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# The effects of explicit strategy-based instruction (SBI) and implicit task-based instruction on EFL students' oral performance (a pilot study)



## **Abstract**

This pilot study aimed to investigate the effects of two classroom instructions on the complexity, accuracy, and fluency of EFL students' speaking. The first one involved implicit task-based instruction with meaning-focused pedagogic tasks. The second instruction reduced students' practice time but complemented it with explicit strategy-based instruction (SBI) to raise their metacognitive awareness in planning, monitoring, and evaluating their speech. Participants in the explicit instruction group learned to practice three specific strategies, while the first group had only more practice opportunities. The study involved 16 English students from a third-tier university in Indonesia. Audio recordings of each participant's oral presentations during the pre-test and the post-test were transcribed and coded for non-parametric analysis. The findings revealed that both instructions had a comparable impact on EFL students' oral performance by improving the complexity but not accuracy and fluency. There was also a possible trade-off effect found in participants' performance. The study findings could provide a basis for EFL teachers to use either explicit strategy instruction or implicit instruction for their speaking class.

**Keywords**: Explicit and implicit instruction, learning strategy, metacognitive awareness, trade-off effect

## INTRODUCTION

Learning strategies are believed to have an association with second or foreign language proficiency (Ardasheva, Wang, Adesope, & Valentine, 2017; Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Cohen, Weaver, & Li, 1996; Zhang, Thomas, & Qin, 2019). Researchers in language learning argue that learning strategies could help students succeed in their learning. In turn, the strategies could also be applied to help less-achieving students through strategy training instruction (Chamot & Harris, 2019). Despite the benefits, studies investigating strategy training's effects have offered inconsistent results (Ardasheva et al., 2017; Hassan et al., 2005; Plonsky, 2011). Some studies reported that writing and reading skills might be improved by strategy training (Alibabaee, Mehranfar, & Zarei, 2014; Hassan et al., 2005). Meanwhile, Plonsky (2011) argues that the training might impact speaking more, but not listening. Therefore, more research on strategy training instruction is required to quantify research findings regarding the effectiveness of the instruction.

This study tried to compare the impact of two instructional approaches: explicit strategy training instruction using Strategy-Based Instruction (SBI) and implicit task-based instruction, as they were applied in EFL classrooms. The study could contribute to research

application regarding how to conduct a pilot study to prepare for comprehensive main research. The study's results could also enrich the theory and practice of foreign language acquisition.

Within the concept of learning strategy and its instruction, it is believed that proficient students employ particular strategies that set them apart from less experienced students (Nakatani, 2005). Learning strategies have been divided into cognitive, metacognitive, and socio-affective. The cognitive strategy addresses students' subconscious actions and mental processes, the metacognitive strategy focuses on conscious awareness about learning, and the socio-affective strategy addresses students' personal and social interactions (Ardasheva et al., 2017, p. 545). In the literature on strategy training, metacognitive strategies have gotten the greatest attention (Cerezo et al., 2019). The metacognitive strategy involves the strategy of planning, monitoring, and evaluation (O'Malley & Chamot, 1990).

SBI is a teaching approach that could apply strategy training to classroom instruction (Rubin, Chamot, Harris, & Anderson, 2007). There are four phases in the SBI: awareness-raising, presentation and modeling, multiple practice opportunities, and evaluating and transferring (Rubin et al., 2007). To implement the SBI's four phases, the Cognitive Academic Language Learning Approach (CALLA) (Chamot et al., 1999) was used. Awareness-raising is used to identify initial students' learning strategies. The presentation and modeling stage provides students with examples of the new strategies and their implementation. In the multiple practice stage, students practice applying the new strategies to several assigned tasks independently outside the classroom. In the final stage, students evaluate the use of strategies after the task practice and apply them on a different task.

To date, only a few studies are concerned with investigating SBI's effects on students' oral performance (i.e., Birjandi & Seifoori, 2009; Cohen et al., 1996; Gunning & Oxford, 2014). For example, Cohen et al. (1996) investigated the effect of SBI on students' communication skills. The students in the study were trained to prepare, monitor, and evaluate their performance in a conversation. The results suggested that a few students still did not have any improvements after the training. In another study, Goh and Taib (2006) examined the effects of metacognitive strategy on students' listening skills. The study's results indicated that the instruction may have affected students' listening skills. Moreover, Gu (2007) also found that SBI training successfully improves students' writing skills. More recently, Kavani and Amjadiparvar (2018) investigated the effects of SBI on EFL students' reading comprehension skills. They found that SBI might significantly affect students' reading skills.

One strategy training commonly trained through SBI is the metacognitive strategy, which consists of planning, monitoring, and evaluation (O'Malley & Chamot, 1990). The planning phase trains students to plan how to do a task, including preparing their own goals and specific steps to achieve them. This task planning encompasses retrospective and prospective elements (Little, 1996). Retrospective planning is concerned with the effectiveness of the executed activity, while prospective planning establishes the conceptual and linguistic requirements of the activity. Three strategies for planning are considered useful for speaking tasks. Those are problem identification, planning content, and planning language (Wenden, 1995). Furthermore, Wenden (1995) defines problem identification as the plan to assess a task's objective and anticipated result. Planning content deals with deciphering the content of a task, while planning language is for language preparation to deliver a task. Ellis (2005) argues that both of these planning types are strategic planning, which are useful for performing a task.

The monitoring phase is applied during task performance. This phase helps students to assess, adjust, and cope with their ongoing performance. O'Malley and Chamot (1990) have suggested some commonly used monitoring strategies such as production, auditory, visual, and strategy monitoring. Production monitoring is specifically applicable to speaking tasks, while strategy monitoring is connected to students' awareness in using a strategy (O'Malley & Chamot, 1990). Therefore, these two types of monitoring strategy were adopted in this study. As the final step, the students evaluate the performed task. O'Malley and Chamot (1990) suggest some evaluation strategies, such as production, performance, and strategy evaluation.

A theoretical model of task-based L2 or EFL performance is necessary since the proposed study examined how strategy training affected task-based oral performance. Skehan (2014b) suggests a model of L2 task performance with restricted attention capacity that incorporates trade-offs in the complexity, accuracy, and fluency of students' L2 production. Skehan (2014) argues that task demands would affect students' attention differently depending on their performance. Unlike proficient speakers, L2 and EFL students must focus on what they want to say and how they can say it because they do not automatically have access to the vocabulary and grammar they need to express ideas. Thus, difficult tasks will simultaneously demand students to prepare their language and content, and Skehan (2014) contends that they cannot perform both of these things at once. Skehan (2014) argues that a 'trade-off' effect might occur when L2 or EFL students perform a speaking task. Students are more likely to use largely automated language—which they can

generate more precisely and fluently—if they concentrate on the subject. Alternately, they can concentrate on language and experiment with less accurate and fluent but more syntactically complex language. This forced decision causes a collapse in oral performance either way.

Explicit SBI instruction and supervised practice with task-relevant strategies may lower the L2 production requirements on difficult tasks for students and enhance their performance. In addition, repeated task practice, mostly performed under implicit instruction, also can lessen the production demand because it allows students to rehearse, modify, and improve their performance. Therefore, the final performance of the task would be better than the first. Hence, this study applied both SBI explicit instruction implicit task-based instruction, to improve EFL students' speaking skills through the utilization of speaking tasks.

It was hypothesized that both instructions would be able to improve participants' oral performance. The explicit instruction was considered to be able to create a better improvement because this group had been given the opportunity to experience a series of strategy training instructions. Hence, this study was focused on investigating three research focus: the effects of implicit instruction, the effects of explicit strategy-based instruction, and the different effects between implicit instruction and explicit strategy-based instruction on L2 students' oral performance.

## METHOD

This pilot study used an experimental design involving two groups of students who received two different treatments. The first one was the implicit group with implicit instruction and practice activity. The other was the explicit group who received metacognitive strategies training in explicit instruction. The study was conducted on five consecutive days. Two days were used for pre-test and post-test, while the other three days were for instruction.

The participants were English students at a three-year vocational university. They were all third-semester students (second year). Twenty students from two intact classes were invited to join the study, and all agreed to be involved. These students were in their third semester at the university. Ten students from one class were chosen to be in the explicit group, while ten others from the other class were in the implicit group. However, when the study started, only seven students from the explicit group showed up. Meanwhile, the implicit group had nine.

Both groups were provided with an identical set of speaking tasks. The tasks assigned participants to report a one-minute monologic news story of oral presentations. Both groups gave and completed three tasks during every lesson or training time in the study. The first one was an input-based listening task, the second was an output-based reading task, and the third was an output-based listening task. The presentation was based on a news video available on YouTube.

Apart from the task materials, metacognitive strategies training materials specifically designed for the explicit group were also prepared. The strategies training was based on the CALLA model. The strategies of planning, monitoring, and evaluation used in the study were problem identification, production monitoring, and evaluation monitoring.

One-minute monolog news reports served as both the pre-test and post-test materials. Although the stories on the tests differed from those that students summarized in class, they were comparable in terms of length and difficulty. The news events' topics of the tests were similar to those given for the training session. The complete list of materials and topics used in this study can be seen in Table 1.

Table 1. Topics and Materials for Pilot Study

Day	Activity	Strategies Material	News Topic
1	Pre-test	None	Terror Incidents in Indonesia
2	Instruction	Problem identification	Terrorist Attacks
3	Instruction	Production monitoring	Flight <mark>Accident\$</mark>
4	Instruction	Production evaluation	Accidents at Sea
5	Post-test	None	Natural Disaster in Indonesia

The study was conducted over five consecutive days in a language laboratory in the university. The study was begun with the pre-test on Day 1, in which both groups received the same test. The topic of the pre-test was *Terror Incident in Indonesia*. The pre-test lasted for 45 minutes and consisted of 30 minutes of preparation and 15 minutes of presentation. Students watched a new video and planned for their own presentation during the preparation time. The post-test, which was administered on Day 5, also used the same method but with a different topic, *Natural Disaster in Indonesia*.

The respective treatment, which took three days, was started on Day 2 and finished on Day 4. Each day consisted of one meeting discussing a different topic: *Terrorist Attacks, Flight Accidents, and Accidents at Sea*. A two-hour lesson was given to them in every meeting. There were three sessions concluded in each of the 2-hour lessons: introduction, planning and practice, and performance (task recording). Participants in both groups completed one

identical task in each session. Both groups received the same instruction in the introduction and performance sessions but not in the planning and practice. In general, the introduction session took about 30 minutes, the planning and practice for 75 minutes, and the performance took 15 minutes.

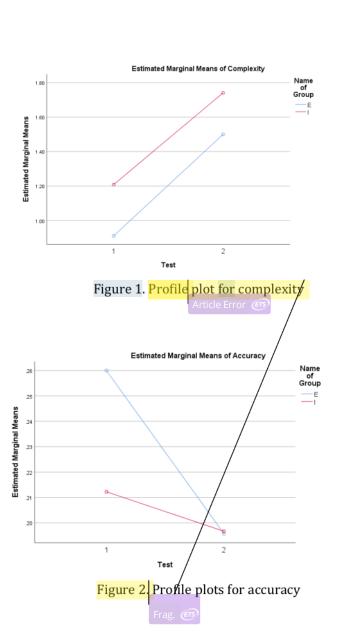
In the planning and practice session, the explicit group performed the four phases of CALLA training. The first phase, awareness raising, was used to identify students' learning strategies through a discussion. In the second phase, presentation and modeling, the students were given one example of a learning strategy and the way to apply it. They were then asked to apply the strategy to a task during the third phase, known as multiple practice opportunities. Finally, the students evaluated their strategy use and applied it to another task in the fourth or evaluating and transferring phase.

All of the audio recording data of students' oral performances were first transcribed verbatim into Analysis of Speech Units (AS-unit) (Foster, Tonkyn, & Wigglesworth, 2000). AS-unit is syntactic for the spoken language, also known as a single speaker's utterance (Foster et al., 2000, p. 365). The analysis used AS-unit to measure each student's oral performance's complexity, accuracy, and fluency.

In measuring syntactic complexity, subordination was calculated as standard s-nodes per AS-unit measures (Foster et al., 2000). Subordination was derived from dividing number of clauses by number of AS-unit. Ascuracy was resulted from dividing number of errors by the number of words (Ellis & Barkhuizen, 2005). Meanwhile, to measure fluency, one subconstructs, speech rate, was coded (de Jong, Steinel, Florijn, Schoonen, & Hulstijn, 2013). Speed rate was defined as the number of syllables produced in a second (Kormos & Dénes, 2004). This study operationalized speed rate as the total number of syllables divided by total production times. The statistical analysis software SPSS 25.0 was used, and a series of Multivariate tests were applied to all measures. The alpha was set at 0.05 to define statistical significance.

# FINDING AND DISCUSSION

To visualize any potential improvements experienced by both groups, Figure 1, Figure 2, and Figure 3 show the gain of each group in complexity, accuracy, and fluency from pre-test to post-test.



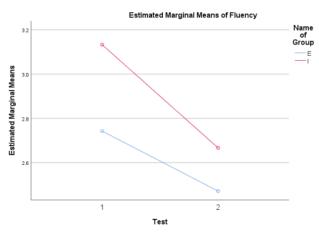


Figure 3. Profile plot for fluency

The three figures indicate that both groups had a comparable trend of gains. The improvement can only be seen in complexity, while accuracy and fluency experienced a deterioration since the mean scores decreased from pre-test to post-test. For further analysis, Table 2 shows pairwise comparison results between the explicit and implicit groups in the pre-test and post-test conditions.

Table 2. Pairwise Comparisons results of groups and tests

		Sp.	ETS			95% Confidenc	e Interval for	
Measure		Mean Difference		Std.	Sig.b	Difference		
Measure			(I-J)	Error	Jig.b	Lower Bound	Upper Bound	
Between Gro	ups							
Fluency	E	I	-0.29	0.27	0.29	-0.86	0.28	
	I	E	0.29	0.27	0.29	-0.28	0.86	
Accuracy	E	I	0.02	0.03	0.41	-0.04	80.0	
	I	E	-0.02	0.03	0.41	-0.08	0.04	
Complexity	E	I	269*	0.11	0.03	-0.51	-0.03	
	I	E	.269*	0.11	0.03	0.03	0.51	
Between Te	sts							
Fluency	1	2	.369*	0.17	0.04	0.01	0.73	
	2	1	369*	0.17	0.04	-0.73	-0.01	
Accuracy	1	2	.040*	0.01	0.00	0.02	0.06	
	2	1	040*	0.01	0.00	-0.06	-0.02	
Complexity	1	2	561*	0.11	0.00	-0.80	-0.32	
	2	1	.561*	0.11	0.00	0.32	0.80	

As can be seen from Table 2, both groups experienced some improvement from pretest to post-test in all three measures. The improvements reached a statistically significant level that ranged from p < 0.01 for accuracy and complexity to p = 0.04 for fluency. However, no significant differences are found when the improvement between groups is compared. The multivariate result, as shown in Table 3, confirmed the result that each group gained a significant improvement from the pre-test to the post-test (p < 0.01). The observed power of the improvement test was also acceptable (> 0.80). Again, improvement between groups was found insignificant (P = 0.24).

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Table 3. The multivariate result of groups and tests

Within Effect	-Subjects	Value	F	Hypothesis	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
Test	Pillai's	0.74	11.64c	3.00	12.00	0.00	0.74	34.93	0.99
	Trace Po								
	Wilks'	0.26	11.64c	3.00	12.00	0.00	0.74	34.93	0.99
	Lambda 🖯								
Test *	Pillai's	0.29	1.63c	3.00	12.00	0.24	0.29	4.88	0.32
Group	Trace	ssessive 📧							
	Wilks'	0.71	1.63c	3.00	12.00	0.24	0.29	4.88	0.32
	Lambda 🕤								

To discuss the findings in regard to the first research focus, the effect of Implicit instruction on students' oral performance, the results indicated that the implicit group appeared to have a significant improvement in their oral performance in terms of the complexity of their speech. This result is in line with several previous studies (e.g., Ahmadian & Tavakoli, 2011; Ferrari, 2012) that found instruction could improve students' complexity. It seemed that the students paid more attention to the content of their speech by trying to make the speech more complex. It also seemed that more practice opportunity given to them was used to revise the content and language use for the speech. This attention to complexity also seemed to make students ignore the accuracy and fluency of the speech.

This finding is similar to the 'trade-off effect' theory, which states that aspects of speech that receive enough attention will reach optimal performance while the others with less or limited attention will deteriorate (Skehan, 2014a). Thus, it might be concluded that for students within the context of the study, implicit instruction could have an effect on the complexity of students' oral performance. In regard to the second research focus, the explicit group showed similar results. The explicit instruction under the SBI also seemed to have a better impact on the complexity than the accuracy and fluency of their speech. In fact, there were also visible declines in the accuracy and fluency, as shown in Figure 2 and

Figure 3. Although most of the previous studies under the SBI approach did not use CAF measures, most of those studies found a link between the SBI and students' improvement in general speaking proficiency (e.g., Chou, 2017; Kim & Tracy-Ventura, 2013; Sarafianou & Gavriilidou, 2015). Therefore, the result of this present study supports those previous SBI studies in a particular aspect of oral performance because students in this study were able to improve the complexity of their speech after being trained with the SBI. It is safe to assume that training students explicitly to use specific strategies in planning the content of their speech and make some evaluations and revisions with repeated practice could impact the complexity of the speech.

In light of the third research focus, different effects between the SBI explicit instruction and implicit instruction, the present study found that both instructional approaches had a comparable effect on students within the context of the study. These findings, to some extents, corroborate previous studies' findings (e.g., Andrews, 2007; Marzuki, 2021; Wang, 2014), which conclude that explicit and implicit instruction would give different benefits to EFL students. Both instructions could improve students' complexity at the expense of accuracy and fluency. The only difference between both groups was in accuracy, in which the implicit group experienced more decline than the explicit group. However, this decline is negligible and cannot be discussed further in relation to the instructional effect. To the author's knowledge, the present study is the only one that attempts to compare the effect of both instructional conditions on the EFL context. Therefore, comparing the results of the present study with others is impossible.

The present study also found evidence of trade-off effects in both groups of study, indicating that EFL students tend to prioritize by focusing more on improving the complexity of the speech when instructed either by explicit strategy training or implicit instruction. EFL students have capacity limitations in their language repertoire; therefore, they have to divide their attentional resources between all the processes required to perform a speaking task or make a speech, like selecting the input, processing effective information, and preparing the response. Usually, some related areas of performance such as linguistic complexity, accuracy, and fluency will compete with each other. The performative aspect, which gains more attention, will reach optimal performance while others that do not become flawed (Skehan, 1998, 2009). The present study's results indicated that explicit and implicit instruction when equipped with a degree of planning time and repeated practice. However, the result showed an insignificant difference between groups' oral performance despite the gain that could switch students' attention to

the complexity of their speech. As a result, the accuracy and fluency of the speech are neglected. Some efforts are required to make both instructional approaches able to improve the complexity and accuracy and fluency of their speech. These efforts will become the recommendation for future studies.

Based on the results, it is believed that two main reasons could become the cause are the duration of the training and the speaking tasks being employed. The explicit group trained three metacognitive strategies during three lessons within three days consecutively. Perhaps the result would be more successful if they were given more opportunities and time to practice with different topics. Oxford (1990) suggests that students must be provided with plenty of time to practice their learning strategies. Future studies are recommended to have a longer study duration employing more practice opportunities for students.

## CONCLUSION

Both instructions were predicted to have an impact on improving students' oral their performance. Also, the explicit instruction was considered to give a better impact since students in this group had been given the opportunity to experience a series of strategy training instructions. However, the findings revealed that the explicit and implicit instruction seemed to have comparable effects on students' oral performance. In terms of how to conduct a comprehensive pilot study, the findings of the study could contribute to research application regarding how to conduct a pilot study as a means to prepare for comprehensive main research and the theory and practice of instructed second language acquisition. Also, by employing the suggestions stated in the discussion, the study could improve teaching practices by providing choices for teachers on whether to use explicit or implicit instruction in L2 speaking classes and better understand the specific instructional objectives that might be achieved.

However, this study had some limitation that could also be the recommendation for future studies with similar context. This study involved a limited number of participants and instructional meetings. More participants would present more robust results for a quantitative study, therefore future studies are suggested to employ this. Meanwhile, limited number of instructional meetings would limit participants' opportunity to have practice session within the classroom. This limitation could hinder their language development, especially the development of the language skill being learned. For this reason, it is suggested that future studies should consider applying more instructional meetings.

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