ผลการใช้การเสริมต่อการเรียนรู้แบบเน้นโครงสร้าง และการแก้ปัญหาร่วมกัน กับเทคนิคการสอนแบบแลกเปลี่ยนระหว่างเพื่อน ต่อทักษะการเขียนภาษาอังกฤษของนักศึกษาระดับปริญญาตรีของไทย

The Effects of Using Structuring and Problematizing Scaffolds and Reciprocal-Peer Tutoring Approach on Writing Skills of Thai University Students

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บทคัดย่อ

งานวิจัยฉบับนี้ มีวัตถุประสงค์เพื่อศึกษาผลการใช้เครื่องมือการสอนแบบใช้โครงสร้างและการแก้ปัญหาในการเสริมต่อการเรียนรู้ร่วมกัน กับเทคนิคการสอนแบบแลกเปลี่ยนระหว่างเพื่อน (SPRint) ต่อทักษะการเขียนภาษาอังกฤษของนักศึกษาระดับปริญญาตรีของไทย ประชากร คือ กลุ่มนักศึกษาระดับอุดมศึกษาจำนวน 42 คน ตัวอย่างได้มาจากการสุ่มแบบกลุ่ม และถูกแบ่งออกเป็นสองกลุ่มย่อย คือ 23 คนแรก อยู่ในกลุ่มทดลอง และ 19 คน อยู่ในกลุ่มควบคุม โดยทั้งหมด เรียนการเขียนบทอนุเฉทจาก 3 แบบอรรถฐาน ผลจากการวิเคราะห์ข้อมูลที่ได้จากการทดสอบก่อนและหลังสอบของการวิจัยเชิงทดลองครั้งนี้ ซึ่งใช้สถิติพรรณนาผ่านค่ากลาง ค่าทดสอบความแตกต่างเฉลี่ยของประชากร และค่าทดสอบความแตกต่างเฉลี่ยประชากรที่เป็นอิสระต่อกัน พบว่า เครื่องมือการสอนดังกล่าว มีผลทำให้คะแนนการเขียนของกลุ่มทดลองในการสอบหลังการสอน ($\bar{\text{X}}$ = 5.94, คะแนนเต็ม = 10) เพิ่มขึ้น อย่างมีนัยยะสำคัญที่ P=0.035 จากคะแนน pre-test ($\bar{\text{X}}$ = 4.7, คะแนนเต็ม = 10) และยังพบว่า การใช้กิจกรรมการเรียนรู้แบบร่วมมือร่วมกับเครื่องมือ SPRint ช่วยให้ผู้เรียนมีทักษะในการจัดลำดับความคิดรวมถึงการเขียนบรรยายเนื้อหาที่ครบถ้วน และใช้ภาษาและโครงสร้างประโยคที่เป็นมาตรฐานอย่างถูกต้องเพิ่มมากขึ้นในเวลาอันสั้น นอกจากนี้ ข้อค้นพบจากการวิจัยสามารถยังประโยชน์ต่อคณาจารย์ที่ต้องการพัฒนาการสอนเขียนภาษาอังกฤษแบบแลกเปลี่ยนระหว่างเพื่อน

คำสำคัญ: การเรียนแบบเสริมต่อการเรียนรู้ การสอนแบบแลกเปลี่ยนระหว่างเพื่อน เครื่องมือการเรียนแบบใช้โครงสร้างและการแก้ปัญหา การเขียนแบบร่วมมือ

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Abstract

The objective of this research is to investigate the effects of Structuring and Problematizing Scaffolds and Reciprocal Peer Tutoring-Integrated Process Writing (SPRint) on writing skills of Thai university students. The participants were 42 university students recruited by the random-cluster sampling. The first 23 were put in the experimental group, and the other 19 students were in the control group. Through the experiment research design, the data were collected from the pretest and the posttest and analyzed by descriptive statistics, paired sample test, and independent t-tests. The results showed that the SPRint significantly enhanced the writing quality. The study revealed that the mean scores of the posttest ($\overline{X}$ = 5.9, total scores = 10) significantly increased from the pretest ($\overline{X}$ = 4.7, total scores = 10) at the p-value of 0.035. Classroom collaborative-based activities such as group task-solving in each writing step using both structuring and problematic scaffolds were found helpful for students in organizing their ideas, developing relevant and logical contents, and using correct standard sentence structures at a faster rate. English writing instructors should consider using SPRint to design a writing classroom which promotes the reciprocal peer learning environment.

Keywords: Scaffolding, Reciprocal-Peer Tutoring, Structuring and Problematizing Scaffolds, Collaborative Writing

Introduction

English writing is an integral part of everyday life. It can be used in any kind of situation, for example, filling in application forms, taking messages, sharing opinions on social media (Hiranburana, 2017, p. 32) or studying overseas (Boonyarattanasoontorn, 2017, p. 112). Furthermore, writing skills can increase student confidence when expressing themselves, which can be a vehicle for them to excel in their profession and facilitate leadership within the professional community (Mohamed & Zouaoui, 2014, cited in Seensangworn & Chaya, 2017, p. 114).

Due to the global demand for expert English users, it is mandated for all Thai university students that they have to complete at least four compulsory English courses to meet their degree requirements (Kaur, Young, & Kirkpatrick, 2016, p. 349). Despite this policy being implemented many years ago, Thai students are still in a dire need of continuous assistance with all the language skills (listening, speaking, reading and writing) (Kongkerd, 2013, p. 5).

Students' dilemma in learning English, particularly English writing, can stem from an unhealthy learning experience. There are a great number of students with different levels of English proficiency being cramped into one classroom. In one regular English class at government universities, for example, there can be as many as 40-50 enrolled students. This results in the English teachers having less of a chance to provide their pupils with individual attention (Kuadnok, 2017, p. 13; Topping, Buchs, Duran, & van Keer, 2017, p. 134). Furthermore, regardless of their different English proficiency, the students are taught at the same learning pace and evaluated using the same criteria. When it comes to writing lessons, for instance, many university lecturers employ a product-based approach in order to cope with the great amount of written homework to be reviewed and to catch up with demanding course syllabi. For example, the lecturers might teach their students to remember fixed expressions and format so that everyone's work has the same pattern. As a consequence, this teaching pedagogy has reduced students to complete novices, waiting solely for input from the teachers and neglecting the benefits of peer learning. This is because the learners are so consumed with a desire to copy the model text from their teacher that they do not see the importance of learning from their peers.

It is therefore urgent for Thai university English teachers to adopt process-based writing, which walks the students through different stages of writing systematically, instead of using solely the product-based writing approach. English teachers have to also incorporate the Reciprocal-Peer Tutoring approach in their writing classes to ensure a richer learning environment for their students, using Structuring and Problematizing Scaffolds (SPSs). SPSs are tools which help making learning experience manageable and doable by offering hints, prompts, samples and making the learning experience deeper and more meaningful by asking differentiated questions.

Research Objective

This research project aimed to investigate the effects of using Structuring and Problematizing Scaffolds and Reciprocal-Peer Tutoring approach on writing skills of undergraduate Thai university students.

Research Problem

To what extent can the integration of Structuring and Problematizing Scaffolds and Reciprocal Peer Tutoring-Integrated Process Writing (SPRint) impact the academic writing skills of undergraduate Thai university students?

Research Scope

The primary scope of this research was to determine the extent to which the integration of the SPRint in process-writing instruction had effects on academic writing skills. It therefore measured the varying degrees of academic writing skills, which included only the skills of idea organization, content development and language use.

Conceptual Framework

This research employed four strands of second language teaching and learning in designing a treatment (SPRint) which aimed to improve students' writing skills. The conceptual framework is depicted in Figure 1 below.
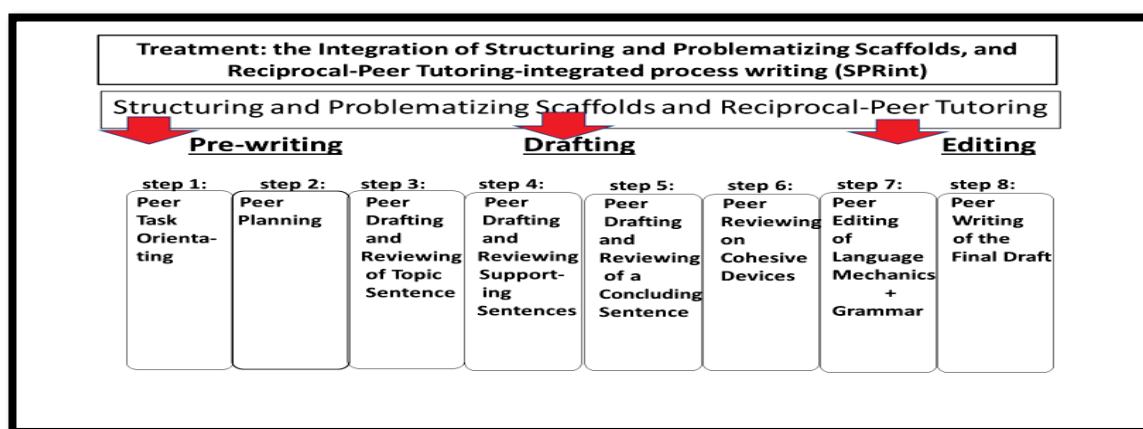
Figure 1 The SPRint teaching model

This study integrated the Structuring and problematizing Scaffolding framework of Reiser (2004, p. 250), who proposes that the scaffolding process should incorporate ideas of simplifying and deep learning. Structuring Scaffolding per se includes "reducing complexity, clarifying the underlying components and supporting planning and performance" (Molenaar, Sleegers, & van Boxtel, 2014, p. 604), providing explicit instructions and directions, sometimes with models, or possible choices which help learners to sub-divide a task in a more manageable manner. In the same vein, Raiser (2004) proposes three Problematizing Scaffolding strategies to promote meaningful and in-depth learning experiences. These include: (a) "elicit articulation," where students are encouraged to present and exemplify their reasoning; (b) "elicit decisions," where students are confronted with decision-making procedures; and (c) "surface gaps and disagreements," where students need to engage in resolving disagreements among peers in collaborative learning arrangements" (Ertmer & Glazewski, 2019, p. 327). Furthermore,

this research has incorporated the Reciprocal-Peer Tutoring framework by Falchikov (2001, p. 108), which includes the concepts of mutual thinking of practical learning strategies and regulating the learning experience between peer-tutors and tutees. These two frameworks are further blended into the process-based writing model designed by Flower and Hayes (1981, p. 370), which consists of three factors when composing a writing piece: (a) "task environment," where writers define and set the scope of the task; (b) "external factors," where writers need to determine what kind of plans and options are needed to complete the assignment based on their previous knowledge; and (c) "writing process," where self-monitoring and evaluation are crucial to ensure the finished written task is addressing task requirements. These main key frameworks are illustrated in the current research's conceptual framework, which consists of three writing stages (Pre-writing, Drafting, and Editing) with eight writing steps: (1) Peer Task Orientation, (2) Peer Planning, (3) Peer Drafting and Reviewing of Topic Sentence, (4) Peer Drafting and Revising of Supporting Sentences, (5) Peer Drafting of a Concluding Sentence, (6) Peer Reviewing on Cohesive and Coherent Devices, (7) Peer Editing and Language Mechanism, and (8) Peer Final Drafting. This proposed model is called the 'Integration of Structuring and Problematizing Scaffolds and Reciprocal Peer Tutoring-Integrated Process Writing, or from now onward to be called the SPRint model as shown in Figure 1.

Research methodology

Population and Samples

The setting of this research project was in a government university in Chiang Mai. The project course was 001311: Reading and Writing I for non-English major students. The enrolled students were from many different faculties, majoring, or even university years. Probability sampling design to recruit the research participants was random-cluster sampling. The target groups were sampled from the pool of the 300-enrolled students' names in the project course in the first semester of the 2020 academic year. They were then randomly assigned into different sections, maximum 24 students per section, based on their registration submission online. Then the researcher was randomly assigned to teach in two of the available sections by the Scheduling Department.

Forty-eight participants were initially expected to participate in the research project. However, 6 participants dropped out. Therefore, by the time the research was completed, 23 remained in the experimental group and 19 were in the control group.

Data Collection

Before the treatment began the participants of both research conditions took a pre-test. After the third treatment cycle was completed, the participants were given the post-test, where they were required to write in response to the same topics as they did in the pre-test.

The data collection tools included the pre-and post-test and a writing rubric. Both the 75-minute pre-and post-test contained three different genre topics-description, narration and cause/effect. Each genre contained two topics from one of which the learners must choose and write into a paragraph. In total, the research participants were required to write three paragraphs of at least 80-100 words in response to their chosen topics. The writing rubric was then used to analyse the written texts from the two tests for idea organisation, content development, and language use.

Research instruments

Lesson plans

During each genre-writing practice cycle, lesson plans which were designed based on the SPRint model were used to promote meaningful and deep learning experience. The lesson plans covered three main writing stages, pre-writing, drafting and editing, featuring 8 writing steps. There were nine lessons with each one lasting for one and a half hours covering eight topics, namely, 1) task orientating; 2) brainstorming for ideas; 3) outlining; 4-6) writing of the topic sentence, supporting details, and the concluding sentence; 7) revising writing; and 8) editing.

During the first 30 minutes of each lesson, the instructor taught basic information, vocabulary and grammatical structures relevant to each genre through reading of sample-genre passages. Then, the instructor informed the class of the group writing practice tasks which were to be facilitated by the assigned student tutors, who were pre-assigned to read the peer-tutor manual before the class began. The tutors facilitated the group discussion by following the tutor manual instructions designed specifically for each writing step as scaffolds. For example, in the pre-writing stage of writing step 1 (task orientating), after receiving the task, the tutor began by asking the group members about the task demand and their own self-efficacy in handling the task. If the group had doubts about any given points of the assigned task, the tutor would explain, clarify the raised points based on the given prompts from the tutor manual. This process lasted approximately 60 minutes. There were eight tutor manuals altogether to cover the eight

writing steps of each writing genre. It should also be noted that the instructor was always standing by in the class to provide assistance in case anyone had difficulty solving the group writing tasks.

Group Writing Tasks

Also, in each genre-writing cycle, there were eight group writing tasks for the learners to work together in groups of four to practice writing texts under the leadership of the group tutor. After they had completed all the eight writing tasks, their work was evaluated by the instructor. The feedback given to each group included their idea organization, content development and grammar use. Altogether, the learners had to write three written group works from three different genre-writing cycles.

Validity and Reliability of Research Instruments

Three experts evaluated the validity of the research instruments to ensure acceptable instrument validity of the lesson plan, the pre-and post-tests and the rubric, under the Index of Item Objective Congruence (IOC). The validity value of the tests and the lesson plan was 0.75 while the rubric's value was on the scale of 1.0. Furthermore, Intra-rater reliability was then confirmed at 0.97, using the Cronbach's Alpha value.

Data Analysis and Interpretation

1. A paired sample t-test was used to analyze the pre- and post-test scores investigating the effects of scaffolding on the learners' academic writing performance within each participating group. Further analysis was also conducted in the three areas of writing competence: 1) idea organization, 2) content development, and 3) language use of each letter-graded student group (Excellent, Mediocre, or Weak).

2. Independent sample tests were used to analyze the post-test scores across the two groups in the three assigned writing skills.

3. The score ranges and interpretations for the rubric are: 9-10 meaning 'Above standard'; 7-8 implying 'Standard'; 5-6 suggesting 'Approaching standard'; and 0-4 indicating 'Below standard'.

Research Results

The study findings and discussion are presented below, corresponding to the Research Question (RQ).

Research Question 1: To what extent can the integration of Structuring and Problematizing Scaffolds and Reciprocal Peer Tutoring-Integrated Process Writing (SPRint) impact the academic writing skills of undergraduate Thai university students?

To examine the effects of the SPRint model on each writing skill, an independent t-test was applied. Table 1 summarizes the mean scores of the pre-test and post-test based on each writing skill, namely, Idea Organization, Content Development, and Language between the two participating groups.

Table 1 Mean scores of the pre-test and post-test by writing skills and group conditions

Writing Skills	Group	Test-type	N	Mean	Mean Dif.	Std. Deviation	Sig. (2-tailed
Idea Organization	Experiment	Pre-test	23	4.8982	.67977	2.26503	.340
	Control	Pre-test	19	4.2184		2.28182	
Content Development	Experiment	Pre-test	23	4.1703	.90011	1.87428	.080
	Control	Pre-test	19	3.2702		1.23648	
Language Use	Experiment	Pre-test	23	5.1993	.28663	2.53791	.726
	Control	Pre-test	19	4.9127		2.71257	
Idea Organization	Experiment	Post-test	23	6.5964	1.35076	1.74252	.023
	Control	Post-test	19	5.2456		1.94947	
Content Development	Experiment	Post-test	23	5.4493	1.20366	1.98824	.042
	Control	Post-test	19	4.2456		1.66886	
Language Use	Experiment	Post-test	23	5.8428	1.31556	2.37752	.073
	Control	Post-test	19	4.5272		2.21140	

Based on Table 1, all mean scores of the writing skills are higher in the post-test when compared to those in the pre-test. However, it was found that the improvement in Language use was not statistically significant. These mean scores were further analyzed using independent sample t-tests to examine differences in the enhancement of overall writing skills between the two learner groups. Table 2 represents the comparison of overall post-test mean scores. Based from the information in Table 2, it can be seen that there was a significant enhancement in the students' overall writing scores of the experimental group (t=2.177, p<.05).

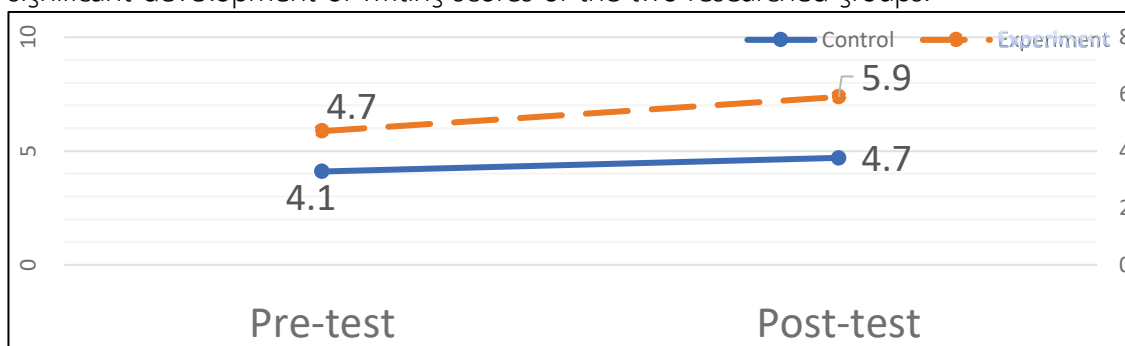**Table 2** Post-test scores results between the two researched groups

Group Types	N	Mean	Std. Deviation	SD	t	Sig. (2 tailed)
Experimental	23	5.9628	1.95198	.40702	2.177	0.035
Control	19	4.6728	1.85986	.42668		

Furthermore, the data revealed the enhancement rate in writing scores of the experimental group exceeding that of the control group as the former progressed from the 'Below standard (4-0)' territory, from their pre-test scores of 4.7, to 5.9, to the 'Approaching standard' range. In contrast to this, the overall writing score of the control

group, though exhibiting enhancement in scores from the pre-test of 4.1 to the post-test scores of 4.7, was unable to emerge from the "Below standard". Figure 2 illustrates significant development of writing scores of the two researched groups.

Figure 2 Comparison of the pre-and post-test results between the two groups

In order to explore the extent to which the SPRint model has effects on each writing skill, a pairwise comparison using paired-sample t-tests was administered. Table 3 presents comparison between overall pre- and post-mean scores of the researched writing skills.

Table 3 Pairwise comparison of overall mean score of each writing skill

Test types	Test types	Mean Difference	Std. Error	Sig.
Idea Organization				
Pre-test	Post-test	1.39464	.25323	0.000*.
Content Development				
Pre-test	Post-test	1.14167	.22006	0.000*.
Language Use				
Pre-test	Post-test	0.17794	.34190	0.606

*. The mean difference is significant at the .05 level.

For idea organization skills, it was found that the improvement of mean scores from the pre-test mean scores of 4.5907 to post-test mean score of 5.9853 was statistically significant (p=.000). As with the content development component, these writing scores significantly increased from the pre-test mean scores of 3.7631 to 4.9048 for the post-test with statistical significance ratio of p=.000. However, the findings for the language skills were slightly different. It was found that when comparing the overall mean scores of the pre-test (Mean=5.0697) and the post-test (Mean=5.2476) between the two groups, the increase in the mean scores was not statistically significant (p=0.606).

However, when examining the language skill component in separate groups using the paired sample t-test, it was found that learners in the experimental group significantly attained higher post-test scores than did the control group. Table 4 summarizes the findings.

Table 4 Paired comparison of language components between the two groups

| Group types | Mean scores Pre-post tests | Paired Differences of Language Use | | t | df | Sig. (2-tailed) |
		Mean	Std. D			
Experimental	(5.1993) – (5.8428)	-.64341	1.36140	-2.267	22	.034
Control	(4.9127) – (4.5272)	.38553	2.88192	.583	18	.567

From table 4, the findings showed that the post-test scores of the students in the experimental group increased significantly in the language component (t=-2.267, df=22, p<.05). In contrast to this, students in the control group experienced a decrease in language use skills (t=.583, df=18, p>.05).

According to Table 4, it can be concluded that the SPRint model used in teaching English writing in the experimental group can help enhance learners' writing skills because they earned significantly higher mean scores than their pre-test scores.

Furthermore, also based from Figure 2, an in-depth analysis revealed that the experimental group exhibited a higher development rate in writing skills than did the control group. Table 5 compares writing skills development of students between the two participating groups.

Table 5 Comparison of post-test score by student group types

Research group types	N	Mean	Std. Deviation	Std. Error Mean
Excellent group				
Experimental	8	7.6153	1.30811	.46249
Control	4	7.1181	.99028	.49514
Mediocre group				
Experimental	7	5.3746	1.58584	.59939
Control	4	4.7458	1.45718	.72859
Weak group				
Experimental	8	4.8250	1.77817	.62868
Control	11	3.7571	1.40673	.42415

It can be seen from Table 5 that two-thirds of the learners in the experimental group, both in the 'excellent' and the 'mediocre' groups (fifteen), could surpass the 'below standard,' reaching the 'approaching standard' level. Interestingly, even the 'weak group' of the experimental group was inching into the higher writing proficiency, lacking only 0.15. The opposite is true from the control group as less than a quarter of the students (four) have reached the 'approaching standard' level while the others (fifteen) remained stagnant in the 'below standard' territory.

However, when running an independent sample-t test to measure whether the increased scores were statically significant between the two researched groups, it was found that there was not a statistical significance across the two groups. Every student seemed to experience a similar increase in his/her writing scores; however, this increase was greater in the experimental group when integrating the SPRint model. This can indicate that the SPRint model can be used for teaching students across different English proficiency levels.

Discussion of Results

The study revealed a significant improvement in the learners' writing scores who were taught in the experimental group. There was crucial improvement in all areas of their writing skills.

The findings from this research confirmed findings from previous studies using Reciprocal-Peer Tutoring (RPT) and Structural and Problematic scaffolds (SPSs). For example, the research results are in line with the works of Nnamani, Akabogu, Uloh-Bethels & Ede (2018, p. 15104) and Gupita & Suryaman (2019, p. 222) as both research teams found that the RPT approach could facilitate the improvement of writing skills resulting in better writing quality. It can be interpreted that through the RPT approach the experimental group had more opportunities to work, discuss and evaluate their work while composing their written assignments. This collaborative writing is ideal and provides students with opportunities to collectively scaffold each other as they can "pool ideas, deliberate over language use, and provide each other with feedback" (Villarreal & Gil-Sarratea, 2020, p. 874).

Especially during the reviewing stage, RPT provided an opportunity for the learners to improve their work through immediate feedback from their real audience. It was a reciprocal-learning opportunity for students to negotiate and clarify the meanings in their written portion with other group members. The SPRint model indeed provides a

platform for learners to enhance the quality of their written tasks as it encourages interactions, collaborative dialogue, and cooperation with peers (Rollinson, 2005, p. 25).

Another contribution of RPT can be clearly seen when it helps learners to comprehend and digest the content of the course into a manageable and controllable manner within their Zone of Proximal Development (ZPD). Through asking and helping each other to make sense of their learning (Bradford-Watts, 2011, p. 34), it is believed that group members reciprocally benefit from the learning experience. This contribution of the SPRint model is in line with Vygotsky's (1980, p. 24) words who posited that learning happens through the guidance and response of others.

With regard to the effect of using the Structural and Problematic scaffolds (SPSs) in a writing classroom, it is evident that these scaffolds can contribute to improved writing skills of the EFL learners. The findings are congruent with the previous research results using SPSs. For example, both Sumarno (2019) and Jafarigohar & Mortazavi (2017) found that both SPSs ,when combined together, yielded greater writing performance than using only one of the approaches separately or without the SPSs. This is because both of the scaffolds promote meaning-making, open discussion and group learning (Ertmer & Glazewski, 2019, p. 327).

Apparently, the two scaffolds incorporated in the treatment could "provide needed structure that students can use to help guide and organize their work…and… also elicit attention to critical issues" (Reiser, 2004, p. 295). This is in line with Puntambekar and Kolodner (2005, cited in Jafarigohar & Mortazavi, 2017), who put forward the importance of providing multiple scaffolds in classrooms as a way to cater to all learners' needs.

Also, this study was designed to incorporate collaborative writing activities which provided a great deal of learning experience and interdependent roles between tutors and tutees. This helps them to interact with other group members through processes of sharing, constructing, and negotiating their learning experience, which contributes to mutual knowledge construction (Santoso, 2010 cited in Vonna, Mukminatien, & Laksmi, 2015, p. 232).

Evident from this research study, however, is the fact that the improvement in language use is not significant. This finding is in line with previous research studies which revealed the pertinent and prevalent grammar issues among Thai EFL learners, positing that structural accuracy did not improve as significantly as other areas, according to Al-Mekhlafi & Nagaranam (2011, p. 72) and Piamsai (2020, p. 297). This might probably be because of different developmental stages of learning when slow learners might require more time to comprehend and digest the content in the class. Due to the thirty-hour treatment, it would be

too soon to pinpoint that their language abilities had not improved. Their language acquisition might simply be in the process of maturation (Boonteerarak, Jenwachirapong, Chantraboon, & Thepud, 2020, p. 87; Chiravate, 2011, p. 41).

All in all, it can be concluded that this research project has expanded a new research horizon to the scarcity of research on the integration of the RPT approach with SPSs to enhance writing skills. In addition, this research has explored the effects of using RPT and SPSs at the individual writing skill level, which has not been available in the previous research studies.

Conclusion and Suggestions

Structuring and Problematic Scaffolds (SPSs) with the integration of the Reciprocal-Peer Tutoring approach (RPT), SPRint, can yield intellectual growth and improve pedagogical practices in higher education. It encourages English language users to socially engage in making sense of their own learning experience as well as the communities' (group members) abilities to improve their writing. The interactions between the writers and readers during the collaborative peer working and reviewing can enhance achievement of the learning goals as suggested by the Sociocultural theory. Therefore, writing for real readers makes the writing activities more meaningful. Scaffolds that incorporate prompts and guided questions during each writing stage are also crucial to promoting meaningful and deep learning experience. The findings from this study suggest that university English lecturers should incorporate the SPRint model into their lessons in order to make their classes more participative and collaborative, while ensuring meaningful and focused learning experience for the learners.

The SPRint model, in fact, proves ineffective at improving language use skills among learners (see Table 3). These specific scores could, however, be a direct result of limited treatment time and class hours. Additionally, the reciprocal-peer tutoring process consumed a great amount of class time, requiring the instructor to both keep up with the course requirements and the need to make their class achieve deep learning. The future researchers who wish to apply the model to their research are advised to manage their time wisely to strike a balance between the two.

The research into how SPRint can improve language use skills by designing it for use among learners with different English proficiency is a promising area. Furthermore, future researchers may conduct a study using the longitudinal research approach in order to document a continuum of L2 language development over an extended period of time. Such longitudinal studies that include effective class management might be required to prove the efficiency of this model to the benefit of all.

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