

**THE EFFECT OF PICTURE WORD INDUCTIVE MODEL (PWIM) AND  
STUDENTS' SELF-EFFICACY TOWARD THEIR WRITING SKILL  
OF DESCRIPTIVE TEXTS AT GRADE X OF SMA NEGERI 1  
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**Abstrak**

Penelitian ini ditulis untuk melihat pengaruh strategi *picture word inductive model* (PWIM) dan *self-efficacy* siswa terhadap keterampilan mereka dalam menulis teks deskriptif. Penelitian ini merupakan *quasi-experimental* dengan rancangan *factorial design*. Data penelitian ini diambil dari hasil tes keterampilan menulis siswa dan angket *self-efficacy*. Kemudian, data tersebut dianalisis dengan menggunakan t-test dan Anova dua Arah melalui aplikasi Minitab 14. Hasil penelitian ini menunjukkan strategi PWIM memberikan efek yang signifikan terhadap keterampilan menulis siswa jika dibandingkan dengan strategi *listing* yang biasa digunakan oleh guru dalam pengajaran menulis. Hasil tersebut memperlihatkan t-hitung sebesar 1,900 yang lebih besar daripada t-tabel yang bernilai 1,684. Kemudian, siswa yang memiliki *self-efficacy* tinggi yang diajarkan dengan strategi PWIM mempunyai kemampuan yang lebih baik dalam menulis teks deskriptif dibandingkan dengan siswa yang diajarkan dengan strategi *listing*, dimana t-hitung sebesar 3,160 yang lebih besar daripada t-tabel yang bernilai 1,812. Akan tetapi, siswa yang memiliki *self-efficacy* rendah yang diajarkan dengan strategi PWIM tidak mempunyai kemampuan yang lebih baik dalam menulis teks deskriptif dibandingkan dengan siswa yang diajarkan dengan strategi *listing* yang mana t-hitung sebesar 1,730 yang lebih kecil daripada t-tabel yang bernilai 1,812. Selanjutnya, dari hasil penelitian juga ditemukan bahwa tidak ada interaksi antara strategi mengajar dengan *self-efficacy* terhadap keterampilan menulis siswa dimana F-hitung sebesar 0,08 yang lebih tinggi daripada F-tabel yang bernilai 2,58.

**Key words:** *picture word inductive model, self-efficacy, writing skill, descriptive text*

**Introduction**

Writing is one of language skills that should be taught at Senior High Schools beside other skills such as listening, speaking, and reading. The students' daily activities in schools cannot be separated from writing, especially when they are learning English as foreign language. Based on the curriculum of English for Senior High Schools, the students should be able to show their feeling and ideas in spoken and written forms. They also should be able to use their analytic and imaginative ability in learning English as foreign language. It

means that these expectations are included in the language skills, one of them is writing skill.

The scope of learning English at Senior High Schools as mentioned on the curriculum is the students are able to understand and produce any kind of functional texts. For the first grade students of Senior High Schools, they learn about recount, narrative, procedure, descriptive, and news item text. From the several texts above, descriptive texts is one of text types besides narrative and news item texts learnt

by the first grade students of Senior High Schools in second semester.

Descriptive text is one of text types besides narrative and news item texts learnt by the first grade students of Senior High Schools in second semester. Based on the observation at SMA Negeri 1 IX Koto Sungai Lasi, descriptive text is difficult to be mastered by the students. It might be caused by the text construction that requires the students to be able to describe about a specific thing, person, or place. Eventhough it looks simple to write a text that describes about something, students still need more guidelines to write this kind of text.

Writing is not an easy activity that can be simply done by the students, because writing is not an activity that only crash the pen or pencil on a piece of paper. Palmer (2003:5) states that writing is an activity that let the students to explore and express their ideas, to communicate what they think and know, and to take the ownership of all that they learn. It means that writing is an activity that cannot be separated from students' activity in the teaching and learning process. They need writing as a skill that supports their learning whether it is on other skills or subjects.

In addition, Harmer (2007:118) states that writing is an enabling activity where teachers have students write sentences in preparation for some other activity. In other words, writing is used as a practical tool to help students practice and work with language they have been studying. It means that students can practice their language through writing as the form of written language.

There are many problems found by the teachers when asking the students in writing a certain kind of text. Some problems are limited vocabulary, lack of grammar mastery, lack of ideas, and less of practice. When the students do not have enough vocabulary related to the topic, they may get difficulties to write down their ideas. Grammar mastery also has an impact to the students' writing ability. If they are not good in grammar mastery, they cannot produce a good written work.

Hedge (2000:32) says that writing process involves several activities such as setting goals, generating ideas, organizing information, selecting appropriate language, making a draft, reading and reviewing it, then revising and editing. It shows that writing is a complex activity which is neither easy nor spontaneous for the students.

In the same way, Richards and Renandya (2000:53) add that the writing process as a private activity may be broadly seen as comprising for main stages. The stages are planning, drafting, revising, and editing. These stages are usually used as the process of writing.

Moreover, teachers do not consider about strategy that they use in teaching writing. Teachers seldom teach the students how to write a text based on the genre where it is also important to be mastered by the students beside other language skills. Teachers often ask the students to write a text as their homework. As a result, most of the students accomplish the task through copying texts that they find from internet. In other words, the students do not produce the texts based on their writing ability.

One of strategies that is usually used by the teachers in teaching writing is listing strategy. Nordquist (2009:3) says that listing is the simplest prewriting strategy. It is usually the first method writers use to generate ideas. Listing means exactly what the name implies--listing the writer's ideas and experiences. The writers usually write down as many ideas as they can without stopping to analyze any of them.

Ferris and Hedgcock (2005:149) state that listing is the process of generating ideas that offers another way of producing concepts and sources for further thought, exploration, and speculation. Listing is distinct from free writing and brainstorming in that students generate only words and phrases, which can be classified and organized if only in a sketchy way.

There are new strategies that are created and applied in teaching language skills. The strategies can be used to help the students in solving their problem in writing

where the common problems found by students are related to vocabulary, grammar, and idea. One of the strategies that may help the students to solve the problems is Picture Word Inductive Model (PWIM) which is one of strategies that can be applied to various level of students. It is also can be focused on all language skill, specifically reading and writing skills.

McBurney and Paetsch (2012:2) state that Picture Word Induction Model (PWIM) is an inquiry oriented strategy that includes explicit instruction and structured inductive activities. It is focused to develop reading and writing skill. In other words, Picture Word Induction Model (PWIM) supports the students learning of sight words which include expanding their speaking vocabulary into a reading and writing vocabulary. As final process, this strategy leads the students into the writing of titles, factual sentences, and paragraph building.

Jiang and Perkins (2013:9) explain that the intent of the PWIM strategy is to capitalize on students' ability to think inductively and generalize the basis structural and phonetic analysis. They also add that the purpose of this strategy is to develop vocabulary word concepts and paragraph and sentence structures. Because of that, this strategy can help the students in writing process. Through this strategy, students can compose their writing from the basic aspect such as vocabulary.

Calhoun (1999:4) states that the Picture Word Inductive Model is designed to teach reading, writing, and the language system. Because of that, this strategy is predicted can help the students to solve their problems in writing, especially in writing descriptive texts. This strategy leads the students to identify each object in a picture that they will describe. Through this strategy, the students will be easier to develop their descriptive writing based a picture.

Furthermore, there are many psychological factors affected the students in language learning. There is one interesting aspect found in sub-indicators of motivation, which is self-efficacy. Bandura

(1986:16) explains that how people behave can often be predicted by the beliefs they hold about their capabilities than by what they are actually capable of accomplishing, for these self-perceptions help determine what individuals do with the knowledge and skills they have. In other words, students' successful in language learning can be predicted by their beliefs about themselves in doing something.

Lin and Wen (2012:4) say that writing self-efficacy as a strong sense of confidence for the task of writing. Having sufficient self-belief in their writing ability, students may have greater interest in writing, make more constant efforts, and show greater perseverance and resiliency in the face of difficulty when they are conducting a writing task.

So, self-efficacy is one of aspects that can be used to measure the students' ability in learning a language psychologically. It is often defined as people's judgments of their capabilities to organize and to do something. As can be seen in daily life, everyone can judge themselves whether they are able or not to do something. This is also applicable to the students who may have their own judgement about themselves in learning a language, especially in writing skill.

Related to the explanation above, the research questions of this study are:

Q1. Are students' writing skills taught by using Picture Word Inductive Model (PWIM) strategy significantly higher than those who are taught by using listing strategy at grade X of SMA Negeri 1 IX Koto Sungai Lasi?

Q2. Are students' writing skills with high self-efficacy taught by using Picture Word Inductive Model (PWIM) strategy significantly higher than those who are taught by using listing strategy at grade X of SMA Negeri 1 IX Koto Sungai Lasi?

Q3. Are students' writing skills with low self-efficacy taught by using Picture Word Inductive Model (PWIM) strategy significantly higher than those who are taught by using listing strategy at grade X of SMA Negeri 1 IX Koto Sungai Lasi?

Q4. Is there any interaction between teaching strategy (PWIM and listing strategy) and students' self-efficacy toward the students' writing skill?

### Research Methodology

This research was conducted by using quasi experimental research, because the researcher investigated the effect of Picture Word Inductive Model strategy and students' self-efficacy toward their writing skill of descriptive texts. This research used the factorial design.

The population of this research was the grade X students of SMA Negeri 1 IX Koto Sungai Lasi. There were five classes in this grade that were consisted of 137 students; they are X1, X2, X3, X4, and X5.

The sampling method of this research was the cluster random sampling in which group, not individual, was randomly selected. There were two classes chosen as the sample of this research. Students in class X2 were chosen as experimental group and students in class X1 were chosen as control group.

The data was collected through writing test and students' self-efficacy questionnaire. Both of the groups got the treatment where the experimental class was treated through PWIM strategy and the control class was treated through listing strategy. Then, the groups got same post-test in the same length of time. The questionnaire of self-efficacy was distributed at the end of teaching and learning process. The data was divided into two parts, high and low self-efficacy.

The hypotheses testing were analyzed by using Minitab 14 for Microsoft Windows. T-test was used to test the first, second, and third hypothesis in order to know the difference of students' score in experimental group and control group. Then, two ways ANOVA was used to test the fourth hypothesis. It was used in order to know the interaction between strategy used and students' self-efficacy toward their writing skill.

### Finding and Discussion

Based on the data analysis of the hypothesis testing, the finding of this research can be described as follows: Firstly, students' who were taught by using Picture Word Inductive Model (PWIM) strategy have better writing skill of descriptive texts than students who were taught by using listing strategy. It was approved by the result of hypothesis testing showed that  $t\text{-value} = 1,900$  and  $t\text{-table} = 1,684$  with  $df = 46$  and  $\alpha = 0,050$ . Since  $t\text{-value}$  was higher than  $t\text{-table}$  ( $t\text{-value} > t\text{-table}$ ), it means that null hypothesis ( $H_0$ ) is rejected and alternative hypothesis ( $H_a$ ) is accepted. In other words, it shows that the students' writing skill of descriptive text that was taught through Picture Word Inductive Model (PWIM) strategy was better than students who were taught through listing strategy.

This is related to Bandura's theory about self-efficacy where he suggests that individuals will perform a task successfully if they know what behaviors will produce desired outcomes and if they evaluate themselves as capable of performing the necessary behaviors. In this way, a student might know what is expected in an effective piece of writing and might even know the steps necessary to produce such a piece. But if the person lacks the belief that he or she can achieve the desired outcome, then effective behavior will likely not result.

It was also supported by McCarthy in Erkan and Saban (2011) who states that students with strong efficacy are better writers; and less anxious students were better writers. She had proved the statement through a research showed there was only efficacy strength was significantly related to performance in students' writing at post-test.

So, students with high self-efficacy have a better performance on their writing because they had known well about their capability in accomplishing a writing test. In addition, the PWIM strategy assisted the students to be more familiar with vocabularies that they identified based on the given picture and helped them to know

new vocabularies. While in listing strategy, students were very limited to develop their vocabulary because they were leaded directly to the ideas.

Secondly, tudents with high self-efficacy got higher score through Picture Word Inductive Model (PWIM) strategy which can improve their vocabulary and grammar that also lead them into a good writing. This result was proved by their record sheet and the result of the writing test.

The result of hypothesis testing showed that  $t\text{-value} = 3,160$  and  $t\text{-table} = 1,812$  with  $df = 10$  and  $\alpha = 0,050$ . Since  $t\text{-value}$  was higher than  $t\text{-table}$  ( $t\text{-value} > t\text{-table}$ ), it means that null hypothesis ( $H_0$ ) is rejected and alternative hypothesis ( $H_a$ ) is accepted. In other words, it shows that the writing skill of descriptive text of students with high self-efficacy who was taught through Picture Word Inductive Model (PWIM) strategy was better than students who were taught through listing strategy.

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students to be more familiar with vocabularies that they identified based on the given picture and helped them to know new vocabularies. While in listing strategy, students were very limited to develop their vocabulary because they were leaded directly to the ideas.

Thirdly, students with low self-efficacy who were taught by using Picture Word Inductive Model (PWIM) strategy was not better than students who were taught by listing strategy. Eventhough the mean score of students with low self-efficacy in experimental group was higher than students with low self-efficacy in control group, there was no significant difference both of group.

The result of hypothesis testing showed that  $t\text{-value} = 1,730$  and  $t\text{-table} = 1,812$  with  $\alpha = 0,050$ . Since  $t\text{-value}$  was lower than  $t\text{-table}$  ( $t\text{-value} < t\text{-table}$ ), it means that null hypothesis ( $H_0$ ) is accepted and alternative hypothesis ( $H_a$ ) is rejected. In other words, it shows that the writing skill of descriptive text of students with low self-efficacy who was taught through Picture Word Inductive Model (PWIM) strategy was not better than students who were taught through listing strategy.

This is related to McCarthy in Erkan and Saban (2011) who states that efficacy expectations lead to performance, followed by feedback and further development of expectations. Students with strong efficacy expectations evaluate themselves as capable, while students with weak efficacy expectations evaluate themselves as less capable of effective performance.

So, students with low self-efficacy were intended to have low performance in their writing. They had judged their capability was low in accomplishing the writing performance. Indirectly, their judgment included them into the form of low self-efficacy that also indicated them has low capability in writing.

Fourthly, the data analysis showed that  $F\text{-value}$  is  $0,08$  and the score of  $F\text{-table}$  is  $2,58$ . It means that  $F\text{-value} < F\text{-table}$ . It means that there was no interaction between both strategies of teaching writing and self-

efficacy toward students' writing skill of descriptive text.

This result is related Schunk and Swartz in Schunk (2007) who state that modeled strategy instruction combined with goal setting raised students' writing skills and self-efficacy and helped them maintain and transfer use of the strategy beyond the instructional context. Strategy may bring positive result to students' writing skill and self-efficacy, but there is no interaction between the strategy and self-efficacy that may affect students' writing skill.

So, it can be concluded that there is no interaction between teaching strategy (PWIM and listing strategy) and students' self-efficacy toward the students' writing skill. Teaching strategy indirectly lead the students to grow up their self-efficacy become well, but the interaction both of them can not affect the students' writing skill.

Based on the explanation above, it can be concluded that Picture Word Inductive Model (PWIM) strategy is more effective in teaching writing skill of descriptive texts than listing strategy. This strategy can be applied by the teachers in teaching writing of descriptive text. Thus, the students can develop their writing skill of descriptive texts.

### Conclusion

Related to the research finding above about the effect of Picture Word Inductive Model (PWIM) strategy and students' self-efficacy toward their writing skill of descriptive texts, it can be concluded that the implementing Picture Word Inductive Model (PWIM) strategy is better than Listing strategy on students' writing skill of descriptive text. It also gives effect to students who have high self-efficacy, but it is not happened to students with low self-efficacy. Then, there is no interaction between teaching strategies (Picture Word Inductive Model and Listing strategy) toward the students' writing skill.

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