The Effect of Scaffolding on Non-proficient EFL Learners' Performance in an Academic Writing Class

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Abstract

The objective of this research is to investigate the effect of scaffolding teaching in an academic writing class where students were non-proficient writers. This was a challenging context in which identical content and assessment criteria were applied to students with various levels of proficiency. Scaffolding has long been considered an effective teaching approach to assist students in extending their competence in the Zone of Proximal Development. This study focused on academic writing in the Thai context and involved non-proficient EFL students. The participants in the study were 20 second-year Economics students enrolled in an academic writing course at a public university in Bangkok, Thailand. The teaching integrated cognitive, metacognitive and affective scaffolding into activities implemented in class. The results showed a significant improvement in the post-test scores in all aspects of writing competence, i.e. task completion, organization, lexical variety, and structural variety and accuracy. The students also revealed positive attitudes towards the use of scaffolding teaching in the writing class.

Key words: scaffolding, academic writing, non-proficient students

Introduction

In an academic context, especially at the tertiary level, writing ability is very important as it can determine one's success (Abbate-Vaughn, 2007; Alter & Adkins, 2006 cited in Fallahi, 2012). Written work serves as an assessment tool to determine students' academic achievement, which means weak writing ability can put students at a disadvantage (Komba, Kafanabo, Njabili, et al., 2012). This is a major problem in Thai teaching contexts where all students have to adhere to the same curriculum and evaluation criteria, leaving non-proficient students far behind their peers. Teaching writing is a difficult task as writing ability involves a wide range of language knowledge and cognition. Good writers are equipped with the necessary language skills as they are able to comprehend, synthesize, and apply new knowledge and produce appropriate written work. Good writers also have creativity, inspiration, problem-solving skills, reflective skills and communication skills. All of these traits are grounded in the cognitive domain. For non-proficient students, however, writing can be very demanding, and the challenges they encounter when writing can deter them from further practice. These students, as a result, are concerned about their poor writing ability. Studies conducted in different EFL or ESL contexts found different problems in students' writing (Fareed, Ashraf & Bilal, 2016; Komba, Kafanabo, Njabili, et al., 2012). These problems are context-specific. In the Thai context, writing problems include time constraints, lack of knowledge in English structures and lexis as well as task difficulty (Boonyarattanasoontorn, 2017; Pawapatcharaudom, 2007). Grammar use, practice hours and feedback from teachers are also common problems found among Thai students (Rodsawang, 2017). The complex nature of writing makes teaching writing challenging for teachers, particularly if their students are non-proficient and the course is field- specific. A number of related studies revealed that scaffolding is essential in teaching various subjects, including English writing, as it helps reduce anxiety and promotes learners' autonomy (Cotterall &

Cohen, 2003; Dix, 2016; Mulatsih, 2011; Spycher, 2017; Walqui, 2006; Yau, 2007). Scaffolding is believed to enhance students' writing skills because it provides assistance, fosters students' learning, and focuses on interactions with peers and teachers. Personal attention and scaffolding input are needed for students to write better (Limpabandhu, Yutdhana & Kongmanus, 2018). Although research investigating the use of scaffolding in writing classes has been conducted worldwide, more studies on writing in different local contexts are still necessary and worthwhile as each educational context is different and the perspectives of the insiders that belong to a particular context are important and should be taken into account (Leki, Cumming & Silva, 2008).

In this research context, various scaffolding teaching frameworks were studied and analyzed to develop a framework to suit the second-year Economic students at a Thai public university. This study aimed to explore if the scaffolding teaching approach can help non-proficient university students in this context improve their academic writing skills. The study looked at four areas of writing competence that the scaffolding teaching method supports (i.e. task completion, organization, lexical variety and structural variety and accuracy) and the attitudes of the students towards the method in writing class.

Review of Literature

Writing is a social, cultural and cognitive activity and it must be formally learnt. Good writers must have knowledge of the world and language knowledge, which refers to linguistic, discourse, sociolinguistic and strategic knowledge (Weigle, 2002). Writing is also considered "the central activity of institutions" (Hyland, 2013). Writing is embedded in all kinds of complex social activities in both academic and corporate contexts. Writing is seen as a key skill that one has to master in order to be successful in one's academic and career paths.

Although writing competence might be evaluated differently in various academic contexts, the major criteria of standardized writing rubrics (IELTS, TOEFL, and Cambridge) and those used at universities lie in the areas of task achievement and content, organization, coherence, and language, which refers to the ability to use appropriate words, as well as accurate sentence structure, grammar and mechanics. Mastering the writing skill is difficult as other skills (namely, cognitive and metacognitive skills) are involved in the entire writing process. Students need to use metacognitive strategies when they set goals, plan, monitor, evaluate and revise their work. While writing, they must use cognitive strategies as they have to analyze reading sources and synthesize the information they have read (Klimova, 2014). Also, various internal and external factors such as unwillingness to use the target language, writing anxiety, lack of knowledge in vocabulary, syntax, grammar and content, cohesion, insufficient time provided to complete the writing task, heavy reliance on their first language as well as teachers' instructional methods, can affect leaners' writing performance (Johana & Rico, 2014; Fareed, Ashraf & Bilal., 2016; Boonyarattanasoontorn, 2017; Pawapatcharaudom, 2007). As such, language teachers play a major role in fostering or hindering students' writing development (Tseng, 2019). Fareed, Ashraf and Bilal (2016) also noted that problems can be caused by inexperienced teachers and ineffective teaching approaches. Rodsawang (2017) found that instructors' feedback was one facet of these problems. This highlights the importance of the teaching approaches that teachers adopt. They should be appropriate and enhance students' capacity to produce written work.

Academic Writing

In academic writing, the aforementioned factors can make writing more challenging for students as it requires not only the knowledge of syntax, lexis and topic, but it is more demanding in that learners have to know the genres they are engaging in, and they have to be able to select appropriate rhetorical functions. They have to determine whether explaining,

describing, comparing, etc. is appropriate and sufficient for the assigned writing context. According to Coffin, Curry, Hewings, et al. (2003), academic writing skills are very important for teaching and learning as learners are assessed through writing. Academic writing skills can, therefore, determine both graduate and undergraduate students' success in studies as writing assessment is implemented at all stages (Alter & Adkins, 2006). Writers who possess good academic writing skills are at an advantage. Not only are they able to convey their ideas or messages clearly to readers, they can also develop other skills and knowledge, e.g. synthesizing skill, through the process of academic writing (Pinit, 2012). Three writing teaching approaches are writing as text, writing as process and writing as social practice. The text approach focuses on the product of writing, requiring students to follow models of writing, which are discussed and analyzed. The students are exposed to appropriate structures, language and organization. The process approach, on the other hand, gives importance to language use development, which is promoted through activities like brainstorming, group discussion and re-writing (Klimova, 2014). Lastly, teaching writing as a social practice treats writing as an activity in social contexts. Students have to understand relationships with the audience, conventions, and their personal and social identity. No matter which approach is used, Coffin, Curry, Hewings, et al. (2003) suggest teachers familiarize their students with the target types of language use so that they can be more motivated and able to extend their existing knowledge and the current level of their language uses, which can be achieved through scaffolding.

Scaffolding

According to Wood, Bruner and Ross (1976), scaffolding is a social process to support learners with an aim towards helping their future independence. Scaffolding is temporary, specific, meaningful and interactive. Donato (1994), as cited in Cotterall and Cohen (2003), explained that scaffolding is a social interaction between the knowledgeable and the novice. Walqui (2006) described scaffolding as contingent, collaborative and interactive. Through the interaction, the knowledgeable provides support to the novice.

The concept of scaffolding derives from Lev Vygotsky's Zone of Proximal Development or ZPD, which refers to the amount of learning that learners can achieve with assistance or guidance (Vygotsky, 1978). Based on this theory, to help students pass the ZPD, the presence of a more advanced expert or a teacher, social interactions, and scaffolding and other supportive activities are needed (McLeod, 2019). In the educational setting, scaffolding is the process involving teachers' temporary assistance and guidance at the beginning of the class so that learners can later develop their knowledge and skills, which is when scaffolding can be withdrawn (Mulatsih, 2011). Scaffolds can refer to "models, cues, prompts, hints, partial solutions, think-aloud modeling and direct instruction", (Hartman, 2002 cited in Yau 2007, p. 23). Scaffolding is considered an instructional method that helps learners learn how to solve a problem, work on a task, and achieve their goals (Pinantoan, 2013). Scaffolding combines the features of the three writing approaches: modelling and analyzing model texts (text approach), focusing on the process of writing, such as through brainstorming, group discussion and re-writing (process approach) and promoting social interaction and collaboration (teaching writing as a social practice).

Scaffolding plays an important role in language instruction, and has an important role in writing development. According to Spycher (2017), students who are exposed to academic styles of writing more than others are more prepared, and know how to write well. It is suggested that teachers scaffold their students to help them build their writing skills and make them aware of what a piece of good writing is. In a writing classroom, teachers need to focus on the process and raise students' awareness of writing conventions they are engaging in while helping them to acquire the linguistic and rhetorical knowledge (Coffin, Curry,

Hewings, et al., 2003). Scaffolding instruction (Spycher, 2017) can be integrated into the teaching and learning cycle through 5 stages of learning: 1) building the field, 2) exploring the structure and language of text types, 3) jointly constructing texts, 4) independently constructing texts, and 5) reflecting on one's own written texts. These scaffolding stages involve building learners' background or content knowledge, structural and language knowledge, as well as reflection on one's work. These aspects of scaffolding can also be found in the conceptual framework of scaffolding proposed by Cotterall and Cohen (2003, p. 158). The framework includes: 1) linking topics to concurrent study themes, 2) predetermining an essay structure, 3) assisting with finding texts and data, 4) giving instruction and focusing on one section of the essay each week, 5) providing extensive modelling of the composition process, 6) focusing on language, and 7) integrating peer and teacher feedback. Walqui's (2006) framework involved 1) modelling, 2) bridging, 3) contextualizing, 4) schema building, 5) re-representing text, and 6) developing metacognition. Based on these scaffolding frameworks, scaffolding needs to be done in all aspects of language competence, namely structure, language and schemata. This can be done by providing students with modelling texts which serve as good examples. The mentioned frameworks can be grouped into the following key stages.

Table 1: Key Stages of Scaffolding Frameworks

Stages	Spycher (2017)	Cotterall and Cohen 2003	Walqui (2006)
Scaffolding vocabulary, structure and content	Building the field Exploring the structure and language of text types	Linking topics to concurrent study themes Predetermining an essay structure Assisting with finding texts and data Giving instruction and focusing on one section of the essay each week Providing extensive modelling of the composition process Focusing on language	Modelling Bridging Contextualizing Schema building
Composition	Jointly constructing texts Independently constructing texts	Composing	Re-representing text
Evaluation and feedback	Reflecting on one's own written text	Integrating peer and teacher feedback	Developing metacognition

The activities presented in the three frameworks can be grouped into three main stages: the scaffolding stage which involves vocabulary, content and structure scaffolding; the composition stage in which students have to compose their writing work; and the evaluation and feedback stage in which students have to perform self- and peer-evaluation. In the first stage, students are assisted in the areas of content and language through modelling. The second stage requires them to produce a written text by using or recycling what they have learned from the first stage. In the last stage, students are engaged in reflecting and evaluating written work, which, in turn, helps them learn how to write better. These scaffolding activities help build students' cognitive skills. Metacognitive skills are also part of scaffolding processes as learners must evaluate either their own work or their peers'. Van de Pol, Volman, and Beishuizen (2010) noted six types of scaffolding: 1) students' feeding

back, 2) teachers' providing hints, clues or suggestions, 3) teachers' instruction and explanation, 4) teachers' clarification, 5) teachers' modeling, and 6) questions from teachers. According to Dix (2016), during scaffolding, teachers can help students to be mentally prepared for a task so they will be emotionally ready and have gained more self-esteem. Affective scaffolding can build more confidence and reduce anxiety in writing.

Findings from numerous studies clearly support the use of scaffolding teaching in English writing classes at various age groups and levels. The results of previous studies revealed a significant improvement in students' writing performance (Faraj, 2015; Khanza & Nufus, 2019; Pasand & Tahriri, 2017; Pinchai, 2017; Saputri, Raja & Nurweni, 2017; Vonna, Mukminatien & Laksmi, 2015). It was found that teacher modelling through explicit writing was especially beneficial for ESL learners who were developing writing skills (Choi and Wong, 2018). Some studies showed that students can finally construct their own knowledge as independent learners, or gain more learner autonomy (Park & Kim, 2016; Santoso, 2010; Saputri, Raja & Nurweni, 2017). Others reported the benefits of scaffolding on affective domains, e.g. motivation, confidence and positive attitudes (Dewi & Iswandari, 2017; Kim & Kim, 2005; Saputri, Raja & Nurweni, 2017). However, scaffolding also has some limitations. It requires trials and training, and it is time-consuming as learners are allowed to work at their own pace (Peters, 2019). Furthermore, using scaffolding instruction does not always result in better student performance (Van de Pol, Volman, Oort et al., 2015). Other factors such as the cognitive load of the task, the amount of help provided (Baleghizadeh, Memar, & Parsazadeh (2011), students' task effort, etc. can affect scaffolding's effectiveness.

Research Objectives

The two objectives of the study are:

1. to investigate the effect of scaffolding on non-proficient EFL students' academic writing performance.
2. to explore the students' attitudes towards scaffolding in the academic writing class.

Methodology

Context of the Study and Participants

Students in the Faculty of Economics at the researched public university are required to take five English courses: two English foundation courses in their first year, two English for academic purposes courses (EAP) in their second year, and one EAP course in their third year. The proficiency levels of the students in this faculty range from highly proficient to very low proficient. The gap is so wide that a placement policy was implemented in the second-year courses to place students in classes based on their proficiency level to accommodate teaching and learning. All groups must follow the same core course assessment criteria.

The study was conducted in the second semester of the students' second year at the faculty. The students were taking the academic writing course, the content of which involved academic writing in the economics context. The genres of writing included an overview of academic essays, cause and effect, comparison, problem-solving and argumentation. There were 108 students enrolled in the course, and the participants in the study were an intact group of 24 students. The results from the pre-test and the post-test of 20 students were analyzed as 4 of them missed either the pre-test or the post-test, or both. There were 16 students who completed all parts of the questionnaire. The rest either missed the last class or failed to answer all questions. The students were grouped according to their English proficiency, which was determined by mid-term and quiz scores they obtained from their previous semester English course. These students were placed in the lowest proficiency

group. Based on the two assessments used as the criteria of placement, it could be concluded that they were weak in both reading and writing. Their CU-TEP (Chulalongkorn University Test of English Proficiency) scores also revealed a clear picture of their proficiency. Their scores ranged from 25 to 48, or CEFR levels A2 to low B1, based on the range of cut-off scores and CEFR descriptors proposed by Wudthayagorn (2018).

This study followed a framework adapted from Cotterall and Cohen (2003), Spycher (2017), and Walqui (2006). These frameworks were chosen because they fit the content of the course, which was based on themes, starting with a model reading text, and focused on process writing.

Scaffolding Framework

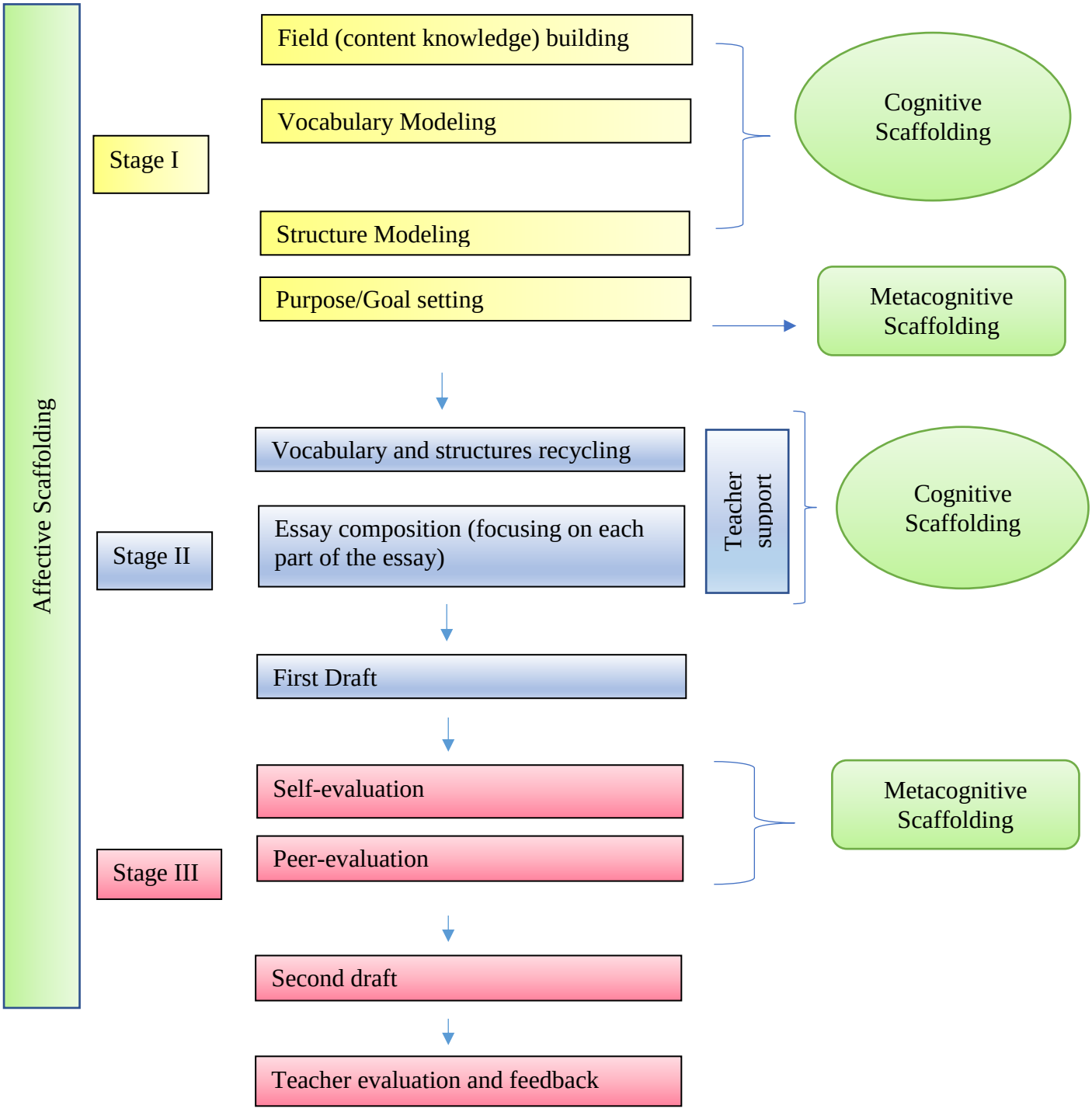

Figure 1: Scaffolding Framework

Research Instruments

Pre-Test and Post-Test

The pre-test and post-test were the same test. There was one essay prompt on the test, selected based on careful consideration of appropriateness in terms of the level of difficulty, genres and topic. This ensured that the prompt was suitable for university students. The selected genre was taught in class, and the topic concerned issues the students could relate to: reasons why people attend college or university. The test was validated by 3 experts who were the teachers of the course.

Writing Rubric

The rubric used to evaluate the students' pre- and post-test was the same rubric used to evaluate the students in the course. The areas of writing competence were task completion (2.5 points), organization (2.5 points), lexical variety (2.5 points) and structural variety and accuracy (2.5 points). The criteria were also the core criteria used in standardized tests such as IELTS, TOEFL, and Cambridge.

Self and Peer Evaluation Checklist

Self and peer evaluation were part of the scaffolding activities students had to utilize in class. The checklist served as a guideline to help students evaluate their own and their peers' writing assignments. The checklist format was selected as a means of self and peer evaluation because it was simple, helped the students feel in control and made the points that the students had to focus on when writing a good essay salient for them. The evaluation was on task completion, organization, lexical variety and structural variety and accuracy. Task completion refers to the ability to write a complete essay with a good introduction, a thesis statement, clear main ideas, topic sentences, supporting details and a good conclusion. Organization includes the ability to arrange ideas logically, use appropriate transitions and make the essay coherent. Lexical variety means the ability to use a wide range of vocabulary. Structural variety and accuracy refers to the ability to write accurately in complete sentences and make few grammatical mistakes. The students could write more comments for each section. The peer review checklist also allowed the students to give overall impressions about the essay. The students were trained how to use the checklist for the self and peer evaluation at the beginning of the course by following the teacher's guidance. The students could ask the teacher for help during all evaluation sessions. The students' final drafts were evaluated by the teacher. Feedback regarding the four areas was also given.

Attitude Questionnaire

The attitude questionnaire was used to assess students' opinions towards the use of scaffolding teaching approach in class. The 4-point Likert scale questionnaire was constructed based on the framework used in the study (4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree).

The interpretation was as follows:

1.00 - 1.75 strongly disagree
1.76 - 2.5 disagree
2.51 - 3.25 agree
3.26 - 4.00 strongly agree

The questionnaire covered the three areas of scaffolding: cognitive (Questions 1 to 14), metacognitive (Questions 15 to 26) and affective (Questions 27 to 31).

All of the research instruments were validated by 3 experts who were the teachers of the course. Revision was made on the order of the items on the self and peer evaluation checklist as well as word choice. For the attitude questionnaire, accurate translation was also thoroughly evaluated. The Cronbach's Alpha value of 0.93 confirmed that the attitude questionnaire had high reliability.

Research Procedure

1. The pre-test was administered in class in the first week of the semester. The students had 1 hour to write the essay. The students' essays were double-rated by the teachers who taught the course.
2. For 14 weeks, the teacher followed the framework adapted from Cotterall and Cohen (2003), Spycher (2017), and Walqui (2006). The framework was developed to suit all course requirements and to comply with the course syllabus. The types of scaffolding used in this study were based on those illustrated in Van de Pol, Volman, and Beishuizen, (2010), namely students' feeding back, teachers' providing hints, teachers' instruction and explanation, teachers' clarification, teachers' modeling, and questions from teachers. The steps are illustrated as follows:

Stage 1

Content, vocabulary and structures were scaffolded through a reading passage, which served as a model text, and the teacher's explicit teaching of grammatical structures and the vocabulary. Cognitive scaffolding was achieved through teaching, brainstorming and reading activities, for example, highlighting important vocabulary and useful language structures in the model texts, asking students to look up words in groups, making lists and explaining how to use the vocabulary and structures, reading and outlining the model texts, giving comprehension questions, analyzing the texts' organization, evaluating their own or peers' work, and giving feedback. Metacognitive scaffolding involved teacher's assistance in goal setting and planning. Metacognitive question prompts were given to students to help them plan for the writing stage.

Stage 2

The students used the content, vocabulary and structures they learned to write their essay. Scaffolding included teacher's feedback, which served as an expert's guidance. Cognitive scaffolding was provided all through this stage through teacher instruction, explanation and clarification.

Stage 3

After the students finished their first draft, they evaluated it by using the checklist before exchanging their work with their peers. The self-evaluation and peer feedback checklists served as a mediator or metacognitive prompts to enhance students' writing abilities. The students had to evaluate their own and their peers' writing, and plan how to revise their essays. After this stage, the first draft was revised, and the second draft produced. The teacher evaluated the second draft and gave feedback.

These teaching steps were repeated for all essay genres. Affective scaffolding was present in all stages. A positive learning environment and learner autonomy were promoted through teacher, self and peer feedback, teacher support, and in-class activities.

3. At the end of the semester, a one-hour post-test was administered in class. The attitudes questionnaire was distributed to the students. The same teachers rated the post-test. Inter-rater reliability was high for both the pre-test and the post-test (r = 0.869 and 0.873 respectively).

Data Analysis

1. A paired samples t-test was used to analyze the pre- and post-test scores to investigate the effect of scaffolding on non-proficient EFL learners' academic writing performance. Further analysis was also conducted on these scores in the four areas of writing competence: 1) task completion, 2) organization 3) lexical variety and 4) structural variety and accuracy.
2. Descriptive statistics were used to analyze the students 'attitudes towards the use of scaffolding in class.

Results and Discussion

Results and discussion are presented according to the two research objectives.

Research Objective 1: To investigate the effect of scaffolding on non-proficient EFL students' academic writing performance

The study showed that there was a significant improvement in the students' writing scores ($t = -7.68$, $df = 19$, $p < .05$). There were significant differences in all areas of writing ability: task completion ($t = -7.87$, $df = 19$, $p < .05$), organization ($t = -7.60$, $df = 19$, $p < .05$), lexical variety ($t = -6.21$, $df = 19$, $p < .05$), and structural variety and accuracy ($t = -8.19$, $df = 19$, $p < .05$). The findings showed that the students were able to complete the task within the time limit. The students performed significantly better after the course was taught using the scaffolding teaching approach. The findings supported what earlier studies found concerning the positive effect of the use of scaffolding in language teaching (Choi & Wong, 2018; Dewi & Isawandari, 2017; Faraj, 2015; Khanza & Nufus, 2019; Kim & Kim, 2005; Pasand & Tahriri, 2017; Pinchai, 2017; Saputri, Raja & Nurweni, 2017; Vonna, Mukminatien & Laksmi, 2015).

Table 2: Pre-test and Post-test Scores

	Pre-test raw score Mean	Post-test raw score Mean	Paired Differences					t	df	Sig. (2- tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Pre-task completion – Post-task completion	0.91	1.89	-.98	.55	.12	-1.23	-.72	-7.87	19	.000
Pre-organization – Post-organization	0.7	1.74	-1.04	.61	.14	-1.32	-.75	-7.60	19	.000
Pre-lexical variety – Post-lexical variety	0.72	1.4	-.68	.49	.11	-.91	-.45	-6.21	19	.000

Pre-structural variety – Post-structural variety and accuracy	0.67	1.42	-.75	.41	.09	-.94	-.56	-8.19	19	.000
Pre-test total – Post-test total	2.88	6.42	-3.54	2.06	.46	-4.50	-2.57	-7.68	19	.000

The findings showed scaffolding led to an improvement in the zone of proximal development of non-proficient students' writing competence. The students' post-test scores improved significantly in all criteria components: task completion, organization, lexical variety, and structural variety and accuracy. Students' lexical variety improved (t = -6.21, df = 19, $p < .05$) as the students were assigned to read model texts which served as good models as they were rich in vocabulary and structures. It was found in Kim and Kim (2005), Spycher (2017), Cotterall and Cohen (2003) and Walqui (2006) that model texts were important parts in scaffolding. In addition, vocabulary usage and meaning were presented in meaningful contexts and were made salient for them. They were also encouraged to use the vocabulary they learned in stage 1 to write their own essay in stage 2. They learned not only to use a greater variety of vocabulary, but also with a more acceptable degree of accuracy and appropriateness. These findings supported the notion of effective vocabulary teaching through listening and reading and through the use of context clues. Producing vocabulary either through speaking or writing likely also enhances the students' vocabulary knowledge (Nation, 2002). As for task completion (t = -7.88, df = 19, $p <.05$), the students were able to express significantly clearer stances and main ideas as well as fully and clearly address the topic. This might be from the metacognitive scaffolding provided to the students. The students were guided on how to set goals, plan and select which content should be used to support their position. Another area which was positively affected by the cognitive scaffolding was the students' organization scores (t = -7.60, df = 19, $p <.05$). They gained more competence in arranging ideas logically, using appropriate and sufficient transitions and making their essays coherent and smooth. Improvement in students' writing organization through the use of scaffolding was also reported in Faraj (2015). The scaffolding in this area was also done by exposing them to model texts and by giving feedback. The improvement of the students' structural variety and accuracy (t = -8.19, df = 19, $p <.05$) could be from their having more control over sentence structures and grammatical errors and it was probably from the benefits of modelling and feedback (Kim & Kim, 2005; Spycher, 2017; Cotterall & Cohen, 2003; Walqui, 2006). Unsurprisingly, structural variety and accuracy did not improve as significantly as other areas. Using various and accurate structures in writing is always challenging for EFL students. Al-Mekhlafi and Nagaranam (2011) stated that despite intensive teaching of grammar rules, learners still have difficulty in acquiring them.

Cognitive and Metacognitive Scaffolding through the Whole Process of Writing

Writing is a social process involving cognition and metacognition (Kilmova, 2014). The model of teaching used in the study allowed the students to be assisted in cognitive and metacognitive aspects all through the stages of learning. The two key factors that led to improvement were expert's assistance and interactions. As Mcleoad (2019) suggested that the ZPD should start with experts' guidance and help; then it should be supported by social interactions and supporting activities which serve as scaffolding. Walqui (2006) also viewed scaffolding as interactive. In this study, the students were initially guided by the teacher (the

expert) through teaching and the use of model texts, which is supported in many research studies including Coffin, Curry, Hewings, et al. (2003), who emphasized the importance of providing students with scaffolding activities and the various examples of target language use. They said that scaffolding must include collaboration and interaction between the expert and the novice (teacher feedback). In the study, interaction, one of the main components of scaffolding, was incorporated through brainstorming and peer review activities. Moreover, the study integrated both product and process-oriented approaches (Klimova, 2014), which led to desirable results. The product-oriented approach gives importance to models. The use of models of writing in this study was to guide the students in focusing on organization, vocabulary and structures. At the same time, activities that represented the process teaching approach like brainstorming, discussion and rewriting were also included at various stages of teaching. Various types of feedback—considered to be metacognitive scaffolding—were given to the students in this study. Feedback came from teachers, peers, and evaluation of their own work.

Scaffolding for Future Independence through Feedback and Modeling

Scaffolding is temporary and can be withdrawn when students are equipped with knowledge and skills. When scaffolding students, teachers aim for students' future independence (Wood, Bruner & Ross, 1976 cited in Spycher, 2017). The study integrated activities that promoted learner autonomy, for example, individual writing tasks as well as self-evaluation and peer review activities. Self-evaluation and peer feedback are shown to promote learner autonomy in writing (Park & Kim, 2016). Integrating various types of feedback in a writing class was also supported by Coffin, Curry, Hewings, et al. (2003) and Kim and Kim (2005) who stated that giving and receiving feedback was beneficial, and teacher feedback and peer feedback were both valuable. In the same way, Faraj (2015) mentioned that the students who were scaffolded knew how to write an organized piece of writing and improve their work through reviewing and editing.

Good models are very important for learners (Kim & Kim, 2005; Spycher, 2017; Cotterall & Cohen, 2003; Walqui, 2006), especially for non-proficient writers. In this study, the students had to read good sample essays that represented each writing genre at the beginning of each new lesson. During this stage, they could expand their lexical and structural knowledge as well as gain more ideas and content related to the theme of each lesson. Kim and Kim (2005) stated that students should be made aware of content and language. In the same way, Spycher (2017) emphasized that students needed to be taught what good writing is through modeling. Cotterall and Cohen (2003) and Walqui (2006) also included the use of good models in their scaffolding frameworks. Good models can scaffold content, language and vocabulary that will prepare students for their writing tasks.

Research Objective 2: To explore the students' attitudes towards scaffolding in the academic writing class

The results from the 4-point Likert scale questionnaire showed that the students generally had positive attitudes towards the use of scaffolding in the writing class. Based on the questionnaire that targeted their attitudes towards the three areas of scaffolding (cognitive, metacognitive and affective), it was revealed that they agreed that scaffolding helped them in the three areas, as shown in the following table.

Table 3: Overall Attitudes of the Students towards Scaffolding

	M	SD	Interpretation
Cognitive	3.20	0.65	Agree
Metacognitive	2.87	0.83	Agree
Affective	3.04	0.59	Agree

The results from the attitudes questionnaire showed that the students were satisfied with the use of the scaffolding teaching approach in class. However, the degree of satisfaction varied from one type of scaffolding to another. Overall, the students agreed that they learned and used the vocabulary, content and structures from the model texts, the teacher's instruction, and class activities (cognitive scaffolding M = 3.20, SD = 0.65). The students' opinions towards affective scaffolding were also positive (M = 3.04, SD = 0.59) This part clearly showed that the students felt that scaffolding helped reduce their anxiety, increased their motivation and confidence, and helped them obtain more control over both their language and content in writing. The students also showed positive attitudes towards metacognition scaffolding with the mean score of 2.87 (SD = 0.83).

Further analysis was made in each area, and the results are shown in Table 4 below.

Table 4: Attitudes of the Students towards Cognitive, Metacognitive and Affecting Scaffolding

Cognitive Scaffolding	**Mean**	**Std. Deviation**	**Interpretation**
1. I learned useful vocabulary from the reading texts.	3.25	.45	Agree
2. I gained useful ideas/information/content related to the topic that I had to write from the reading texts.	3.25	.58	Agree
3. I learned useful structures and language expressions from the reading texts.	3.31	.60	Agree
4. I learned useful vocabulary from my teacher in class.	3.19	.66	Agree
5. I learned useful structures and expressions from my teacher in class.	3.06	.93	Agree
6. I learned useful vocabulary from the brainstorming activity in class.	2.94	.77	Agree
7. I gained more ideas/information/content from the brainstorming activity in class.	2.94	.68	Agree
8. I used the vocabulary I learned from the reading texts when writing.	3.38	.62	Strongly agree
9. I used the ideas/information/content I learned from the reading texts when writing.	3.31	.70	Strongly agree
10. I used the structures and language expressions I learned from the reading texts when writing.	3.38	.72	Strongly agree
11. I used the vocabulary I learned from my teacher when writing.	3.25	.58	Agree
12. I used the structures and language expressions I learned from my teacher when writing.	3.25	.77	Agree
13. I used the vocabulary I earned from the brainstorming activity in class when writing.	3.00	.82	Agree

Cognitive Scaffolding	Mean	Std. Deviation	Interpretation
14. I used the ideas/information/content and vocabulary I learned from the brainstorming activity in class when writing.	3.25	.58	Agree
Metacognitive Scaffolding	**Mean**	**Std. Deviation**	**Interpretation**
15. I understood the objective of each writing task the teacher assigned me to do.	3.19	.40	Agree
16. I always set the goal before I started writing.	2.94	.68	Agree
17. I monitored myself when I was writing each task to make sure I used appropriate vocabulary.	2.63	.72	Agree
18. I monitored myself when I was writing each task to make sure I used correct structures and grammatical sentences.	2.63	.96	Agree
19. I monitored myself when I was writing each task to make sure the ideas/information/content was appropriate and relevant.	2.75	.77	Agree
20. I evaluated my work after I finished each writing assignment by checking if I used appropriate vocabulary.	2.63	.72	Agree
21. I evaluated my work after I finished each writing assignment by checking if I used correct structures and grammatical sentences.	2.50	.73	Disagree
22. I evaluated my work after I finished each writing assignment by checking if I included appropriate and relevant ideas/information/content.	2.69	.87	Agree
23. I learned to evaluate my own work from evaluating my peers' work.	2.94	.68	Agree
24. I used feedback from peers to improve my work.	2.88	.81	Agree
25. I learned from my teacher's feedback and comments.	3.38	.62	Strongly agree
26. I used feedback and comments from my teacher to improve my work.	3.31	.70	Strongly agree
Affective Scaffolding	**Mean**	**Std. Deviation**	**Interpretation**
27. I felt less worried when writing as I was equipped with vocabulary, ideas/information/content and structures/language expressions.	3.00	.52	Agree
28. I felt motivated to improve my writing skills.	3.19	.75	Agree
29. I felt more confident when writing.	2.75	.77	Agree
30. I searched for more ideas/information/content about the topics I was assigned to write about on my own outside class.	3.13	.50	Agree
31. I gained more control over my writing in terms of using vocabulary, ideas/information/content and structures/language expressions.	3.13	.50	Agree

* N = 16

Regarding cognitive scaffolding, the mean scores for most questions were between 2.51 and 3.25, showing the students' agreement. There were three items (8), (9) and (10) that

were rated 'strongly agree'. These items asked if they used the content, the vocabulary and the sentence structures they learned from the reading texts. However, items (6) and (7) gained somewhat lower mean scores. These two items reflected students' attitudes towards brainstorming activities with peers.

As for metacognitive scaffolding, most of the mean scores of the questions lay between 2.51 and 3.25 (agree), but most items were rated lower than 3. The lower mean scores revealed that the students were not quite certain of their ability to monitor or evaluate their own work. In terms of self-evaluation, the students rated the area concerning their ability to evaluate structural variety and accuracy the lowest, as illustrated by the mean score of 2.50 (21). Regarding peer evaluation, they saw the benefits of evaluating their peers' work and reported the use of peer feedback to revise their essays (23) and (24), but they did not rate working with peers and using peer feedback as high as the assistance from the teacher. This can be seen in items 25 and 26, which showed their strong, positive attitudes towards teachers' feedback. The question concerning the objective and their learning (15) was also ranked higher than 3.

As for affective scaffolding, positive attitudes were also shown. The mean scores of the students' attitudes were between 2.51 and 3.25 (agree). However, items (27) and (29) regarding their anxiety and confidence did not receive strong agreements (M = 3.0 and M = 2.75, respectively).

The results from the questionnaire supported previous studies such as Faraj (2015) and Saputri, Raja and Nurweni (2017) in that the students had positive attitudes towards the use of scaffolding teaching in writing classes. Through scaffolding, the students gained more understanding of conventions and rhetorical pattern. Scaffolding helped build their confidence in expressing their ideas. The findings revealed the students highly valued teacher's feedback, which highlighted the importance of the presence of teachers, or experts, who can help the students through the ZPD (McLeod, 2019). The results also showed students' strong positive attitudes towards the model texts as sources for vocabulary, content and structures. This supports the benefits of providing students with model texts and justifies modelling as an essential part of scaffolding teaching (Kim & Kim, 2005; Spycher, 2017; Cotterall & Cohen, 2003; Walqui, 2006). The positive attitudes which might not be as strong lay in the areas of self-monitoring, self and peer evaluation as well as confidence and anxiety in writing, which is common for students who are non-proficient. Al-Jarrah, Mansor, Talafhah, et al. (2019) mentioned in their study that non-proficient students usually struggle with challenging writing tasks as well as with the use of metacognitive writing strategies despite the fact that these strategies can be used to help them accomplish the task.

Regarding the feedback, the students valued the feedback from the knowledgeable (teacher) more than that from their peers. They also showed stronger positive attitudes towards the activities led by the teacher, rather than those done with their peers (brainstorming activities). This reinforces the importance of an expert's or teacher's assistance in scaffolding (Donato, 1994 cited in Cotterall & Cohen, 2003; McLeod, 2019). It confirms the ZPD and the scaffolding notions of having the knowledgeable help the novice in the zone where they are not able to achieve the task independently (Donato, 1994, cited in Cotterall and Cohen, 2003; Walqui, 2006; Wood, Bruner and Ross, 1976; McLeod, 2019; Vygotsky, 1978). The findings also suggested that scaffolding could make students emotionally ready and gain more self-esteem (Faraj, 2015). This positively affected their affective schemata, and could possibly lead them to become autonomous learners in the future (Dix, 2016).

Conclusions

This study explored scaffolding teaching in the specific context of academic writing and ESP. Teaching writing to non-proficient students can be very challenging, especially when the teachers and the students have to adhere to the same course content and assessment criteria as those used with their higher-proficient counterparts. The findings showed positive effects of using scaffolding in teaching writing to non-proficient university students. In other words, they showed a significant improvement of students' writing abilities. They also showed students' positive attitudes towards the scaffolding teaching approach. Cognitive, metacognitive and affective scaffolding helped students improve their writing ability in all the main areas of writing competence: task completion, organization, lexical variety, structural variety, and accuracy. Scaffolding should be done through the use of model texts, explicit teaching, and useful feedback. As previous studies concerning Thai students' problems in writing revealed that Thai students have problems regarding grammar use, lexical issues, writing styles and feedback (Rodsawang, 2017 and Boonyarattanasoontorn, 2017), scaffolding can be an effective teaching approach to reduce these problems.

As this study used a one group pretest-posttest design and was conducted with non-proficient Thai students in a public university, generalization of the results might be limited to certain contexts. Suggestions for future research would be to extend the scope of the study to students in other contexts and with other skills to see if scaffolding has a positive effect. Also, as this study aimed at exploring the results from a cohort group, studying the effects of scaffolding on each individual student could lead to more insightful findings. Moreover, it would also be interesting to further investigate the interactions between teachers and students and those among students during teaching and feedback sessions. More extensive and in-depth studies in the scaffolding teaching approach will greatly contribute to teaching and learning in the EFL context.

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