



ผลของการใช้โมเดลของฟิชเชอร์และเฟรย์ในการเพิ่มระดับความรับผิดชอบในการเรียนที่มีต่อ
ความสามารถทางการเขียนของนักเรียนชั้นมัธยมศึกษาปีที่ 4

EFFECT OF FISHER AND FREY'S GRADUAL RELEASE OF RESPONSIBILITY MODEL ON
WRITING ABILITY OF TENTH GRADE STUDENTS

นางสาวพิชินาท กุมภวรรณ *

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บทคัดย่อ

การวิจัยนี้มีจุดประสงค์เพื่อ 1) ศึกษาผลของฟิชเชอร์และเฟรย์ในการเพิ่มระดับความรับผิดชอบในการเรียนที่มีต่อความสามารถทางการเขียนของนักเรียนชั้นมัธยมศึกษาปีที่ 4 และ 2) ศึกษาการเรียนรู้การเขียนของนักเรียนในวิชาการเขียนที่ใช้โมเดลของฟิชเชอร์และเฟรย์ในการเพิ่มระดับความรับผิดชอบในการเรียน กลุ่มตัวอย่างในงานวิจัยนี้ประกอบด้วยนักเรียนชั้นมัธยมศึกษาปีที่ 4 จำนวน 31 คน โรงเรียนสุรศักดิ์มนตรีที่ลงทะเบียนเรียนวิชาการเขียน 1 เครื่องมือในงานวิจัยได้แก่ แบบทดสอบความสามารถทางการเขียนก่อนและหลังเรียน แบบสังเกต และการสัมภาษณ์ สถิติที่ใช้ในการวิเคราะห์ข้อมูลคือ สถิติเชิงพรรณนา ได้แก่ ความถี่ คะแนนเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน การทดสอบค่าที และการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า (1) นักเรียนได้คะแนนเฉลี่ยจากแบบทดสอบความสามารถทางการเขียนภาษาอังกฤษหลังเรียนสูงกว่าคะแนนเฉลี่ยก่อนเรียนอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 และพบว่ามีค่าขนาดอิทธิพลสูง (2) มีการตอบสนองเชิงบวกโดยแสดงความเข้าใจต่อการเรียนการสอนอยู่ในระดับดี และ (3) โมเดลของฟิชเชอร์และเฟรย์ในการเพิ่มระดับความรับผิดชอบในการเรียนมีผลเชิงบวกต่อการพัฒนาการเรียนรู้การเขียนของนักเรียน

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Abstract

The objectives of this study were to: 1) to explore the effects of Fisher and Frey's gradual release of responsibility model on students' writing ability of tenth grade students; 2) to investigate the learning of students' writing in the writing course using the Fisher and Frey's gradual release of responsibility model. The participants of the study were 31 tenth grade students at Surasakmontree school who enrolled in Writing I course. The research instruments were a pretest and posttest of English writing ability, a teacher observation and interview questions. Descriptive statistics: mean scores, S.D., and dependent t-test were used to analyze students' writing ability. Teacher observation and interview questions were analyzed by using content analysis.

The results revealed that (1) the posttest mean scores of students' writing ability were higher than pretest scores at significant level of 0.05. The magnitude of the effect size was large. (2) Students' positive responses showing their understanding were at good level; (3) and Fisher and Frey's gradual release of responsibility model had positive effects on improving students' learning of writing.

คำสำคัญ: โมเดลของฟิชเชอร์และเฟรย์ในการเพิ่มระดับความรับผิดชอบในการเรียน/ การสอนโดยการใช้สcaffolding/ ความสามารถทางการเขียน

KEYWORDS: FISHER AND FREY'S GRADUAL RELEASE OF RESPONSIBILITY MODEL/ SCAFFOLDED INSTRUCTION/ ENGLISH WRITING ABILITY

Introduction

The establishment of the ASEAN Community in the year of 2015 has played an important role in planning and developing the quality of learning in Thailand toward the ASEAN. Therefore, English language is perceived as an official language and a tool to communicate among the ASEAN member countries. However, the results from Ordinary National Education Test (ONET) in 2011 revealed that the English average scores of Thai students were at the lowest, compared with other subject areas (Phanphrut, 2012). In addition, regarding the four skills of English proficiency, writing skill is considered as the most difficult skill for many Thai students (Amkham, 2010). Writing is the most complicated skill since it requires higher ability in using vocabulary, grammatical structure and rhetoric in order to convey their message (Suwannasom, 2001).

Considering EFL context of Thailand, especially the schools in which have participated World-Class Standard School Policy, most students have to enroll in various courses that ask them to compose complicated tasks such as academic reports or essays as the compulsory requirements of the this policy. In fact, it seems that students have not been provided enough practicing in order to produce such complex types of writing. As a result, many Thai scholars have tried to develop and implement many teaching methodology to improve Thai students' writing ability. One of the new perspectives on teaching writing that can pave an alternative pedagogy is the scaffold model. Basically, scaffolds have been widely implemented in various fields of education such as teaching science, teaching mathematics, technology learning, language learning, and teaching reading

(Li & Lim, 2008; Forman, 2008; Chamniyon, 2009; Yosphan, 2014; Mondy, 2014). Recently, there was a research addressing the implementation of scaffolding in teaching writing in Chiang Mai Province and it gave positive results in increasing students' writing ability (Pansue, 2008). Her study suggested that using scaffolding strategies helped students enhance their writing accuracy and creativity as well as led them to be more independent in learning writing.

Scaffolded instruction focuses on the role of mentoring in which teachers provide students guidance along the way of learning and gradually reduce his/her assistance until learners can perform tasks on their own (Wood et al., 1976; Pearson & Gallagher, 1983; Fisher & Frey 2003; 2008). Then Fisher and Frey (2008) tried to adapt the theory of scaffolding and introduced their model called The Gradual Release of Responsibility in which they added one more component: collaborative learning, which is slightly different from other scholars in the field. This pedagogy model could assist teacher's burden in teaching in the large classroom setting as well as promoting learner-centered. Although there were many research on scaffolded instruction in various fields of study. There is no empirical research on the gradual release of responsibility model using this four-component framework in Thailand. Even the research of Pansue (2008) seemed to similarly address the use of scaffolding strategies enhancing writing ability; she investigated different aspects; writing ability and writing anxiety. Therefore, this study investigated the use of the gradual release of responsibility model by using Fisher and Frey's framework (2003; 2008) and how it affected students' writing ability and learning of writing.

Scaffolded Instruction

Originally, scaffold or scaffolding term came from the notion of Wood et al. (1976). Wood et al.'s scaffolding (1976) focuses on the degree of teacher's modeling while students are coping with problem-solving tasks. The adaptation of Wood et al.'s framework (1976) has been found in the field of language teaching and learning, for example Pearson & Gallagher's (1983), who were the authority of the field of gradual release of responsibility model; and Fisher & Frey' (2003). The interpretation of scaffolds in second or foreign language may be slightly different from other fields of education since it less focuses on the process of problem solving; rather on teacher's modeling and explicit grammar teaching, instead. However, the interpretation of scaffolds share some common concepts of bridging learners' skill by providing controlled tasks, giving direct explanation from teacher and guiding students until they can become independent learners.

Gradually Release of Responsibility Model

The gradual release of responsibility model was originally developed by Pearson and Gallagher in 1983 based on theory of Wood et al.'s scaffolding (1976) and Vygotsky's The

Zone of Proximal Development (1978). The four interaction components of Gradual Release of Responsibility Model suggested by (Fisher & Frey, 2008) consist of Focus Lesson, Guided Instruction, Collaborative Learning and Independence Practice.

1) Focus Lesson/ “I Do It” is the first step for students to model a task and skills. The crucial factor of this stage is teacher’s explanation. In this stage, teacher needs to model student’s thinking, establish learning objectives or purpose of the lesson including provide some clues and activate prior knowledge. Additionally, direct explanation is also recommended by Fisher and Frey: it requires teacher to explicitly state what the process or content are.

2) Guided instruction/ “We Do It” is the stage that teacher begins to model learners in applying skills to a new situation. Teacher plays an important role in working closely with students. Teacher is not an instructor but one of their partners in facilitating and leading students to understanding and accomplishing the tasks. Prompting using model, templates and frames are techniques to be used in this stage (Fisher & Frey, 2010). Various types of questions can be used to probe students’ understanding: elicitation, elaboration, clarification, divergent, heuristic and inventive.

3) Collaborative Learning/ “You Do It Together” provides students an opportunity to work together to complete specific tasks. The key of collaborative is sharing accountability for some aspect of the work (Fisher & Frey, 2008b). The collaborative learning tasks allow students to apply their understanding of the content to solve the problem, discuss, and talk with peers.

4) Independent Practice/ “You Do It Alone”, the final stage of the gradual release

of responsibility model, focuses on independent learning tasks. Students are required to apply their understanding and knowledge from focus lesson, guided instruction, and collaborative in completing the task by their own. Independent task is aimed to review what students have learned and transfer knowledge to new ones.

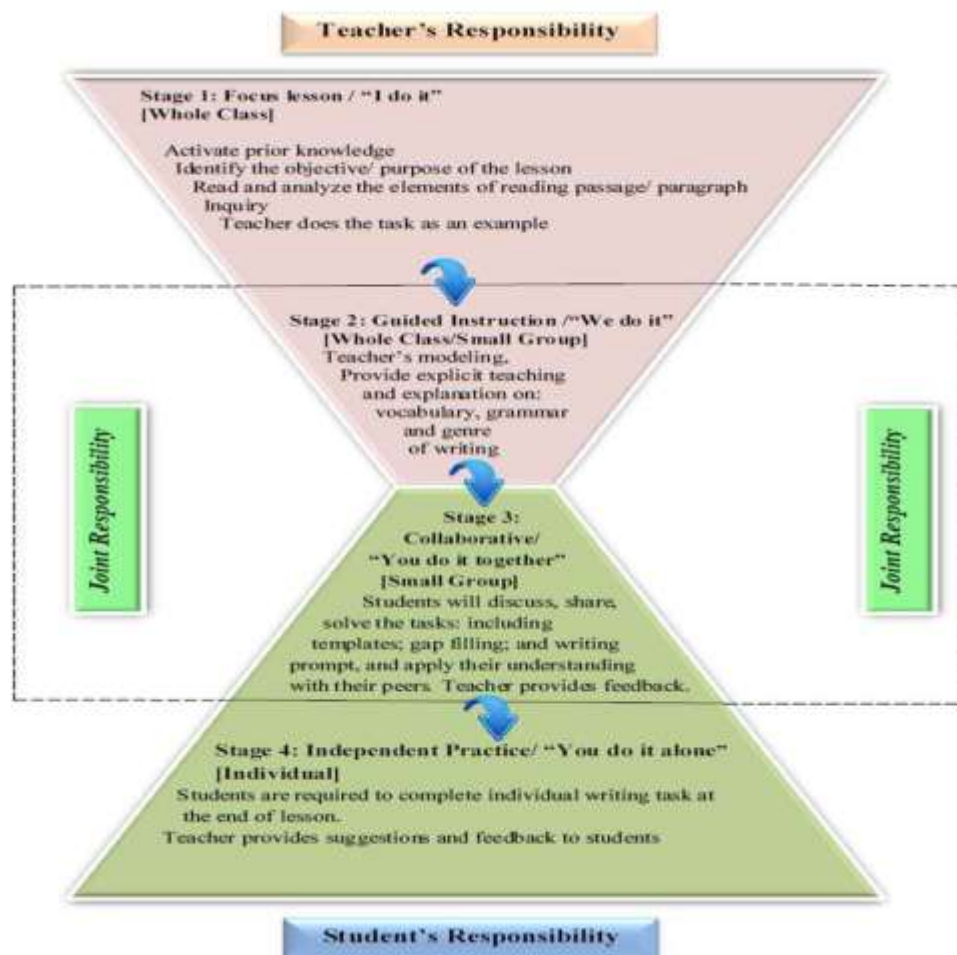


Figure1: Fisher and Frey's Gradual Release of Responsibility Model (2008)

Writing Ability of Thai secondary level students

From the national curriculum and World-Class Standard Strand Policy, students in Grade 10-12 should possess the ability in composing various forms of including an academic essay. That means students must be competent writers in using English language in various and specific context: the writing moves from sentence level toward essay level. Thus, teacher should implement the instruction that could scaffold them to achieve the ultimate goal of leaning: from sentence to paragraph and from paragraph to essay.

Research Objectives

The objectives of this study were:

1. To explore the effects of Fisher and Frey's gradual release of responsibility model on students' writing ability after learning.
2. To investigate the learning of students' writing in the writing course using the Fisher and Frey's gradual release of responsibility model.

Population and Participants

The population in this research was the 150 tenth graded students who studied at Surasakmontree School and enrolled in E30231 Writing I subject in first semester, academic year of 2013.

The participants of this study were purposively selected from 150 tenth grade students who took Mathematic-English program. One particular class, out of four classes, was selected. There were 31 students in the class. In the interviews, six students were chosen from 31 participants. Six participants represented: high proficiency level (2), moderate proficiency level (2), and low proficiency level students (2).

Research Methodology

Research Design

This study is one-group pretest-posttest, quasi-experimental design. This study explored the effect of using Fisher & Frey's gradual release of responsibility model on students' writing ability and the learning of students' writing. The research design was aimed to collect both qualitative and quantitative data.

Research Instruments

There were four research instruments in order to collecting data in this study as follow:

1) Lesson plans

Lesson plans in this study were developed based on Fisher and Frey's Model (2008) of Gradual Release of Responsibility which is divided teaching instruction into four stages: Focus lesson / "I do it", Guided Instruction / "We do it, Collaborative/ "You do it together", and Independent Practice/ "You do it alone". A sample of lesson plans was validated by three experts in the field of teaching writing.

2) English Writing Test

The English writing test was used to measure students' writing ability before and after the treatment. The same English writing test was used as pretest and posttest. Students were required to write a well-organized paragraph on the topics: "My favorite movie character". The writing ability was evaluated by writing scoring rubrics, with 30 point. Three experts in the field of teaching writing and assessment were asked to evaluate the

validity of the writing test, in terms of tasks, direction and scoring system. Inter-rater reliability was used to find the consistency between the two raters in grading students' writing ability. The Pearson Product-Moment correlation coefficient of the pretest was 0.831, and the posttest was 0.957, which were considered as consistent at high level.

3) Observation checklist

Teacher observations were used to gain qualitative data. The instrument was aimed at investigating students' positive responses showing their understanding of the content (vocabulary and grammar) and of writing activities during the class. It was validated by three experts in the field. Inter-rater reliability was used to find the level of agreement among two observers. Cohen's Kappa value was 1.00 with $p < 0.001$, which was considered as perfect agreement.

4) Interviews

After the treatment, six students were purposively chosen to participate in the semi-structured interviews. The interviews were used to examine student's learning of writing during the treatment. The interviews were conducted in Thai in order to allow the participants freely answered. The interviews were audio recorded and later transcribed. The interview questions were validated by three experts.

Data Collection

The data collection took approximately 12 weeks: starting from pretest, classroom intervention, posttest, observations, interviews and finally data analysis. It started with providing students writing pretest to examine the writing ability. During week 2-9, it was a treatment period. After the treatment, students were tested again with the same writing test to compare their writing ability between before and after. During the classroom, the video recording was used to collect the data of students' positive responses. Then students were interviewed for eliciting their learning of writing. The final process was analyzing the data both quantitatively and qualitatively.

Data Analysis

The data analysis involved both quantitative and qualitative data analysis. The pretest-posttest scores were analyzed by mean scores, S.D., and dependent t-test to prove the hypothesis whether the score difference was statistically significant at a level of 0.5. In addition, Cohen's d was used to find the magnitude of the effect of Fisher and Frey's gradual release of responsibility model. For observation checklist and interviews, the data were analyzed by using content analysis, frequencies and percentage. The researcher transcribed the conversations and categorized the information from the interviews into category.

Findings

This part presented the research finding from the study of effects of Fisher and Frey's gradual release of responsibility model. The finding reveals only the result from the first research question since the findings from other two instruments are in the process.

To probe the research question 1: "To what extent does Fisher and Frey's gradual release of responsibility model enhance tenth grade students' writing ability after learning?", pre-post writing tests were used to measure students' writing ability. The table 1 showed the comparison of mean scores between before and after treatment.

Table 1: Comparison of the pretest and posttest scores of the students (score of 30)

	n	Min	Max	Mean	SD	Mean Difference	t	Sig.(2-tailed)
Pretest	31	8	18	13.13	2.513	7.000	9.644	.000*
Posttest	31	10	29	20.13	4.660			

From table 1, the students' pretest mean score was 13.13 (SD =2.513), with the lowest score of 8 and the highest score of 18. Whereas, the posttest mean score was 20.13 (SD =4.660), with the lowest score of 10 and the highest score of 29. The mean difference was 7.000, and the t-value was 9.644. It showed that the posttest scores are significantly different at 0.05 level ($p < 0.05$). In conclusion, students' writing ability after treatment was improved.

In addition, Cohen's *d* was used to calculate the effect size of Fisher & Frey's gradual release of responsibility model on students' writing ability. The Cohen's *d* value was 1.87 which indicated that it had a large effect, according to Cohen (1988).

To answer the research question 2: "How does Fisher and Frey's gradual release of responsibility model affect learning of students' writing?", the instruments employed to investigate student's learning of writing were the observation checklist and the interviews. The observation checklist was used to investigate students' positive responses showing their understanding of the content (vocabulary and grammar) and writing activities in class. Four video recordings of each teaching stage were examined. The table 2 presented the results from the observation.

Table 2: Total number of student's positive responses

Item	Description	Students' positive responses showing their understanding	
		Yes =1	No =0
I.	Focus lesson / "I Do It"		
1	Students give the definition of vocabulary in Thai. /Students give vocabulary or phrases as examples to	1	

	show their understanding.	
2	Students complete couple sentences by adding words or phrases learned from the lesson.	1
II. Guided Instruction / “We do it”		
3	Students can identify topic sentence from given passage and fill in the organization chart.	1
4	Students can identify supporting sentences and fill in the organization chart.	1
5	Students can identify concluding sentences and fill in the organization chart	1
6	Students can use given information to complete writing templates or a paragraph by adding words, filling phrases and forming complete sentences.	1
III. Collaborative/ “You do it together”		
7	Students work in groups, brainstorming ideas, information / Students ask peers or teacher questions or discuss the topic.	1
8	Students explicitly write an outline in their worksheet. /Students write title, topic sentence, supporting details, or conclusion in the worksheet.	0
9	Students asks peers, teacher for comments, suggestion./ Students look for definition and example of words, phrases in paper dictionary, online dictionary or the Internet.	1
IV. Independent Practice/ “You do it alone”		
10	Students explicitly write outlines in their own worksheet./ Students write title, topic sentence, supporting details , or conclusion in their own worksheet.	0
11	Students ask teacher for comments, suggestion. /Students consult their peers. /Students look for definition and example of words, phrases in paper dictionary, online dictionary, the Internet.	1
12	Students individually write a paragraph on their selected topic.	1
Total students’ positive responses		10

From table 2, it presented the total number of students' positive responses showing their understanding of the content and writing tasks they were asked to complete. Ten explicit responses out of twelve (83.33%) were counted as students' positive responses. There were two items which were not observed because the camera did not capture when the students worked on their outlines. From the result above, it could be concluded that the students' positive responses were at good level.

The semi-structure interviews were employed after the treatment to investigate how Fisher & Frey's gradual release of responsibility model benefited students' learning of writing. The table 3 showed the results from the students' answers from the interviews.

Table 3: Frequencies of key concepts found in the interview

Students' Answers	Frequencies of key concepts found in students' answers (N = 54)	Percentage
Advantages		
Improvement on Knowledge of Language	13	24.07
Improvement on Writing Process	27	50
Motivation in learning writing and in becoming independent learner	10	18.52
Challenges		
Task Complexity	3	5.56
Lack of Cooperation in Groups	1	1.85

N = Frequencies of the key concepts found in the interviews

The Table 3 reported the summary of how students perceived this writing course implementing Fisher and Frey's gradual release of responsibility model had effects on their learning. In terms of positive aspects, students reported that this class helped them in enhancing their knowledge of language: vocabulary and grammar (24.07%). In addition to advantages, students stated that this writing class improved their writing process in planning, writing first draft, brainstorming ideas, revising and editing (50%). Moreover, students showed that they were motivated to learn writing English and wanted to continue learning and improve their skills by themselves (18.52%). Besides advantages, some students thought some writing tasks were difficult and too many to complete within the class time (5.56%). Another challenge was the lack of cooperation among group members (1.85%). They said that some of them did not fully participate in doing their group work.

Discussion

The discussion was split into two parts in relation to the findings of the study: students' English writing ability and learning of students' writing.

1. Students' English writing ability

The overall of students' English writing ability after receiving the treatment showed that it was improved. According to Pearson and Gallagher (1983), gradual release of responsibility model ensures the increase of student's learning responsibility as it systematically allows a shift from teacher-oriented to student-oriented through teacher's modeling, purposeful instruction and individual practice. Considering students' writing improvement in terms of idea and content, organization, word choice, sentence fluency, and conventions, the results suggested that many students could compose longer paragraphs with clear sequencing and focus main idea accompanied by relevant supporting details. The improvement in these two aspects: content and organization were obviously noticed from students' writing. That might because of the writing structure and writing templates periodically provided in the handouts and/ or by the teacher in class. In addition, the results from this study were also consistent with findings from Fisher & Frey's (2003) research on implementing writing instruction. It might be concluded that Fisher and Frey's gradual release of responsibility model could enhance students' writing ability.

2. Learning of student's writing

The results from the observations and interviews indicated that Fisher and Frey's gradual release of responsibility model had positive effects on students' learning of writing. The grounded theory of Vygotsky's The Zone of Proximal Development (1978) supported the finding that social interaction between teachers and peers play a significant role in supporting individuals to achieve their learning. In this study, at the first and second stage of this model, students were only asked to fill in the gap with vocabulary, phrases and write several sentences when the teacher provided language input and explicitly taught the target language. From the observation, during the collaborative stage, students worked in groups to brainstorm ideas, revise, edit and publish their final product. The interaction among peers and the teacher at this stage was explicitly observed from the video recordings. The results from the interviews also confirmed that teacher's guidance and group work helped them construct their knowledge of language as well as improve writing ability. For individual practice, many students adopted some information from group works and from examples in the handouts as well as from teacher's comments to produce their own paragraph. It suggested that students gained and were able to transfer knowledge into other new situations. With a lot of practices in the whole class, groups and individual practice, students' writing ability became better. Furthermore, the results of interviews reflected that

Fisher and Frey's gradual release of responsibility model had a positive effect on their motivation in learning writing from teacher's guidance and interaction among peers.

Recommendations for further study

The recommendations for the future research are as follows:

1. A longitudinal study of Fisher and Frey's gradual release of responsibility model should be expanded into the comparison between two or more different groups of students in order to confirm the effect of the model on students' writing ability.
2. The future research implementing Fisher and Frey's gradual release of responsibility model should be conducted in longer class time. Three-hour period for each topic or each writing genre is highly recommended. Students, especially in the collaborative learning stage, may need more time to select the topic, discuss, brainstorm ideas, draft an outline and revise the first draft before they could compose their final product. Providing longer time to work as a group would lead students to be more familiar with the task and help them consolidate their knowledge before they would be ready to do the individual task on their own. Moreover, the teacher would have more opportunities to provide feedback on students' writing as well as assist them on solving the problems.
3. The video recording for observing students' behaviors should be set up, conducted from different angles of the room and equipped with good quality of sound system to gather as much students' responses as possible in class.

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