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Original Paper

What Could the Big6 Strategy Do to Students' English and Information Literacies?

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Abstract

This study was aimed to investigate what the Big6 strategy could do to the development of both students' proficiency in English literacy and information literacy. To achieve the purpose, an experimental study with time series design was conducted. Forty-five students of a private secondary school in Palembang were randomly selected for intervention based on their levels of reading. To collect the data, both English literacy and information literacy tests were given to the students. The results of paired-sample-t test analysis show that both students' English and information literacies improved significantly. However, the students' level of English Literacy was only a little bit above average and their information literacy was proficient. When regression analysis was used, only students' speaking skill of English Literacy and the ethics aspect of information literacy contributed the least to the total achievement of each variable. These imply that the Big6 strategy is able to make a difference in students' English and information literacies. It also deserves to be used in ELT classrooms in the future for students to enhance their English literacy including their oral expression skill and to familiarize themselves with ethical aspect of information literacy from their puberty.

Keywords

English literacy, information literacy, the Big6 strategy

1. Introduction

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts (OECD, 2000). Literacy in English consists of four skills. They are reading, writing, speaking, and listening skills. These four skills should be taught by teachers without neglecting one over another because all of them are necessary and have different functions in literacy.

Furthermore, English which is considered as a foreign language in Indonesia is formally taught since junior high school until university level. It is stated in the standard of content of the Ministery of National Education Regulation, No. 22 (Permendiknas, 2006). The government expects that the students can compete with other people in the world in this 21st century which requires them to be able to master English so that they can get higher education and better job in the future, especially in Asean Economic Community by mastering English.

Unfortunately, the results of the previous studies showed that the students' level for each skill of the English literacy is very low. The data from PIRLS (2012) showed that Indonesian students' reading literacy was in the 42nd rank of 45 countries with the average score only 428 with the PIRLS scale counterpoint was 500. Nationally, the data reported by the Ministry of Education and Culture (2012) showed that there are 102.969 people or 2.15% people in South Sumatera still illiterate in Bahasa Indonesia, their own national language. From these data, even though the surveys report the data of literacy of the native language, it can be assumed that Indonesian students' English literacy achievements are probably lower than the existing data.

In local context, the study investigated by Diem, Vianty, and Mirizon (2016) showed that English comprehension achievement score of 355 students from various state public high school in Palembang is 67 while the minimum competency criteria (KKM) is 75.00. Zananda (2015) found that the students' reading literacy achievement of one state junior high school in Palembang was also under the minimum standard score. Their reading literacy was in level 2 with the average score was 28. For writing skill, the study of another junior high school found that the mean score was only 30.60 which is categorized as low also (Kartini, 2010). Furthermore, the preliminary study in the present school showed that the students still had problem on their English. The mean score of the preliminary reading test was only 47.23 which was considered poor and their reading was at level 4 that is far from their actual grade.

In this digital era, the technology is also an important part in our life. Technology develops rapidly and many people are using technology for supporting their daily life, including education. It is in line with the National Education Law No.14/2005 article 20 and the Government Regulation No.74/2009, chapter II Part 1 article 3 (Departemen Pendidikan Nasional, 2009) that requires every teacher to improve themselves by using and taking the benefits from the development of technology in teaching and delivering the materials to their students. It can make teaching and learning process become more interesting so the students are more interested in participating in the learning process actively.

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Ironically, although the learners are familiar with internet, it does not guarantee that they are good in accesssing the information on internet. There is no evidence that the young learners are experts of information seekers in academic literature (Rideout, Roberts, & Foehr, 2005, pp. 2-3). It can be stated that although they are familiar with the use of internet, it does not mean that they are information literate. Therefore, they need to know some strategies to cope with information flood concerning information retrieval and to improve students' learning.

There are many teaching strategies which can make teaching and learning process more interesting in order to improve students' English achievement and make the students more active in sharing their thought in the classroom. One of the strategies is the Big6 strategy. This information problem solving strategy is developed by Mike Eissenberg and Bob Berkowitz (1998). They develop this strategy to be suitable for students in every level of study. Eisenberg (2008) adds that it integrates information search and use skills along with technology tools in a systematic process to find, use, apply and evaluate information for specific needs. This strategy focuses on process as well as content. Diem (2011) used the Big6 strategy as one of the sub-strategies for teaching English literacy under the research and reading strategy in 3-Ls approach. In relation to literacy achievement, a study conducted by Diem and Hartati (2011) showed that the Big6 strategy which exposes the fifth grade pupils to the reading materials either online or offline could improve their English literacy achievement. In addition, the study conducted by Hartati (2015) shows that the Big6 strategy is an interesting strategy in teaching and learning process.

Based on the explanation above, as one of the solutions of the problems found by the study conducted by Diem, Mirizon, and Vianty (2016), this study entitled "Improving Secondary School Students' English Literacy and Information Literacy Achievements through Big6 Strategy" was conducted. The main objective of this study wasto see a difference instudents' information literacy and English literacy achievement, either as a whole or in eachskill (listening, reading, writing, speaking) after the students were taught by using the Big6 strategy. The second objective was to describe the contribution of each aspect of information literacy to its total achievement and each aspect of literacy skill to its total English literacy achievement.

Literacy can be viewed from many perspectives. Literacy can be stated as the ability of receptive skills as well as productive skills. Gee (2001, p. 23) defined literacy as a control of secondary uses of language. He claims that it is considered to be a secondary discourse because it is both acquired and learned after primary discourses which are acquired within the family and community.

There are four skills in learning languages. They are receptive skills and productive skills. The receptive skills consist of listening and reading skills while the productive skills consist of speaking and writing skills. English literacy involves the knowledge and skill required to engage in activities required for effective functioning in the community. Moreover, Mascle (2006) adds being literate is more than being able to read the printed or non-printed texts; it is about communication and

understanding.

People now live in a very complex and often overwhelming information world (Eisenberg, 2008, p. 46). This condition requires people to possess the information and technology skills which are essential for success in this informational era. American Library Association (2000, p. 2) defines information literacy as a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively. Information literacy is related to information technology skills, but has broader implications for the individual, the educational system, and for society. Foggett (2002) asserts that all young people need to be taught information literacy skill as part of their general school education in order to ensure that as adults they are prepared for life as contributing citizens in the communities of the future (see also Eisenberg, 2008). Information literacy is now an essential skill for school and academic life as well as for long-life learning. American Library Association (2000, p. 5) asserts that gaining skills in information literacy multiplies the oportunities for students' self-directed learning, as they become engaged in using a wide variety of information sources to expand their knowledge, ask informed questions, and sharpen their critical thinking for still further self-directed learning. Moreover, OECD (2013, p. 5) states that the ability to access, understand and reflect on all kinds of information is essential if individuals are to be able to participate fully in our knowledge-based society. Therefore, teachers should ensure that students have frequent opportunities to learn and practice this informational skill (Foggett, 2002).

The Big6 strategy is a kind of problem solving strategy. It was introduced by Eisenberg and Barkowitz in 1990. Eisenberg (2008, p. 41) defines the Big6 strategy as a six-step strategy to solve an information problem.

Eisenberg, Berkowitz and Johnson (2010, pp. 255-256) describe the six steps of the Big6 strategy. They are task definition, information seeking strategies, location and access, use of information, synthesis, and evaluation. In task definition step, the students define the information problem and identify information needed in order to complete the task (to solve the information problem). After that, the students go to the next step, information seeking strategies. In this step, the students are asked to determine the range of possible sources (brainstorm) and evaluate the different possible sources to determine priorities (select the best sources). The next step is location and access. In this step, the students locate sources (intellectually and physically) and find information within sources. Then, they continue to the next step, use of information. Engaging (e.g., reading, hearing, viewing, touching) the information in a source and extracting relevant information from a source is the activity that the students do in this step. The next step is synthesis. The students organize the information from multiple sources and present the information. The last step is evaluation. In this step, the students judge the product (effectiveness) and judge the information problem solving process (efficiency).

There are several previous studies related to Big6 strategy. The first is an action research by Eisenberg and Berkowitz (1998) entitled "The Big6 and Students' Achievement". It showed the improvement of

the students' academic achievement at Wayne Central High School, New York on the New York State Regents Exam in American History.

The second study was reported by Wolf (2003) who investigated whether the Big6 strategy supports or acts at metacognitive strategies and knowledge management to students. The results showed that the students would be able to manage complex tasks and subject matter content when they were treated by metacognitive support by using Big6 during information problem solving activities.

The third study was conducted by Diem and Hartati (2011). This study aimed at improving students' reading habits and literacy achievements. The results showed that the contribution of the Big6 strategy on students' reading habits was 43.9 percent while on literacy was 79.9 percent.

Another study was conducted by Hartati (2011) dealing with students' reading comprehension and information literacy achievements in one senior high school in Lahat, South Sumatra. The finding of the study showed that exposing the students to a variety of reading materials through the Big6 strategy has successfully improved the students' reading comprehension and information literacy achievements.

There are some similarities and differences between those previous related studies and this present study. This present study investigates the students' literacy achievement in all skills (listening, speaking, reading, writing) while the others only in one skill. The other previous studies were aimed to improve the students' reading comprehension and information literacy achievements for the students in eleventh grade while the present study is aimed to improve the information literacy and English achievement of the students in junior high school. The samples for the present study are not only from seventh grade but also from eighth and ninth grades.

2. Method

In this research an experimental method with time series design was used. Creswell (2012) claims that an experimental research method is used to know the possible cause and effect of independent variable on dependent variable. The independent variable was the Big6 strategy and the dependent variables were students' English literacy and information literacy.

In selecting the sample, stratified random sampling technique was used. This technique was chosen because we divided the population on some specific characteristics and then use simple random sampling from which each subgroup of the population participants were selected and suggested by Diem, Vianty, and Mirizon's survey in 2016. Therefore, the selection of the sample was based on what had been proposed by them in their 2nd year project in 2017. The result of the first year study of Diem, Vianty, and Mirizon in 2016 showed that both grades and gender made a difference in students' levels of comprehension achievement as measured by *Warncke Informal Comprehension Assessment* (1984). Therefore, the sample of this present study is randomly classified into three levels of achievement: below average, average, and above average in addition to grades and gender based on their score from their preliminary test. The total number of the subjects were 45 students.

The treatment using the Big6 strategy was conducted after the pre- and before the post tests of English with its four skills (Listening, Speaking, Reading, and Writing). In between the two tests there were also multiple formative tests or observations. In addition Information Literacy was also given. After the students were classified, further tests were given to find out students' informal comprehension and instructional reading level by using an *Informal Reading Inventory* developed by Stark (1981) to the sample. It was found that the students were on the 4th reading level. Therefore, the students could be given appropriate reading passages in the teaching and learning process as well as for their pretest and posttest. Thus the passages for the tests and for the instruction consisted of 5 levels, i.e., the passage (s) for the students' instructional level, those of two levels below, and two levels above their instructional reading level.

The data found from the tests were analyzed to compare the results and plot them to discern patterns in the data over time in addition to see the students' progress or even the weakness (See Creswell, 2012, p. 314).

Information literacy tests were given using a modified ready-made information literacy test based on the one prepared by Estrella Mountain Community College (2011). This test actually consisted of six parts in which the students found the information from various sources including the Internet and the library website. However, for this study, the test consisted of three parts in which the students could find three sources related to the topic they chose.

Then for English literacy, the students were given listening and reading tests with the same passages with 32 questions for each test. There were fifteen passages with multiple choice questions that cover six aspects which were main idea, detail, sequence, inference, cause and effect, and vocabulary. The writer used Flesch Kincaid Grade Level for analysing the readability of passages. In this study, the content validity of English skills tests (listening, reading, writing, and speaking) was measured by relying on the judgements made by teachers of English who are familiar with language teaching and testing in order to make sure the relevancy of the tests with the purpose of the study as suggested by Hughes (1989). Then in order to determine the appropiateness of the measure, it was tried out in another school to find out the validity of each item of the tests quantitatively. To know the reliability of listening and reading tests, Alpha Cronbach was used.

For writing and speaking tests, the interrater reliability was used by having two persons to independently score the same set of tests and then correlatedthe scores obtained from them to find the significant correlation between them.

For information literacy test, two raters with three criteria (a graduate from strata 2 of English study program or library science, having more than 5 years teaching experience, and achieving TOEFL score above 525) were invited to score the students' information literacy.

After the data were obtained they were firstly analyzed by using Kolmogorov and Levene's Test to see the normal distribution and homogeneity of the students' scores of their English achievements. A paired

sample t-test was used to compare the mean scores of students' English literacy and information literacy achievements resulted from pretest and posttest.

3. Results

3.1 Descriptive Statistics

The descriptive statistics in this study were the results of students' English Literacy Achievement $_{Total}$ and the results of students' Information Literacy Achievement. The scores of the students' English literacy $_{Total}$ were categorized into three levels of achievement as follows: 1-60 (Below Average), 61-75 (Average), and 76-100 (Above Average) (Diem, Vianty, & Mirizon, 2016). The information literacy scores were categorized into four levels of achievement based on Montgomery College General Education (2012) as follows: ≤40 (Not Evident), 41-60 (Novice), 61-80 (Proficient), and 81-100 (Advanced).

The data presented in Table 1 below are based on the score distribution of the group after the intervention. It can be seen that after the intervention, ELA $_{Total}$ of the students (N=45) was on Above Average level (Mean=76,29). In detail, 22 students (49.9%) were on Above Average level and 23 students (50.1%) were on Average level. For information literacy, after the intervention the score distribution for the students was on Proficient level (Mean=72.27).

Table 1. The Score Distribution of Students' English Literacy Achievement $_{Total}$ and Information Literacy Achievement Posttest of its Skill Based on Achievement Level (N=45)

Group	Score Interval	Level of Achievement	Frequency	Percentage (%)	Mean
English Literacy$_{Total}$	76-100	Above Average	22	49.9	80.95
	61-75	Average	23	50.1	68.77
	1-60	Below Average	0	0	0
Total			45	100	76.29
Information Literacy	81-100	Advanced	6	13.3	86.00
	61-80	Proficient	39	86.7	70.15
	41-60	Novice	0	0	0
	≤40	Not Evident	0	0	0
Total			45	100	72.27

3.2 Statistical Analyses

The statistical analyses in this study include normality and homogeneity of the data, the results of paired sample t-test, the contibution of each aspect of English and information literacy on English achievement and information literacy achievement (total), and the results of regression analyses between English literacy on information literacy achievement. In analyzing the data the raw score was used. For English literacy, the score interval was between 1-32 while for information literacy was between 12-100.

After measuring the normality and homogeneity of the data, paired sample t-test was analyzed. The results were categorized significant if the significance values were lower than 0.05. The results can be seen in Table 2.

Table 2. Students' English Literacy and Information Literacy Achievements Based on Paired Sample T-test (N=45)

Variables	Mean score		Mean Difference Pre and Posttest	t-value	Sig
	Pretest	Posttest			
English Literacy$_{Total}$	51.53	86.16	34.622	44.024	.000
Listening	14.64	24.82	9.756	19.644	.000
Reading	15.07	23.91	9.267	39.531	.000
Writing	10.36	18.27	7.911	21.763	.000
Speaking	11.47	19.16	7.689	21.829	.000
Information Literacy (Total)	53.56	72.27	18.711	26.286	.000
Know	9.49	12.71	3.222	11.716	.000
Access	4.93	7.67	2.733	11.881	.000
Use	13.60	17.56	3.956	10.031	.000
Evaluate	14.33	19.91	5.578	18.151	.000
Ethics	11.20	14.47	3.267	15.602	.000

The results show that the mean difference between pretest and posttest ELA $_{Total}$ was 34.622 with the t-$_{obtained}$ was 44,024 and the significance value was .000. In addition, for students' literacy which covers listening, reading, writing, and speaking, the mean difference were: (1) listening (9.267), (2) reading (9.756), (3) writing (7.911), and (4) speaking (7.689). Meanwhile, the mean difference between pretest and posttest information literacy achievement was 18.711 with the t-$_{obtained}$ was 26.286 and the significance value was.000. In details, the mean difference for its aspects were: (1) know (3.222), (2) access (2.733), (3) evaluate (3.956), (4) use (5.578), (5) ethics (3.267).

Since there was a significant difference in students' ELA and Information Literacy Achievements after they were taught by using the Big6 strategy, multiple regression analysis was used to know which aspects contributed the most to the ELA total and information literacy achievements. The result of the analysis is presented in Table 3.

The results of stepwise regression analysis show that Big6 strategy gave significant contribution of each literacy skill and its aspects to English literacy achievement$_{total}$ and information literacy achievement because the significance values of each aspect were lower than 0.05. Based on Table 3, it can be seen that among four literacy skills, the highest contribution to students ELA $_{Total}$ was from Listening (65%). Meanwhile, reading gave 26.2% followed by writing (4.3%), and speaking gave the least contribution (2.7%) to the students ELA $_{Total}$.

Moreover, to see how much each aspect of each literacy skill contributed to each literacy skill (total), regression analyses were also conducted for each literacy skill. Five aspects of listening that gave the highest contribution were detail (45.5%), vocabulary (28.5%), main idea (13.3%), cause effect (4.6%) and sequence (3.7%). The least contribution was given by inference (3.3%). For reading, six aspects of reading gave significant contribution to reading achievement which are vocabulary (40.7%), detail (28.6%), cause and effect (13.3%), inference (8.2%), sequence (6.3%), and main idea (2.7.0%). For students' writing achievement, five aspects of writing gave significant contribution to writing achievement. Grammar (53.4%) gave the highest contribution. The four last contributions were given by vocabulary (15.1%), mechanics (12.2), organizing ideas (9.5%), and developing ideas (5.8%). For students' speaking achievement, the contribution of each aspect of speaking towards speaking achievement is as follows: grammar (41.9%), fluency (26.2%), background knowledge (10.2%), comprehension (8.4%), pronunciation (6.5%), and vocabulary (4.7%).

Table 3 also presents the contribution to students' Information Literacy Achievement. There were five aspects contributed to Information Literacy Achievement. The highest contribution was from evaluate (64.4%), use (19.7%), know (12.1%) followed by access (3%), and the last contribution was given by ethics (1.2%).

Table 3. Regression Analyses between ELA $_{Total}$ and its Skills and Information Literacy and its Aspects (N=45)

Variables	Model	R Square	R Square Changed	Sig. F Change
ELA $_{Total}$ and Its Skills	Listening	.650	.650	.000
	Reading	.912	.262	.000
	Writing	.955	.043	.000
	Speaking	.982	.027	.000
Listening and Its Aspects	Details	.455	.455	.000
	Vocabulary	.740	.285	.000
	Main Idea	.873	.133	.000
	Inference	.907	.033	.001
	Cause and Effect	.953	.046	.000
	Sequence	.991	.037	.000
Reading and Its Aspects	Vocabulary	.407	.407	.000
	Details	.693	.286	.000
	Cause and Effect	.826	.133	.000
	Inference	.909	.082	.000
	Main Idea	.935	.027	.000
	Sequence	.998	.033	.000
Writing and Its Aspects	Grammar	.534	.534	.000
	Vocabulary	.685	.151	.000
	Mechanics	.807	.122	.000
	Developing Ideas	.865	.058	.000
	Organizing Ideas	.960	.095	.000
Speaking and Its Aspects	Grammar	.419	.419	.000
	Fluency	.681	.262	.000
	Background Knowledge	.783	.102	.000
	Comprehension	.867	084	.000
	Vocabulary	.914	.047	.000
	Pronunciation	.979	.065	.000
Information Literacy	Evaluate	.640	.640	.000
	Use	.837	.197	.000
	Know	.958	.121	.000
	Access	.988	.030	.000
	Ethics	1.000	.012	.000

4. Discussion

Since no more students in the group was categorized as below average level category, the Big6 strategy is proved as an effective strategy to improve students' ELA and informationlLiteracy achievement. Instead, more than half of them were on the Above Average level and some were on Average level. Moreover, the students also made significant improvement in four literacy skills and each aspect of Information literacy. The detail descriptions are described as follows.

There was a significant improvement in the students' reading achievement with the highest mean difference among the other English literacy skills after students were taught by using the Big6 strategy and the mean score of students posttest were on the above level. It is probably because in the Big6 strategy, the students had to read the text in order to use the information. The process of reading is reflected in the fourth and fifth steps of the Big6 strategy; using and synthesizing the information which are explained by Jansen (2007, pp. 23-25) as follows: (1) using the information, the students locate sources and find appropriate information. In this stage, students must be able to read and understand the information effectively, find the key concepts and examples relevant to their task. Otherwise, the source will not help them meet their information need, and (2) synthesizing the information refers to the integration and presentation of information from a variety of sources to meet the information need as defined. This skill focuses on determining the best ways to pull together, integrate, and organize the information to meet the task.

Furthermore, the results of stepwise regression analysis show that the Big6 strategy gave significant contribution of each literacy skill and its aspects to English literacy achievement$_{total}$ and information literacy achievement because the significance values of each aspect were lower than 0.05. Based on Table 3 above, the highest contribution in reading aspect was vocabulary. It is likely because during teaching and learning process, the writers introduced the students with the preliminary vocabulary. Besides that, during the discussion, it was common to find the students who looked confused when they found the unfamiliar words. Therefore, they could look up their dictionary. Vocabulary is important in comprehending a text. Broomley (2004, p. 3) states that vocabulary knowledge supports reading fluency, enhances academic achievement, and improves reading comprehension. On the other hand, main idea unexpectedly gave the least contribution toward reading as a whole. It could happen because students did not pay attention on the main idea of the story since they were more focusing in finding the vocabularies of the text in order to understand the story. Although reading shows the highest mean difference between pretest and posttest, based on the result of stepwise regression, reading gives only second highest effect (26.2%) on students' English literacy total.

The second skill which gets the highest mean difference between pretest and posttest is listening. During the teaching and learning process by using the Big6 strategy, they were asked some questions by the writer which are related to the text which were going to be discussed in order to build students' prior knowledge and lead the students to the topic that were going to be listened and discussed. Bueno,

Madrid and McLaren (2006) establish the following pattern for listening: 1) Pre-listening would be the first stage, where the context is established. The teacher creates motivation and students do some activities with the purpose of preparing them for what they will hear. 2) The following stage is listening, where learners do the mentioned tasks or find answers. By applying the listening patterns, it was proved that it could improve students listening.

Furthermore, during the teaching process, the students were asked to listen to each group's explanation which is going to be discussed in that day. The students were asked to make some notes related to the things that they heard from other groups. After listening to their friends' explanation, the students were asked to discuss together about what they have heard. They could add or give their opinion about the information explained by their friends from other groups. By having discussion, students could know whether the information they heard is really what is found in the text. If students know that they are wrong, they could directly learn from their mistakes and they could judge themselves whether they wrote the right or wrong information during the listening session. The highest contributions in listening aspects were detail, vocabulary, and main idea. It could have happened because during listening, students were asked to write some information about what they heard followed by discussion about the text which had been listened to by the students. Question and answer session done by the teacher would also lead the students to the true information about what caused something in the text. Based on the result of stepwise regression, although listening is in the second highest skill among the four skills influenced by the strategy toward students' English literacy total, separately listening has the highest mean difference between pretest and posttest in itself.

Writing is the skill which is in third position in getting the mean difference between pretest and posttest. In using the Big6 strategy, the students were asked to summarize or paraphrase the texts they read. After that, they worked together to compose some good paragraphs from the information found by each student in group. This is probably in line with what Richards and Renandya (2002) who state that writing remains the most challenging task for the students since they need to internalize such skills, like generating, organizing, and translating the ideas into a readable text. Writing is also in third place in giving contribution for English Literacy total. Regardless that grammar was the aspect of writing which gave highest contribution to writing skill achievement total due to the activities done during the teaching and learning process in which the students summarized the information they had from the text by using their own words, they were still weak in developing ideas. It is proved that developing idea was the aspect of writing which gave the smallest contribution to writing skill as a whole. In addition to writing summaries (Khoshima & Nia, 2014, p. 264) which could help students how to write better, one way to support and develop ideas in writing is by having students incorporate words and consider their function in a sentence into their writing as a whole (Richardson, 2009).

The last skill which shows the lowest mean difference between pretest and postest is speaking skill. It also gives the lowest contribution to English Literacy Achievement. During the teaching and learning

process, the students were asked to discuss about the topic in groups. After that they had to present it in front of their friends in the class. However, speaking is still one of the least influenced by the strategy. It is probably due to the students' focus on grammar how to produce a good sentence. It can be seen from the results of stepwise regression which show that grammar is the highest aspect of speaking in giving the contribution to speaking skill as a whole. Hui (2011) stated that the significance of grammar is to learn the correct way to gain expertise in a language both in oral and written form. the students perhaps were afraid in making mistakes because they were avoiding being laughed by their friends. Why so? It seems common for the students to laugh at peers making mistakes.

The lowest contribution of speaking aspect is vocabulary. It can probably be the reason why speaking has the lowest mean difference between pretest and posttest. As stated by Ahmed (2014, p. 99), using the sufficient words in abundance is an indicator of high speech quality. It shows that vocabulary is very important aspect in speaking. When the students are lack of vocabulary, it will be hard for them to express their thought in oral language.

For in information literacy, the highest mean difference between pretest and posttest was evaluate as one of the steps in using the Big6 strategy. It is a very crucial step used in this study because in this step the students were asked to judge the product (effectiveness) and the information problem solving process (efficiency). This step requires the students' understanding about the information they received during the use of the strategy. It is in line with the definition that to evaluate means to analyze and judge the appropriateness, biases, and credibility of a piece of information. Based on how appropriate, biased, or credible the information is judged, one may discover that locating more information is very necessary. Meanwhile, the lowest contribution for information literacy achievement was ethics. Ethics in getting the information from other people's sources is still becoming a big task for Indonesian people. It can be seen from the data which show that Indonesia ranks 10 of 11 countries in South East Asia for ethics in taking information from internet or other sources. There are so many people who still do the plagiarism. They took people's data without citing the sources as stated by River Parishes Community College (2009, p. 12). This aspect still seems neglected by Indonesian people.

From the interpretation above, it can be seen that the Big6 strategy could improve students' English Literacy $_{total}$ (listening, reading, writing, and speaking) and information literacy achievement in junior high school.

5. Conclusion

Based on the findings and the discussion of the study, three followings are concluded. First, at the end of the study it was found that the Big6 strategy could improve students' English Literacy $_{total}$ and most of the aspects of each skill (listening, reading, writing, and speaking). Second, in students' information literacy achievement, there was also a significant difference between pretest and posttest. Third, although the Big6 strategy improves English literacy and information literacy achievements as a whole,

there are still some aspects that show only small contribution. For English literacy, the lowest contribution was obtained by speaking. Meanwhile, the lowest contribution of the strategy received by information literacy was developing idea.

There are some implications of this study. First, the English teachers should provide various kinds of strategies and provide interesting materials that can create effective learning in the classroom. Teachers of English could use the Big6 strategy as one of the alternative strategies in teaching English literacy and information literacy. Then, the teachers should also consider the effective strategy to improve all the aspects of English literacy and Information literacy. Second, the students should increase their knowledge of English grammar, vocabulary and the other aspects of English literacy and Information literacy in order to have good English skills and become information literate. Third, for other researchers who are interested in conducting similar study, it is suggested that they prepare more materials offline because there are still many schools which are not providing internet access. Fourth, since this study focused on four English skills and the results showed that speakig is the lowest skill which gave contribution to ELA $_{\text{Total}}$, the next researchers should give more attention to this skill. Furthermore, it is better to do the research related to the use of the Big6 strategy into teaching and learning process to improve their achievements.

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