Developing Writing Skill for students in Grade 6 at Demonstration School in Chonburi with Online Diary

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Abstract: *This research aims to develop writing skills for students in grade six at Demonstration School in Chonburi by using an "Online Diary". A sample group of 32 students in grade six of the academic year 2018 is selected by applying purposive sampling method. Tools used for collecting data are lesson plans with Online Diary, "Pre- and Post-ability writing skills test" which consists of 30 multiple choices questions and 3 written exams, satisfaction surveys and interviews. The data is analyzed by using dependent t-test for Dependent Samples, the comparative analysis of students' writing ability classified by gender and average scores using One-way-ANOVA statistics. Content analysis uses frequency distribution, percentage, student satisfaction measurement, average statistics, and standard deviation. 1) The result shows that the development of students writing ability using an online diary has an efficiency of 82.38/78.01. 2) A comparison of the writing ability of students pre and post study using as online diary for grade 6 students. 2.1) The writing skills of the students are higher after the training using online diary with statistical significance level of .01. 2.2) The comparison of students writing skills classified by gender pre-study was found that female students had higher writing skills than male students with statistical significance of 0.5. 2.3) The comparison of students writing skills classified by gender post-studied found that the male and female students have no significant differences, with statistical significance of 0.2. 2.4) The comparison of students writing skills classified by average grade after learning, found that students average grade of 2.00 and 4.00 have statistical different of significance of 0.1 and average grade of 3.5 and 4.00 have statistical different of significance 0.5. 3) Satisfaction of students toward writing an online diary found the overall satisfaction at a high level (x=4.43, S.D. = 0.69). 4) Guidelines for writing development plans interview found that 75% of students prefer to use electronic devices (mobile phone, computer, iPad, etc.) with an online applications as a writing tool, a search engine, to submit homework, to share information over notepads.*

Keywords: Writing skills, Online Diary

Introduction

The importance of language in particularly for reading and writing. Teachers ought to have a good teaching technique to develop student's reading and writing skills. Teachers should understand each individual student learning ability and find ways to encourage all students to develop their language skills (Thanapat Chayakul, 2006). Language is also a communication tool for building an understanding and good relationships with other. Writing is one of the tough subjects in the Thai language as this requires multiple skills i.e. spelling, vocabulary, grammar, creativity, story structure and knowledge of the story. As writing is a form of expression through words for readers to understand the authors' intention. A good writer must first be a good listener, good reader and practice writing regularly (Suthiwong Phongphaiboon, 1988).

An advance in information and communication technology in 21st century is allowing students to access language learning sources much easier than before. There are various approaches of learning language on digital platform i.e. reading an e-book, listening to an audio

book, watching movies, learning though an e-learning website and writing an online blog. Based on ideas of teachers and teaching in the 21st century of Direk Phonsima (2016, online page) states that Robotics Technology has advanced alongside with an Artificial Intelligence Technology (AI) which enables humans to develop innovations in various fields faster. Teachers should increase learning activities and able to provide students with useful skills that correspond to current and future advanced technologies which is in line with Anderson (Anderson, 2008). Teachers need appropriate materials for teaching. Today, Online learning responds to flexible learning where students be able to study from home, outside or anywhere in the world. Online learning is cost-effective as students can repeat lessons provided on the online media without wasted learning material i.e. books, stationery, teacher-hours or traveling fees. This new way of learning is a self-paced study which is more effective when compared with just learning in a classroom. If students learn and then practice by themselves such as writing, listening and taking notes from online media, this will improve student's learning abilities to a high level.

An online diary is a fundamental form of creating a website, blog and online article which allows the user to easily create and arrange the appearance of the article written with minimal experience. Today, the ease of online diary makes it possible for people to write stories, write poetry, create plan, review products, save and share articles. The platform often allows readers to express their opinions which corresponds to Steve Worth (Stewart, 2001) who speaks of Timber Nersly's invention of the World Wide Web as a medium of cooperation. This concept has been recorded on the website more than 5 years ago. There are several online diary websites that are available free of charge to those interested i.e. Facebook, Tumblr, Evernote, journey. There are also paid versions to upgrade your online diary websites that allow you to decorate your online diary and be more creative.

Writing problems found in national and school level, can be reflected from the Ordinary National Education Test (O-NET) of Grade 6 students. National Thai language O-NET exam contains process writing, communicate to create knowledge and decision making to solve problems in the daily life to gain a habit of writing. The exam questions contain pictures, short stories, or news of various events for students to analyze and write stories from pictures or articles given. Thai language test results (O-NET) of grade 6 students in the 2016 academic year at the national level average score was 52.98 and at Demonstration Schools level average score was 65.06. From O-NET exam result in Thai language indicate that the school ought to improve teaching technique for Thai language subject, especially in writing. Instructional management in basic Thai language class in elementary grade 6, from results of essay tests that many students have problems with writing such as spelling mistakes and writing incomplete sentences. When writing an essay, students cannot clearly present viewpoints of the story and coherence for the title, introduction and summary. It also found that the students have problems with making notes when studying, such as not being able to capture important points, inability to interpret the story. When students cannot find essence of the story this causes students to not take notes in time, miss key points and some students are not taking notes at all. This is resulting in lower academic performance than the specified criteria. The students do not recognize an importance of writing and resulting in errors in writing. Some students able to read but unable to write which corresponds to the research of Boonyaporn Thongchan (2017, p. 125). Students do not like learning activities that involve a lot of writing. Problems from teachers' side are that teachers do not establish enough activities that focuses on writing skills and unable to notice the important of improve students writing skill by encourage students to think, analyze, interpret and criticize

articles. Teachers also lacking teaching materials/activities that will encourage and attract students to write.

Researchers have studied ways to develop writing skills of students and suggest that online media can be use in writing activities for students. This can attract students in the digital age attention which is an addition to the traditional methods. Students will become more interested in practicing writing and eventually gain a better writing skills. Furthermore, students can apply the knowledge gained to various uses in daily life as well as being able to use writing as a tool for further education. The researcher combined an interesting writing teaching method with online technology for teachers to develop Thai writing skills with Online Diary for Grade 6 Students.

Research objectives

1. To develop writing skills in Thai language of grade 6 students.
2. To assess the effectiveness of the standard writing skill development tool.
3. To compare the writing ability of grade 6 students classified by gender and student's performance before and after using an online diary in writing development.
4. To study student's satisfaction developing writing skills by using an online diary
5. To provide advice on developing Thai writing skills for grade 6 students

Research questions

1. What is the writing skill level of grade 6 students?
2. Does the efficiency of writing skills development tool online diary meet the standards according to the 80/80 criteria or not.
3. Compare the writing ability of grade 6 students by gender and mean grades to see if it improves after using our tool or not?
4. Is our Tools suitable to be used as the guideline for developing writing skills of grade 6 students?

Research hypothesis

Thai writing ability after teaching by using the online diary writing development process for 6-grade students classified by gender and the student's average academic performance was higher than before using the online diary writing development process.

Research scope

1. Sample used in this research is 6-grade, Semester 2, Academic Year 2018, Demonstration School in Chonburi, 32 people were selected by Purposive Sampling since the class is a bilingual program which included international students. Teaching materials are content used for teaching Thai writing for 6-Grade students, 5 lessons. The research time was 1 academic year 2018.

Methodology

1. Thai language learning activities with lesson plans for developing Thai writing skills using online diary 5 Units , 8 lesson plans.
2. The Writing Ability Test, which is divided into 2 parts, Part 1: 30 multiple choices and Part 2: 3 subjective questions, both parts contain a total mark of 50.

3. Likert's rating scale survey form with 5 levels of satisfaction from positive to negative. The guideline for interpreting the results is implemented from Boonchomsri-Sa-san (2002, p. 24) which used mean and percentage values as follows:

Mean 4.51 - 5.00 means a positive attitude at the Highest level.
Mean 3.51 - 4.50 means a positive attitude at High level.
Mean 2.51 - 3.50 means a positive attitude at Moderate level.
Mean 1.51 - 2.50 a positive attitude at Low level.
Mean 1.00 - 1.50 a positive attitude at Lowest level.

Tool quality determination

1. Revised the learning activity plan based on research advisor's feedback and later proposed to three experts by considering Index of Objective Congruence (IOC) value of 0.5 or above. As result this research have an IOC value of 0.90.

2. Pre and Post Writing Ability Tests where each of the test contains 2 parts:

Part 1: Thirty multiple choices exam with total mark of 30.
Part 2: Three subjective questions with total mark of 20.

3. Revised "Pre and Post Writing Ability Tests" based on research advisor's comment and later proposed to three experts by considering Index of Objective Congruence (IOC) value of 0.5 or above. As result this research have an IOC value of 0.96.

4. Used a revised version of "Pre and Post Writing Ability Tests" with students in secondary school (M.1) at Wat Bang Ko School, Bangkok. Then find the difficulty (p), the discriminant power (r) and the confidence by using Kuder – Richardson's formula for calculating the KR-20, it was found that all writing ability tests had difficulty (p) values between 0.3-0.75, discriminant power (r) values between 0.20-0.60 and confidence values of 0.68.

5. Likert's rating scale survey form is proposed to three experts to assess the research area and language used. Results of satisfaction from experts are used to calculate IOC value by determined mean and standard deviation with the satisfaction level of 0.50 or higher. The result shows IOC value of 0.60 and above for 15 questions. When survey form is used with sample students, the results showed that students satisfaction level is very high (x= 4.43 S.D. = 0.69). Details are shown in the Appendix.

Data collection

Researcher collects the data according to the following steps:

1. The researcher collected the data from students' pre-writing ability test before studying.

2. The researcher conducted learning activities with the sample group. According to the 8 Thai language learning activities plans, the researcher asked students to do post-writing ability test after learning activities and collect the exam results for analysis.

Data analysis

The researcher analyzes data used computational statistical software as follows:

1. Statistical Basic, Percentage, Mean and Standard Deviation.

2.To analyze the quality of the instrument used in the research, IOC method is used to determine content accuracy of each question. Determination of questions Performance of the online diary writing skills development Tool set a standard criterion of 80/80 where E1/E2 is used.

3. An inferential statistic t-test (Dependent Samples) is used to determine if there is a significant difference between the means of students' writing ability before and after study.

4. The one-way analysis of variance (ANOVA) is used to analyze writing ability of students, classified by gender and mean student score.

5. Guidelines for writing development of students from the interviewers is used Content Analysis, Frequency distribution and Percentage.

6. Analyze student satisfaction, mean (x) and standard deviation (S.D.) were calculated and compared values with five levels of satisfaction criteria: Strongly Satisfied, Satisfied, Neutral, Dissatisfied and Strongly Dissatisfied.

Research conceptual framework

Theory
Teaching writing using an online diary will improve student's writing

Student status
1. Gender - male
            - female
2. Average academic grade
        - 2.1   1.00 -2.00
        - 2.2   2.01 -3.00
        - 2.3.   3.01   -4.00

Development Methodology

1. **Analyses** writing problems. Find existing problems in writing
2. **Develop** teaching plan with uses online diary to develop writing which includes of 5 units –
Unit 1 Introduction of online diary and writing-related applications.
Unit 2 Fundamental writing for communication.
Unit 3 Different format of story writing.
Unit 4 Creative writing in an online media.
Unit 5 Writing Evaluation

3. **Development** Stage: The writing with online diary plan was used with non-sample group of students.

4. **Implementation** :The developed online diary lesson plan then used with sample group.

5.**Evaluation** teaching and learning process by comparing the average the writing score of pre and post study.

Results of development

1. Ability to write Thai.
2. Recommendations for the development of writing

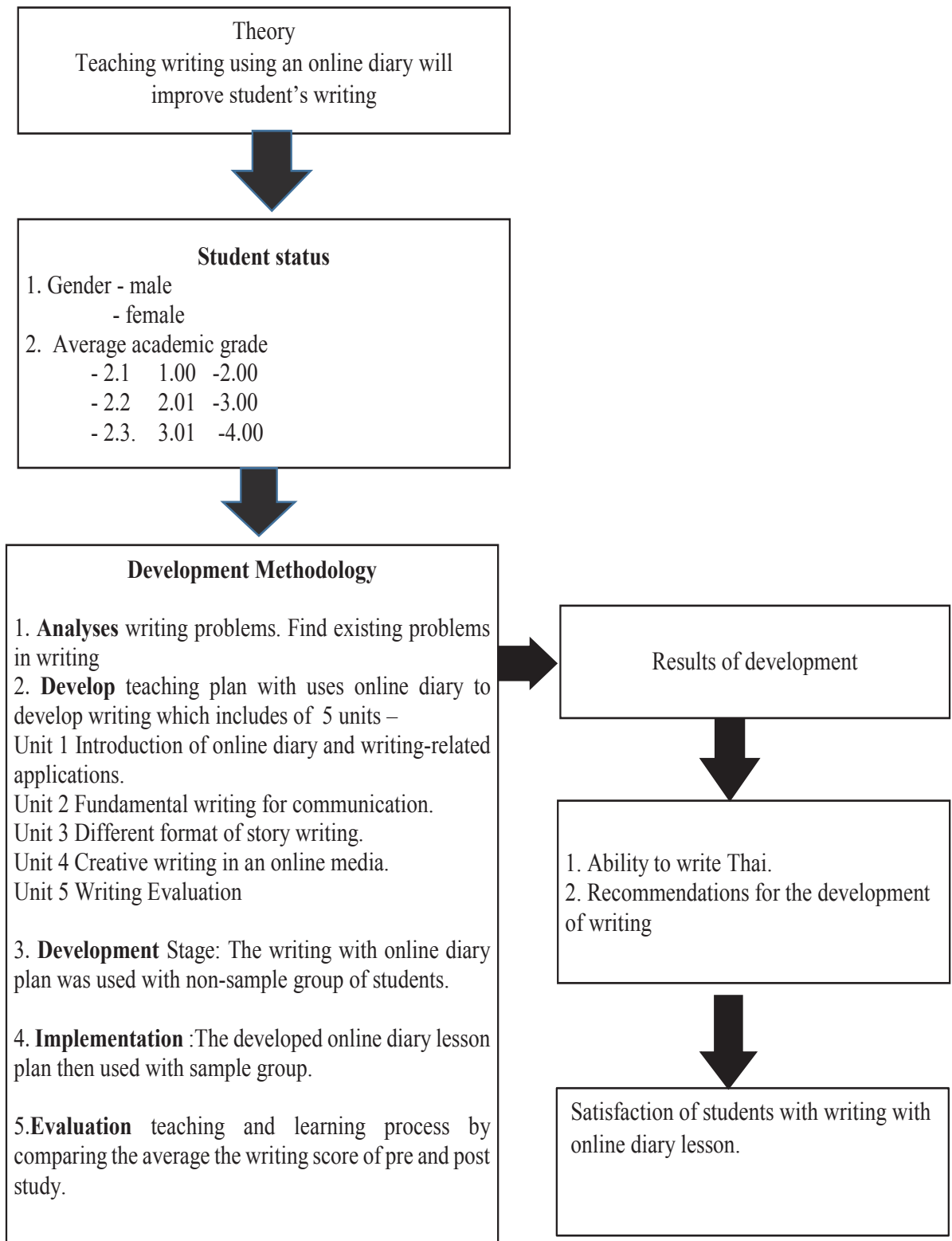Satisfaction of students with writing with online diary lesson.

Figure1: Conceptual Framework of the Study

The study will select sample and measure their current writing to establish a baseline. Then After analysis of those evaluation results, a lesson plan to teach them to write better, which emphasis use of an online daily will be created. The students for writing to their plan. When the course is complete, students are evaluated again, and The results of the performance before and after the course completed to establish whether or not the method is using an online diary was effective.

Definitions of specific terms

An online diary refers to a form of writing on a website. The application used to create diary online is similar to blogs. Such formats allow the user to easily create and arrange the appearance of the written subject. This diaries can be viewed as web pass and look good even on mobile phones.

Skill development tools refers to the process of designing and developing teaching methods for writing by using the online diary These tools are used to assess the quality of content and technical aspects. Then it was revised according to the recommendations of experts and tested to test the performance is in accordance with the 80/80 benchmark.

Teaching efficiency using an online diary is defined as the writing achievement of students as measured by taking the writing proficiency test using the 80/80 benchmark.

The first 80 represents the student's average score on as the exercise at the end of the lessons in writing a journal. All the scores together should have an average of 80 percent or more

The last 80 refers to the student's average score assessed by completing writing tests of students gathered average of 80% or more.

Research results

Table 1 Efficiency of Thai writing skills development with online diary plan with grade 6 students according to the criteria 80/80

Efficiency	Total mark	$\bar{x}$	SD	percentage
(E1)	70	57.67	3.70	82.38
(E2)	50	40.92	2.86	78.01

From Table 1 the effectiveness of Thai Writing Skills development with online diary plan (E1 / E2) equal to 82.38 / 78.01

Table 2 The results of writing ability of the students in Grade 6 are classified according to gender before studying with a Thai writing skill development plan with online diary.
    For grade 6 students

Efficiency	Total mark	$\bar{X}$	SD	n	t	p
efficiency (E1)	50	26.31	5.50	16		
efficiency (E2)	50	31.88	4.24	16	3.20*	.003

** p < .01

   From Table 2, the calculated t value was 3.20, the writing ability of grade 6 students, classified by gender, was found that females had a statistically higher writing ability than male statistical significance of .05.

Table 3 The results of the comparison of the writing ability of the students in Grade 6 are classified by gender after studying with a Thai writing skill development plan with online diary.

Efficiency	Total mark	$\bar{X}$	SD	n	t	p
male	50	42.13	2.90	16	1.58	.125
female	50	43.69	2.70	16		

** p < .01

   From Table 3, calculated t value was 1.58. The writing ability of grade 6 students classified by gender after studied. Found that male students and females have no difference in ability to write.

Table 4 Results of the writing ability of Grade 6 students pre and post study with the development of Thai writing skills with online diary.

Efficiency	Total mark	$\bar{X}$	SD	n	t	p
Pre-study	50	29.09	5.60	32	17.93**	.000
Post-study	50	42.91	2.87	32		

** p < .01

From Table 4, calculated t value was 17.93, the writing ability of the grade 6 students were found to be higher after studied with statistically significant of .01.

Table 5 The results of the comparison of the writing ability of Grade 6 students classified by average academic performance of post studied with online diary.

Writing ability	SS	df	MS	F	Sig
Between Group	121.56	4	30.39	6.162	.001**
Within Group	133.17	27	4.93	-	-
Total	254.72	31	-	-	-

** $p \leq .01$

From Table 5, the writing ability of Grade 6 students classified by average academic performance of post-studied with the Thai Writing Skills Development plan with online diary, found that students' writing ability have statistically significant of .01, where the comparative analysis of pairs was calculated by Scheffe method.

Table 6 Results of comparative analysis of pairs writing ability of Grade 6 student classified by average academic performance post-studied Thai writing skill development plan with online diary.

Average score	$\overline{X}$	2.00	2.50	3.00	3.50	4.
		39.00	43.00	42.67	41.22	44.73
2.00	39.00	-	.44	.41	.69	.01**
2.50	43.00		-	1.00	.90	.90
3.00	42.67			-	.91	.71
3.50	41.22				-	.20*
4.00	44.73					-

* $p \leq .05$

From Table 6, the writing ability of Grade 6 students classified by average academic performance post-studied with a Thai writing skill development plan with online diary, the mean grades 2.00 and 4.00 have statistically significant of .01 and the mean grades 3.5 and 4.00 have statistically significant of .05. The other average grades have not statistically significant.

Table 7 Results of students' satisfaction of Thai writing skills development with online diary.

Survey questions	Satisfaction level		
	$\overline{X}$	S.D	
1. I understand how to write diary.	4.38	0.79	High

Survey questions	Satisfaction level		
	$\overline{X}$	S.D	
2. I enjoy the writing lesson; it is modern and Suitable for learning	4.59	0.71	Highest
3. I understand the method of how to make note.	4.34	0.60	High
4. I understand how to write an essay and Article.	4.47	0.72	High
5. Friendship book help me to improve my writing.	4.44	0.72	High
6. I use internet to help me to write.	4.50	0.57	Highest
7. I have no problems writing on phone or computer.	4.47	0.67	High
8. Writing lessons with online diary helped me enjoy my writing.	4.38	0.79	High
9. Writing on a phone app, and computers helps me improve my writing.	4.53	0.67	Highest
10. I like to use technology to develop my writing skill.	4.56	0.67	Highest
11. I do not like to write on notebook	4.31	0.78	High
12. I know the progress in my writing.	4.47	0.67	High
13. I finish my work on time.	4.38	0.61	High
14. I enjoy variety of writing activities	4.31	0.78	High
15. I am satisfied with the writing test.	4.28	0.69	High
Total score	4.43	0.69	High

Table 7 shows the overall satisfaction of 6-grade students after writing using online diary is at a high level (x= 4.43), four questions were found to be at the highest level which are question 1, 2, 3 and 4. The least satisfaction is question 15 (x= 4.23, SD = 0.77).

Results from an interview can be summaries as follows:
1) The online writing applications allow users to record, publish and share information.
2) Online data can be backed up, easy to search and allow users to insert pictures. It is easy to store unlike paper diaries that can be ripped, wrinkled or lost.
3) Convenient to type and for most applications Speech notes are also available.
4) Easier to summaries information than using a writing book.
5) Faster communication with teacher, friends etc. Most students submit work via line and email.
6) Online platform allows students to update and save information to the systems which help prevent data loss.
7) Line is one of the convenient and popular applications used among students, as the application allows students to communicate and sharing information in a small or large private group. This also makes students cautious in their writing, spelling and delivery of messages.

8) Some students like writing in both notepads and online applications, which depends on their project. For a long writing project that need to include pictures, an online application is preferred by most students. However, some students find that long writing on paper is a lot easier.
9) Students who do not like writing online applications since they fear that data can be easily lost or erased by mistake. Writing by hand can be instantaneous and does not rely on electronics.

Research findings

Research studies on developing Thai writing skills using an online diary for students in Grade 6, the research results were summarized as follows:

1. The results of the effectiveness of the Thai writing skill development with online diary was based on the 80/80 criterion according to the format of learning activities which is a 5-step process of searching which includes 8 learning activity plans. The writing ability test after study found to have an effectiveness of 82.38 / 78.01.

2. Comparison of writing ability of students before and after study with an online diary for the sixth-grade students, was found that the post-study is significantly higher than pre-study with a statistical significance of .01.

2.1 The result of comparing the writing ability of students in grade 6 which classified by gender before study with an online diary, the writing ability of the females was significantly higher than that of the males with a statistical significance of .05.

2.2 The result of comparing the writing ability of students in grade 6 which classified by gender after study with an online diary, it was found that there are no differences in writing abilities between male and female students with no statistical significantly.

2.3 The result of comparing writing ability of students in Grade 6 which classified by academic performance after studied with online diary,

2.4 Results of comparative analysis of each pair, writing ability of student in Grade 6 by average academic performance after studying with online diary. For students with the mean grades 2.00 and 4.00 have statistically significant at the .01 level. For students with the mean grades 3.5 and 4.00 have statistically significant 0.05. The other average grades have no significant different.

3. The results of the analysis of students' satisfaction with learning Thai after studying with online diary, the satisfaction of students in grade 6 after writing using online diary have an overall high satisfaction level ($\overline{X}$ = 4.43, S.D. = 0.69), and when considering the points, it was found to be at a very good level, 4 of them in descending average. It is modern and suitable for study ($\overline{X}$ = 4.59, SD = 0.71) 2. I like to use technology for writing development ($\overline{X}$ = 4.56, SD = 0.51) 3. Writing using phone and computer aided applications. Let me write well ($\overline{X}$ = 4.53, SD = 0.67) 4. My writing uses internet search ($\overline{X}$ = 4.50, SD = 0.57).

4. Data Analysis results from an interview with students in grade 6, out of 32 students majority of 24 students prefer to use mobile phone while few students prefer to use other electronic devices and only one student prefer to use notebooks to write diaries. As online writing applications allow users to record, publish and share information. The data can also be saved and edited afterwards without creating a mess or having to rewrite the whole paragraph. For students who find difficulties in writing can use Speech notes or autocorrect to help correct spelling and grammars. However, the only student who prefers to write in a notebook considers data protection and privacy as a main factor, as students state that sometimes data can be easily lost or stolen with an online application. Therefore, online writing is good for drafting articles,

writing for pleasure, general communication and as a tool to improve writing skills while writing on a notebook can be used for a quick note and record important information.

Discussion

From the above research, the following can be discussed:

1. The results of the effectiveness of the Thai writing skill development with online diary for Grade 6 students, the efficiency was 82.38 / 78.01, considered to be 80/80, meaning that the online diary writing development tool was effective. 82.32 (E1) was the average percentage score from the activities during study, 78.01 (E2) is the average percentage score obtained from results of the test after study. Considering that the value (E2) has not reached 80%, it is still be considered passing the criteria. According to Chaiyong Promwong (2013), the content required time to practice and develop which was unable to reach the high level criteria in the classroom or while studying after class, so it was set below 80/80 but not lower than 75/75. Score (E2) below 80 for the written test requires significant time and concentration in comparison to multiple choice exams. When the researcher set a written exam in class there was a limited time, thus making students score lower than the criteria. However, when considering an overall efficiency of the writing development of students, they still performed well and met the criteria. This may result from the writing lesson plan which it's teaching focuses on media technology, online writing activities and introduce 5-step process of searching for knowledge: 1) Engagement, 2) Exploration 3) Explanation 4) Elaboration 5) Evaluation as well as writing evaluation guidelines. Furthermore, a rubric marking scheme was studied and applied. As the scheme helped to evaluate quality of workpiece thus helping the researcher to identify student's difficulty and to give students a correct pathway to improve their writing to achieve success according to Somsak Pumi Wipadawat (2001, pp. 139-140). There are various educational applications on mobile App Stores and Google Play Stores that cover all subjects from science to language. Online applications can make students become more interactive, more involved in lessons, and work better. Many educational studies found online applications to be an effective learning tool. In this research, the researcher has used diary writing as the content of the lesson and requires students to write an online diary similar to Guy's research (2004) diary writing. Where fourth year biology students in Scottish high school are asked to write a five-minute diary for every 8-week lessons. The results showed that the students were satisfied with the diary writing. There is no mention of improving grammar or the spelling but suggests that an appropriate teaching methods will help students to learn better which is in line with the concepts of Barjesteh, H., Vaseghi, R., & Gholami, R. (2011) that also emphasizes the fact that the diary should not be edited, which will affect the student's lack of fluidity. Students can also use notebooks to reflect on their work and assess their own performance to promote independent learning.

2. A comparison of the writing ability of students pre and post study with online diary for grade 6 students

2.1 A comparison of the writing ability of students pre and post study with online diary for grade 6 students, was found that post-study score is significantly higher than pre-study with a statistic significant of .01. This agrees with the assumptions set which may be due to Technology-based Learning processes that uses technological media to cover variety of writing methods to keep students interested and concentrated. Although the researcher's lesson is a matter of writing that matches the concept of learning management in the 21st century where teachers must use information technology. Teachers must know how to integrate learning management. To be as close to real life as possible, students enjoy learning and the skills of self-

practice (Review Panich, 2012, p. 141) in addition to taking the learner as an important individual is essential, especially in regard to the readiness to use the technology of the students as well (Surasak Pa Hae, 2017, p. 138). The researcher allowed students to choose their own tool for writing diary such as notebook, computers, iPad, and mobile phone. More than 70% of students (24) prefer to write diaries using mobile phones which are considered as digital technologies in the development of teaching and learning today. This agrees with research by Purcell, K., Buchanan, J., & Friedrich, L. (2013) on National Writing Program (NWP) conducted teachers survey which found that digital technology can supports students' writing in many ways. Digital technology is also a useful tool for teaching writing to intermediate and advanced students. Teachers can use internet and digital technologies such as social networking sites, mobile phones to send articles to students in order to promote learner opinion and creativity. Smartphone applications helps to promote and support teaching and learning for students and teachers, it allows learners to communicate and learn with the teacher from anywhere at any time. Panuwat's research Worapit Bencha, Jamras Klin Nu, and Narongsak Srisom. (2008, Abstract) research found that many applications can provide a virtual classroom for teaching on mobile devices which allow students to use the application to review course materials, additional learning information and repeat lessons to gain better understanding of the subject.

2.2 The results of comparing the writing ability of students in grade 6 classified by sex before study showed that females had significant higher writing ability than males with statistic significant of .05. According to Saowarin Sairangsee (2011, online) female's nerve fibers that link the left and right hemispheres for communicate and transmit information, known as the corpus callosum, are about 10 percent larger than men and more than 30 percent of men. Therefore, women tend to excel in language at a younger age faster than men. Study Hedges LV, & Nowell A. (1995). In the study found that women have proficiency in language like writing an essay and giving speeches better than men.

2.1 The results of comparing the writing ability of students in grade 6, classified by sex after study, found that male students and females have no difference in writing ability. The result of introducing new and interesting teaching techniques, especially with the use of online technology which meets the desires of both male and female students, agrees with Saowarin Sairangsee (2011, online). Boys and girls may have different expertise. However, their weak skills in the subject can be improved if the teacher uses the student's proficient skills to overcome their weaknesses as Kelly, F. S., Macain, T., & Jukes, I. (2009) research based on an experimental of students' scientific learning abilities. It was found that both male and female students' capability to learn can be the same, by adjusting the right teaching and learning methods can help improve learning abilities of both sexes to be equal.

2.2 Results of comparative analysis of each pair, writing ability of students in Grade 6 was classified by average academic performance after study. The difference was statistically significant due to student's writing ability, which also depends on the student's GPA. This corresponds with Chiangkul (2019, p. online), which stated that students who have a language knowledge (speaking, reading, writing, listening) will have good academic results and likely to perform well in all subjects. As language is a foundation skill that is used for learning and other areas. Students with language problems may have problem in communication and result in unable to understand the subject. David K. William (2015) stated that writing is creative and critical thinking. Writing can help students to become sharper due to the following reasons:

    1) Writing helps us relieve the confusion in students' mind.
    2) Writing helps students to absorb information better and learn more.

3) Writing helps learners process negative feelings and improve emotional intelligence.

It can be concluded that students with high average grades will develop better in writing than lower academic performance students. Students with a good language skill can give good cooperation in doing various activities resulting in quick learning especially during school age.

3.The result of analysis of students' satisfaction with learning Thai after studying with the Thai writing skill development with online diary, It was found that the overall satisfaction of students in Grade 6 was at a high level (= 4.43, SD = 0.69). Four questions were found to be at the highest levels which are questions 1, 2, 3 and 4. The least satisfaction was question 15 (x= 4.23, SD = 0.77). This may be due to the teacher that allows students to select their own equipment (smart phone, iPad, tablet, computer, or notebook) for writing. Students also are allowed to choose their own preferred writing application that is paid or free of charge. Students have a variety way of submitting their assignments i.e. using online submission via email, social applications (Line). Line is a popular social application in Thailand which allows student to communicate with each other privately or creating a group for evaluating assignments together. Online applications are one of teaching and learning materials that suitable in the present day. It is a medium that allows students to practice and learn by themselves. Also students can make note and save information, images, text, links to help with their study. (Watcharaphon Wibunyasarin, pp.239-243), had created a group of Thai language students on the application Line for students to submit their assessment and to communicate between students and teachers. Online applications are effective as learning tools, which help students enjoy their study, organize activities and helps students to work as a team (Commerce Criticism, 2011, p.141).

4. Data analysis results from an interview with students in grade 6 to provide advice on developing Thai writing skills for grade 6 students.
The overview on why students choose online applications as writing methods and to develop writing skill, 75% of students prefer an online application and mostly use it on their mobile, summarized as follows:

1. The online writing applications allow uses to record, publish and share   information.

2. Online data can be backed up, easy to search and allow users to insert pictures. It is easy to store unlike paper diaries that can be ripped, wrinkled or lost.

1) Convenient to type and for most applications Speech notes are also available.

2) Easier to summaries information than using a writing book.

5) Faster communication with teacher, friends etc. Most students submit work via line and email.

6) Online platform allows students to update and save information to the system which helps prevent data loss.

7) Line is one of the convenient and popular applications used among students. As the application allow students to communicate and sharing information in a small or large private group. This also makes students cautious in their writing, spelling and delivering messages.

8) Some students like writing in both notepads and online applications, which depends on their project. For a long writing project that needs to include pictures, an online application is preferred by most students. However, some students find that long writing on paper is a lot easier.

9) Students who do not like writing online applications justify that sometimes data can be easily lost or erase by mistake. Writing by hand can be instantaneous and does not rely to electronics.

General suggestions
       1. Post-study exam should give significant time for the student to write. If possible, take measurements from direct writing work and evaluated by comparing writing work before and directly after study.
       2. Development of writing using an online diary received a lot of attention from students and helped students to write more expressively. However, teacher should add interesting, varied topics of writing and give considerable time for teaching and marking student's work.

Suggestions for further research
       1. From an interview with students about writing development guidelines shows that most students prefer to write with online social applications (Line, Facebook) on mobile phones. Further research can use different online writing applications.
       2. Teaching materials should be a daily life routine for students such as practicing writing and helps to organize daily activities with online planner/social media applications.

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