based writing instruction improve the writing of students with various levels of writing ability.

*C. RQ3: The Difference in Effects Produced by Strategy Instruction and Strategy-Based Writing Instruction on Students' Writing Abilities in the Control and Experimental Groups*

The findings of our study revealed the differences in the effects of strategy and strategic-based writing instruction on students writing abilities in the control and experimental groups, as indicated by the ANOVA test. The difference between the pre-test and post-test indicates that the data in the experimental group is better than the control group. These results confirm the previous finding that the effect of strategy instruction on synthetic writing on students' writing performance in the experimental group was more effective than control (Machili et al., 2020). In contrast, prior research by Bai et al. (2014) found that learners at all proficiency levels used planning strategies more frequently than other types of writing strategies. Thus, it is possible that students in the experimental group planned their writing more carefully following the intervention. This research demonstrates that studies incorporating a complete cycle of strategy instruction and strategy-based writing instruction have a greater effect than those focusing exclusively on one or two groups of writing strategies. Writing strategy instruction and strategy-based writing instruction were successfully implemented in a teaching environment at the State University of Malang to improve students' writing abilities. The findings indicated that both strategy instruction and strategy-based writing instruction were effective at increasing students' writing competence and strategy use.

## V. CONCLUSION

This study reveals the effect of using strategy instruction and strategy-based writing instruction on students' writing ability in terms of content, organization, language, citation, idea construction, revision, modified, replacement, plagiarism, and creativity. This study reveals that the use of strategy instruction and strategy-based writing instruction has a good effect on students' writing ability. The results of the ANCOVA test on all dependent variables showed a significant influence on the excitement of idea construction, both in the control and experimental groups.

Additionally, evidence from other studies and the researcher's observation indicates that strategy instruction and strategy-based writing instruction are beneficial. This research makes a significant contribution to writing strategy instruction and research on strategy-based writing instruction. This is one of the few attempts to examine the impact of strategy instruction and strategy-based writing instruction on young EFL writers. The sustained positive effect observed one month after the intervention indicates that the intervention represents a more effective alternative pedagogical approach to writing instruction in universities. Additionally, the study includes a complete cycle of writing instruction, as is customary in authentic university settings. Robust research evidence was used to draw numerous pedagogical implications. Writing strategies should be explicitly taught and integrated into existing writing lessons. Teacher training should be prioritized to ensure that strategy instruction and strategy-based writing instruction are implemented successfully in the classroom. To achieve a sustained positive effect, a full cycle of locally contextualized writing instructions is required.

This study has several limitations, some of which can be addressed in future research. This study only examined the effect of strategic instruction on students' writing abilities in terms of content, organization, language, citation, idea construction, revision, modification, replacement, plagiarism, and creativity. It can be expanded in the future with such components as planning, feedback handling, and text generation. Future research will be able to determine the greater effect that strategic instruction and strategy-based writing instruction have on not only students' writing abilities but also their writing performance.

#### ACKNOWLEDGMENTS

The project was funded by the University of Pahlawan Tuanku Tambusai (2022-0158). The researchers gratefully thank the agency that fully funded this project and the two anonymous reviewers and editors for their helpful suggestions and comments during the preparation of this article.

#### APPENDIX. SCORING RUBRIC

NO	Variable	Range score
1	Idea construction	0-5
2	Revision	0-5
3	Content	0-5
4	Organization	0-5
5	Language	0-5
6	Citation	0-3
7	Modified	0-2
8	Replacement	0-2
9	Plagiarism	0-2
10	Creativity	0-3

#### REFERENCES

- [1] Al-Jarrah, R. S., & Al-Ahmad, S. (2013). Writing instruction in Jordan: Past, present, and future trends. *System*, 41(1), 84–94. <https://doi.org/10.1016/j.system.2013.01.016>
- [2] Azin, N., Biriya, R., & Ameri-Golestan, A. (2021). The Effect of Strategy-based Instruction on Iranian EFL Learners' Learner Autonomy: Learners' Perceptions. *International Journal of Foreign Language Teaching and Research*, 9(38), 237–249. <https://doi.org/10.52547/jfl.9.38.237>
- [3] Baghbadorani, E. A., & Roohani, A. (2014). The Impact of Strategy-based Instruction on L2 Learners' Persuasive Writing. *Procedia - Social and Behavioral Sciences*, 98, 235–241. <https://doi.org/10.1016/j.sbspro.2014.03.412>
- [4] Bai, R., Hu, G., & Gu, P. Y. (2014). The Relationship Between Use of Writing Strategies and English Proficiency in Singapore Primary Schools. *Asia-Pacific Education Researcher*, 23(3), 355–365. <https://doi.org/10.1007/s40299-013-0110-0>
- [5] Beiler, I. R. (2019). *Negotiating Multilingual Resources in English Writing Instruction for Recent Immigrants to Norway*. 0(0), 1–25. <https://doi.org/10.1002/tesq.535>
- [6] Cohen, A. D. (2002). Preparing teachers for styles- and strategies-based instruction. *Reflecting on Language in Education*, 49–69.
- [7] Cohen, Andrew D., & Weaver, S. J. (2006). *Styles- and Strategies-Based Instruction: A Teachers' Guide*. May, 200.
- [8] Creswell, J. W. (2015). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, Enhanced Pearson eText with Loose-Leaf Version--Access Card Package. Pearson Education, Inc.
- [9] Cumming, A., Kantor, R., Baba, K., Erdosy, U., Eouanzoui, K., & James, M. (2005). Differences in written discourse in independent and integrated prototype tasks for next generation TOEFL. *Assessing Writing*, 10(1), 5–43. <https://doi.org/10.1016/J.ASW.2005.02.001>
- [10] Cumming, A., Lai, C., & Cho, H. (2016). Students' writing from sources for academic purposes: A synthesis of recent research. *Journal of English for Academic Purposes*, 23, 47–58. <https://doi.org/10.1016/j.jeap.2016.06.002>
- [11] Finlayson, K., & McCrudden, M. T. (2019). Teacher-Implemented Writing Instruction for Elementary Students: A Literature Review Teacher-Implemented Writing Instruction for Elementary. *Reading & Writing Quarterly*, 0(0), 1–18. <https://doi.org/10.1080/10573569.2019.1604278>



- [12] Flower, L., & Hayes, J. R. (1981). A Cognitive Process Theory of Writing. *College Composition and Communication*, 32(4), 365. <https://doi.org/10.2307/356600>
- [13] Graham, S., & Harris, K. R. (2009). Almost 30 Years of Writing Research: Making Sense of It All with The Wrath of Khan. *Learning Disabilities Research & Practice*, 24(2), 58–68. <https://doi.org/10.1111/j.1540-5826.2009.01277.x>
- [14] Graham, S., McKeown, D., Kiuahara, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, 104(4), 879–896. <https://doi.org/10.1037/a0029185>
- [15] Graham, S., & Sandmel, K. (2011). The process writing approach: A meta-analysis. *Journal of Educational Research*, 104(6), 396–407. <https://doi.org/10.1080/00220671.2010.488703>
- [16] Gu, P. Y. (2019). Approaches to learning strategy instruction. *Learning Strategy Instruction in the Language Classroom: Issues and Implementation*, 22–37.
- [17] Hinkel, E. (2006). Current Perspectives on Teaching the Four Skills. *TESOL Quarterly*, 40(1), 109. <https://doi.org/10.2307/40264513>
- [18] Kirkpatrick, L. C., & Klein, P. D. (2009). Planning text structure as a way to improve students' writing from sources in the compare-contrast genre. *Learning and Instruction*, 19(4), 309–321. <https://doi.org/10.1016/j.learninstruc.2008.06.001>
- [19] Lam, R. (2015). Understanding EFL students' development of self-regulated learning in a process-oriented writing course. *TESOL Journal*, 6(3), 527–553. <https://doi.org/10.1002/tesj.179>
- [20] Lee, J. (2019). students' writing performance in the context of English as a foreign language: an approach using structural equation modeling. *Reading and Writing*, 0123456789. <https://doi.org/10.1007/s11145-019-10007-2>
- [21] Machili, I., Papadopoulou, I., & Kantaridou, Z. (2020). Effect of strategy instruction on EFL students' video-mediated integrated writing performance. *Journal of Second Language Writing*, 48(November 2018), 100708. <https://doi.org/10.1016/j.jslw.2019.100708>
- [22] Nguyen, L. T. C., & Gu, Y. (2013). Strategy-based instruction: A learner-focused approach to developing learner autonomy. *Language Teaching Research*, 17(1), 9–30. <https://doi.org/10.1177/1362168812457528>
- [23] Rubin, J., Chamot, A. U., Harris, V., & Anderson, N. J. (2007). Intervening in the use of strategies. *Language Learner Strategies*, 30, 29–45.
- [24] Salah-Din, D., Persky, H., & Miller, J. (2008). *The nation's report Card™: Writing 2007*. National assessment of educational progress at grades 8 and 12. National, state, and trial urban district results. NCES 2008-468. National Center for Education Statistics. Writing.
- [25] Victori, M. (1999). An analysis of writing knowledge in EFL composing: A case study of two effective and two less effective writers. *System*, 27(4), 537–555. [https://doi.org/10.1016/S0346-251X\(99\)00049-4](https://doi.org/10.1016/S0346-251X(99)00049-4)
- [26] Yang, H. C., & Plakans, L. (2012). Second Language Writers' Strategy Use and Performance on an Integrated Reading-Listening-Writing Task. *TESOL Quarterly*, 46(1), 80–103. <https://doi.org/10.1002/tesq.6>
- [27] Zhang, C. (2013). Effect of instruction on ESL students' synthesis writing. *Journal of Second Language Writing*, 22(1), 51–67. <https://doi.org/10.1016/j.jslw.2012.12.001>



**Masrul** is a lecturer at the University of Pahlawan Tuanku Tambusai, Riau, Indonesia. He is master in English education and he has completed his Doctoral degree in Universitas Negeri Padang. He taught at English education department and he is expert at writing, reading, assessment and evaluation of English education. He has written several four articles related to the assessment of students' reading and writing and five authors have cited his article. Moreover, he is also active on writing program which focus on research and writing scientific article. For his details, please contact him at e-mail: [masrulm25@gmail.com](mailto:masrulm25@gmail.com). Hp/Wa: +62 853-6494-0453



**Gunadi, R Andi Ahmad** is a full-time staff at the Master's Program of Educational Technology, Faculty of Education, Universitas Muhammadiyah Jakarta (UMJ), Indonesia. He is an active lecturer and researcher in educational technology, literacy, and material development. Besides, he is also active as a speaker in national and international webinars and seminars in Indonesia and some foreign International Universities. He has authored numerous scholarly papers in the areas of education, technology, and material development. Now, he is completing a project in Educational Technology Development granted by his university. Some grants from Kemristekdikti are also his previous parts of projects dealing with the development of material, and a technological approach. For his details, please contact him at e-mail: [aagunadi@umj.ac.id](mailto:aagunadi@umj.ac.id), HP/WA: 085814200910.



087882445275.

**Aswir** is a faculty staff of the English Education Study Program at the Faculty of Education at Universitas Muhammadiyah Jakarta (UMJ), Indonesia. Handling Foreign Language Community (FLC) is his other activity. His interests are in English Language Education Department, Technology Support, and Material Development in Kurikulum Merdeka. He is active in English associations, seminars, and collaborative research. His scholarly papers are published in some reputable journals both in Indonesia and foreign countries. His research in the areas of material development is one of his works supported by government funds from Hibah Kemristekdikti. Aswir developed and implemented English learning methodologies, which optimally utilize technologically enhanced language learning. Besides research activities, he is also a coach for teacher development. Please contact him for further details at e-mail: [aswir@umj.ac.id](mailto:aswir@umj.ac.id), HP/WA:



**Hamdani, Beny** is a lecturer of Universitas Islam Zainul Hasan Genggong, Jawa Timur, Indonesia. He taught at English Language Education Department Department, and he is expert at TEFL (Teaching English as Foreign Language), translation and linguistics. He has published 22 articles related to English education, as well as English language teaching. He has become active writer since 2016. His research has been cited by several authors. Then, he is actively involved in teacher's development program related to the digital literacy in Jawa Timur, Indonesia. Please contact him for further details at e-mail: [benyhamdani.ielts9.consultation@gmail.com](mailto:benyhamdani.ielts9.consultation@gmail.com)



**Rasyidah, Ummi** was born in November 16th, 1987 in Kampung Tengah, Indonesia. She earned her bachelor degree from Universitas Riau in 2010. Two years after graduation, she obtained her master's degree also majoring in English Education at Universitas Negeri Padang. In August 2016, she was admitted to continue her study at the Post Graduate Proram in ELT of Universitas Negeri Malang and obtained her PhD in 2021.

She has been a full-time faculty member of the English Department of Universitas Pasir Pengaraian, Indonesia, since 2013 and involved in the development of English Language Curriculum and in other related activities at national levels such as, TEFLIN, KODE-LN, Visiting Researcher, *Praktisi Mengajar*, National Reviewer, ect. During her study at the Post Graduate Program, she got scholarship from LPDP in collaboration with Kemenristek DIKTI called BUDI-DN in 2019. She has also been participated in Enhancing International Publication Program at Northern Illinois University (NIU), US in 2019.

Dr. Rasyidah is awarded *Hibah Dosen Pemula* in 2013 and 2014 respectively from DIKTI. She also gets recognition from LPDP for her work in *The Qualitative Report* in 2020. At present, she has published articles both in national and international reputable journals where her main research interest includes assessment, reading, critical thinking, professional development, and ELT. She can be reached through her email address for further communication at [ummirasyidah@yahoo.com](mailto:ummirasyidah@yahoo.com) / [ummirasyidah1987@gmail.com](mailto:ummirasyidah1987@gmail.com).



**Sri Yuliani** is a lecturer of English Education Study Program, Education Faculty in Universitas Islam Riau (UIR), Pekanbaru, Indonesia. She is an active lecturer in handling English Club, National and International Reviewer in some Journals. She is also active as speaker in some webinar and seminar in Indonesia and some foreign International University. She has authored numerous scholarly papers in the areas of education, technology, curriculum and now she is doing project in Educational Robot. Her research in the areas of educational technology has been supported by government funds from Hibah DIKTI. Sri Yuliani has developed and implemented pedagogical approaches, which optimally utilize computer and communication technology in support of teaching/learning processes and has developed unique ways to improve these processes in form of digital storytelling. For knowing further please contact her at: Email:

[sriyuliani@edu.uir.ac.id](mailto:sriyuliani@edu.uir.ac.id), HP/WA: 085278905799.