



DISCOVERY LEARNING STRATEGY: INTEGRATING THINK-PAIR-SHARE AND TEACHER'S CORRECTIVE FEEDBACK TO ENHANCE STUDENTS' WRITING LANGUAGE ACCURACY

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ABSTRACT

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This research aimed at finding out the students' writing language accuracy and their experience (perception) after learning how to use the integration of Think-Pair-Share (TPS) and Teacher's Corrective Feedback (TCF) within discovery learning strategy. A quantitative study in the form of pre-experimental design was conducted which involved 24 students of English study program in the Faculty of Education at Lampung University-Indonesia who took Pre-Intermediate writing class. These students were prepared to be junior and/or senior school English teachers. Therefore, language accuracy was badly needed. The results demonstrate that there was improvement of students' writing language accuracy after the implementation of integrating Think-Pair-Share and teacher's corrective feedback within discovery learning strategy. Grammar accuracy was the highest compared to vocabulary and spelling accuracy. In addition, the students demonstrated positive perception among the five categories of perception, interest and motivation were the highest. It is because of the steps of TPS and minimum TCF in the form of scaffolding and constructive questions of the teacher.

Contribution/Originality: This study contributes to the existing literature in the areas of discovery learning, TPS, TCF and perception. The study provides evidence how the integration of TPS and TCF within the concept of discovery learning can be beneficial in attaining students' writing language accuracy.

1. INTRODUCTION

In this modern era with the massive development of technology, written form of communication has become more essential than ever (Brown, 2001; Coulmas, 2002; Graham, 2008; Graham & Perin, 2007). However, writing is still considered difficult for learners because they need to produce their ideas into words, sentences, paragraphs, and composition in written form (Byrne, 1993; Heaton, 1991; Kellogg, 2008). Puengpipattrakul (2009) observed many things to consider in writing, such as the process of inventing ideas, thinking about how to express them, and organizing them into statements and paragraph. Prior to this idea, Heaton (1991) suggested that for intermediate level students, it will be much better if it is limited to linguistic knowledge such as grammar, vocabulary and spelling. This idea is in line with the input hypothesis suggested by Krashen (1985); Krashen (1994); Krashen (2003) that the input should be $i + 1$.

Referring to the ideas above, therefore, English foreign language teachers need to consider about the appropriate technique. Portnov-Neeman and Barak (2013) implied that learning is a cognitive process of knowledge construction and this can be done through discovery learning methods (Kirschner, Sweller, & Clark, 2006; Mayer, 2004). Discovery Learning is inspired by constructivism learning theory proposed by previous experts such as, Dewey (1938) and Bruner (1961). Many studies have been conducted to see its effectiveness (Kirschner et al. (2006); Lee (2014); Mahmoud (2014); Trang (2009); Alfieri, Brooks, Aldrich, and Tenenbaum (2011); Mukharomah (2015); Arifani (2016) and Nastiti and Azwandi. (2017)).

However, among the previous studies, integrating Think-Pair-Share (TPS) and teacher's corrective feedback (TCF) within discovery learning have not been explored yet. TPS is beneficial in teaching because the learners can use their critical thinking and help each other (Candraloka, 2016; Liang, 2002; Putri, 2017; Sharma, 2018). To make the students' critical thinking higher, there must be a trigger. In this present study, the trigger is in form of TCF. The students were given only minimum guidance to discover their language accuracy (Kirschner et al., 2006; Mayer, 2004). In addition, to have rich information of this learning model, the students' perception is also explored because students are in a good position to assess the effectiveness of teaching (Awwad, 2019; Hawkey, 2006; Tavakoli, 2009).

To sum up, having looked into all the studies above, the researchers came to the conclusion that deeper research on discovery learning was still profoundly urgent to conduct for the following reasons. None of the research has discussed TPS and TCF within discovery learning in enhancing students' writing language accuracy. This learning model is also believed to be effective since the students have time to think first with only minimum guidance from the teacher (Kirschner et al., 2006; Mayer, 2004) and then share the things to his pair (Candraloka, 2016; Liang, 2002; Putri, 2017; Sharma, 2018) so that each learner can get input (Krashen, 1985; Krashen., 1994; Krashen 2003). All previous studies have examined writing holistically while in this present study, we focused only on language accuracy, such as accuracy of grammar, vocabulary and spelling (Heaton, 1991). In addition, students' perception was also explored since it gave the information of a quality learning model (Awwad, 2019; Hawkey, 2006; Tavakoli, 2009). Therefore, this present research attempts to find out the improvement of students' writing language accuracy and their experience (perception) in learning by using the integration of TPS and TCF within discovery learning strategy.

1.1. Research Questions

1. Is there any significant improvement of students' writing accuracy after they were taught using the integration model of Think-Pair-Share (TPS) and teacher's corrective feedback (TCF) within discovery learning strategy?
2. Which aspect of language accuracy enhances most significant: Grammar, vocabulary, or spelling?
3. How is the students' perception after the learning process?

2. LITERATURE REVIEW

In this section, the theoretical concepts of discovery learning strategy, Think-Pair-Share (TPS) and teacher's corrective feedback (TCF) are presented. This is followed by the concept of language accuracy and perception.

2.1. Discovery Learning Strategy, Think-Pair-Share (TPS) and Teacher's Corrective Feedback (TCF)

Discovery learning strategy is designed to engage students in inquiry guided by the teacher. It encourages students to arrive at a conclusion based upon their own activities and observations (Balm, 2009; Harmer, 1998). In conclusion, the learners have opportunities to learn from their own and each other's experiences, being actively and personally engaged in the process. It is similar to the concept of Think-Pair-Share (TPS) offered by Lyman (1981). TPS is a collaborative discussion strategy designed to provide the time for students to think and formulate their

individual thoughts and ideas about a given topic or concept before forming a pair with a peer to share their thinking (Lyman, 1981). Using this concept, there are many previous research studies (Rasinski and Padak (2004); Kagan (2009) and Millis (2012). They all agree that TPS has benefits for the learners in learning the target language. During the learning process, the role of the teacher is as a facilitator (Fisher, 2005) and it can be done by using teacher's corrective feedback (TCF). In regard to TCF it will be given a minimum guidance as suggested by discovery learning concept (Kirschner et al., 2006; Mayer, 2004).

In this present study, TCF is managed by using symbols to tell students that something is wrong, such as ; gr (grammar), sp (spelling), and vc (vocabulary). This technique is believed to encourage students to think critically and try to find the solution. In this study, a few steps were taken to implement this this learning model:

1. Every student was given a text about someone's past holiday activity.
2. Every student was instructed to find the verb available in the text by filling the table provided by the teacher. The first two lines were given as examples so that the students have the idea to continue it.
3. Then, each student shared his idea with his pair.
4. The representative of each pairs displayed their idea on LCD; teacher and others offered comments.
5. Each pair was asked the verb (tense) that was mostly used in the text and why.
6. Each student was instructed to write his own past holiday activity and submit it to the teacher.
7. The teacher gave corrective feedback by writing symbols on their works, such as ; gr (grammar), sp (spelling), and vc (vocabulary) and they were instructed to revise individually first and then share it with his pair.
8. Finally, the teacher gave feedback classically.

Table-1. The example of students' activity.

No	V1	V2	V3	Meaning (Indonesian)
1	go	Went	Gone	Pergi
2	Stay	Stayed	Stayed	Tinggal
3	Etc	Etc	Etc	Etc

2.2. Language Accuracy and Perception

Language accuracy has crucial role in writing and it will be much better if teachers pay attention to this fact (Heaton, 1991). In relation to this, Ellis (2009) suggested focused corrective feedback. Therefore, in this present study, the focused corrective feedback is on language accuracy, namely grammar, vocabulary, and spelling since these components play important roles in writing (Hinkel, 2011; Javed, Juan, & Nazli, 2013; Saadian & Bagheri, 2014). In line with this, Bae (2001) stated that language accuracy refers to grammatical usage as prescribed by academic grammars of the language. This statement was supported by Javed et al. (2013); Saadian and Bagheri (2014) and Bae (2001) that adequate competency in grammar will help the author to produce good writing quality and text length reasonable enough to communicate ideas. In line with this, Sheen and Ellis (2011) concluded that unfocused corrective feedback (CF) is of limited pedagogical value and that much can be gained by focused CF where grammatical accuracy in L2 writing is concerned.

Therefore, teachers should identify specific linguistic targets for correction in different lessons. It is because if the teacher corrects all mistakes that the students make, it will possibly cause over-correction that even can harm the students. In other words, if the teacher corrects all the components of writing as suggested by Heaton (1991) the students might get frustration since the input is too high (Krashen, 1985; Krashen, 1994; Krashen 2003) and to many correction will make students get frustration (Harmer, 1998).

Similarly, vocabulary knowledge is often viewed as a critical tool for second language learners because a limited vocabulary in a second language impedes successful communication (Alqahtani, 2015; Susanto, 2017). Another component of language accuracy in this study is spelling. Incorrect spelling can be a barrier to the reader and it may be seen as an indication of lower writing ability or as an indication of lower cognitive abilities in general

(Bolton & Snowball, 1993; Kreiner, Schnakenberg, Green, Costello, & McClin, 2002). Considering this idea, in this present study, the focus is on language accuracy (grammar, vocabulary, and spelling). In addition, to have rich information of this learning model, the students' perception is also explored. This was done based on the statement of Hawkey (2006); Tavakoli (2009) who stated that students are in a good position to assess the effectiveness of teaching. By knowing students' perception, it gives contribution for the teacher to make them more professional in teaching. In short, it gives in-depth information regarding teaching effectiveness (Kimball & Milanowski, 2009; Kumaravadivelu, 1991).

3. METHODOLOGY

3.1. Design

In this study, the writer used One Group Pre-Test – Post-Test Design. By this way the result of the pre-test before treatment was compared with the result of the Post-Test after the treatment (Ary, 2010). The result of the comparisons gave data to conclude whether the treatment was effective or not in enhancing the learners' language accuracy. The questionnaire was distributed to the students after the treatment in order to find out students' perception.

3.2. Participants

The participants of this study were the second semester students of English study program in the Faculty of Education at Lampung University-Indonesia who took the Pre-Intermediate writing class. These students were preparing to become junior and /or senior school English teachers. Therefore, language accuracy was badly needed by them.

3.3. Instrument and Data Collection

There were two instruments used in this research, a writing test and a questionnaire.

- a. The writing test was administered before and after the treatment. The students were asked to choose one of the available topics and were asked to compose a writing text based on a topic of their choice from those suggested (e.g. a. My Embarrassing Moment or b. My Good Experience).
- b. The questionnaire comprised eight open-ended questions, which was administered after the experiment. It was adapted from Mahpul (2014) and its main categories were related to Level of Difficulty (2 questions), Degree of stress (1 question), Confidence (2 questions), Interest (1 questions), and motivation (2 questions), a total of eight questions. The teacher guided the students to answer questions and they were instructed to give answers in their own language, Indonesian. This was done in order to have valid data.

3.4. Data Analysis

a. Writing Language Accuracy

The writing language accuracy of pre-test and post-test of writing were graded by two lecturers to get the score of each student. Each T unit was supposed to have a main clause and all of its modifiers, including any embedded or attached clauses, so that cutting a passage into T-units will be cutting it into the shortest units which are grammatically allowable to punctuate as sentences. Grammar accuracy was measured by the proportion of error-free T-units divided by the total T-units produced by each student.

$$\text{Grammar Accuracy} = \frac{\text{Number of error free T-Units}}{\text{Total target T-Units produced}} \times 100$$

$$\text{Vocabulary score} = \frac{\text{Number of correct vocabulary produced}}{\text{target words length}} \times 100$$

$$\text{Spelling score} = \frac{\text{Number of correct words spelling produced}}{\text{target words length}} \times 100$$

Then, the language accuracy of student’s writing was measured as:

$$\text{Writing accuracy} = \frac{\text{Grammar score} + \text{Vocabulary score} + \text{Spelling Score}}{3}$$

After the students’ writing was checked and graded, the quantitative data in form of raw students’ score of writing language accuracy was analyzed by using Repeated Measures t-test. The significant level (α) used was 0.05. From this process, it could be determined whether or not there was a significant improvement on students’ writing accuracy.

b. Perception

The qualitative data in this study was gained from the open-ended questionnaire. There were eight questions in five categories: levels of difficulty, degree of stress, confidence, interest, and motivation (Mahpul, 2014). Based on the concept of analyzing the qualitative data suggested by Bogdan and Biklen (1992) the following steps were used :

- a. The students’ answers were read comprehensively.
- b. The data was then interpreted and was coded into (+) or (-).
- c. Those codes were grouped based on the categories of perception.
- d. All the codes were counted for each category and were calculated by dividing the number of students (24 students)
- e. Finally, the average score was calculated.

4. RESULT

The research results were analyzed based on the formulated research questions for this study.

- RQ1. Is there any significant improvement of student’s writing accuracy after they are taught using integrating Think-Pair-Share (TPS) and Teacher’s Corrective Feedback (TCF) within discovery learning strategy?

After analyzing the data in both writing pre-test and post-test, the data was compared in order to examine the difference between writing tests and to find out the improvement of students’ writing achievement. The result is shown in Figure 1.

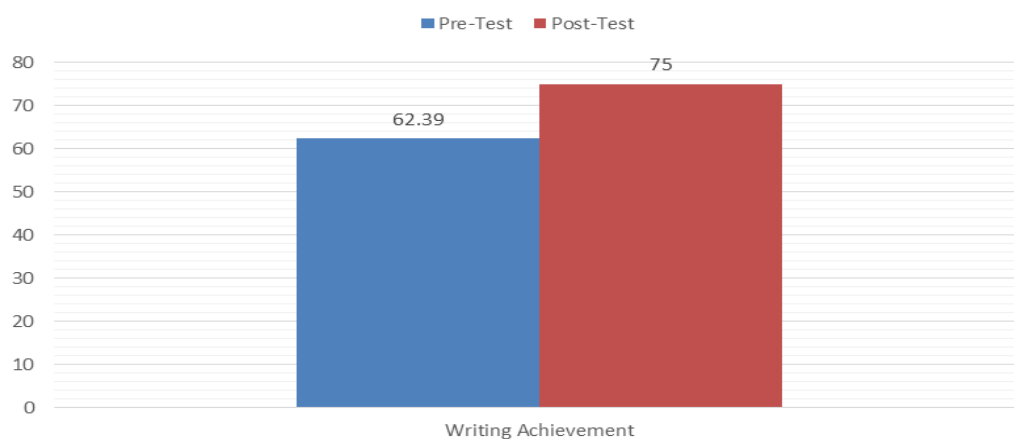


Figure-1. Students’ writing language accuracy achievement.

Figure 1 shows the mean of both students' writing achievement tests. It shows that the mean of students' writing pre-test is 62.39 while the mean of students' writing post-test was 75. Table 2 corresponds to this difference and measures it to be 12.61. This implies that students' writing language accuracy had improved after having been taught by integrating Think-Pair-Share and Teacher's Corrective Feedback within the Discovery Learning Strategy.

In addition to providing statistical result, the data was also analyzed to find out the significant value and the improvement through sample t-tests.

Table-2. SPaired samples test.

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PostTest – PreTest	12.611	16.731	3.415	5.546	19.676	3.693	23	.001

RQ 2. Which aspect of language accuracy enhances most significant: Grammar, vocabulary, or spelling?

In Table 3Table 2 also, it shows that the *p-value* (0.00100) is lower than the 0.05, meaning that there is a statistical significant difference of students' writing achievement between writing pre-test and post-test. In addition, the t-value is 3.693 which is higher than t-table (2.045), meaning that there was improvement of students' writing language accuracy after the implementation of integrating Think-Pair-Share and Teacher's Corrective Feedback within Discovery Learning Strategy.

In order to answer the second research question dealing with the improvement of students' writing language accuracy aspects, the data was analyzed statistically through Independent Sample t-test. The results of each aspect improvement are shown in Figure 2.

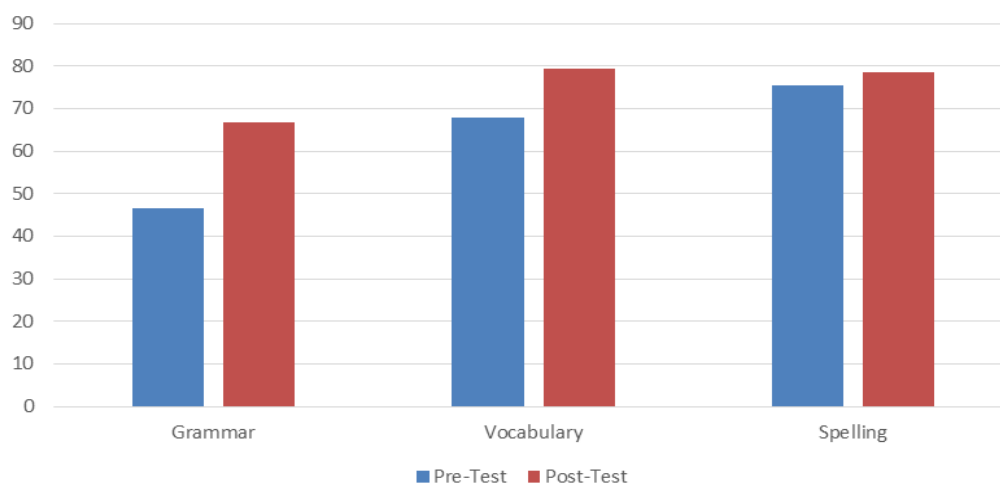


Figure-2. Students' writing language accuracy aspects.

Based on Figure 2, it could be concluded that each of language accuracy aspect shows improvement after students were taught by integrating Think-Pair-Share and Teacher's Corrective Feedback within Discovery Learning Strategy. In addition, each of the student's writing accuracy aspect improved constantly. However, although grammar is shown with the lowest score in each pre-test and post-test, Table 3 reveals that grammar accuracy improved the most while spelling improvement was the least. To provide a statistical hypothesis test, the data was analyzed through independent sample t-test and results are shown in Table 3.

Table-3. Independent samples test.

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
							Lower
Grammar	Equal variances assumed	5.929	46	0.000	23.167	3.908	-31.032
	Equal variances not assumed	5.929	38.910	0.000	23.167	3.908	-31.071
Vocabulary	Equal variances assumed	3.921	46	0.000	11.625	2.965	-17.593
	Equal variances not assumed	3.921	41.926	0.000	11.625	2.965	-17.608
Spelling	Equal variances assumed	1.050	46	0.299	3.042	2.897	-8.873
	Equal variances not assumed	1.050	45.922	0.299	3.042	2.897	-8.873

Table 3 shows that the p-value of grammar and vocabulary is 0.000 (lower than 0.05) which means there is significant difference of students' writing grammar aspect and vocabulary aspect. In addition, the t-value of grammar aspect and vocabulary aspect are 5.929 and 3.921 respectively (higher than t-table, 2.045), meaning that both grammar and vocabulary accuracy show that there is an improvement of grammar and vocabulary. However, students' spelling accuracy shows the p-value is 0.299 (higher than 0.000) meaning that there is no significant difference of students' spelling accuracy between writing pre-test and writing post-test. In addition, the t-value of spelling aspect is 1.050 (lower than t-table, 2.045) meaning that there is no improvement of spelling accuracy after students were taught by integrating Think-Pair-Share and Teacher's Corrective Feedback within Discovery Learning Strategy.

4.1. Students' Perception

RQ 3. How is the students' perception after the learning process?

The students' perception is displayed on the following table.

Table-4. Students' perception after they had experience learning through integrating TPS and TCF

No Categories	Answers											
	Step1 (Think and TCF)				Step2 (Pair and TCF)				Step 3 (share and TCF)			
	(+)		(-)		(+)		(-)		(+)		(-)	
	S	%	S	%	S	%	S	%	S	%	S	%
Level of difficulty	19	79	5	21	22	92	2	8	22	92	2	8
Degree of stress	22	92	2	8	24	100	0	0	18	75	6	25
Confidence	22	92	2	8	22	92	2	8	18	75	6	25
Interest	24	100	0	0	24	100	0	0	24	100	0	0
Motivation	24	100	0	0	24	100	0	0	24	100	0	0
Average	22	92	2	8	23	97	1	3	21	88	1	12

Note:

TCF = Teacher corrective feedback.

S = Students.

It can be seen in Table 4 that 22 (92%) students have positive perception on "Think" integrated to TCF stage, 23 (97%) on 'Pair' stage, and 21 (88%) on "share" stage.

This perception is also can be seen on this following Figure 3.

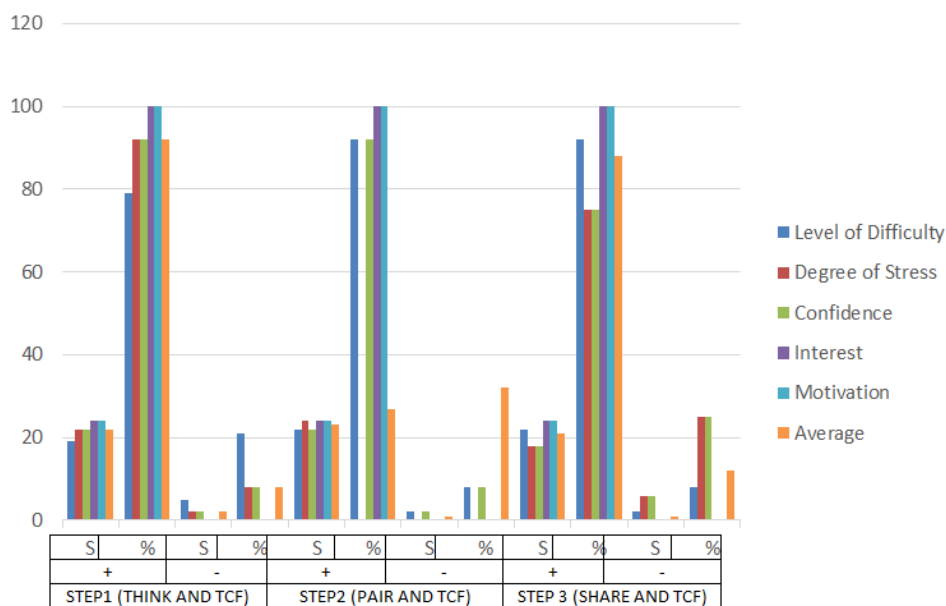


Figure-3. Students' perception after they had experience learning through integrating TPS and TCF

5. DISCUSSION

The study had premised that by integrating the concept of TPS and TCF within discovery learning strategy, students' writing language accuracy could be increased. Based on results cited in Figure 2, it was concluded that each of language accuracy aspect showed improvement after students were taught through integrating Think-Pair-Share and teacher's corrective feedback within discovery learning strategy. In addition, each of students' writing accuracy aspect improved constantly. Although grammar accuracy has the lowest score in each pre-test and post-test, but it improved the most. By having the steps of TPS combined with the TCF inform of proving the data, and asking questions, the students were able to make their own conclusion about the rules of the sentences. The students' understanding was built most by themselves through a sequence of activities. By having the steps as mentioned on methodology, for example step 2, where each student was given a text about someone's past holiday activity, they knew what they were going to do by using the method of brainstorming (Manktelow, 2011).

In addition, students also had time to think what they should do and internalize the examples given by the teacher automatically to complete the task. During the pair stage, they were required to actively discuss their work. By doing so they learnt the benefit of pairing with each other. They learnt the benefits of cooperation and teamwork (Kagan, 2009). However, not all problems can be solved by pairing. For examples, they produced the sentence such as "before went to the beach, we bought some snacks". Then, the teacher gave some examples of sentences using preposition before the verbs. They observed them, and finally they were able to discover the rules. Therefore, discovery learning strategy was more effective if it was combined with the teacher' corrective feedback.

By having these gradual steps, the students internalized the input since it consisted of *i + 1* (Krashen, 1985; Krashen, 1994; Krashen 2003) and psychologically it was good for learners (Slavin, 2000). During the step of 'think', each student tried to fill verb 1, 2 and 3 on the worksheet provided by the teacher. By observing the verbs in the provided text, they were able to find the tense that was mostly used in telling the past activity. This is in line with the idea of a cognitive process of knowledge construction stated by Portnov-Neeman and Barak (2013).

When the teacher walked around, it was noticed that some of the students could not find the appropriate forms of verbs. The teacher made them exchange their verbs within the pair and the result improved. The teacher also asked other pairs whether they had any doubts. This is the benefits of the "share" step as stated in Sharma (2018) and Manktelow (2011). In addition to this, TCF in the form of questions also played an important role to make students think critically. For example, when the teacher asked: "Why was verb 2 (tense) mostly used in the text? How

did you form verb -2 ? Various answers were given by the students and all were correct, conceptually. It happens only when students have time to observe, think, and analyze the text given by the teacher contextually.

Evidently, by following the recommended steps, students were able to discover the success formula. In addition, by interpreting the continuity and fluency of sentences that they wrote in the worksheet, they were able to formulate the structure of verbs in the past tense. In other words, the students could discover the formulation of past tense by themselves by having prior knowledge (Deshpande, 2016).

By doing these activities, the students were treated to realize that the verbs used in past activity were mostly Verb-2. In addition, they were also able to improve their knowledge about verb form and also the word-meaning (vocabulary). When they were instructed to find the forms of the verbs (verb 1, 2 and 3) and each meaning, some of them tried to use the dictionary in their mobile phones for the meaning of the words. Further, the students were also able to group sentences into verbal and nominal, as the examples given by the teacher were taken from the text that they had with them. After grouping the sentences, the teacher asked the reason. Again, various answers appeared and conceptually it was evident that they did understand it.

Although there were some mistakes committed by students', but there is evidence that TCF was a good form of scaffolding and that it could help them have better understanding. It can be concluded that this learning model was a meaningful learning activity that constructed a better understanding for students. Based on individual writing (the teacher asked them to write their own activity during the last semester holiday), there were some mistakes of grammar, a few in the choice of words (vocabulary) and spelling. Then the teacher gave corrective feedback (TCF) by giving symbols showing what their errors belonged to namely; "gr" for grammar, "vc" for vocabulary, and "sp" for spelling. Each student tried to find a solution. TCF in form of a minimum guidance as suggested by discovery learning concept (Kirschner et al., 2006; Mayer, 2004) really worked in this study.

However, three students (8%) made mistakes on grammar using the wrong concept. For example they used Verb-2 after the preposition "after" and "before" when they wrote their past holiday activity, such as; *"After took a bath, we had a very big lunch at a cheap café in Bali"*. It happened because the student thought that she had to use verb-2 in telling the past activity but her knowledge of using preposition was limited. In other words overgeneralization happened.

To overcome this problem, the teacher made corrective feedback by writing prepositions following verb-ing on the white board. Students were instructed to observe and to make conclusion. This process made students develop a deeper understanding of grammar rules. The corrective feedback was done in this study in order to avoid inaccuracy suggested by Kirschner et al. (2006) or misconception (Hai-Jew, 2008).

In general, students showed positive perception after having experience in learning using the integration of TPS and TCF. Among the five categories of perception, interest and motivation was the highest. All students (100%) declared that they were very interested in the learning process. They gave different answers, but the idea showed that they were interested and were motivated. This indicates a positive element of this learning model since motivation serves as the initial engine to generate learning and later functions as an ongoing driving force that helps learners to develop a foreign language (Bahous, Bacha, & Nabhani, 2011; Cheng & Dörnyei, 2007). This is in line with this, Amirkhanova, Ageeva, and Fakhretdinov (2016) who declared that motivation is considered to be an essential part in the achievement of any goal and it plays an important role that has a positive influence on any educational process, especially in learning a second language. Way before it, Dörnyei (1998) had argued that without sufficient motivation, even individuals with the most remarkable abilities cannot accomplish long-term goals, and there are neither appropriate curricula nor good teaching enough for students to learn on their own and ensure achievement. To support this idea, Kubanyiova (2006) and Lasagabaster (2011) stated that the students' involvement and progress in their learning, can change their motivation.

In short, in the teaching-learning process, the task and atmosphere in the classroom might decrease students' motivation and teacher should find a way in dealing with those situations. In this study, as elaborated previously,

the way to motivate the students in writing is by applying TPS and TCF within discovery learning strategy. The learning task or activity is seen in the form of scaffolding discovery (Hai-Jew, 2008) which enables them to produce their own sentences accurately. It is in line with the concept of input hypothesis by Krashen (1985); Krashen (1994); Krashen (2003) which stated that the input should be $i + 1$ and with the output hypothesis as well stated by Swain (1985); Swain and Lapkin (1995) and Ellis (1991) who stated that when a learner uttered or produced wrong expressions or sentences, s/he could also find relevant input. In this study, TCF was applied and was made to act as the input to achieve their writing language accuracy. This intervention definitely made them motivated for learning.

6. CONCLUSION

This study was designed and built on the existing knowledge in the areas of Discovery Learning, TPS, TCF and Perception. This study premised that by integrating TPS and TCF within the concept of Discovery Learning can be beneficial on students' writing language accuracy. The discovery learning - process during the steps (think, pair and share) within TCF in form of scaffolding discovery, make them discover the right pattern and concept of the material. These activities also enable them to discover the rules because they have time to think individually based on examples given, or to discuss with their pair and often share with the class after the teacher's constructive feedback. It was found that by adopting these measures, the students received more impressive learning experience and resulted in a better understanding. Consequently they built positive perception especially on their interest and motivation perception categories. Such a positive perception was crucial in learning, because it served as the initial engine to generate learning and later functions as an ongoing driving force that helped learners to develop a foreign language.

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