

Review

Exploring online resources for/with fifth graders to cultivate reading habits and increase English literacy achievement

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Rapid advances of ICT have important implications in the process of EYL teaching and learning. This paper highlights the results of the experimental study using 'Online Resources Strategy (ORS)' at an Elementary School in Palembang to cultivate the pupils' reading habits and improve their English achievement. Forty fifth graders were randomly chosen out of 112 pupils based on gender. They were then equally divided into two groups, experimental and control. Despite a set of literacy tests, comprising four skills and reading habit questionnaires given to both groups, as pretest and posttest, only the experimental group was taught English by using the strategy. The results show that there was a significant change in the experimental group pupils' reading habits ($t=5.604$, $p<0.000$) and their literacy achievement ($t=11.541$, $p<0.000$). Of the four literacy skills measured, writing skill had the highest mean difference followed by listening, reading, and speaking. However, when the gain scores between the two groups were compared, it was found that the highest significant mean difference was in listening followed by reading and speaking but not in writing. The contribution of ORS to both pupils' literacy achievement was 74.9% ($t=10.659$, $p<0.000$; $R=0.866$, $R^2=0.749$) and their reading habits was 15.5% ($t=2.638$, $p<0.012$; $R=0.393$, $R^2=0.155$). Finally, to make the results of this present study meaningful, some interpretation and plausible implications in EYL classroom are discussed.

Keywords. EFL, literacy achievement, online resources strategy, TEYL, reading habits

INTRODUCTION

In the technological age, the use of technological gadgets is crucial. Technological changes have been influential to almost every aspect of life including reading habits and literacy practices of the school children (Barujel, Abalde et al., 2004; Cammack, 2002; Harvey, Kambouri et al., 2007) because compared to those a couple of decades back, children now have more access to a wide variety of leisure activities besides reading (Jackson, 2005). There is a competition between prints and recent innovative attracting gadgets for capturing children's time and attention. Many researchers (Leander and Frank, 2002; Marsh, 2011; Marsh, 2010) have been concerned that English literacy be operated as a means of also developing online social cohesion although literacy practices that serve this function are located within the social, material, and cultural structures in the offline world. Teachers of English cannot view literacy practices

in isolation from 21st century wider discourses.

Several studies investigated the favorite pastime activities of primary and secondary school students. For example, Rideout et al. (2005) reported that watching TV and playing computer games were the two most preferred after school leisure activities. According to statistics from the Kaiser Family Foundation (Rideout et al., 2005), youth ages 8-18 spend approximately 6.5 hours each day using media, an activity that far surpasses the time they spend with parents, doing homework or playing sports. Majid and Tan (2007) found that, using the Internet and talking on the phone are in the repertoire of most children and teenagers' typical behavior. In fact, 87 percent of 12-17-year olds are now online. In line with this, Jackson et al. (2006) showed that home Internet use improved standardized reading test scores and encouraged children to be more self-directed

learners. What is unique about the Internet as compared with traditional ways of developing academic performance skills is that it is more of a fun environment. It is a play tool. Children can learn without any pain. In summary, beneficial academic outcomes may be a coincidental effect of having a good time.

Jackson (2005) said that children who used the Internet more had higher grade point average of the study than did children who used it less. More time spent reading, given the heavily text-based nature of Web pages, may account for the improvement.

Furthermore, the rapid growth of the Internet has made successful multimedia online learning. According to Grant (2004), using interactive electronic books can be valuable in teaching reading comprehension and word recognition under certain conditions. The interactive characteristics of an electronic book aid in reading comprehension by allowing the student to get immediate feedback on pronunciations and in some cases word meanings. According to Dudeney and Hockley (2007) one of the reasons for using Internet in the classroom is that it presents teachers with new opportunities for authentic tasks and a wealth of ready-made ELT materials and for collaboration and communication between learners who are geographically dispersed.

However, the reading proficiency level of Indonesian children is still low (OECD/PISA, 2010), that is 57th rank of 65 countries in which most of them are in level 1a (37.6%). The causes of this condition, among others are the poor reading culture of the Indonesian people and the scarcity of ICT at schools which result in having no access of relevant reading resources either offline or online (Diem, 2010). Since reading habits play a very crucial role in enabling a person to achieve practical efficiency, we believe that it is important to cultivate this reading habit of Indonesian children from the early age. It is hoped that good reading habits will result in good literacy achievement.

In this study, children's involvement in retrieving and using online resources together with the teachers and peers and how they responded to a wide array of digital texts was closely looked at. Then the second purpose was to see whether there was a significant difference in reading habit and literacy achievement of the children who were taught using the 'Online Resources Strategy' and those who were not. Finally, this study also wanted to see whether the strategy was effective to develop reading habits and increase literacy achievement of the pupils by looking at its contribution to both variables.

Teaching and Learning by Exploring Online Resources

Teaching with Internet tools, such as websites, is based on the classifications developed in the environment whose real value lies on their complementariness of the

ability to communicate and work with information that could be carried out in a collaborative way in information search, interpersonal exchanges, and problem solving.

As a source of teaching and learning materials, websites were used either in or outside the classroom. According to Dudeney and Hockley (2007, p. 27) there are 4 kinds of websites and in this study these have been chosen to use in exploring online resources for and with the pupils. The authentic websites used were: (1) ELT-specific websites (websites which have been made by and for teachers), (2) monolingual or multilingual websites, (3) websites with multimedia; and (4) websites with simple texts (for those on slower connection).

To use web pages in the classroom, either as printed pages, with no computers, with one computer and one internet connection, or in a computer lab with a set of connected computers was profoundly considered.

Based on what was suggested by Corralejo et al. (2008) three basic ways of searching on the internet, which are (1) search engines, such as Google; (2) subject guides, such as Yahoo!; and (3) real language searches, such as Ask (www.ask.com) were used. To evaluate how useful and appropriate the websites were for the classroom, there were various standard criteria for judging websites which could serve as a starting point for our evaluation: (1) accuracy, i.e. Who wrote the page?; (2) currency, i.e. Was the content up to date, interesting, stimulating from the learners' point of view, and attractive and easy to navigate?; and (3) functionality, i.e. Whether the site worked well and how quickly it loaded for learners.

Why Online Resources Used as Media and Materials?

Various media and systems were used in this study. Some pupils actually had ever used these media and systems for leisure purposes (video games, movies, etc.) before this study took place. In exploring on line resources, several types of information during the blended learning to support learning activities, such as children's books, dictionary, and exercises/quizzes were used.

In addition, some advantages of the online learning, in terms of its flexibility, autonomy, and efficacy (Corralejo, 2008) were also considered, as follows.

(1) *Flexibility*. Pupils could work at any place, at (almost) any time and at their own pace. In this study, the issue of flexibility changed a bit and aspects like the management of time and pace, the degree and frequency of participation, and cooperation with other learners were expected from them and if they were working individually, in pairs, or in groups.

(2) *Autonomy*. The fact revealed that the type of learning used in this study promoted learners autonomy in which they had the ability to take charge of their own learning. This required on the one hand, a change of attitude if

they were not used to having control of their own learning. On the other hand, it required that they took responsibility for their own learning and became active participants. Autonomy here also meant working with partners, moving from dependence on the teacher to learners' independence, or doing self-access and self-paced learning.

(3) *Efficacy*. This means that using technology to learn English literacy could help learners make the learning process more efficient, providing them to manage, among others, their time and their materials in an appropriate way.

In summary, the use of technology here had offered a new vision and dimension of learners' responses by merging new ways in teaching literacy skills using both digital tools and traditional literature in the classroom (Read also Hancock, 2008, p. 108; Higgins, 2002) which was worth trying. It was believed that this was in line with what was confirmed by Larson (2010, p. 15) that "E-books [or materials] have the potential to unveil an array of new teaching and learning possibilities as traditional and new literacy skills are integrated in meaningful ways" (Read also Kikuchi et al., 2001; Packard, 2007).

This present study was conducted as an attempt in finding out the effective use of the Online Resources Strategy to develop literacy achievement and reading habits. It was believed that this strategy was appropriate to be used since Internet is a rich source of materials for the four skills of English and linking technology to literacy learning is considered important in this technological age nowadays. It was also attempted to verify the following hypotheses that (1) there were significant differences in reading habits and literacy achievement of the pupils who were exposed to using Online Resources and those who were not; and (2) either reading habits or literacy achievement of the fifth grade pupils could then be increased.

METHOD AND PROCEDURE

Variables of the Study

First, the words 'explore and use' mean 'to find' the right resources available on the internet which were suitable for the pupils' need and to use in learning English as a foreign language. Second, the word 'habits' means some actions, in this case, reading activities, that every pupil often did and almost without thinking, especially the ones which were hard to stop doing. Therefore, 'reading habits' refers to the behaviors of likeness of reading any type of resources, any time, and anywhere shown by the pupil as a reader. Furthermore, 'literacy achievement' here means the ability to listen, read, and use English either to write or to speak.

In other words, 'Exploring online resources for or with fifth-grade children' means the process of finding the right

resources by using internet connection (online) which could be done with or for the children to develop their reading habits and increase literacy achievement.

To achieve those two objectives 40 fifth graders were randomly chosen out of 112 pupils of one elementary school in Palembang, South Sumatra, Indonesia based on gender. They were then equally divided into two groups, experimental and control. Despite a set of literacy tests, comprising four skills and reading habit questionnaires given to both groups, as pretest and posttest, only the experimental group was taught English by using the Online Resources Strategy. The process was firstly done by giving the entire population a reading comprehension test and the pupils of a very poor level whose scores between 30 and 36 as measured by sight words were selected as sample. Using random sampling technique, then 20 boys and 20 girls were chosen to be grouped in one experimental group and in one control group.

In order to obtain the data about the pupils' reading habits a questionnaire of Reading Interest Survey (Hill, 2006 cited in Hill, 2008) consisting of twenty questions was used. The original language of the questionnaire was in English but to make it easier for the pupils, the questionnaire was translated into Bahasa Indonesia. To get quick information about the pupils' reading level, they were given Sight Words of Informal Reading Inventory (IRI) (Burns and Roe, 1985). It was found that most pupils were in level 2. Therefore, using the results of this preliminary test, we decided to use five levels of reading passages to be tested to the pupils, namely primer level, level 1, level 2, level 3, and level 4 (two levels above and two levels below level 2) to assess the pupils' reading comprehension. To do this Informal Reading Inventory (IRI) written by Burns and Roe (1985) was used. In level Primer up to level 2, there were 8 (eight) questions each while in levels 3 and 4 there were 10 (ten) each. The composition of the questions of each level consisted of main idea, details, comparison and contrast, inference, and sequence. Since this was an experiment to see the effectiveness of the online resources strategy, the reading comprehension pretest was given to the students in order to know their literacy achievement before giving the treatment while the posttest was given after that. The test consisted of 44 questions. For the writing test, the students were asked to write a short paragraph which dealt with their personal data (name, age, parents, siblings, address, and hobby). Their compositions were recorded and scored using the writing rubric which consisted of ideas, organization, language, and mechanics. Meanwhile, the speaking test was conducted in the form of oral presentation. The pupils talked about their personal data (name, age, parents, siblings, address, and hobby) during the test. Their presentations were recorded and scored using the speaking rubric which consisted of pronunciation, loudness, rate, and word usage.

For listening comprehension, the pupils were given the test in the form of multiple choice questions which consisted of eight passages and 44 questions. Each question had four options (A, B, C, D). Each passage was read aloud to the pupils and they answered them directly on the answer sheet.

The reliability coefficients of the tests are as follows: listening was 0.809; reading was 0.878; and Dolch list of words was 0.840, and the reliability coefficient of the reading habits questionnaire was 0.735. These four reliabilities were the results of the piloted study given to other pupils before the pretest was done. The reliability coefficient of speaking test was 0.874; the reliability coefficients of writing test was 0.756 and were just found out after the pupils had the pretest.

The validity of the tests was focused on the contents, that is, the nature of their contents and the specification used to formulate the contents. For the purpose of achieving a high degree of content validity, the test was arranged in accordance with the objective of the study, that is, to measure the pupils' literacy achievement. After the pilot test was done, the number of the valid questions for reading test was 31 questions and there were 30 questions for listening; therefore, they were used for pretest.

As this study was the experimental study using 'Online Resources Strategy' (ORS) at one Elementary School in Palembang to cultivate reading habit and improve the pupils' English achievement, the sample consisting of 40 fifth graders were randomly chosen out of 112 pupils based on gender. They were then equally divided into two groups, experimental and control. Despite a set of literacy tests, comprising four skills, and reading habit questionnaires given to both groups, as pretest and posttest, only the experimental group was taught English by using the ORS.

In this study, the treatment for the experimental group was conducted in eight weeks, four meetings a week. Each meeting lasted for 40 minutes. During the experiment, the students were taught literacy skills by using the strategy of exploring and using online resources.

Teaching Procedure

In conducting the study, the teaching procedures for the experimental group somewhat included the teacher's explanation of the objective of the study, showing the pupils how to start and use Internet connection, find and select materials online from several websites on each meeting either by the teacher alone or together with the pupils. Then the teacher with the pupils read the materials accessed, discussed the content of the materials with the pupils followed by such activities as listening to other materials and writing about them.

Data Analysis

The answers of the literacy tests were evaluated using scoring system ranged from 0 to 100. The score interval is as follows: 86 – 100 (excellent); 71 – 85 (good); 56 – 70 (average); 41 – 55 (poor); 40 (very poor) (The Manual of Faculty of Teacher Training and Education, Sriwijaya University (Buku Pedoman FKIP, UNSRI, 2004).

To score the pupils' speaking achievement, a speaking rating scale was used. The maximum possible total score is 100 (20 times 5) categorized as poor (4-8), fair (9-12), good (13-16), and very good (17-20). To score the pupils' writing achievement, we used a speaking rating scale presented by Hill (2008). Using this scale, the scoring system is as follows: 1 (never), 2 (sometimes), 3 (half the time), 4 (mostly), 5 (always). Maximum possible total score is 100 (20 times 5). The range is as follows: poor (4-8), fair (9-12), good (13-16), very good (17-20).

For Reading Habits, the Scoring Rubric was used. The highest score that could be achieved by a student was 86, in which only item number 1 scored 10 while items numbers 2 to 20 scored 4.

The mean scores of both pretest and post-test within each group were compared to determine how great the significant difference between the two means (McMillan and Schumacher, 2010). Before conducting the analysis, Levene's test was firstly done to find the equality of variance. To find out the statistically significant difference between the experimental group and control group, the independent sample t-test was used.

RESULTS

Score Distribution

Using three levels of reading (frustration, instructional, and independent), the achievement of the sight words of both groups is presented in Table 1.

Table 1 shows that there is no difference in pupils' reading level of the experimental group before and after the experiment. There was no pupil in independent level, only 2 pupils (10%) were in the instructional level, and 18 students (90%) were in frustration level. Meanwhile, in the control group, there was also no difference between the pre-test and post-test level of reading of the pupils in which all of them in this group (100%) were in the frustration level.

Using five criteria, the achievements of the pupils in literacy^{-total} and its sub-literacy skills and reading habits are presented in Table 2. When the literacy skill^{-total} was looked at, it was found that the experimental group's achievement increased. Although in the pre-test, 80% of the pupils were in very poor and poor categories, 15% was in average category and 5% was in a good category,

Table 1. Levels of Reading Skill of Both Groups Based on Sight Words

Levels of Reading Skill	Score Interval	Pre-Test Frequency		Percentage		Post-Test Frequency		Percentage	
		Exp	Cont	Exp	Cont	Exp	Cont	Exp	Cont
Frustration Level	5+ Errors	18	20	90	100	18	20	90	100
Instructional Level	3-4 Errors	2	-	10	-	2	-	10	-
Independent Level	0-2 Errors	-	-	-	-	-	-	-	-
Total		20	20	100	100	20	20	100	100

in the post-test, 65% of them moved to average category and 35% was even in a good category. On the other hand, for the control group's pre-test, although 30% was in a very poor category and 70% in a poor category, in the post-test, there was a decrease in percentage of those in very poor category (20%) and increase in number of those in poor category (80%). For listening literacy, in pretest, none of the experimental group pupils belonged to good or excellent category; 70% was very poor, 15% was poor, and 15% was average. In the post-test there was still no one in excellent category, and as expected no pupil was in very poor category anymore. However, 35% was in poor, 35% average, and 30% in good category. For the control group, no pupil in the pretest was in average, good or excellent categories. Instead, all of the pupils were in very poor (75%) and poor (25%) categories. In the post-test, there was still no pupil in average, good, or excellent category. Instead, 70% of them were in very poor and 30% poor categories.

For speaking literacy, the results of the pretest showed that no pupils in the experimental group belonged to very poor category, 10% poor, 45% average, 35% good, and 10% excellent categories. In the post-test, no one was in very poor or poor category, 45% was average, 45% good, and 10% excellent. While in the control group, 10% was very poor, 20% poor, 40% average, 20% good, and 10% excellent. In the post-test, 15% was very poor, 25% poor, 50% average, and 10% good; and no one was excellent.

For reading literacy, it was found out that in the experimental group's pre-test, 85% was very poor, 10% poor, 5% average and no pupil was in good or excellent category. In the post test, however, only 15% was very poor, 70% poor, 10% average, and 5% good. While in the control group's pre-test, 90% was in very poor category and 10% was in poor category. Unfortunately, in the post-test, all of the students (100%) were in very poor category.

For writing literacy, it was found that in the experimental group's pre-test, 25% was very poor, 40% poor, 30% average, 5% was good and no one was excellent. In the post-test there was an increase in the achievement of the pupils in which no one belonged to

very poor or poor category. Instead, 15% belonged to average, 65% good, and 20% excellent. While in the control group's pretest, it was found that 30% was very poor, 45% poor, 25% average and no one was in excellent category. In the post-test, there was an increase that no one was in the very poor or poor category although still there was no one in an excellent category either. It was amazing instead, 60% was in an average category and 40% was in a good category.

Finally, for reading habits, it was found out that although in the experimental group's pre-test, 85% of the pupils were in a poor category and 15% was in an average category, in the post-test, on the other hand, only 15% was in a poor category and 85% in an average one. Meanwhile, the control group's pre-test showed that, 75% was in a poor category and 25% was in an average category. In the post-test, on the other hand, only 70% was in a poor category and 30% was in an average category.

Statistical Analyses

There were two statistical analyses applied in this study; (1) paired sample t-test, and (2) independent sample t-test. However, prior to the application of the analyses, Levene's Test was used (McMillan and Schumcher, 2010). It was found that the data had equal variance.

Furthermore, from Table 3, it can be seen that each mean of the experimental group in all variables increased. The highest mean was in sight words (19.9) followed by literacy skill (12.15) and reading habits (9.0). When each sub-skill was counted, it was found that the highest increase happened in writing (28.75) followed by listening (28.35), reading (17.5), and speaking (5.35). In the control group, on the other hand, the highest increase occurred only in literacy (4.55) and reading habit (1.75). The pupils' achievement in sight words seemed to be decreasing (-0.65), However, when each sub-skill was considered, only the pupils' writing literacy (21.5) and listening literacy (4.55) obtained the increase. The other two (reading and speaking) did not.

Table 2. Frequency and Percentage of Pupils' Achievement Levels of Both Experimental and Control Groups

Achievement level	Pre-Test Frequency		Percentage (%)		Post-Test Frequency		Percentage (%)	
	Ex	Con	Ex	Con	Ex	Con	Ex	Con
LITERACY TOTAL								
Very Poor	4	6	20	40	-	4	-	20
Poor	12	14	60	60	-	16	-	80
Average	3	-	15	-	13	-	65	-
Good	1	-	5	-	7	-	35	-
Excellent	-	-	-	-	-	-	-	-
TOTAL	20	20	100	100	20	20	100	100
LISTENING LITERACY								
Very Poor	14	15	70	75	-	14	-	70
Poor	3	5	15	25	7	6	35	30
Average	3	-	15	-	7	-	35	-
Good	-	-	-	-	6	-	30	-
Excellent	-	-	-	-	-	-	-	-
TOTAL	20	20	100	100	20	20	100	100
SPEAKING LITERACY								
Very Poor	-	2	-	10	-	3	-	15
Poor	2	4	10	20	-	5	-	25
Average	9	8	45	40	9	10	45	50
Good	7	4	35	20	9	2	45	10
Excellent	2	2	10	10	2	-	10	-
TOTAL	20	20	100	100	20	20	100	100
READING LITERACY								
Very Poor	17	18	85	90	3	20	15	100
Poor	2	2	10	10	14	-	70	-
Average	1	-	5	-	2	-	10	-
Good	-	-	-	-	1	-	5	-
Excellent	-	-	-	-	-	-	-	-
TOTAL	20	20	100	100	20	20	100	100
WRITING LITERACY								
Very Poor	5	6	25	30	-	-	-	-
Poor	8	9	40	45	-	-	-	-
Average	6	5	30	25	3	12	15	60
Good	1	-	5	-	13	8	65	40
Excellent	-	-	-	-	4	-	20	-
TOTAL	20	20	100	100	20	20	100	100
READING HABITS								
Very Poor	-	-	-	-	-	-	-	-
Poor	17	15	85	75	3	14	15	70
Average	3	5	15	25	17	6	85	30
Good	-	-	-	-	-	-	-	-
Excellent	-	-	-	-	-	-	-	-
TOTAL	20	20	100	100	20	20	100	100

Table 3. Descriptive Statistics of Pre-test and Post-Test of Experimental and Control Groups

Variables	PRE-TEST		POST-TEST		Mean Difference
	Mean	Std. Deviation	Mean	Std. deviation	
EXPERIMENTAL GROUP					
1. Literacy _{Total}	47.15	10.080	67.05	7.052	19.9
a. Listening	35.15	16.731	63.50	13.422	28.35
b. Speaking	72.50	11.528	77.85	9.230	5.35
c. Reading	30.30	12.819	47.45	12.146	17.15
d. Writing	51.00	12.096	79.75	7.340	28.75
2. Reading Habit	50.75	4.610	59.75	5.562	9.0
3. Sight Words	52.95	15.592	65.10	13.127	12.15
CONTROL GROUP					
1. Literacy _{Total}	42.15	6.683	46.70	4.813	4.55
a. Listening	31.75	10.553	36.55	10.758	4.8
b. Speaking	64.50	14.859	57.20	14.735	-7.3
c. Reading	25.60	9.472	22.30	5.704	-3.3
d. Writing	49.00	10.336	70.50	7.052	21.5
2. Reading Habit	52.00	5.410	53.75	8.515	1.75
3. Sight Words	52.65	18.012	52.00	17.298	-0.65

Table 4. Summary Statistics of Mean Difference in Literacy Skills and Reading Habits of Experimental and Control Groups based on Paired Sample t-Test (df=19)

Variables	T	Df	P<0.05	Mean
1. Literacy (Pre-Post) – Exp	11.541	19	0.000	19.900
Literacy (Pre-Post) – Cont	3.285	19	0.004	4.550
a. Listening (Pre-Post) – Exp	6.322	19	0.000	28.350
Listening (Pre-Post) – Cont	1.218	19	0.238 NS	4.800
b. Speaking (Pre-Post) – Exp	4.095	19	0.001	5.350
Speaking (Pre-Post) – Cont	-2.482	19	0.023	-7.300
c. Reading (Pre-Post) – Exp	8.940	19	0.000	17.150
Reading (Pre-Post) – Cont	-1.476	19	0.156 NS	-3.300
d. Writing (Pre-Post) – Exp	9.765	19	0.000	28.750
Writing (Pre-Post) – Cont	8.546	19	0.000	21.500
2. Reading Habits (Pre-Post) – Exp	5.604	19	0.000	9.000
Reading Habits (Pre-Post) –Cont	0.813	19	0.426 NS	1.750

The Analysis of Mean Difference within the Groups

Literacy Achievement

There was a significant difference in the experimental group pupils' literacy achievement (total) ($t = 11.541$, $p < 0.000$ with $df = 19$) before and after the treatment. Meanwhile, in the control group, the value of t_{count} was 3.285; $p < 0.04$ with $df = 19$. It means that there was also significant difference in pupils' literacy achievement in the control group.

Furthermore, the mean difference in every sub-skill within both groups can be seen in Table 4.

In the experimental group, all pupils had significant

progress in every literacy skill. For example for listening literacy, the value of t_{count} was 6.322 at $p < 0.000$; for speaking the value of t_{count} 4.095 at $p < 0.000$; for reading literacy, the value of t_{count} was 8.940 at $p < 0.000$; and for writing literacy, the value of t_{count} was 9.765 at $p < 0.000$. All of these findings show that there was a significant difference in pupils' achievement for all skills after being introduced with the online resources strategy.

Meanwhile, the control group pupils did not achieve as well as those from the experimental group. For listening literacy, the value of t_{count} was 6.322 at $p < 0.000$; for speaking literacy, the t_{count} was -2.482 at $p < 0.023$; for reading literacy, the value of t_{count} was -1.476 at $p > 0.156$; and for writing literacy, the value of t_{count} was 3.285 at

Table 5. Summary Statistics of Literacy Achievement and Reading Habits of Experimental and Control Groups Based on Independent Sample t-Test

Variables	T	Df	P<0.05	Mean
1. Literacy (Post-test)	0.659	38	0.000	20.350
Literacy (Gain Score)	6.940		0.000	15.350
a. Listening (Post-test)	7.007	38	0.000	26.950
Listening (Gain Score)	3.870		0.000	23.700
b. Speaking (Post-test)	5.311	38	0.000	20.650
Speaking (Gain Score)	3.963		0.000	13.150
c. Reading (Post-test))	8.382	38	0.000	25.150
Reading (Gain Score)	6.857		0.000	20.300
d. Writing (Post-test)	4.064	38	0.000	9.250
Writing (Gain Score)	1.872		0.069 NS	7.250
2. Reading Habits (Post-test)	2.638	38	0.012	6.000
Reading Habits (Gain Score)	3.128		0.003	8.000

$p < 0.04$. These imply that there was no significant difference in pupils' reading achievement while for the other three skills the pupils obtained their significant increase in achievement.

Reading Habits Achievement

The value of t_{count} 5.604 at the significant level $p < 0.000$ was found in the experimental group which means that there was a significant difference in pupils' reading habits before and after the treatment was done. On the other hand, the value of t_{count} 0.813 obtained by the control group was lower than that of the t_{table} at the significant level $p > 0.426$ with $df = 19$. It means that there was no significant difference in pupils' reading habits in this group.

Based on the results of paired sample t-test, it can be concluded that there was a significant difference before and after the treatment was given to the experimental group in literacy and reading habits of the pupils. The same was true when we looked at each literacy sub-skill. In the control group, there was only significant difference in literacy skill_{total} but not in reading habits of children. When each sub-skill was furtherly considered, it shows that both the productive skills of the children were significantly improved but not the receptive skills (See Table 4 above).

The Analysis of Mean Difference between the Groups

Using independent sample t-test, the gain scores of the two groups were compared to see whether the pupils' achievements were statistically different. See Table 5.

From table 5 above, it can be seen that the value of t_{count} of Literacy (total) and its sub-skills (Listening, Speaking, Reading, Writing) and Reading Habits in the post-test, were all significant at $p < 0.000$ in two tailed testing with $df = 38$ (post test). While the value of t_{count} on the gain scores of Literacy total, Speaking Skill, Reading

Skill, Listening skill, and Reading Habits were significant at $p < 0.000$ except Writing skill whose significant level was $p < 0.069$ in two tailed testing with $df = 38$ (gain score). In general, there was a significant difference in Literacy Achievement and Reading Habits and between the pupils who learned through exploring online resources for/with the pupils and those who did not.

Regression Analysis

To see the effectiveness of the Online Resources Strategy, the regression analysis was done. The results showed that the correlation coefficient (R) between the activities of exploring online resources for or with the pupils and reading habits was 0.393. The determiner coefficient (R^2) is 0.155. We can say that the online resources strategy contributes significantly (15.5%) to reading habits based on both the t_{count} (2.638) and F_{count} (6.960) which are higher than that of the t_{table} 2.0244 at $p < 0.012$.

For the pupils' literacy achievement, it is found that correlation coefficient between exploring online resources for or with the pupils strategy and literacy achievement is 0.866. The correlation was very high and the R^2 or the determiner coefficient is 0.749. This means that online resources strategy contributes 74,9% to literacy achievement. Either the t_{count} (10.659) or F_{count} (113.610) is higher than the t_{table} 2.0244 at $p < 0.000$. It means that online resources strategy also contributes significantly to literacy achievement. See Table 6.

Then for the reading habit and the pupils' sight words, the significant correlation coefficient of 0.462 was also found. The determiner coefficient or R^2 is 0.213. We can say that the online resource strategy contributes 21,3% to the sight words due to either t_{count} 3.211 or F_{count} 10.309 which is higher than that of the t_{table} 2.0244 at $p < 0.003$. It means that reading habits contribute significantly to the recognition of sight words.

Based on the result of paired sample t-test, The value of t_{count} of sight words in experimental group 7.488 was

Table 6. Summary Statistics of Exploring Online Resources for or with the Pupils on Literacy Achievement and Reading Habits (N=40)

Model	Independent Variable	Dependent Variable	R	R ²	df	F	T	Sig
Model 1	Exploring Online Resources for or with the Pupils	Literacy Achievement	0.866	0.749	1	113,610	10.659	0.000
	Reading Habit	Reading Habits	0.393	0.155	1	6.960	2.638	0.012
		Sight Words	0.462	0.213	1	10.309	3.211	0.003

higher than $t_{\text{table}} 2.093$ at the significant $p < 0.000 < 0.05$ in two tailed testing with $df = 19$. It means there was a significant difference in students' ability in performing sight words before and after the treatment. On the other hand, the value of t_{count} of sight words in control group 0.053 was lower than $t_{\text{table}} 2.093$ at the significant $p > 0.958 > 0.05$ in two tailed testing with $df = 19$. It means that there was no significant difference in control group.

The result of independent sample t-test (Gain score) also showed that the value of t_{count} of sight words 4.866 was higher than $t_{\text{table}} 2.0244$ at $p < 0.000$ in two tailed testing with $df = 38$. Again, it means there was a significant difference in students' ability in performing sight words before and after the treatment.

So, we can conclude that the improvement in the number of words that the students could recognize in experimental group was better than those in the control group.

DISCUSSION

Among the four skills which are integrated in literacy achievement, the pupils in this research had higher achievement in receptive skills than in productive ones although they had significant progress in all of them. We assumed that this high achievement in listening and reading skills happened because most of the online resources which were exposed to the pupils during the research were the animated electronic books or materials provided with the text and the audio. The audio enabled the pupils to hear the pronunciation of the words in the text during reading. The good sound systems of the multimedia room also helped the pupils to catch the words better. After they listened to the pronunciation of the audio the pupils loved to imitate the words that they heard online which also had a good effect on their pronunciation and eagerness to read the materials offline.

The increase of speaking skill also happened significantly. This increase could probably happen because the pupils in experimental group had already accustomed to using English orally. During the treatment the pupils were encouraged to speak English and share their opinions or ideas while they had the activity in the classroom. They did not feel shy and nervous anymore

when they did the presentation about themselves.

In sight words, although most of the pupils were still in frustration level they had already made a progress because the number of words that they could recognize after the treatment increased compared to the number of words that they could recognize before the treatment. This progress was one of the effects of the use of the online resources for or with the pupils because during the activity, the pupils were exposed to the high frequency words from the websites that they visited online and the materials they read.

Learning English through exploring online resources for or with the pupils is considered as one of the techniques that could be used to increase pupils' literacy achievement because it brings benefits to the pupils. The online resources introduced during the teaching and learning process facilitated the pupils to obtain the affective filter consisting of motivation, self confidence and anxiety. According to Krashen and Terrel (1983) the appropriate affective filter is when the motivation and self confidence is high and anxiety is low. When this condition happens, input will be easier to absorb.

In this study, this happened probably because exploring online resources was a fun activity for the children. Internet here was interesting as a play tool. Children in this study loved to play. Exploring online resources for or with the pupils had enabled them to have fun while learning. They had a great interest and were curious about Internet and how to use it. At this stage, we then were able to transfer the input to develop children's reading habits by introducing them to the resources for reading that were appropriate for their age and could be searched by themselves through the internet. Therefore, at the same time, we began to increase children's literacy achievement.

From the observation done, exploring online resources for or with the pupils could also improve the pupils' computer literacy and confidence. At the beginning of the research, the pupils were still shy and afraid to use the computer and told us what materials they wanted to choose. Most of the pupils did not have a computer at home. That is why they became unconfident to use the computer. However, during the treatment, they were exposed continuously to computer and internet. Slowly, they were able to operate the computer and use the

internet. Then, they were confident to tell what materials they were interested in. From the observation it seemed that the students were interested in two kinds of websites in choosing the online resources. First is the websites which provide story in the form of animation (electronic books) and the other is websites which deal with social networking, such as face book. The latter was used by the children to communicate with their friends in the same class.

Then, since this study was dealing with behavior, in this case reading habits, it is compulsory for the students' parents to support the development of the children's reading habit because children's attitudes are mostly influenced by their parents at home. Based on the results of the questionnaires it could be seen that the correlation why students' reading habits were mostly still in the average category was that because when they were asked about 'whether their parents liked reading or not,' the highest answer was 'Yes, but only sometimes'.

Finally, exploring online resources for or with the pupils is beneficial and must be involved as one of the teaching techniques to be used in English class, moreover of EFL setting, as a vital means of a tool to develop young learners' reading habits and increase literacy achievement in this technological era.

CONCLUSIONS

The provision of new reading materials online for TEYL has proven to be successful in cultivating reading habits and addressing literacy achievement. When pupils are customized searching their learning materials in various forms of media based on their own interest with the guidance from the teacher rather than having only prepackaged books or materials, it can have a great impact on their engagement, motivation, and achievement. This activity allows them to be involved more in teaching and learning process, sharing ideas, and learning even about technology, meaning not only learning literacy but also reading to learn other content areas.

It is important to introduce a change in ELT strategy, that is, from having only traditional way of teaching and learning to involving ICT in classroom activities to build early success for young learners. Therefore, the government must provide Internet connection to every school.

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