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**THE EFFECTS OF EXPLICIT METACOGNITIVE
STRATEGY TRAINING ON EFL STUDENTS' REVISION
OF THEIR ARGUMENTATIVE ESSAY**

Walaiporn Chaya

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วไลพร ฉายา : ผลของการสอนกลวิธีการรู้คิดโดยตรงที่มีต่อการแก้ไขงานเขียนเชิงอภิปราย
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METACOGNITIVE STRATEGY TRAINING/REVISION/AN ARGUMENTATIVE
ESSAY/METACOGNITIVE STRATEGIES

This study investigated the effects of metacognitive strategy training on revising the first draft of an argumentative essay of EFL students. It also examined metacognitive strategies EFL successful and less successful student writers employed in revising the first draft of their argumentative essay before and after metacognitive strategy training.

The participants of the study consisted of 20 Thai third-year students majoring in English enrolled in EN 431- Composition 2 course at Srinakharinwirot University (SWU) in Bangkok, Thailand. The participants were allocated into two groups: 10 successful and 10 less successful students. The participants in both groups were trained to revise the first draft of their argumentative essay using metacognitive strategies in planning, monitoring, and evaluating with nine sub-strategies for five weeks. The students were also assigned to write weekly journals as one of the course requirements during metacognitive strategy training in revision.

The results revealed statistically significant difference between metacognitive strategies use before and after metacognitive strategy training in revision for both successful and less successful student writers at the 0.05 level. After training, the students from both groups used more metacognitive strategies to revise the first draft

of their argumentative essay than before training. Also, after training, both successful and less successful students reported the use of all nine metacognitive strategies at the high level of usage. Further, in terms of the effects of metacognitive strategy training on students' quality of writing, the results revealed that the mean scores for the less successful students' first draft and second drafts were significantly different at the 0.05 level. The results indicated that the less successful students made a greater writing improvement on the revised draft of their argumentative essay.

The findings suggested that the explicit metacognitive strategy training might have a potential role in facilitating students' first draft revision leading to the improvements of the quality of writing. Therefore, the students should be trained to automatically use metacognitive strategies to monitor cognitive processes, particularly writing. In addition, EFL college students should be encouraged to explicitly employ more powerful levels of metacognitive strategies within the context of academic writing focusing on the process-based approach.

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TABLE OF CONTENTS

	Page
ABSTRACT (THAI)	I
ABSTRACT (ENGLISH)	II
ACKNOWLEDGEMENT	III
TABLE OF CONTENTS	VII
LIST OF TABLES	XV
LIST OF FIGURES	XIX
CHAPTER	

1. INTRODUCTION

1.1 Rationale of the Study	1
1.2 Statement of the Problem.....	4
1.3 Purpose Statement.....	8
1.4 Purposes of the Study.....	9
1.5 Research Questions.....	10
1.6 Significance of the Study.....	10
1.7 Assumptions.....	11
1.8 Delimitations and Limitation of the Study.....	11
1.9 The Operational Definition of Terms.....	12

TABLE OF CONTENTS (Continued)

	Page
1.10 Summary of the Chapter.....	13
1.11 The Organization of the Dissertation.....	14
 2. REVIEW OF THE RELATED LITERATURE	
2.1 Metacognitive Theory.....	16
2.1.1 Definition of Metacognition.....	16
2.1.2 Metacognition and its Contribution.....	20
2.1.3 Metacognitive and Writing.....	23
2.1.3.1 Metacognitive View of the Writing.. Process.....	23
2.1.3.2 Metacognitive Strategies and Writing.....	27
2.1.3.3 Metacognitive Strategy Model of Writing.....	28
2.1.3.4 Metacognitive Roles on the Revision Process.....	34
2.2 Writing an Argumentative Essay.....	37
2.2.1 Essentials of Argumentative Writing.....	37
2.2.1.1 Defining Argumentation/Persuasion: Goal, Structure or Purpose.....	37
2.2.1.2 The Process of Argumentative Writing.....	38
2.2.2 Structural Elements of an Argumentative Essay.....	41
2.2.3 Evaluating Argumentative Essay Writing.....	44
2.2.3.1 Toulmin System.....	45
2.2.3.2 Holistic Scoring for Argumentative Essay	48
2.3 Students' Problems in Writing an Argumentative Essay.....	49
2.3.1 Students' Problems in the First Draft Revision.....	54

TABLE OF CONTENTS (Continued)

	Page
2.4 Metacognitive Strategy Training in Revision.....	58
2.4.1 Studies on Metacognitive Strategies in Revision.....	58
2.4.2 Incorporating Metacognitive Strategies into Revision.....	62
2.5 Summary of the Chapter.....	69
 3. RESEARCH METHODOLOGY	
3.1 Research Design.....	71
3.2 Subjects and the Context of the Study.....	73
3.2 Sampling Design and Location of Research.....	77
3.4 Data Collection.....	77
3.4.1 The Data and Variables.....	77
3.4.2 Instruments for Data Collection.....	78
3.2.4.1 Metacognitive Strategies Questionnaire (MSQ).....	78
3.2.4.2 The Semi-Structured Interview.....	90
3.5 Metacognitive Strategy Training in Revision (MSTR).....	93
3.5.1 Writing Lesson for EN431-Composition 2.....	93
3.5.2 The Instructional Plan for Metacognitive Strategy Training in Revision (MSTR).....	93
3.5.3 The Teaching Materials.....	97
3.5.3.1 Student Information Sheet.....	97
3.5.3.2 Self-Question and Answer Worksheet.....	98
3.5.3.3 Plan Revision Think Sheet.....	98
3.5.3.4 Self-Revision Think Sheet.....	100

TABLE OF CONTENTS (Continued)

	Page
3.5.3.5 Self-Evaluation Checklist.....	102
3.5.3.6 A Guided Journal.....	102
3.5.4 Teaching Procedure.....	104
3.5.4.1 Teaching Procedure for a Regular EN431 Class.....	104
3.5.4.2 The Procedure for Implementing the MSTR Model.....	105
3.5.5 The Pilot Study for the Model of Metacognitive Strategy	
Training in the First Draft Revision (MSTR).....	112
3.5.5.1 A Trial of the Teaching Procedure and Materials.....	112
3.5.5.2 A Trial of the Scoring Rubric.....	114
3.6 Data Collection Procedure.....	117
3.6.1 Data Collection for Research Question 1.....	118
3.6.2 Data collection for Research Question 2.....	120
3.6.2.1 Collecting Students' First draft and Second Drafts.....	120
3.6.2.2 Scoring the First Draft and Second Drafts.....	122
3.6.2.3 Scoring Less Successful Students' First Draft and	
Second Drafts.....	122
3.7 Data Analysis.....	122
3.7.1 Data Analysis Procedure for the Pre and Post MSQ.....	122
3.7.2 Data analysis Procedure for the Pre and Post Interview.....	125
3.7.3 Data analysis Procedure for Journal Entries.....	126
3.7.4 Data analysis Procedure for the Ratings of the First Draft	
and Second Drafts.....	127

TABLE OF CONTENTS (Continued)

	Page
3.8 Summary of the Chapter.....	128
 4. QUANTITATIVE RESULTS OF THE STUDY	
4.1 Quantitative Results for the Use of Metacognitive Strategies	
from the Pre and Post MSQ.....	132
4.1.1 Successful Students’ Metacognitive Strategy Use	133
4.1.2 Less Successful Students’ Metacognitive Strategy Use.....	135
4.1.3 The Individual Strategy Use of Metacognitive Strategies	
among the Successful Students.....	137
4.1.4 The Individual Strategy Use of Metacognitive Strategies	
among the Less Successful Students.....	138
4.1.5 The Comparison in the Order of Metacognitive Strategies	
Use by the Successful and Less Successful Students before	
Training.....	139
4.1.6 The Comparison in the Order of Metacognitive Strategies	
Use by the Successful and Less Successful Students after	
Training.....	141
4.2 Quantitative Results for Metacognitive Strategies Use	
from the Interview.....	142
4.2.1 Frequency of Metacognitive Strategies Use by the Successful	
Students.....	142
4.2.2 Differences in Frequency of Individual Strategies by the	
Successful Students.....	145

TABLE OF CONTENTS (Continued)

	Page
4.2.3 Frequency of Metacognitive Strategies Use by the Less Successful Students.....	148
4.2.4 Differences in Frequency of Individual Strategies by the Less Successful Students.....	151
4.3 Quantitative Results for the Quality of the Second Draft.....	153
4.3.1 Differences between the Mean Scores of the First and Second Draft.....	154
4.3.1.1 The Difference between the Mean Scores of the Holistic Ratings.....	154
4.3.1.2 The Difference between the Mean Scores of the Analytic Ratings.....	155
4.3.2 Comparison of the Less Successful Students' First and Second Draft.....	157
4.3.2.1 The Comparison of the Holistic Ratings.....	157
4.3.2.2 The Comparison of the Analytic Ratings.....	159
4.3.3 Correlation of the Holistic and Analytic Ratings.....	162
4.3.3.1 Correlation of the Holistic Ratings.....	159
4.3.3.2 Correlation of the Analytic Ratings.....	160
4.4 Summary of the Chapter.....	166
 5. QUALITATIVE RESULTS OF THE STUDY	
5.1 Successful Students Use of Metacognitive Strategies In the First Draft Revision	168

TABLE OF CONTENTS (Continued)

	Page
5.1.1 The Use of Planning Strategies.....	169
5.1.2 The Use of Monitoring Strategies.....	182
5.1.3 The Use of Evaluating strategies.....	189
5.2 Less Successful Students' Use of Metacognitive Strategies	
In the First Draft Revision.....	200
5.2.1 The Use of Planning Strategies.....	200
5.2.2 The Use of Monitoring Strategies.....	218
5.2.3 The Use of Evaluating Strategies.....	227
5.3 Qualitative Analysis of Results from the Journals.....	241
5.3.1 Cognitive Factors.....	242
5.3.2 Affective Factors.....	248
5.3.3 Motivational Beliefs and or Self-Confidence.....	255
5.4 Summary of the Chapter.....	262
 6. SUMMARY, DISCUSSION AND CONCLUSION	
6.1 Summary and Discussion.....	264
6.1.1 EFL Students' Metacognitive Strategy Use in Revision:	
a Quantitative Analysis.....	264
6.1.2 EFL Students' Metacognitive Strategy Use in the First Draft	
Revision: Quantitative Results from the Pre and Post Interview....	266
6.1.3 Pattern and Type of Metacognitive Strategy Use.....	267
6.1.4 The Difference in the Metacognitive Strategies Use between the	
Successful and Less Successful Students	271

TABLE OF CONTENTS (Continued)

	Page
6.1.5 Successful and Less Successful Students' Metacognitive Strategy Use: a Qualitative Results.....	278
6.2 Conclusion.....	282
6.3 Limitation.....	284
6.4 Implications.....	286
6.4.1 Theoretical Implication of the Study.....	286
6.4.2 .Pedagogical Implication for Writing Instruction.....	288
6.4.3 Methodological Implication.....	293
6.5 Recommendations for Future Research.....	295
REFERENCES.....	300
APPENDICES.....	322

LIST OF FIGURES

Figure	page
2.1 Metacognitive Strategies Model of Writing.....	33
2.2 Three Basic Structural Plans for an Argumentative Essay.....	42
2.3 The Structural Elements of an Argumentative Essay.....	43
2.4 Diagram of Essential Parts of Toulmin’s Model of Argument Terms.....	48
2.5 Metacognitive Strategy Training Model of Revision (MSTR).....	68
3.1 Research Design for the Present Study: Two-Phase, Sequential Mixed Method (Sequential Exploratory Strategy).....	73
3.2 The Procedure for Metacognitive Strategy Training in Revision.....	111
4.1 Differences of Metacognitive Strategies Use by the Successful Students.....	144
4.2 Differences in the Individual Strategies Use by the Successful Students before and after Training.....	148
4.3 Differences of Metacognitive Strategies Use by the Less Successful Students(as reported in the pre and post interview).....	150
4.4 Differences in the Individual Strategies Use by the Less Successful Students before and after Training.....	153
5.1 Types of Cognitive Factors Revealed by the Successful and Less Successful Students.....	247
5.2 Obstacles to the First Draft Affecting the Students’ Emotion.....	254

CHAPTER 1

INTRODUCTION

1.1 Rationale of the Study

Argumentative writing has long been highly regarded as an essential mode of writing discourse. We are required to produce certain argumentative texts in a variety of contexts. In academic setting, argumentative writing emphasized in a composition course is an essential tool for students who have to write persuasively to prove one's point of view on a particular topic. It is also an important instrument for students or graduate students who face the task of writing dozens of lengthy research papers before finishing their college careers. At work, individuals often try to persuade others to support their proposals or opinions in a meeting. In a broader sense, argumentative writing is an essential instrument for a free society that deliberates about social, political, and ethical issues (McCann, 1989) such as in an editorial of a daily newspaper. Given the presumed importance of argumentative writing, it is clear that argumentative writing plays a significant role in our daily life. Thus, competence in argumentative writing is needed. Ultimately, the students need to develop the ability to write effective arguments for academic success, and preparation for further studies and employment.

Generally, argumentative writing refers to the type of writing that the writers are asked to write arguments in response to a persuasive topic by providing sound reasons to support it; therefore, in much of the empirical research the terms

“argumentative and persuasive” writing are used interchangeably (McCann, 1989). Pringle and Freedman (1985 as cited in Varghese & Abraham, 1998) define argumentative writing as a kind of writing that is organized around a clear thesis. This thesis then is “substantiated logically and through illustration” (p.289). As an academic endeavor, writing an argumentative essay has been justified by its virtue as the most difficult mode of writing discourse, one which encompasses many other writing tasks because its purpose is to influence people’s thoughts (Brandon, 1994; Golder & Coirier, 1994; Knudson, 1994).

According to Cornor (1987), argumentative writing aims to change the reader’s initial opposing position to the final position that equals to the writer, so audience awareness is essential in this type of writing. Reid (1982) notes that in argumentative writing, the writer takes a stand on a controversial issue, offers reasons and opinions, clarifies, and illustrates those opinions to persuade the audience to agree or disagree with an issue. Crowhurst (1991) defines an argumentative essay as the kind of writing that the writers takes a point of view and support it with either emotional appeals or logical argument. The task of persuasion is then a complex cognitive process of problem-solving requiring the writer’s awareness of the audience expectation, the writer’s purpose, the rhetorical pattern, and the context of situation or problematic situation (Cornor, 1987). In this study, argumentative writing involves presenting an argument in a way that a particular audience will find convincing or persuasive and the terms “argumentative and persuasive” are also used interchangeably.

In light of the above discussion, the students’ success in argumentative writing involves taking into account the target audience expectation and the high-level of rhetorical goal (Chandrasegarun, 1993). To cope with the reader expectation, as

writers, the students are required to perceive writing as the act of persuasion in which they respond to the rhetorical problem and intend to persuade the reader to accept their position on the given topic or issue. That is, the student writer composing an argumentative essay would need to do careful planning by analyzing the presumed audience, anticipating and addressing the reader's opposition, and producing thought-provoking arguments or reasons to convince the readers to think or act in the same way as the writer expects (Reid, 1988; Cornor, 1990). To conform to the rhetorical approach of an argumentative essay, the student writer has to focus on a controversial issue, take a position and offers reasons and supporting evidence to persuade the reader to agree with him or her.

It follows that to develop the effective argumentative writing, one has to perform dual roles of a writer and reader. As a writer, he or she needs to focus on the arguments as they appeal to the self-interest, attitudes, beliefs, and decision of the reader. At the same time, the writer acts as a reader, making assumption about the reader's expectation (Hyland, 2002). In the reader's role, the writer has to anticipate the reader's questions or reactions to the text. The text is consequently produced as a series of the writer's responses to the reader's anticipated reaction, not for the writer himself (Widdowson, 1984). Thus, developing the successful argumentative skill involves developing audience awareness, being able to exploit that awareness in producing an argumentative text (Grabe & Kaplan, 1996; Johns, 1997).

To write argumentatively, the writer has to put great effort to transform his/her thinking to create a kind of writing called a reader-based prose (Flower, 1987) which demands integrated content and the rhetorical pattern of argumentation. Unfortunately, most students are not really able to produce such a prose. Indeed, they

tend to produce a writer-based one (Flower, 1987). In this kind of writing, novice writers employ the approach, called knowledge-telling (Bereiter & Scardamalia, 1987) to convert a writing task into a task of telling, narrating, describing or informing factual information retrieved from the memory.

Writing a reader-based prose, according to Flower (1987), is to communicate new knowledge to the reader in a creative way. The writer, first of all, needs to create a shared goal or the purpose for writing and the goal to motivate the reader to understand the ideas or thoughts that he/she is trying to communicate. In this respect, the writer has to be aware of the problematic situation that the reader is facing. He/she has to analyze this problematic situation carefully so that the cause(s) of the problem(s) become clear. To solve the problem(s), the writer has to visualize different directions of consequences and choose the best one appropriate for the reader's need. This process of thinking is similar to the knowledge-transforming approach of problem-solving (Bereiter & Scardamalia, 1987) which requires sophisticated thinking on the part of the writer. It is such a complicated process that a number of students fail to produce this kind of writing successfully.

1.2 Statement of the Problem

For non-native speakers (NNS), writing an argumentative essay in English as a reader-based prose causes even more problems since they have both linguistic and rhetoric deficits (Ferris, 1994). In fact, several characteristic problems are common in argumentative writing of students of both native and non-native English speakers. For example, Crowhurst (1991) notes that argumentative student writing (up to and including college-level) reveals the three areas of weaknesses: inadequate content-that

is, students often fail to support their points of view (Applebee, 1984); and the content tends to be less original than other kinds of writing (e.g. narration, description). The second weakness is poor organization associated with a lack of knowledge of argumentative structure, and failure to elaborate reasons to support the arguments. This study reveals that unskilled writers at the college level write narration or conversational dialogues rather than an argumentative text because of its unelaborated reasons, no clues of introductory or concluding paragraphs (Crowhurst, 1983b in Crowhurst, 1991). Finally, the native English speakers demonstrate inappropriate style of writing by using different registers of language, and a number of wrong use of connectors typical of arguments (Crowhurst, 1987).

Several features of writing problems, specifically of non-native English speakers both ESL/EFL students are also identified (Ferris, 1994; Varaprasad ,2001). These ESL/EFL students tend to produce shorter texts. The essays lack clarity in content and a clear focus on the issue aiming at communicating to the reader. They weakly address the components of effective argument including the strong issue as shown in the thesis statement, problematic situation providing the background information of the argument, no explicit counterarguments and inappropriate conclusion. Indeed, these problems are mainly the ideation or the content of the argument. Ferris further points out that the major cause of the problems is that these ESL/EFL students had little exposure to the convention of formal argumentation. In her study, Ferris also looked into their English usage. ESL/EFL students used simple sentences, less variety of sentence types and word choices because they had limited experience with English forms of argumentation. It was also possible that the argumentative conventions of L1 and L2 may be different.

It can be clearly seen that the researcher realizes a number of the students' problems in constructing an argumentative essay. In short, the students tend to produce a writer-based prose rather than the reader-based one, which is unsatisfactory for the demand of the academic argumentative text. Furthermore, they have the vague idea regarding the key elements of argumentative writing: problematic situation, roles of a writer, audience expectation and needs, the logical reasons supporting their argument as well as the conventions of the argumentative text. It is definite that non-native speakers of English require special instruction in argumentative writing. The priority would be its ideation or content.

To the researcher's long experience as a writing teacher in Srinakharinwirot University (SWU), SWU English majors have similar problems as those non-native speakers of English mentioned above in writing an argumentative essay. Their writing problems obtained from the analyses of their essays and their teachers' comments include lacking a clear focus, being unaware of the audience, not providing adequate supporting details, using inappropriate connectors making it difficult to read smoothly, etc. Again, their writing represents mainly the writer-based prose. To be successful in writing an argumentative essay, SWU English majors need to raise awareness of the audience leading to problem analysis and goal setting. Audience awareness also guides the writer in organizational pattern, word choices, syntax and the length of the essay (Prater & Padia, 1983). On the other hand, they need to develop the ability to transform their writing to the reader-based one.

To be able to transform their writer-based prose into the reader-based one, Flower (1987) recommends certain kinds of instruction that helps raise students' schemata of argumentative discourse and organizational features of an argumentative

text. The researcher sees this recommendation as the enhancement of the student's metacognitive strategies in constructing their argumentative writing. Bereiter and Scardamalia (1986) propose teaching students a number of crucial strategies, namely, task-related procedural facilitation to help students incorporate additional self-regulatory mechanism into the executive procedure of knowledge telling, for instance planning, revising or evaluation. This model of teaching also increases students' metacognitive mechanisms in writing. Raphael, Englert and Kirschner (1989) use certain tools to develop their students' metacognitive strategies when they teach writing. These tools help make students think visibly in planning, revising and organizing their writing while focusing on an audience and purpose during the writing processes. The results of this study revealed that the students did improve their writing as a result of their awareness of audience, the purpose of writing, and their use of writing process as well as the awareness of metacognitive strategies while constructing their writing.

Zellermayer, Salomon, Globerson, and Givon (1991) recommend "metacognitive-like guidance" to help students move from knowledge-telling to knowledge-transforming approach. This metacognitive-like guidance provides help in the process of writing an argumentative essay in pre-writing, providing the questions related to rhetorical purpose and discourse schemata. Another set of metacognitive-like guides supports the writers as they were writing their first drafts, and this metacognitive-like revision guides asked the writer to revise their first drafts and check whether there was enough support for claims made in the persuasive topic or examples to illustrate the subject described. This method proved to be useful in the improvement of the writing quality.

Many studies noted above (Flower, 1987; Bereiter & Scardamalia; 1986; Raphael, Englert and Kirschner, 1989; Zellermayer, Salomon, Globerson, and Givon , 1991; Hung, 1993) have addressed the positive effect of utilizing metacognitive strategies in the writing process. These studies also indicated the positive relationship between metacognitive strategies and the writing quality.

It is essential then to clarify what metacognitive strategies means. Metacognitive strategies or executive control, the second dimension of metacognition, consists of three components: planning, monitoring, and evaluating (Brown et al., 1983). By using these skills to guide, direct or regulate their own thought process, the learners can take control over the learning process and select which method of learning works best (Wenden, 1998). This becomes an automatic process in the experienced and mature learners (Brunning et.al., 1999). Metacognitive strategies also allow learners to plan, monitor, and evaluate learning in a way that directly improve learning performance (Brunning, et.al., 1999; Schraw & Dennsion, 1994; Brown, 1984).

1.3 Purpose Statement

Since metacognitive strategies can be taught to students and introducing metacognitive strategy training to students proves to have significant gains in performance, students need to be engaged in metacognitive activities that teach and support the use of metacognitive strategies (Brunning et.al., 1999; Von Wright, 1992). Unfortunately, at present the activities and process described here, and the number of studies in this area with ESL/EFL learners is very rare, providing an obscure picture of how training in metacognitive strategies can help students facilitate their revising behaviors.

This study, then attempted to contribute to the knowledge base by exploring the effects of metacognitive strategy training on EFL students' revision of their argumentative essay. The researcher explored metacognitive strategies that Thai university students, both successful and less successful ones employed in their writing when they wrote their argumentative essays, specifically their first draft revision. The first phase was a quantitative exploration of metacognitive strategies using the questionnaire to collect data from third-year undergraduate students majoring in English in Srinakharinwirot University (SWU), and then followed by semi-structured interviews with the individuals to probe these results in depth. Then, based on the themes from the first phase, the teaching model was developed to test whether metacognitive strategy training resulted in the improvement of less successful third-year undergraduate SWU English majors' revision leading to the better quality of the second draft of their argumentative essay.

1.4 Purposes of the Study

This study was aimed at

1. examining metacognitive strategies that successful and less successful third-year English majors of Srinakharinwirot University (SWU) employed in the first draft revision of their argumentative essay.
2. proving whether less successful third-year English majors improve the quality of the second draft of their argumentative essays after metacognitive strategy training in revision of their argumentative essay.

1.5 Research Questions

Two research questions were addressed to be answered in this study.

1. What metacognitive strategies do successful and less successful third-year English majors of Srinakharinwirot University use in revising the first draft of their argumentative essay?
 - 1.1 What metacognitive strategies do successful students employ in planning, monitoring, and evaluating their first draft revision before and after metacognitive strategy training?
 - 1.2 What metacognitive strategies do less successful students employ in planning, monitoring and evaluating their first draft revision before and after metacognitive strategy training?
2. Do less successful SWU English majors improve the quality of the second drafts of their argumentative e essay after the metacognitive strategy training in revision?

1.6 The Significance of the Study

Metacognitive strategies are, in fact, learners' tools. To be successful in doing any educational tasks, these strategies are required. All Thai students should be trained to use metacognitive strategies competently. In revising the first draft, which is one important task of constructing content of the essay, metacognitive strategies also play the important role. This study examined what metacognitive strategies successful and less successful SWU English majors employed in revising their argumentative writing, and whether metacognitive strategy training in revision improved students' first draft revision. The findings from this study were directly

beneficial to other researchers aiming at the development of students' writing abilities as well as the development of the method of teaching writing for the writing teachers.

First of all, the results obtained answered the research questions and shed light into the application of metacognitive strategies in teaching revision.

Secondly, it might be possible to introduce metacognitive strategies identified among successful SWU English majors to the less successful students so that the less successful students can be enhanced to use those successful metacognitive strategies in their revision to improve the writing quality of an argumentative essay.

Thirdly, the training scheme offered insights into the design of metacognitive strategy training in revision applicable for other writing classes.

1.7 Assumptions

1.5.1 Students used metacognitive strategies in doing all academic task.

1.5.2 Successful students utilized metacognitive strategies in doing their academic tasks more effectively than the less successful counterparts.

1.5.3 Students can be trained to be aware of their metacognitive strategies and to utilize them in doing their tasks, in this case, revising their first draft.

1.8 A Delimitation and Limitation of the Study

A delimitation

1.8.1 This study focused on the effect of metacognitive strategy training on revising the first draft of an argumentative essay.

A limitation

1.8.2 The purposive sampling procedure of this current study decreased the generalizability of findings. This study was not generalized to all area of EFL learning and teaching of writing.

1.9 The Operational Definition of Terms

Metacognitive strategies

Metacognitive strategies are defined as actions or behaviors one takes to plan for learning, to monitor one's own comprehension/production, or to evaluate the extent to which a learning goal has been reached (O'Malley & Chamot, 1990; O'Malley & Chamot, 1994). Metacognitive strategies, then include the skills through which ones use in planning, monitoring, and evaluating learning and learning outcome.

Successful and less successful students

Successful students refer to students with the grade point average (GPA) above 3.19 and A or B+ in the previous writing courses. Less successful students refer to SWU English majors with the GPA from 3.02 or less and C or D in the previous writing courses.

First draft

First draft refers to a piece of writing in which the writer produces to obtain the content and ideas around the selected or the issue according to the genre pattern. Writing the first draft is the first step of the writing process then the writer can make changes in the content and turn into a finished essay.

First draft revision

First draft revision refers to the step after the student has finished writing the first draft, and then he or she revises to make it clear, coherent and unified. To revise the first draft to the second draft and improve the clarity, coherence and unity, the student will revise do the following revision tasks:

- Revise for the clear ideas of rhetorical situations
- Revise for the better content and ideas and rhetorical pattern of an argumentative essay (Revise at the whole essay level)
- Revise for logical paragraph development (the essay's overall organization).
- Revise for the connected ideas in each part of the essay and the whole essay (coherence and unity).

1.10 Summary of the Chapter

This chapter presented the background of the study, the context and direction for this study. The chapter first discussed how important and complex argumentative writing are to college students in their daily life and academic matters. Then, it described argumentative writing problems facing students, both native speakers of English and non-native, particularly, EFL students. The following section, therefore proposed metacognitive strategy training in revision based on previous studies (Flower, 1987; Bereiter & Scardamalia, 1986; Raphael, et al., 1989; Zellermayer et al. 1991 and Hung, 1993), as the first step to help improve the quality of writing and develop metacognitive awareness to apply in various language learning contexts. The chapter concluded with the most limitation of the study and the significance of the

study-that it is hopefully intended to offer insights toward metacognitive practices and measures in revision, the control of the writing process, applicable for other writing classes.

1.11 Organization of this Dissertation

The rest of this dissertation is organized as follows:

Chapter 2 reviews prior studies as the theoretical foundation for the concepts discussed in this study including metacognitive theory and its contributions, review of related literature on metacognitive strategies and the writing process focusing on the revision process, and then the chapter describes the method of incorporating metacognitive strategies in revising the first draft of an argumentative essay. This chapter finally explains the complexity and the nature of argumentative writing and argues different methods employed in evaluating argumentative texts.

Chapter 3 describes the research design and method used in the study. It also discusses the research instruments and materials applied in the quasi-experimental study in full description. Data collection and data analysis both quantitative and qualitative methods, then are discussed in the last section of the chapter.

Chapter 4 presents the findings of quantitative data analysis and the findings of the participants' metacognitive strategies use in the first draft revision of an argumentative essay before and after metacognitive strategy training. The second part of this chapter elaborates on the results of quantitative data analysis of participants' from pre and post interview as the triangulation for metacognitive strategies use revealed from the Pre and Post MSQ. The third part of the chapter discusses the results on the ratings of the participants first and second draft and the findings in the

improvements of the second drafts affected by the metacognitive strategy training in revision.

Chapter 5 describes the qualitative results showing the students' use of metacognitive strategies identified in the retrospective interview data as the methodological triangulation to gain a more insight into how the students incorporated metacognitive strategies in doing the revision tasks. The second part of the chapter provides the analysis of the students' journal entries regarding the person knowledge, one aspect of the metacognitive knowledge.

Chapter 6 summarizes the major findings of the study, discusses the study on the basis of quantitative and qualitative data analysis and provides possible directions for teaching writing and metacognitive practices, and recommendations and implications for future research. Most importantly, this chapter proposes model and study for future work.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

This research study investigated the effects of metacognitive strategy training on EFL students' first draft revision, as well as metacognitive strategies third-year English majors of Srinakharinwirot University use in revising the first draft of their argumentative essay. The purpose of this chapter was to review of literature relevant to the present study. A number of primary and secondary sources, taken from ESL/EFL journals, textbooks, books, on-line articles and research works being of special values of this study, were examined. This chapter was organized into three main sections. First, it discusses the metacognitive theory and its contributions to the writing process, particularly metacognitive view on the revision process. It also outlines the nature of argumentative essay writing. Finally, the chapter describes how metacognitive strategies can be incorporated in revision. At the end of each section the previous research contributed to this study was discussed.

2.1 Metacognitive Theory

2.1.1 Definition of Metacognition

Literally, metacognition is referred to as thinking about one's own thinking or knowing about knowing. More specifically, metacognition refers to the knowledge people have about their own thinking which is considered as an important key to learning and learning performance (Brunning, Schraw, & Ronning, 1999).

According to metacognitive research, metacognition is believed to develop with age and experience (Garner & Alexander, 1989)

The term “metacognition” is originated by Flavell (1979). In Flavell’s description, metacognition is defined as knowledge and cognition about one’s own cognitive state and processes. The first dimension of metacognition, knowledge about cognition (declarative knowledge) refers to the acquired world knowledge that ones have about their own cognitive processes. The second area of metacognition is regulation of cognition (procedural knowledge) that may be applied to control (monitor) and regulate cognitive activity (thinking about thinking). The regulation of cognitive processing is identified as central to metacognition. Flavell’s (1987) also divides knowledge about cognition into metacognitive knowledge and metacognitive experiences.

Metacognitive knowledge involves factual acquired knowledge about cognition as well as an awareness of and knowledge that can be used to control one’s own cognitive processes. Flavell further divides metacognitive knowledge that impacts on students’ strategic approaches to the learning tasks into three categories: person or self-knowledge, task knowledge, and strategic knowledge. Self-knowledge refers to general knowledge about oneself as a thinker. More specifically, this knowledge reflects understandings about how human beings learn and process information, as well as individual of one’s own learning process. Knowledge of task involves knowledge about the nature of the task. That is, a task can be easy, average or difficult for individuals, and different tasks may require different cognitive strategies. Finally, strategic knowledge is knowledge of general strategies for learning, thinking and problem- solving. This knowledge also involves both cognitive

and metacognitive strategies for accomplishing learning tasks.

Metacognitive experiences include a number of effective or cognitive conscious experience that is pertinent to the conduct of cognitive goal. One has metacognitive experience when something is hard to perceive, understand, remember or solve.

The second area of metacognition, regulation of cognition involves active monitoring, regulation and orchestration of cognitive processes to achieve cognitive goals. The regulation of cognitive processes can take the form of checking, planning, selecting, and inferring. Flavell (1979) has termed these sequential processes as “metacognitive strategies,” while Brown (1980) claims that these processes that one uses to control or regulate cognitive activities, and to ensure that a cognitive goal has been reached, are referred to as metacognitive skills. According to Flavell (1979), metacognitive strategies are invoked to monitor or regulate cognitive progress while the learner performs the learning task. Similarly, Brown (1987) argues that these metacognitive processes also help to regulate and oversee learning and consist of planning and monitoring cognitive activities as well as evaluating the outcome of those cognitive activities. In other words, by planning, monitoring, and evaluating their own thought processes, ones can streamline the learning process and select which method of learning works best and leads to achieving the learning task (Brunning et al., 1999).

The concept of metacognitive strategies is referred to executive control or procedural knowledge in Kluwe’s (1987) definition. According to Kluwe (1987), the executive control strategies are higher order processes that monitor or regulate cognitive skills. The executive or regulatory processes involve both monitoring and

regulating other thought processes. Executive monitoring processes are those that are “directed at the acquisition of information about the person’s thinking processes” (p.36).” They involve one’s decision that helps (a) identify the task on which one is currently working (b) check on current progress of that work (c) evaluate that progress, and (d) predict what the outcome of that progress will be. Executive regulation processes are those that are “directed at the regulation of the course of one’s own thinking” (p.44). They involve one’s decision that helps (a) allocate his or her resources to the task, (b) determine the order of steps to be taken to complete the task, and the intensity or, (c) pace the speed at which one should work the task.

It is also important to note that there is a close relationship between metacognitive knowledge and executive control functions or metacognitive strategies. Cavanaugh and Perlmutter (1982, as cited in Wenden, 1987) state that it is through metacognitive strategies that metacognitive knowledge is utilized or applied to learning tasks. Others maintain that insights gained through the exercise of these metacognitive strategies can be assimilated into one’s existent metacognitive knowledge base to develop, revise and refine it. In fact, these two dimensions can be conceived as existing in a reciprocal relationship (Wenden, 1987). That is, knowledge is constructed from what is done and approaches to problems being constructed, by past experience. Wenden (1999) further discusses that metacognitive knowledge and metacognitive strategies should be required as complementary components. To be precise, metacognitive knowledge is the information learners acquire about their learning while metacognitive strategies, i.e., planning, monitoring and evaluating, are general skills through which learners manage, direct, regulate, and guide their learning.

2.1.2 Metacognition and Its Contributions

In the literature regarding metacognition, there are significant claims that metacognition has made contributions in the field of cognitive and instructional development in many aspects. First, it focuses attention on the role of awareness and executive management of one's own thinking. That is, metacognition helps learners become active participants in their own performance rather than the passive recipients of instruction and imposed experience (Paris & Winograd, 1990). Second, metacognition is obviously embedded in cognitive development and represents the kind of knowledge and executive abilities that develop with experience and schooling. Third, metacognition is also believed to play a significant role in many types of cognitive activities including oral communication, reading comprehension, writing, language acquisition, perception, attention, memory, problem-solving, social cognition, and various forms of self-instruction and self-control (Flavell, 1979). Therefore, metacognition describes the control processes in which active language learners engage as they perform various cognitive activities. The fourth virtue, metacognitive awareness leads to positive feelings of pride and satisfaction, promotes cognitive courage and persistence in the face of failure and may, eventually, enhance performance on a range of cognitive tasks. Finally, the virtue of metacognition or the executive control processes (Brown, 1984) may underline the very important processes of generalization and transfer of strategies learned (Brown, 1984; Flavell, 1978; Flavell and Wellman, 1977; Garner & Alexander, 1989).

The study of metacognition has also provided the insights about cognitive processes in language learning and what differentiates successful and less successful language learners. Divine (1993) states that any successful learner is one

who has “ ample of metacognitive knowledge about the self as a learner about the nature of cognitive task at hand, and about appropriate strategies for achieving cognitive goal” (p.109). Similarly, Pierce (2003) points out that the more students are aware of their own thinking processes as they learn–self-awareness, the more they can control such matters as goals, in a way that they are to reaching goals. Therefore, students need to develop their metacognitive abilities and practice of being able to think about thinking because it is an essential step in cognitive processes, and allows the learners to control and access strategies while understanding their limitations and strengths in learning. It can be concluded that metacognition is considered a key to successful learning. When metacognitive dimension is missing, students are not helped to understand the significance of what they are doing and rarely encourage any reflection on the learning process. In contrast, the development of metacognitive awareness, as metacognition can develop as people grow or it can be developed, is important in enhancing learning efficacy (Ellis, 1990).

It is also evident that metacognition is an essential component of intelligence as well as a major influence on academic success (Sternberg, 1984 in Anderson, 2001, 2002). Recent research indicates that metacognitively aware learners are more strategic and perform better than unaware learners (Garner & Alexander, 1989; Pressley & Ghatala, 1990). One explanation is that metacognitive awareness allows individuals to plan, sequence and monitor their learning in a way that directly improves performance (Schraw & Dennison, 1994). Preley, Snyder and Cariglia-Bull (1987, in Carrell, 1998) discuss the role of metacognition in general learning that metacognition helps learners to be consciously aware of what they have learned, recognize situations in which it would be useful and processes involved in using it.

In the ESL literature, a number of L2 research have repeatedly shown a significant role of metacognition on successful learning outcomes (Reid & Hresko, 1982; Weinert & Kluwe, 1987). Studies by Naiman, Frohlich and Stern (1975 in Wenden, 1978) and O'Malley et al. (1985) have led to the same conclusion that metacognition is one of the important variables to be taken into account in any explanation of successful and unsuccessful learning outcomes. If learners' repertoire of strategies can be expanded and refined, poor learners may benefit from learning how to use strategies utilized to good effect by the effective learners (O'Malley et al, 1985; Baker & Brown, 1984; and Carrell, 1989). It has also been proved that language learners can be trained in metacognitive strategy use. This training helps learners monitor, evaluate its use and determine its relevance for themselves (Schunk, 1982, 1983; Goetz & Palmer, 1984; and Paris et al. 1982). Also, the training can influence the learners' maintenance of strategies and their transfer to other situations (Brown & Palinscar, 1982).

The above mentioned literature indicates great hope for ESL or EFL language teachers, researchers and practitioners to support students in their metacognitive skill development so that they can be responsible for managing their own learning competence. Once the students develop insightful beliefs about language learning process, their own abilities and the use of metacognitive strategies, they may compensate for possible weaknesses and, in turn, become initiators of their own learning leading them to finally become autonomous learners. Thus, it is essential that these students are engaged in metacognitive strategy training.

2.1.3 Metacognition and Writing

2.1.3.1 Metacognitive View of the Writing Process

Research has shown several implications of metacognition in two dimensions: metacognitive knowledge and metacognitive strategies, and the relationship between metacognition and writing. Since writing is a complex cognitive process that requires the awareness on one's own problem-solving strategies. It is necessary to understand what constitutes good writing. Flower and Hayes (1986) propose the model of the writing process consisting of the task environment, long-term memory and working memory. It is in the working memory that the major concentration of cognitive activity takes place. This involves three sub-components: planning (setting goal, generating ideas and organizing ideas into a coherence structure), translating (the transformation of ideas and knowledge into text), and reviewing (the final evaluation and subsequent revising that must take place for a written document to be successful). Effective writers benefit from this workable model every time they write. This model exists in a non-linear process and all stages of the workable model occur rapidly, simultaneously, and furthermore, automatically for the experienced writer. In contrast, for the inexperienced writer, this working memory component of the writing process may be beneficial through metacognitive development.

Englert, Raphael and Anderson (1991) elaborate this notion as they indicate that the writer involves the processes of writing throughout their composing. For example, in planning, it entails thinking and self-questioning strategies, such as identifying one's audience, determining one's purpose, activating background knowledge, and organizing brainstormed ideas. During drafting, the writer takes the

ideas gathered in planning and translates these ideas to confirm to his audience and purpose; relevant ideas are included and expanded in the written draft, while irrelevant ideas are excluded. During editing, the writer edits his draft to ensure that writing objectives are met, giving attention to their intended audience and to their purpose. Finally, in revising the writer implements his editing plans to add, delete, substitute and modify their textual ideas. These writing activities require metacognitive ability so that the writer can take control of his own writing process.

Sternberg (1998 as cited in Anderson, 2002) proposes three major roles of metacognition related to writing skill. First, metacognition is diverse. In other words, metacognition includes understanding and control of cognitive processes. This is important for writing teachers because the writer may demonstrate his/her understanding in different ways. Also, in writing as a problem-solving process, the writer has multiple ways to find the solutions to his learning task or to approach a writing assignment. Much of the literature has shown that metacognition is the appropriate skill for this learning task. The second role of metacognition is in understanding of learners' metacognition and knowing how to act on understanding. Sternberg suggests that the writing teachers and researchers must use metacognitive skills to reflect on what they are learning about the processes utilized by their learners. Third, the interaction of metacognition with other characters of a learner is of vital importance. That is, the teacher must be aware of varied abilities of the writers. In addition, the factors such as learning style and learning strategies must be taken into consideration.

Sitko (1998) also provides literature related to metacognition and the process of writing. According to Sitko, skilled and unskilled writers approach writing

differently. In planning, skilled writers are more aware of high-level interaction processes of goal setting, generating ideas and organizing text involving in their writing. Revising also appears to differ between skilled and unskilled writers. While skilled writers are better at both detecting and diagnosing in texts written by others and in texts of their own making, novice writers only revise the text at word and sentence levels. Less experienced writers appear to lack awareness of conscious control of their writing process such as in activating their background knowledge for help in generating content, organizing the texts, identifying their purpose and goal, reviewing globally or considering reader's attention as criteria for rewriting. Therefore, heightening students' metacognitive awareness in the processes of writing is the essential aspect for effective writing.

Anderson (2001) suggests that activities in the classroom that allow writers to reflect on what they are doing and how they approach writing will lead to improved writing performance. Additionally, understanding what constitutes metacognition will allow teachers to incorporate more metacognitive activities in the learning process because metacognition combines various attended thinking and reflective process. According to Anderson (2001), metacognition can be divided into five components (1) preparing and planning for effective learning, (2) deciding when to use particular strategies, (3) knowing how to monitor strategy use, (4) learning how to orchestrate various strategies, and (5) evaluate use and learning.

In brief, the previous review reveals the relationship between metacognitive knowledge and the writing process. Writing is a very complex cognitive process in which numerous cognitive and metacognitive activities take place. In the writing process, metacognitive awareness or executive control in

planning, regulating, and evaluating help the writer to take control of their own cognitive process which can lead to improvement in writing performance.

However, second language writers often have a limited metacognitive knowledge base which makes them unable to determine whether they are making progress towards the goal of the writing task or not. Additionally, students may not have clearly defined goals for the English language writing tasks that they are assigned to do. Normally, it seems that the ESL students expect that it is the teacher's responsibility to clarify the writing goals for them and to monitor their writing progress (Zamel, 1985 as cited in Kasper, 1997, Silva, 1993, Ferris, 1995). In fact, students themselves have to learn how to be responsible to set up their writing goals, and then regulate and monitor their own writing progress. That is to say, the development of ESL students' metacognitive awareness depends of the reduction of the teacher's substantive facilitation to students' written products and the increase in the procedural facilitation (Bereiter & Scardamalia, 1987)

A number of strategies and techniques similar to those of procedural facilitation thus have been proposed and practiced in the attempt of developing ESL students metacognitive ability in writing. Charles (1990) used the "self-monitoring technique" to enhance students awareness of self-monitoring by giving them the control over the initiation of feedback whereby the students produced the annotations about the problems they have during the writing process. Charles (1990) claims that self-monitoring encourages the students to look critically and analytically at their writing, and to carry out the writing task by using reader-based approach. Cresswell (2000) also used the self-monitoring technique to increase recognition of the value of ESL learner autonomy by training the students to revise their annotation focusing on

the global concerns. The results revealed that self-monitoring technique deserves attention because it provides self-direction. Ziang (2004) investigated the use of self-monitoring technique in the Chinese students' English writing. The results showed that the students could be trained to use self-monitoring in their writing, and self-monitoring is an effective way to help students revise their drafts and improve their writing proficiency.

The studies mentioned above have shed light on raising students' metacognitive mechanism of the performance of the writing tasks. Thus, it appears that ESL student writers need to develop their metacognitive abilities or awareness to take control of their own writing process. Integrating the metacognitive mechanism within the students through the steps of planning and setting goal, monitoring or regulating and evaluating enables the students to apply metacognitive strategies to their writing task performance, and metacognitive strategies can empower the writers with the highly individual metacognitive ability.

Essentially, this research study concentrated on the concept of metacognitive strategies, which are the skills through which students develop in writing as a foreign language. The researcher specifically looked into how the ESL student writers used and applied Silva, 1993: planning, monitoring, and evaluating their first draft of an argumentative essay.

2.1.3.2 Metacognitive Strategies and Writing

Metacognitive strategies have been recognized as a feature of expert response to problem-solving in general (Sternberg, 1984) as well as of expert writing (Flower, 1989; Flavell, 1979; Scardamalia & Berreiter, 1986; Brown, 1980).

Proficient writers are more consciously aware of what they write, they make more decisions about planning and regulating as they write, and they are more likely to self-evaluate their writing as they write than inefficient writers.

To clarify the role of metacognitive strategies in writing, it is important to consider the relationship between cognitive and metacognitive strategies that a strategic writer employs. An efficient writer uses a wide range of cognitive strategies for completing the writing tasks. Cognitive strategies have been designed to help learners achieve their cognitive goal (Flavell, 1979). Examples of cognitive strategies for writing might include brainstorming ideas, formulating an outline, doing the pre-writing, writing the first draft, writing effective sentences or editing for grammatical errors. In contrast to cognitive strategies, metacognitive strategies have been designed to monitor cognitive progress. Student writers employ metacognitive processes or strategies to orchestrate their engagement in the writing process (Butler, 1998). Metacognitive strategies for writing might include analyzing the writing task to determine what is required, making plans in accordance with writing strategies to use in a given writing task (e.g. determining whether brainstorming is necessary), monitoring the success (e.g. judging whether sufficient ideas were generated during brainstorming), and selecting remedial strategies (e.g. deciding that more research is needed to gather ideas).

In brief, strategic writers (and learners) use cognitive strategies to achieve a particular writing goal and metacognitive strategies to ensure that the cognitive writing goal has been met (Livingston, 1997; Butler, 1998). In this context, efficient writers may shift between cognitive and metacognitive activities while

performing the writing tasks. Teachers therefore should help students develop metacognitive strategies to become efficient writers.

2.1.3.3 Metacognitive Strategy Model of Writing

Given the importance of metacognitive dimensions in writing, many researchers (Brown et al., 1982 as cited in Wenden, 1987; O' Malley & Chamot, 1990; and Wenden, 1990) have categorized metacognitive strategies in different aspects depending on the research purposes and the purpose of the language learning or language skills. Since the categorization of metacognitive strategies is not the focus of this present study, the researcher selected the metacognitive strategy scheme proposed by O'Malley and Chamot (1990) as the basis for this study.

According to O'Malley and Chamot (1990), the metacognitive model is based on extensive research in which data were collected on the metacognitive strategy use of effective foreign and second language (EFL & ESL) learners ranging from elementary through university level (Chamot & Kupper, 1989; Chamot et al., 1993; Chamot et al., 1996; O'Malley & Chamot, 1985a). In addition, the metacognitive strategy model has been developed for explicit strategy instruction in ESL and EFL context based on the usefulness and applicability of the learning tasks including reading, listening, writing and speaking. This present study investigated the effects of metacognitive strategy training on EFL students' revision of their argumentative essay; therefore, the metacognitive strategy training model, adapted from the metacongitive model of strategic learning by O'Malley and Chamot (1999) was also used as the conceptual framework for the study.

O'Malley and Chamot (1990) discuss the metacognitive model in term

terms of learning strategies, used by good language learners, including three recursive processes: planning, monitoring and evaluating. The students work through each of these processes for any learning task; whereas, the teacher can select the strategies to teach depending on the point of the learning task in which the learners need the most help. The learners can also use and apply these metacognitive strategies to plan, monitor and evaluate the success of the learning activity. However research has shown that without the combination of metacognitive strategy development, learners are unable to transfer strategies to new tasks or other learning tasks (O'Malley et al., 1985; Ellis & Sinclair, 1989). As O'Malley stated in the most frequent quote in the metacognitive research "Students without metacognitive approaches are essentially learners without direction, or opportunity to review their progress, accomplishment, and future directions "(p.561).

In O'Malley and Chamot's classification system, under the three categories of planning, monitoring and evaluating, there are seven subcategories of metacognitive strategies: 1) advance organizer, 2) organizational planning, 3) selective attention, 4) self-management, 5) monitoring comprehension, 6) monitoring production, and 7) self-evaluation. These metacognitive strategies are used by good language learners; all have been successfully incorporated by teachers into second language instructions. These strategies can be used before, during and after a learning task. The learners use metacognitive strategies to plan before doing a task (planning strategies), to check how the plan is being carried out during the task (monitoring strategies), and evaluate the learning outcome after the task is completed (evaluating strategies). Table 2.1 presents taxonomies of metacognitive strategies with sub-categories, definition, and description proposed by O'Malley and Chamot (1990).

Table 2.1 Taxonomies of Metacognitive Strategies

Metacognitive strategies	Sub-processes/ categories	Definition	Descriptions
Planning	Advance organizer	Focus on special aspects of the learning task	Preview the main ideas and concepts of a text, identifying the organizing principle.
	Organizational planning	Planning the organization of the written discourse.	Planning how to accomplish the learning task, planning the parts and sequence of ideas to express.
	Selective attention	Scanning for key words, concepts or linguistic markers	Decide in advance to attend to specific input, key words, phrases, ideas, linguistic markers, types of information.
	Self-management	Plan when, where and how to study.	Understanding the conditions that help one learn and arranging for the process of those conditions.
Monitoring	Monitoring Comprehension monitoring Production	Monitor or reviewing attention to a task	Checking one's comprehension or checking the accuracy and appropriateness of one's written production while it is taking place.
Evaluation	Self-assessment Self-evaluation	Check back Reflect on what have learned	Checking the outcomes of one own language learning against a standard after it has been completed. Judging how well they accomplish a learning task. Consider if they need to go back through their own learning process

(O'Malley & Chamot,1990, p.198)

When applied to writing, a productive skill, three basic elements of metacognitive strategies are involved before, during, and after doing the writing tasks. However, the three strategies are not strictly sequential but may be used as necessary

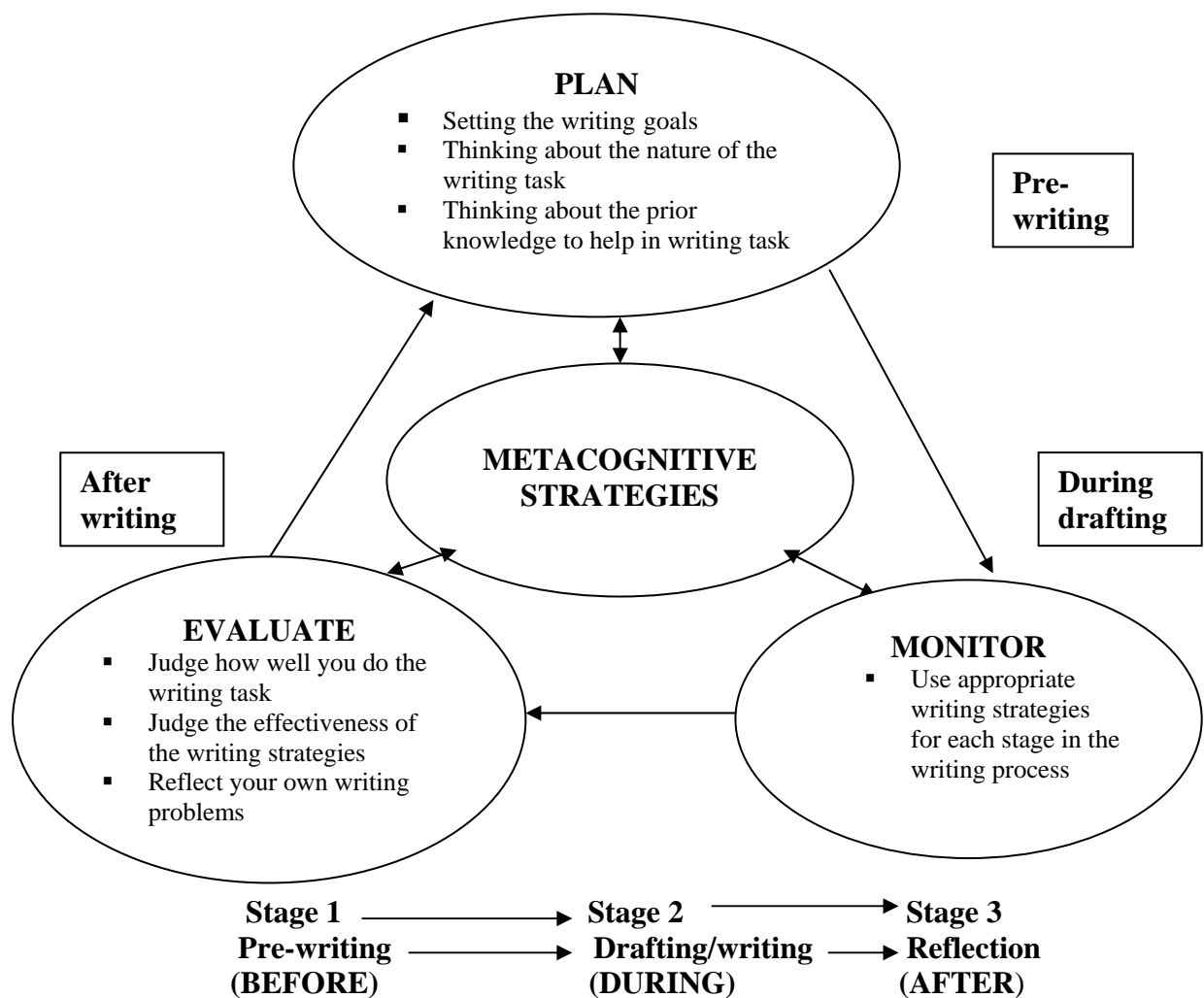
depending on the demands of the writing task and the interaction between the task and the writer. For instance, when an expert writer begins to do the writing task, he/she plans by setting his goals of thinking about the nature of the particular writing task; therefore, he/ she knows when and how to accomplish the goal. The more clearly articulated the goal, the easier it will be for the writer to judge whether progress is being made (Anderson, 2002).

Knowing when and how to achieve the writing goal, he/she selects and uses the appropriate writing strategies based on his prior knowledge related to the particular writing task. Then, he/she moves on to the monitoring (during the writing task), the writer uses appropriate writing strategies for each stage in the writing process such as developing the ideas for the particular rhetorical mode of writing (e.g. narrative, descriptive, cause/effect or comparison/contrast) in the pre-writing stage, putting the ideas down on the paper (drafting/writing) and going back and revising some of the draft. He may also need to bring in his new background knowledge or even change his goals. And at last, after he completes the first draft, he decides to stop and evaluates how well he does (whether he meets the criteria or requirements of that type of writing), considers if he needs to go back (review) through the draft, and reflects his own writing problems in the draft

It appears that the nature of metacognitive strategy mode can be used to explain as an analogy of the writing process because of the recursive nature of the model. In the writing process, a writer begins by brainstorming ideas and then writing the first draft. While writing, he/she may decide that he needs to generate more ideas and example, so he goes back to the beginning process. He then revises what he has written based on feedback and his own work. Finally, he works through the recursive

process until he is satisfied that what he has written is good. Figure 2.1 illustrates the metacognitive strategies model of writing.

Figure 2.1 Metacognitive Strategies Model of Writing



As already stated, the development of metacognitive awareness is considered to be the key to successful learning. Metacognitive skills allow a learner to think about his/her own thinking process and to control his/her own thinking process for achieving for improving a learner's competence, specifically writing competence

since writing is a complex process that must be regulated by a writer himself (Glower & Hayes, 1981; Flower, 1987). It is necessary to help a student writer develop his/her metacognitive skills to allow him/her to become an expert writer because some student writers develop the skills by themselves, but some student writers do not (Kayashima & Inoba, 2003).

In the classroom, students get lots of implicit practice in experimenting with different cognitive strategies, but most classroom situations and materials rarely inform students explicitly about when, where, why and how they are using certain strategies or get them reflect on how they are learning. In other words, metacognitive dimension is missing (Ellis, 1990). Without explicit implementation of metacognitive strategies model of writing, students will not be able to take control over their writing process because they will not know how, where, when or why to engage this knowledge, and they also will not be able to transfer strategies from one task to the next (Chamot et.al, 1996).

2.1.3.4 Metacognitive Role of the Revision Process

Among the various definitions and studies on revision process and revising strategies, the one made by Hayes, Flower, Schriver, and Carey (1987 as cited in Piolate & Roussey, 1991), Beach and Eaton (1984), Bridwell (1980), and Bereiter and Scardamalia (1987) is the most precise and agreeable. These researchers, giving a more complex description of the revision process, see revision as a goal-oriented process that has both internal and external actions. For internal act, revision is the thinking process that the writer goes through in reconsidering what is written and in imagining possible changes, and in the external process; revision is what

actually happens to the product. That is, the revision task . In addition, revision process, though including editing for errors, can occur after drafting in the multi-stage writing process and at any point in writing.

Bereiter and Scardamalia (1987) also describe revision as a problem-oriented process that the writer makes improvements in parts of the draft. The revision process, in this case the process of making the draft better, can be divided into four stages: a) defines the task; b) evaluates the text and defines the encountered problem, c) selects a strategy involving either goes back to the preceding process or going on to modify the text, and d) modifies the text either by revising it or rewriting it. These sub-processes of revision are considered the higher-order sub-processes (Piolate & Roussey, 1991). Therefore, in order to revise, writers must have a representation of what they consider to be involved in evaluating and improving a text. The writers must have what they are going to do by specifying the goals to reach (for instance, revise to make it clear) – goal setting, the characteristics of the text to be examined (e.g. revise at the local or global aspects of the text)- determining the nature of the task, the means that can be used to reach the defined goals (e.g. correct the text several times in succession) – selecting strategies.

Schiver (1993, in Anderson, 2002) discusses the relationship between the revision process and metacognitive ability by focusing on the sub-processes of evaluating skill. He discusses that poor writers demonstrate part of metacognitive skills of evaluating affected in their poor ability and weakness in their writing. Schiver further pointed that if students know how and when to revise their writing, though it is not an easy task, these students demonstrate the metacognitive activity of evaluation. Schiver (1993), therefore proposes the steps that can encourage

metacognitive thinking about revising. Firstly, by helping students to see, characterize and solve text problems. To be specific, student writers need the ability to analyze their own problems in the written text. Secondly, the student writers need to focus their attention to the revision-knowing what part of revision they should attend or ignore leading to establishing the goal for revising. Thirdly, setting the goal of what to be revised and how to be revised. This is in line with Flower and Hayes (1980) and Bereiter and Scardamalia (1987) when these researchers define these processes as task definition required the metacognitive thinking to self-create, construct or self-control of revision process. Schiver finally states that student writers can benefit this metacognitive activity from instruction that helps them to revise by planning, monitoring, and evaluating. These three metacognitive activities represent each stage of revision process before, during and after revising the first draft paper of their essay.

According to the definition of revision mentioned by various researchers above, Hayes, et al (1987) discuss that the writers play the metacognitive role when they perform the revision. That is, the revision task, based on this definition, serves as the executive control (control manager) over the sequencing of complex sub-processes of revision by setting goal, determining the nature of the task and selecting the revising strategies to guide the entire revising activity. Hayes et al. (1987 as cited in Piolate & Roussey, 1991) further suggest promoting the setting of goal as the writers start to revise. For example, students can plan to revise (set goal) for clear ideas at the local or global aspects of the text. Then, they can analyze the task to determine the nature of the task. Finally, the writers need to consider the mean for revising or revising strategies that can be used to revise. In this way, students can develop the metacognitive awareness in doing the revision task

To sum up, the literature reviewed in this section has shed light on the metacognitive strategies used in the writing and revision process. It offers insights into the design of the training of metacognitive strategies on revision that aims at improving students' writing quality of an argumentative essay. For this study, three types of metacognitive strategies: planning, monitoring, and evaluating were chosen to represent each stage of revision process-before, during and after revising the first draft paper of an argumentative essay.

2.2 Writing an Argumentative Essay

2.2.1 Essentials of Argumentative Writing

2.2.1.1 Defining Argumentative Writing

Argumentative writing is also recognized as persuasive writing in much of the empirical research although the term "persuasion" is generally a much broader term than "argumentation." Brandon (1994) states that persuasive writing can exist without argumentation while all argumentation is persuasive by its nature. Specifically, argumentative writing usually begins with a controversial issue of which the writer takes a position on the issue, offers reasons and supporting evidence, and attempts to persuade or convince the reader to accept a certain point of view, take a course of action or at least consider the position (Farmer, Yesner, Zemelman & Richmon, 1985; Knudson, 1994; Varghese & Abraham; 1998). In an attempt to accomplish this, the writer must develop a specific topic or an issue, which is well-defined and debatable. That is, a topic with more than one side. It is important that the author understands the other side of the position so that the strongest information to counter the side can be presented. The argument must also use sound reasoning and

solid evidence to defend the position by stating facts, giving logical reasons using examples, and quoting experts (Farmer et al., 1985).

In brief, writing persuasively or argumentatively requires that the writer thinks clearly, organizes the points skillfully, presents his/her position honestly and logically, and refutes the opposite side, if it is advantageous, using relevant evidence such as facts, testimony, and reliable reasons.

2.2.1.2 The Process of Argumentative Writing

Although many scholars (Flower 1981; Connor, 1987, Reid, 1988, Brandon 1994, Wood, 1995, and Anker, 2004) have discussed writing and argumentative writing in different ways, they have tended to use both terms interchangeably, and they all agree on the goal, purpose, structure, and the process of writing an argumentative essay. Those extensive discussions are pivotal to the present study. Among those who focus on the goal and the process of argumentative writing is Flower (1981), who uses the term “argument” in referring to argumentative essay writing. Flower describes that the goal of argument is to communicate the writer’s ideas to the reader. To fulfill the goal of writing to meet the needs of the readers, the writer has to understand the reader needs and create a clear goal for the readers because it helps in the context, a clear structure, and guiding expectations to the reader to effectively understand the writer’s ideas in the written text. Flower also points out that a successful argument is a reader-based act.

To achieve the goal of argumentative writing, Flower proposes the process of creating the successful reader-based prose, called rhetorical strategies including setting up the shared goal. To create a shared goal, the writer gives a reason for

writing and a reason for the readers to read. The writer uses the shared goal in the problem/purpose statement, and when generating ideas. A shared goal can be a powerful tool for persuasion when it can motivate the readers by providing a context for understanding the writer's ideas and a reason for acting on them. Then the writer needs to develop a reader-based structure. In order to write a reader-based prose from the beginning, the writer has to generate and organize the ideas in the first place. In addition, the writer creates expectations-the reader expectations, and begins to develop a persuasive argument to support the issue to gain the reader support (for the actions he recommends) by giving sound reasoning. In this respect, the writer needs to look into the nature of the arguments he can use to make the readers see, believe or agree with his point of view. To do so, the writer has to anticipate the reader expectation by including the shared goal in the problem statement and purpose in the introductory paragraph.

Likewise, Connor (1987) points out that the goal of the writer in writing an argumentative essay is to change the reader's initial opposing position to the final position that equals the position of the writer. Connor further discusses that the goals of argumentative writing can be achieved through a series of sub-goals- the individual points in the argument (namely, claim). According to Connor, the process of written argumentation includes the following structural units: situation, problem, solution, and evaluation. The situation introduces background information; the problem is a statement of the undesirable condition of things while the solution is a statement of the desirable condition followed by an evaluation.

Reid (1988) indicates that the goals of argument include presenting an opinion to the reader, explaining, clarifying and illustrating that opinion, and

persuading the reader that the opinion is valid to move the reader to action, convince the reader that the opinion is correct or, for a hostile audience, persuade the reader that the opinion is at least worth considering. Reid also suggests the process of achieving the goals of argumentative writing in which the writer needs to decide upon the controversial topic or issue including making a list of arguments for two sides (usually a controversy has two sides, that the argument must be able to be answered “yes ” and “no” by different audience), writing a thesis, developing reasons or arguments and organizing them in order of importance and strengths using supporting evidence such as facts, examples, physical description, statistics, and personal experiences, and anticipating the counterarguments, then denying those counterarguments along with the main point of the essay.

Regarding the goal and the process of creating argumentative writing, Wood (1995) points out that the purpose of writing an argumentative essay is to write out an argument on a controversial issue in a systematic manner to persuade the audience to accept the writer’s views and perspectives, or at least to consider and understand his/her position. Therefore, the outcome of the arguments can be a clear agreement with a friendly audience or getting the attention and even perhaps some consensus from the undecided/neutral opponents. In addition, argument seeks to establish what is probably true as well as what might be useful or desirable for the future. In argumentative writing, the writers tell the audience what they think for now along with what they think should be done, given their present information, mostly reasons for their arguments. According to Wood, the responsible writers, to communicate effectively, have to modify, and present their views in a logical way as the reasoning behind the issue to make them acceptable to the audience.

Based on the previous review, it appears that in writing an argumentative essay, the writer is expected to argue in support of his/her position on an issue to bring about the changes in attitudes, beliefs, and the point of view in the readers. The production of argumentative writing occurs in the certain complex stages, and it requires the writer to attend to the context of situation and rhetorical goals, and it requires the writer to include several steps following the convention format of the essays: the introduction, the body and the concluding paragraph.

2.2.2 Structural Elements of Argumentative Writing

In developing the ideas to achieve in argumentative writing, it is necessary to follow the essential structural elements of argumentative text or rhetorical mode and analytic procedures that contribute to the whole argumentative writing. This study is based on the basic structural plans for an argumentative essay proposed by Reid (1988) and Crowhurst Figure 2.2 illustrates Reid's (1988) three structural plans for an argumentative essay commonly used in the textbooks.

Figure 2.2 Three Basic Structural Plans for an Argumentative Essay

Plan A

- I. Introduction (+ thesis statement of intent)
- II. Background paragraph about the topic (OPTIONAL depending on assignment, audience, and available materials)
- III. Pro paragraph# 1 (weakest argument that supports the writer's opinion.)
- IV. Pro paragraph# 2 (stronger argument that supports the writer's opinion.)
- V. Pro paragraph# 3 (strongest argument that supports the writer's opinion.)
- VI. Con (Counterarguments and the writer's refutation/rebuttal)
- VII. Solution to the problem (OPTIONAL depending on assignment, audience, and available materials).
- VIII. Conclusion (summary +solution, prediction, or recommendation)

Plan B

- I. Introduction (+ thesis statement of intent)
- II. Background paragraph about the topic (OPTIONAL depending on assignment, audience, and available materials)
- III. Con (Counterarguments and the writer's refutation/rebuttal)
- IV. Pro paragraph# 1 (weakest argument that supports the writer's opinion.)
- V. Pro paragraph# 2 (stronger argument that supports the writer's opinion.)
- VI. Pro paragraph# 3 (strongest argument that supports the writer's opinion.)
- VII. Solution to the problem (OPTIONAL depending on assignment, audience, and available materials).
- VIII. Conclusion (summary +solution, prediction, or recommendation)

Plan C

- I. Introduction (+ thesis statement of intent)
- II. Background paragraph about the topic (OPTIONAL depending on assignment, audience, and available materials)
- III. Counterargument # 1 + Pro argument to refute it
- IV. Counterargument # 2 + Pro argument to refute it
- V. Counterargument # 3+ Pro argument to refute it
- VI. Counterargument # 4+ Pro argument to refute it (OPTIONAL depends on available material)
- VII. Solution to the problem (OPTIONAL depending on assignment, audience, and available materials)
- VIII. Conclusion (summary + solution, prediction, or recommendation)

Source: Reid, (1988, p.94)

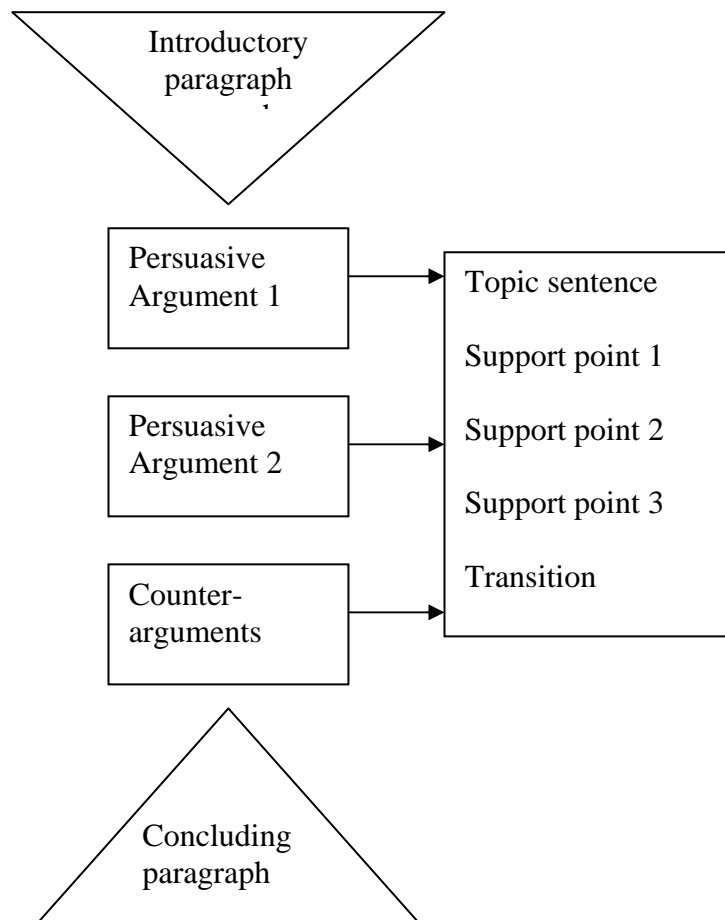
Crowhurst (1994) highlights the structural elements of an argumentative text

including:

- | | |
|----------------------------|---|
| 1. Introductory paragraph: | a statement of belief and list argument for it. |
| 2. Persuasive argument 1: | support statement of belief (the first argument and more supporting ideas) |
| 3. Persuasive argument 2 | support statement of belief (develop the second argument and more supporting ideas) |
| 4. Counterarguments: | counter objections |
| 5. Concluding paragraph: | make the summation of your argument comes at end. |

Figure 2.3 also presents the structural elements of an argumentative essay by Crowhurst (1994) mostly used in the literature.

Figure 2.3 The Structural Elements of an Argumentative Essay



Intraprawat (2002) indicates that an effective argumentative writing starts with good ideas and depends on appropriate content clearly stated in addition to the length and organizational features. Therefore, in writing the first draft of argumentative essay, Intraprawat proposes the following parts need to be included in the essay:

In the introduction, the writer should

- provide background information introducing the issue to the expected reader.
- state his/her position on the issue in the main idea or thesis
- show how the main idea relates to the rest of the essay.
- indicate the scope of the essay.

The body of the paragraph consists of four main parts:

- the topic sentence in which the writer tells the reader his point.
- a sufficient number of supporting sentences and references to prove his point stated in the topic sentence.
- the interpretation-the writer's own explanation about the details.
- the concluding sentence of the clincher:

In the concluding paragraph, a good conclusion should:

- include a brief summary of the main parts
- ask a provocative question
- call for some action
- end with a warning if not the following the writer's suggestion.
- suggest results or consequences.

2.2.3 Evaluating Argumentative Writing

When student writers learn to write an argumentative essay, they learn to apply the rhetorical pattern or structural elements of an argumentative essay and the components of the rhetorical situation including the audience, the purpose, and the writer to help them write an effective argumentative essay. In writing, they play the role as an author that makes use of those elements to think critically and make a decision about their own writing, then write down what comes to their minds. In the same way, it is always helpful to apply those elements to help in evaluating both one's own paper and observing how others argue effectively or ineffectively. In this way, the student writers play the role of the reader to read critically and analyze other writers' written arguments or even of their own.

To consider the effectiveness of argumentative essay writing, recent developments in the research on argumentative writing have developed a set of

measures to describe and evaluate student argumentative writing using different analysis of text including the classical one, namely the Toulmin system created by Stephen Toulmin in 1958, analysis of linguistic features, analysis of coherence (discourse-structure level) and topical structure analysis (Cornor, 1990, Cornor & Kaplan, 1987, Wood, 1995). Among those various measurements, most of them were developed and grounded in the Toulmin system (1958).

For this present study, the researcher explicitly used some of the theoretical insights about analysis of argumentative text by drawing on many researchers including the Toulmin analysis of argumentative structure (1958) focusing on the role of informal reasoning in argumentation, Corner's variables (1990) and measures for analysis of argumentative student writing emphasizing on syntax, coherence (discourse-level feature) and rhetorical features of text, and Knudson's (1992) analysis of argumentative writing in which the writer uses holistic scoring for argumentative writing of Grade 2 L1 students.

In doing an analysis of argumentative text, the reader determines analytically how the authors/writers presented the level of ideas using argumentative strategies and why they did so. The discovery from the analysis then leads the reader to respond to the content (what level) of that argument in the way the written arguments had been organized.

2.2.3.1 The Toulmin System: an Analysis of Argumentative Text

The Toulmin method (1958) is as an effective way of doing very detailed analysis to discover the how and why level of the argument. The Toulmin method has six parts. The first three parts are essential to all argumentative

writing including the claim, the reason (support), and the warrant (evidence). Arguments may also contain the additional elements: the backing, the rebuttal, and the qualifiers. The Toulmin model was also used to decide how effectively those parts of written arguments participated in the overall text. In applying the Toulmin method, then the argument's claim, reasons, and evidence are identified, and the effectiveness of each is evaluated. Wood (1995) discussed the Toulmin model, the influential one in details as in the following.

To begin with, the claim or thesis in Toulmin's discussion of argumentation is defined as the position the writer is trying to get the audience to accept. It is the focus or arguments telling the audience what arguments are all about. The claim, whether implied or explicitly stated, organizes the entire argument and everything else in the argument is related to it. However, in a good argumentative essay, the claim or thesis is always clearly and explicitly stated.

Next, the reason or support supports the claim that proves the paper's thesis. In the Toulmin model, the synonyms for support are data and grounds. Others use proof, evidence and reasons and premises may also be used for major evidence. The support provides the evidence, opinions, reasoning, examples, and factual information about a claim that make it possible for the audience to accept. Like any other types of discourse, good argumentative writing has main ideas and ideas that support them. The claim is the main point of the entire piece of writing, and the sub claims are reasons for the claim. In addition, support comprises all explicitly stated explanations, information, facts, personal narratives, and examples that the writers use to make their claim or sub claims convincing, believable, and acceptable. Factual evidence needs to be true and verifiable. All needs to be clear, relevant and understandable. It also

should represent all of the significant information available. Understanding of the types of support is, therefore needed.

In brief, different writers develop the support in different ways depending on the requirement of the topic of the essay, their purpose and their audience. When the issue is an abstract and the audience is described, the writer may present mainly opinions and a few facts or examples. Such arguments include a claim and list of logical reasoning organized around sub-claims to develop and prove the claim.

Wood (1995) further describes additional parts of arguments: warrants, backing, rebuttal, and qualifiers. Warrants, in the Toulmin method, are the restated assumptions behind the claim (e.g. the statement of acted beliefs, general principles, widely held values and appeals to human motives) that are an important part of any argument.

Backing is the evidence needed to support the warrants and to persuade the audience to gradually accept the beliefs and values that inform the claim. The writers, themselves also require their own support for the warrants to make the warrants more acceptable to the audience. The writer then provides “backing” or additional evidence to back up a warrant.

A rebuttal establishes what is wrong, involved, or unacceptable about an argument and may also present counterarguments, or new arguments that represent different perspectives or points of view on the issue. That is, when using the Toulmin method to analyze an argument, the reader looks for potential objectives to the argument’s reasons, objections which the writers expect their opponents to make. The writers then may demonstrate that the support is faulty or that the warrants are faulty or unbelievable. The rebuttal may appear as answers to arguments that have already

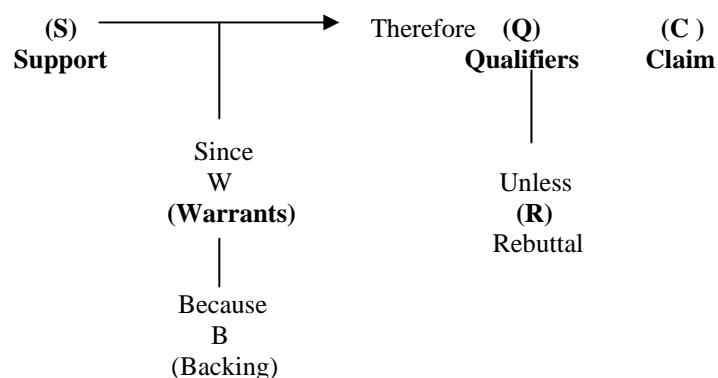
been stated or the author may anticipate the reader's rebuttal and include answers to possible objections that may be raised.

Qualifiers are words like some, most, may, in general, usually, typically and so on. Since the argument is not expected to demonstrate certainty, the language of certainty (e.g. always, never, the best, the worst) is avoided. Instead, most writers use the words that demonstrate probabilities, or quantified language as listed above.

When the Toulmin system is applied for rating students' quality of argumentative essay, the scoring guide can have six or three argumentative traits. This depends on the rater's need. For example, the rater can rate for the clarity of claims, data, warrants, proposition qualifiers (recognition of opposition), and response to opposition (rebuttal), or the rater can select three argumentative traits including claim, reasoning and rebuttal. This study used three traits of argumentative writing including claim, reason, and rebuttal adapted from the Toulmin model (1958).

Figure 2.4 demonstrates the diagram of the six elements in the Toulmin model.

Figure 2.4 Diagram of Essentials Parts of Toulmin's Model of Argument Terms



Source: Woods, (1995, p 147)

2.2.3.2 Holistic Scoring for Argumentative Writing

Holistic scoring gives evaluation of the overall proficiency level reflected in a given sample of student argumentative writing. That is, this approach requires the raters to rate the overall quality of the writing, regardless of how students choose to respond to specific aspects of a given task. Crowhurst (1991) rated students' argumentative writing using holistic ratings by dividing the criteria into three categories: the overall quality, organization, and structural elements. For the overall quality and organization, Crowhurst considered content, organization and structure, and expression (usage and vocabulary), and sentence structure. The overall score was ranged from 1 to 6 and the organization from 1 to 4. To score in terms of structural elements, the raters were assigned to count each part of the essay including reasons, elaborations of reasons, conclusions, text markers (such as the first reason, finally, etc), the total number of words, and the number of words in each elaboration. Knudson (1992) used holistic scoring to evaluate the effectiveness of student argumentative writing at 10th and 12th grade level, but the requirements were placed on the purpose of writing, the audience, and the degree to which the writing task was addressed. In Knudson's holistic scale, scoring ranged from 1 to 6.

2.3 Students' Problems in Writing an Argumentative Essay

The production of argumentative writing is difficult and problematic for student writers, especially non-native speakers. It is difficult because the task of persuasion is a complex cognitive process of problem-solving requiring the writer's awareness of both the audience and the writer's purpose. This type of argumentative discourse also offers a complex rhetorical situation (Connor, 1987) including the

context situation in which the issue emerges (Chandrasegaran, 1993). The argumentative writing is, then a reader-based prose (Flower, 1987) while most students writers usually write based on a writer- based approach or as described by Bereiter and Scardamalia (1986) as the knowledge-telling approach to writing.

Flower (1987) characterizes writer-based prose based on three criteria: function, structure and style of writing that the writer applies to generate his or her own text. The first feature found in the L1 students' writing is an egocentric focus on the writer. To be precise, the writer writes to himself and for himself, just to pass his own knowledge without attention to the reader's needs. There is also grammatically focused on the writer's thoughts and actions rather than on the issues. Therefore, the result of the writing is the final draft functioned as a device to reflect the writer's mind. The second feature is the narrative organization without the casual relation or logical development. Instead of having to create a hierarchical organization among ideas and focusing attention to the reader, the writer writes from his own discovering process. The third feature, the styles of the writer-based prose are in a survey textbook form because the writer ignores the reader's need for a different organization of information. In this respect, there are two main stylistic features: firstly, as a monologue, that is the organization of sentences and paragraphs reflects the focus of the writer's attention; secondly, the language used is not to evoke the reader, but the writer, himself with no complex content.

Bereiter and Scardamalia (1986) also describe the writer-based prose as the knowledge-telling approach to writing which is an easily acquired writing skill used by novice writers who tell what they know about a topic in a relative free, associationist manner. To elaborate this notion, the writer simply uses one idea first,

and then leads to another without much prior planning and without much metacognitive self-guidance. Such writing is also writer-rather than reader-oriented in the sense that the writer does not take into consideration the knowledge, attitudes, expectations or abilities of the audience-related awareness.

In contrast, the reader-based prose emphasizes the audience expectations. Audience awareness is fundamentally related to a good argumentative writing; when the audience is invoked, it links the writer to a rhetorical purpose and situation and therefore, always leads to better writing (Rafoth, 1989). Similarly, Connor (1987) suggests that the importance of audience awareness appears to be a predictor of successful argumentation.

Studies on L1 argumentative writing showed various problems in students' writing. First of all, most of the students' writing was poorly argumentative and they did not give sufficient reasons to support the position; the argumentative composition was shorter and less well-developed compared with narrative writing and informative writing (Applebee et al., 1994 as cited in Ferretti et al., 2000). In addition, most younger students gave fewer reasons for their position than do older students (Crowhurst, 1990). Also, students have difficulties producing arguments that conforms to exconventional argumentative discourse (McCann, 1989). Additionally, the students with learning disabilities (LD) have similar problems as normal students. They plan less and revise less when writing an argumentative essay; these students have problems with generating and organizing appropriate content (Graham, Harris, MacArthur, & Schwartz, 1991; MacArthur, Harris, & Graham, 1994). The students with LD also have problems with the important components of the argumentative writing such as a thesis and supporting details in their arguments (Graham, 1990,

(Graham, 1990, Graham, MacArthur, Schwart, & Page-Vohn, 1992). These problems have led to poor quality of persuasiveness in their essays.

Similarly, in writing an argumentative essay, L2 writers take a writer-based approach. They do not take into account the purpose, the requirements of the argumentative writing task, the reader expectations (Varaprasad, 2001). Also, they have difficulties in structural elements of argumentation (Ferris, 1994). Further, L2 writers have greater problems than native speakers because writing in a second language may be hindered because of the limited second knowledge (Weigle, 2002). In addition, L2 writers' composing is "more constrained, more difficult and less effective than writing in the first language. They plan less, revise for content less, and write less fluently and accurately than native speakers (Silva, 1993,). Silva indicates that that L2' writing is different from native speakers' writing in many ways, particularly strategic, rhetorical and linguistic knowledge. Therefore, L2 writers (whether basic or skilled) have special needs, particularly in writing argumentatively, as Raime (1985) suggests, "L2 writing teachers will need to devote more time and attention across the strategic, rhetorical, and linguistic concerns" (p.250).

One of the most important reasons to explain the students' problems in poor quality of argumentative writing is that they have difficulty in setting the goal and the sub goals to support the goal of persuading their audience (Connor, 1987; Ferreti et al., 2000). The goal of the arguments is not well-defined. When the goal is ill-defined, students face the problems on the knowledge of argumentative discourse because the purpose and goal will lead the writer to the rhetorical patterns (Flower, 1980) and enable them to write persuasively (Bereiter & Scardamalia, 1986).

Silva further points out that L2 writers need more work on planning-to generate ideas, text structure, and language – in order to make the actual writing more manageable. In addition, L2 writing teachers should have their students draft in stages; for example, to focus on content and organization in one draft and on linguistic concerns in a subsequent draft or to separate the practice of revising (rhetorical) and editing (grammatical). That is, L2 writers need more extensive practice of textual concern. At the discourse level, students need to focus the attention to audience expectations and teachers should provide them with strategies for dealing with different textual patterns and task types they are likely to produce.

In an investigation with L2 students, Chandrasegaran concludes that an awareness of rhetorical goals is a significant factor in students' success in academic writing, particularly, an argumentative essay. He also suggests that to write effectively students need to approach the act of writing as a response to a rhetorical problem, that is, perceive any writing assignment as an act of persuasion driven by an intent to convince the audience of the acceptability of the student writer's position on the given topic or issue. Furthermore, the rhetorical approach to writing helps students see an essay writing or written assignment as a communicative task (writing performance) of which involves taking into account the target reader's expectations, the assumptions and value system underlying the assignment instruction and the discourse moves. These are keys to success in an academic argumentative writing.

To sum, students, both native and non-native speakers, have many problems in writing an argumentative essay. It seems that they have most difficulties in setting the goal for the audience expectations resulting in poor performance in argumentative writing because the successful argumentative writing depends on the audience

awareness. Audience awareness is regarded as an important element in good argumentative writing because it leads to rhetorical purpose and situations. argumentative writing requires the writer to include the reader expectations in the entire process of writing. That is, the reader-based approach should be an effective way to develop for a successful argumentative writing.

2.3.1 Students' Problems in the First Draft Revision

Revising is an important part of good writing (Fitzgerald, 1987). It provides a valuable means for improving the quality of compositions, and it may help the writers expand and elaborate what they are trying to say (Sommers, 1980). The importance of revising is specifically considered as a key to distinguish expert writers and novice writers (Flower, 1987). Research suggests that expert writers revise more effectively than novice writers (Fitzgerald & Markham, 1987) and good writing entails considerable revision (Sommers, 1980; Scardamalia & Bereiter, 1986; Englert, Herbert, & Stewart, 1989). According to Sommers, expert writers describe their primarily objectives when revising as finding the form or shape of argument, and they have a secondary objective as a concern for the relationship. In addition, expert writers define revision as a whole-text task and tend to read the whole text through before beginning revision and create global goals to guide the revision process.

In contrast, novice writers consistently make superficial changes consistently mostly of mechanical changes and word substitution (Butterfield, Hacker, & Plum, 1994). Therefore, this approach to revising has little impact on improving the communicative quality of the text (Bracewell, Scardamalia & Bereiter, 1987 as cited in De La Paz, Swanson & Graham, 1998). Similarly, Hayes et al. (1985) point out that

novice writers see revision largely as a sentence-level task in which the goal is to improve individual words and phrases without modifying the text structure.

In the areas of L2, much of the knowledge also seeks to distinguish between good and poor language learners by describing the typical strategies in revision of either group. The comparative studies reveal that revision occurs at various points in the composing process (Raimes, 1987). The good writers are more aware of audience (Cohen & Cavalcanti, 1990), discourse types, and organization (Hall, 1987). Therefore, better writers appear to pay more attention to the global factors of content and style; on the other hand, the poor writers reflect less on their texts. That is, they tend to make changes to the surface grammatical structure of the writing task, with the focus on local concerns at word-level. In his research (1993) of how L2 writers revise their work, Silva observes that ESL writers revise at a superficial level. They reread and reflect less on the written text, revise less, and when they do, the revision is primarily on grammatical correction.

In brief, it is evident that expert writers revise more effectively than novice writers. The expert writers' revision starts with a large concern trying to achieve the goal for the audience expectations; and they revise the entire essay. In this sense, it leads to improve the quality of writing. This provides information for this study to continue investigating students' revision to help improve revising and quality of argumentative writing.

Several studies in L1 have revealed the revision problems and the reasons for students' limitation of revising an argumentative essay. For example, MacArthur, Schwartz, and Graham (1991a as cited in Graham, MacArthur & Schwartz, 1993) state that students' revisions have little effects on the quality of

writing because they revise infrequently and focus their revising efforts on proofreading. Also, students' revisions are limited because they do not serve an authentic purpose, or their work is not shared with a real audience. MacArthur et al., further indicate that students have limitations in revisions because they (a) fail to establish clear goals and intention for their writing; (b) find it difficult to evaluate their own writing from the reader's perspectives; (c) experience problems determining to change it; and (d) lack adequate executive control to coordinate and manage conflicting revising goals or separate knowledge and abilities underlying the revising process (Fitzgerald, 1987).

Bereiter and Scardamalia (1986) propose that students' limitations in revision may result from difficulties with the executive control, or the coordination and management of the elements underlying the revising process. Graham (1997) also indicates three reasons for poor students' limitations in revising. First, students viewed revising as proofreading as they emphasized the changes on the mechanical attributes of text such as word spelling. A second limitation in students' revising was their general indifference to reader-based concerns because it is difficult for poor writers to take perspective of a reader (Flower, 1980). A third limitation in students' revising involved their competence with the individual elements underlying the revising process because students have difficulties detecting and diagnosing problems in the communicative quality of text.

Wallace et al. (1996) indicate that the causes of student difficulties in revision are deficiencies in the ability to detect and fix text problems; working memory resources; and a learned task schema that specifies how the basic processes

are to be used in performing a revision task. The learned task schema includes criteria for an acceptable text, types of text problems, and strategies for fixing those problems.

To sum, students, both native and non-native speakers of English, have problems in revising. Their problems are not only lack of executive control to detect their problems, coordinate and manage their revising goals, but they also have difficulties in revising the global issues. For good argumentative writing, it requires the writer to revise at the global level. That is, the writer has to consider the whole essay for the rhetorical situations including the audience expectations and the purpose, the organization, the clarity of ideas and coherence. In the researcher's view, if we believe that instruction in revising by teaching techniques focusing attention on audience during revising and executive support to help detect the problems and strengths improve students' quality of writing, these skills should be activated in students by integrating revising with the executive control or metacognitive strategies.

Since this present study aims to study the effects of metacognitive strategy training in revising an argumentative essay from the first draft to the second draft, and to find out whether metacognitive strategy training in revision improves students' quality of writing, the main focus of the study will be concentrated on revising for the reader expectations. The research evidence from related literature has led the researcher to anticipate that in writing an argumentative essay, the students, given the emphasis on revising for the reader expectations, would affect the improvement of their argumentative writing. As the reader usually expects certain types of ideas in an argumentative essay, the students will be trained to revise for the ideas or contents of the entire essay by integrating metacognitive strategies before,

during and after revising their first draft. The first draft revision then includes two levels: at the level of the whole essay and paragraph level.

2.4 Metacognitive Strategy Training in the First Draft Revision

2.4.1 Studies on Metacognitive Strategies in Revision

Metacognitive strategies are essential for a student writer because they allow students to take more control of their writing and to successfully approach the new writing task. Metacognitive strategies help the writer select strategies to define a writing problem and research alternative solutions, then monitor/control and judge his/her own writing. Finally, the writer evaluates and decides when the writing problem is solved to a satisfactory degree or the demand of the writing goal (Spence & Elaine, 1993). Several studies have investigated the relative effects of metacognitive strategies or executive control in planning, monitoring and evaluating on revision (i.e. Bereiter & Scardamalia, 1987, Beal, 1989; Stoddard & MacArthur, 1993; Wallace et al., 1997; Graham, 1997; De La Paz, Swanson, Graham, 1998; Graham, MacArthur & Schwartz, 1995; and Voth & Graham, 1999).

Berreiter and Scardamalia (1986) point out that students' limitation in revision may be a lack of executive control. They also discuss that students may be able to make appropriate evaluations and revision, but have difficulties organizing and integrating the elements of revising into the global composing process. Later, Scardamalia and Berreiter (1987) use a technique called "procedural facilitation" in which students were prompted during revising to identify and diagnose problems in their writing and to select tactics for fixing them. The results show that procedural facilitation alone results in more revision but no improvement in quality of the text.

However, procedural facilitation in combination with instruction and practice in diagnosing and remedying problems in text result in revision that improves overall quality.

Beal, Garrod, and Bonitatibus (1990) investigate the effect of training third and sixth grade children to revise problematic texts through cognitive monitoring. The purpose of the study is to learn whether the training strategy to enhance comprehension monitoring could help children detect and revise problems in written text. The students are taught to ask a series of questions to self-evaluate their text. The results reveal that the students, who are taught self-questioning strategy, locate and revise more text problems than students in the control group. This suggests that when they are trained the self-questioning strategy as the criteria for evaluating their own text, the students revise more successfully. The results from the study also imply that the classroom writing program should include instruction in specific strategies for text evaluation as part of the revision process.

One of the important studies investigating the effectiveness to improving revising skills that integrated strategy instruction, peer response, and word processing by Stoddard and MacArthur (1993) suggest that many students make more revisions between first and second drafts. Furthermore, the overall quality of final drafts increases substantially. This study also demonstrates that by sharing their papers with a peer, and asking questions about their texts, students may have developed a sharper sense of audience and purpose that contribute to shaping what they revise. Matsuhashi and Gordon (1985 in Graham & MacArthur, 1995) trained college students who were poor writers to revise by assigning the revising goals to

direct their substantive concerns. The results reveal that poor writers make more substantial revisions when assigned specific goal to revise.

Similar effects are reported by Graham, MacArthur, and Schwartz (1995) with elementary-aged students who have both writing and learning difficulties. Specific revising goals to add information on revising have been used to increase the writing performance of poor writers. This study also examines whether procedural assistance in meeting the goal to add information would enhance students' performance. The results reveal that students assigned to specific goals to revise made more meaning-based changes, particularly addition, when revising their papers. More importantly, the goal to add information results in greater improvement in text quality than the general revising goal.

Graham (1997) investigates the role of executive control in revising difficulties of 5th and 6th graders with writing and learning problems by providing procedural support in managing and coordinating the elements involved in the process of revision. The model of revising involves three elements: Compare, Diagnosis, and Operate (CDO). Compare consists of detecting mismatches between the author's intentions and the actual written text. Diagnosis involves determining the cause of such mismatches. Operate involves deciding on the types of changes needed and carrying them out. Students applied CDO on a sentence-by-sentence basis. The CDO or procedural support makes the process of revising easier and increase the number of non-surface revision and improved text. This study also suggests techniques to help students with writing problems to organize and manage revising by teaching self-questioning and focusing the attention on audience during revising. This can be done through goal setting.

In a similar study, De La Paz, Swanson and Givon (1998) investigate the role of executive control in revising problems of 8th graders with writing and learning disabilities. The students were provided with two conditions for revising their essays: normal revising condition and CDO condition in which students were presented the procedure to revise. To follow the steps in the CDO procedure, the students, first consider the global concerns in the revision by detecting the problems in the whole papers. Actually, the problems were provided in the cards which directed students' attention to problems with the text as a whole, including the presentation of a one-sided argument, meager ideation, inclusion of extraneous information, and illogical sequence of organization of text. In the second step, the students select the given strategies appropriate to their own writing problems, then revise, and evaluate their papers using two evaluation guides: evaluation for specific problems and open-ended evaluation. The results, when compared to the normal revising condition, executive support make the process of revising easier for students and improve their revising behavior. They revised more often, produced meaning-revisions that improved text.

To sum, L1 studies have shown that executive control in planning or Goal setting to revise, detecting the problems, managing the elements in the revising process, and evaluating the text help students revise effectively and improve the quality of their texts. Therefore, to revise their text successfully, the writers require: first, the implicit goals and purposes for writing to motivate and guide revision, second, a general understanding of revision focusing on meaning and organization, and third, the knowledge of evaluation and the criteria for detecting the problems of their own texts.

In addition, students need to monitor the goals and the criteria during

their revising stage. Finally, they need a repertoire of strategies for revising. Unfortunately, the number of studies in this area with L2 is very rare, providing an obscure picture of how training in metacognitive strategies can help students facilitate their revising behaviors. However, L1 studies provide the basis for the design of metacognitive strategy training in revision and the assumption that students can be trained to plan, monitor, and evaluate their revising process to make changes in their written texts. It might be beneficial for SWU English majors if they receive metacognitive strategies training in revision.

2.4 .2 Incorporating Metacognitive Strategies into the First Draft Revision

Insights from the research mentioned above point out the need to incorporate metacognitive strategies into writing practice because they allow student writers to reflect on their problems and look for appropriate strategies to accomplish their writing goal, specifically in revision, in order to improve revision skills and the quality of students' argumentative writing. This study combined explicit ways of encouraging basic metacognitive components: planning, monitoring, and evaluating with individual strategies based on the previous studies (Chamot et al. 1996; O'Malley & Chamot, 1990; Brown et al, 1987; and Wenden, 1987, 1999). In addition, in revising an argumentative essay, students received explicit metacognitive strategy instruction to revise four revision tasks: revise for the clear ideas of rhetorical situation, revise globally for the better content and ideas and rhetorical pattern of an argumentative essay, revise for logical development and revise for the connected ideas in each part of the essay and the whole essay (unity and coherence). Table 2.2 illustrates metacognitive strategies integrated the first draft revision.

Table 2.2 Metacognitive Strategies Integrated into the First Draft Revision of an Argumentative Essay

Metacognitive process & its sub-processes/categories	Definition of each sub category	Metacognitive strategies in the first draft revision of an argumentative essay
Planning (Before revising) Advance organizer Organizational planning Selective attention Self-management	<i>Advance organizer</i> Understand the revision task. Develop personal objectives/ goals. Identify the purpose of the revision task.	<ul style="list-style-type: none"> • Determining the nature of the revision task need to be done for completing the first draft revision of an argumentative essay. • Setting the personal revision goal. • Planning the objectives of revision sub-tasks
	<i>Organizational planning</i> Plan the content sequence and the revision task. Plan how to accomplish the revision task. Activate the background knowledge.	<ul style="list-style-type: none"> • Planning the content of each revision task, the parts of specific revision tasks. • Planning the strategies for completing the first draft revision. • Thinking about the prior knowledge about a good argumentative essay writing. • Elaborating the prior knowledge connected with the revision tasks need to be done.
	<i>Selective attention</i> Focus on specific aspects of the revision tasks. Decide in advance to focus on a particular task for the first draft revision.	<ul style="list-style-type: none"> • Focusing on a specific task by sequencing/prioritizing the tasks need to do to complete the first draft revision of an argumentative essay. For example, in revising for the content and ideas of the whole essay, students need to <ul style="list-style-type: none"> - revise for the audience, purpose and problematic situation (background information). - revise the focus or thesis - revise the overall organization (the structural pattern of an argumentative essay). - Revise for the unity and coherence of the whole essay. <p>In revising at the paragraph level, the writers need to emphasize on:</p> <ul style="list-style-type: none"> - revising the topic sentence/ the main idea of each body paragraph. - revising for the supporting evidence - revising for the concluding sentence.

Metacognitive process & its sub-processes/categories	Definition of each sub category	Metacognitive strategies in the first draft revision of an argumentative essay
Monitoring (During revision) Comprehension monitoring Production monitoring	<p><i>Self-management</i> Arrange for conditions that help in the revision tasks. Know when, where and how to do the revision tasks successfully or unsuccessfully.</p>	<ul style="list-style-type: none"> • Knowing one or more specific revising strategies relevant to the revision task. • Selecting the appropriate revising strategies for the specific purpose of revision tasks by describing effective or ineffective ones for completing each revision task. For example, <ul style="list-style-type: none"> - using reasons to support the thesis clearly. - arguing on the controversial issue and stating the writer's position clearly. - using supporting evidence to support the thesis clearly.
	<p><i>Comprehension monitoring</i> Check one's comprehension or the accuracy and appropriateness of the revision task while it is taking place. Think about whether ones are understanding when doing the revision task.</p>	<ul style="list-style-type: none"> • Checking one' understanding, accuracy and appropriateness of the overall revision task/process. • Checking one's own abilities and difficulties in each revision task.
	<p><i>Production monitoring</i> Think about how the information ones are receiving or producing fits in the prior knowledge (schema). Make decision about information ones are processing and use it effectively.</p>	<ul style="list-style-type: none"> • Selecting revising strategies learned from class or prior knowledge such as writing strategies, the genre pattern of an argumentative essay or the linguistic knowledge to apply in the first draft revision by articulating the tasks of the first draft revision. • Using the selected revising strategies and matching them with one's own problem in the first draft.

Metacognitive process & its sub-processes/categories	Definition of each sub category	Metacognitive strategies in the first draft revision of an argumentative essay
Evaluating (After revision) Self assessment Self-evaluating Self-reflection	<p><i>Self-assessment</i> Making judgment whether ones have met the requirements of the task. Checking whether the personal goal or expectations were met while carrying out the task.</p> <p><i>Self-Reflection</i> Reflecting on one's own problems whether one needs to go back through the revision tasks.</p> <p><i>Self-evaluation</i> Evaluating oneself by checking how well one learned the task/materials or did the tasks. Evaluating one's own strategies and effectiveness of strategies.</p>	<ul style="list-style-type: none"> • Making a decision about the outcome (the complete second draft) based on a clear description of criteria to judge the quality of one's own paper in a personalized way by asking the questions such as the question about components making a good argumentative essay. <ul style="list-style-type: none"> - Do I state the problem clearly? - Do my arguments supported by evidence that is sufficient to convince the reader? - Do I have the topic sentence stated for each paragraph? - Do I include all the necessary parts of the thesis statement including the topic part, the thesis (claim), reasons and implied organizational pattern? - Do I restate the thesis in the concluding paragraph? • Making an assessment of why one succeeds in /achieves the revision goal. • Evaluating how well one learned to revise by employing metacognitive strategies in the first draft revision and how well one improved the first draft. • Reflecting one's own problems whether he/she needs to go back through the revision process by providing a clear assessment for a good argumentative essay such as making an outline to illustrate the content of the first draft, then reconsider the second draft whether he/she included all the components for a complete second draft.

As shown in Table 2.2, planning is a critical first step toward becoming a metacognitively aware learner. Planning strategies help the learner develop and use forethought. They encourage thinking so that the learner reflects their thoughts before beginning a task. Regarding the use of planning in the revision process, students can

use Advance Organizer to think about the nature of revision task, understand it and then set the revision goals. Organizational Planning involves planning how they can accomplish each revision task and they can connect the revising strategies they already know to help them to do the revision task. That is, students also plan for the strategies for the learning task. For example, students might ask themselves (using self-questioning strategies) about their own writing problems, what part of the essay needs to be changed, cut or deleted. The students could also use Selective Attention to focus their attention on the specific aspects of the revision that will help them perform the revision task. For example, in revising the first draft of an argumentative essay, deciding to focus on the rhetorical situation will make it easier to clarify the content and ideas to meet the reader expectation and the purpose of writing. Self-Management involves seeking or arranging the condition that helps students revise and focus on what they know. For example, students know that they could use statistics or examples to support the essay's thesis statement.

As for the use of Monitoring strategies, students can use Monitoring to measure effectiveness the revision strategies while doing the revision task. First, they use Monitoring Comprehension to check how they are revising and then use Monitoring Production to make judgment how they are revising as necessary. For example, while students are revising the introductory paragraph of the essay, they add more background information to orient the reader clearly about the controversial issue. In the monitoring process, students should think about where their focus of concentration needs to be at any given time and then consciously focus their attention on a specific of the task (Chamot et al., 1996). Students monitor their comprehension and production by thinking about whether they are making sense when they revise the

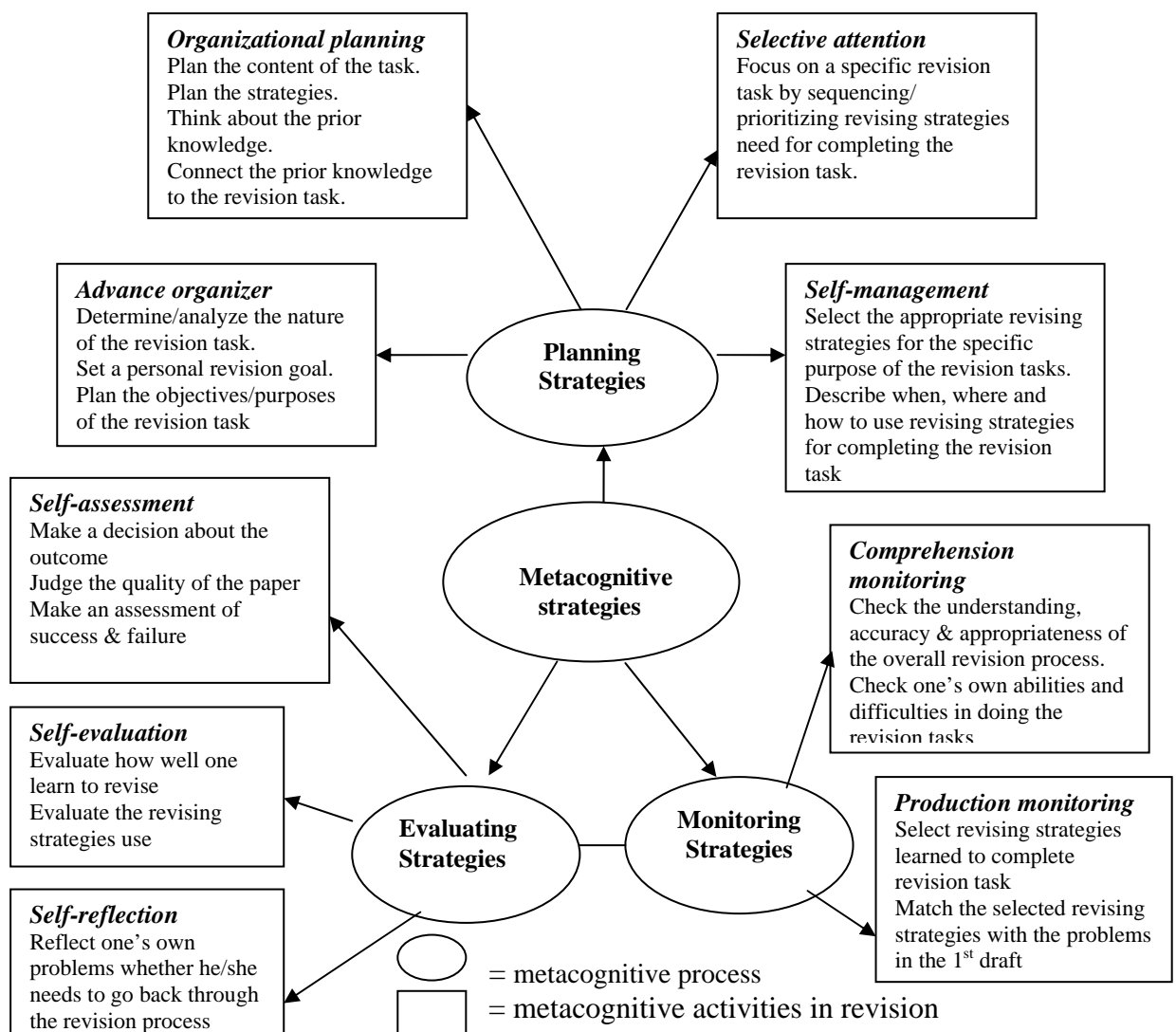
first draft of an argumentative essay. Students also think about how the revised version of their argumentative essay fits the elements of a good argumentative essay (knowledge of the world or schema based on their experience). They rely on their knowledge of the revising strategies and essentials of an argumentative essay to make decisions about what to change, add, maintain or delete in their first draft. When they feel frustrated, they help themselves by thinking about their learning tools, that is, strategies. For example, when students check their understanding they might ask themselves like: Do I have clearly stated thesis?/ Is it making sense if I give some explanations at this point?/ Is the thesis supported in the body paragraphs?, and so on.

After completing part or the entire revision task, students could use Evaluating strategies to check the outcome, goals, strategies and their strengths and weaknesses (Self-Assessment). First, they can reflect on how well the revision task goes based on the criteria to judge the quality of their own paper. This process allows them to see if they carry out the revision plans. Then, they decide whether they meet the revision goal. For example, they can ask themselves, “Did I accomplish my revision goal? (e.g. the goal is to revise for paragraph development). Metacognitive strategic students self-assess whether they met their revision goals and if they did not, why they didn’t meet these goals and what they can do differently next time.

Students can assess their strategies by judging how well they apply the strategies to revision tasks, judging how effective and appropriate their strategies were for the specific revision task, identifying why a strategy was helpful or not helpful for the task, comparing the usefulness of various strategies on the same revision task, and thinking about better strategies they could have used. Self Evaluation help students decide when certain strategies work best so they can choose

appropriate strategies in the future. Finally, students can use Evaluating strategies to reflect their own strengths and weaknesses (Self-Reflection), so they can do the better job next time. For example, they can ask themselves questions or use self-evaluation checklist after they complete each revision sub-task: “Do the introduction and the conclusion match? Do I restate the main points of my arguments in the concluding paragraph?” Figure 2.5 illustrates the Metacognitive Strategy Training Model of Revision.

Figure 2.5 Metacognitive Strategy Training Model of Revision (MSTR)



This chapter presented the theoretical framework in support of this study. The chapter first discussed metacognitive theory including the concept of metacognition, particularly metacognitive strategies or executive control and the contributions to the writing process and the success to language learning. These metacognitive views were discussed based on the literature review by various experts and researchers including the original concepts of metacognition by Flavell (1979). While Kluwe (1987) discussed this concept in terms of “executive control” over the thinking process, Wenden (1987), Brown (1984), Garner and Alexander (1989), O’Malley and Chamot (1990) focused on the benefit of metacognitive strategies on teaching and learning the language skills. This study concerned about metacognitive strategies used in the revision process, which is central to the writing process (Flower & Hayes, 1986).

The discussion in the second section of the chapter moved to argumentative writing, the complex cognitive process and the most difficult mode of discourse that required high order of thinking process (Flower, 1987; Flower & Hayes, 1986; Scardamali & Bereiter, 1986; Anderson, 2002). This section, then listed writing problems emerged from ESL, EFL or even native speaking English students in writing persuasively and the problems in the revision process revealed by Flower (1987; Cohen and Cavalcanti (1990); Raimes (1987); Hall (1987); Wallace et al (1996); Bereiter & Sacrdamalia (1986); and Graham (1997) and others. Those researchers agreed that students’ problems in revision were affected by the lack of executive control or metacognitive strategies to control over the writing process, particularly revision, considered as the cognitive goal-oriented and problem-solving processes. These researchers suggested metacognitive strategy training to improve the

quality of writing through different types of methods and techniques, particularly, “procedural facilitation” proposed by Bereiter and Scardamalia (1987).

The last section of the chapter pointed out the need for incorporating metacognitive strategies into writing practice by training students to plan, monitor and evaluate the writing task (O’Malley & Chamot, 1990); Wenden, 1987, 1999). Finally, in the end of the chapter, the proposed model to incorporate metacognitive strategies into the first draft revision of an argumentative essay was illustrated.

Chapter 3 presents research methodology providing the evidence to test two research questions mentioned above. The chapter explains research design, data collection with the instruments and the methods for collecting three types of data: numerical, descriptive and self-reflection data. It also discusses data analysis method in details.

CHAPTER 3

RESEARCH METHODOLOGY

This study was designed to find the answer of two research questions regarding the use of metacognitive strategies in revising the first draft of an argumentative essay. The first research question aimed to find what metacognitive strategies successful and less successful third-year English majors of Srinakharinwirot University (SWU) used in revising the first draft of their argumentative essay, and the second research question aimed to find out whether less successful SWU English majors improved the quality of the first draft of their argumentative essays after metacognitive strategy training in revision. This chapter then describes the research methodology beginning with a discussion of the research design, the participants, instruments used in the study, and data collection procedure. The data analyses method is also presented at the end of the chapter.

3.1 Research Design

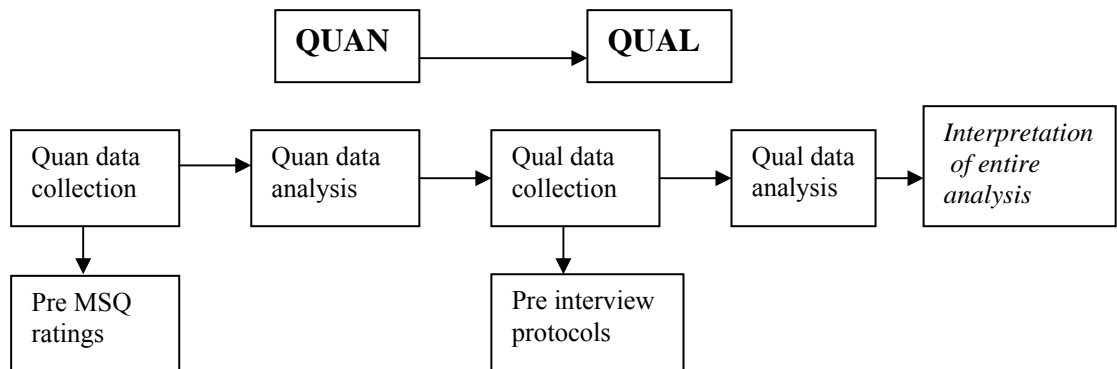
The research design of this study is a two-phase, sequential mixed design combining quantitative data and qualitative data analysis. In Phase 1, for the quantitative data, the pre- Metacognitive Strategies Questionnaire (Pre-MSQ) was employed to elicit the information about metacognitive strategies third-year SWU English majors used in revising the first draft of an argumentative essay. For qualitative phase, semi-structured interview was used to obtain the qualitative

data from individuals. The data, metacognitive strategies obtained from different methods allowed triangulation and ensured the validity, reliability and the appropriateness of metacognitive measures. As Garner and Alexander (1989) suggested that using multiple methods that did not share the same of error is imperative if we are to measure “knowing about knowing” with accuracy (p.147). Therefore, the use of multiple research methods proved to be useful in eliciting the complementary data which could be combined together to provide the full understanding of metacognitive strategies use by Thai English majors college students.

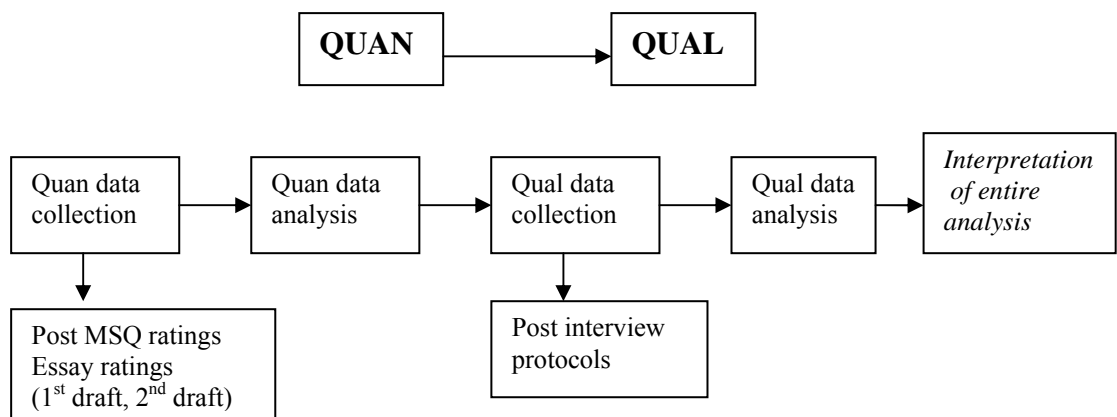
Phase 2 of the study was metacognitive strategy training in the first draft revision using the quasi-experimental study. The metacognitive strategy training model was developed to find out whether the metacognitive strategy training resulted in the improvement of less successful SWU English majors’ revision. After training, the Post-MSQ was also employed to investigate the metacognitive strategies SWU English majors used in revising the first draft of an argumentative essay, followed by the post semi-structured interview. The quantitative data in phase 2 included the essay ratings for the students’ first and second draft, self-ratings from the Post-MSQ and the qualitative data came from the post interview protocols and students’ journal entries. Figure 3.1 illustrated the model and procedures of the research design adapted from Cresswell (2003).

Figure 3.1 Research Design for the Present Study: Two-Phase, Sequential Mixed Method (Sequential Exploratory Strategy)

Phase 1: Sequential exploratory



Phase 2: Quasi-experimental study (Sequential exploratory strategy for data collection)



3.2 Subjects and the Context for the Study

The population of this study was Thai third-year college students majoring in English taking an academic writing course at Srinakharinwirot University (SWU), Bangkok, Thailand where the researcher has taught. The initial sample for this study was 36 undergraduate third-year English majors selected from two intact classes of all

third-year English majors of Srinakharinwirot University. There were 16 students in Section 1 and 20 in Section 2. These students were enrolled in an academic writing course (EN 431-Composition2) designed for third-year English majors in the second semester of 2004 academic year between November 2004 and February 2005. Both groups were of mixed English language ability. Their grade point average (GPA) range was from 2.80 or less to 3.00 or more. Table 3.1 illustrates the number of third-year English majors in the initial group.

Table 3.1 The Number of Third-Year English Majors from the Initial Group

Number of third-year English majors in the study	Language proficiency level	
	Successful	Less Successful
Section 1 = 20	7	6
Section 2 = 16	3	4
Total = 36	10	10

Twenty students were selected from the initial group and allocated into two small groups: successful and less successful students. Successful students were identified as those who received A, B+ or B in the previous writing courses and the GPA ranging from 3.19 or better and less successful students ones with C+, C or D in the previous writing courses and the GPA ranging from 3.02 or less. Writing proficiency was also reported by instructors for the previous courses. The researcher was allowed to report their grade for the research project. These students also took the pre-writing exam in which they were assigned to write an essay about 500 words on a given topic. The topic of the essay concerned different modes of writing: description, spatial order and argumentation, so that the pre-test writing, and the amount of writing

requested was consistent with the students prior experience.

Three independent raters were given the typed version of a random selection of all 36 students (all 36 essays) and rated these pre writing exams using the Test of Written English Scoring Guide-TWE-base scoring criteria for TOFEL writing examination (Educational Testing Services, 1996, p.23). TWE scoring guide, holistic scoring procedure is widely used to evaluate writing from TOEFL examination. A great deal of research was conducted by the Educational Testing Service into the development and validation of a measure to assess communicative competence in writing (Hamp & Lyons, 1991). TWE scoring guide, using a holistic approach was specifically designed to evaluate writing by academically-oriented ESL and EFL. The TWE scoring guide has six levels and includes syntactic and rhetorical criteria. In addition, TWE is a measurement of overall writing quality; therefore, it is appropriate for scoring prewriting examination of this study. Before scoring, the three raters were informed the procedures and the criteria used for rating in order that the scores were reliable. Then, the mean scores for students' writing were calculated and used for determining students' writing ability and classifying them into the successful and less successful group. The successful students' mean scores ranged from 4 to 4.5 and the less successful students with 2.5 to 3.

As for the gender of participants, there were fewer male participants than females (Males=3, Females =17). Their average age was 21 ranging from 20 to 23. All information was gathered by the Background Questionnaire. (Also see Appendix A.) Table 3.2 illustrates the grouping detail of the successful students. The abbreviation SS was used instead of the participants' names although the researcher was allowed to reveal their grades for the research purpose.

Table 3.2 Profiles of Participants in the Successful Group

No	Name	GPA	EN231 grade	EN331 grade	Pre- writing score	Proficiency level
1	Successful Student 1 (SS1)	3.65	B+	B+	4	successful
2	Successful Student 2 (SS2)	3.55	B+	B+	4	successful
3	Successful Student 3 (SS3)	3.50	B+	B	4	successful
4	Successful Student 4 (SS4)	3.35	A	B+	4	successful
5	Successful Student 5 (SS5)	3.38	B+	B+	4	successful
6	Successful Student 6 (SS6)	3.32	A	B	4.5	successful
7	Successful Student 7 (SS7)	3.39	B+	B+	4	successful
8	Successful Student 8 (SS8)	3.28	B	B+	5	successful
9	Successful Student 9 (SS9)	3.20	B+	B	4	successful
10	Successful Student 10(SS10)	3.19	B+	B	4.5	successful

Table 3.3 also illustrates the grouping detail of the less successful students.

The abbreviation LSS was used instead of the participants' names.

Table 3.3 Profiles of Participants in the Less successful Group

No	Name	GPA	EN231 grade	EN331 grade	Pre- writing score	Proficiency level
1	Less Successful Student 1	2.60	C	D+	3	Less successful
2	Less Successful Student 2	2.60	C	C+	2.5	Less successful
3	Less Successful Student 3	2.60	C+	C+	3	Less successful
4	Less Successful Student 4	2.80	C	C+	2.5	Less successful
5	Less Successful Student 5	2.50	C+	C+	3	Less successful
6	Less Successful Student 6	2.90	C+	C+	3	Less successful
7	Less Successful Student 7	2.40	C	C	3	Less successful
8	Less Successful Student 8	2.93	C+	C	3	Less successful
9	Less Successful Student 9	2.92	C	C+	3	Less successful
10	Less Successful Student 10	3.02	C+	C+	3	Less successful

All 36 students were informed that they were selected to take part in the research project, but the individuals were not knowingly participating and have not

consented to participate. That is, the researcher divided students regarding the level of proficiency confidentially for the study. All students from the initial groups were taught by the researcher and did the same writing class activities.

3.2 Sampling Design and Location of Research

Since SWU English majors are naturally formed classes, the subjects were selected by a non-random sampling from all third year English majors who were taking the EN 431-Composition 2 course in the second semester of 2004 academic year. That is, the purposeful sampling in which the participants were selected by the researcher from the initial groups of third-year English majors enrolling in the EN 431. The purposeful sampling is possible in a quasi-experimental design with a single group interrupted-time series design. In addition, in the purposeful sampling design, the subjects were selected by the researcher on the basis of his/her own estimate of their typicality. It usually assesses high participation rate, and generalization is possible to similar subjects (Frankel & Wallen, 1991).

3.4 Data Collection

3.4 1 The Data and Variables

The data of this study were metacognitive strategies successful and less successful students used in revising the first draft of an argumentative essay before and after metacognitive strategy training in revision and ratings for the first and second draft of less successful students' argumentative essay. The data were of two kinds: numerical and descriptive data.

The independent variable was metacognitive strategy training in revision, and the dependent variable was the quality of students' writing for an argumentative essay.

3.4.2 Instruments for Data Collection

For this study, there were two main instruments used in collecting data.

3.4.2.1 Metacognitive Strategies Questionnaire (MSQ)

The purpose of MSQ

In this study, metacognitive strategies were defined as actions or behaviors students took to plan for revising, to monitor their own comprehension and production, and to evaluate the extent to which a revision goal has been reached (O'Malley & Chamot, 1990 & Chamot et.al., 1999). This implied that the MSQ (Pre MSQ) was aimed to obtain the information about students perception of metacognitive strategies they employed in revising the first draft of an argumentative essay before metacognitive strategy training in revision as well as the actual strategies they used. The post MSQ then focused on the actual metacognitive strategies students used to revise their first draft after training. The revision task involved four revision sub-tasks including revising for the clear ideas of rhetorical situation, revising for the better content and ideas and rhetorical pattern of an argumentative essay of the whole essay, revising for logical paragraph development (the essay's overall organization), and the revising for the connected ideas in each part of the essay and the whole essay (unity and coherence unit).

The data obtained from the questionnaire were numerical ones. Since the most metacognitive strategies are invisible, the self-report questionnaire can draw

the information directly from students themselves to identify their metacognitive strategy use in an introspective way (O'Malley & Chamot, 1990). In addition, the reason for researcher's appropriate use of the self-report questionnaire is that it is often difficult for researchers to use standard observational technique. Therefore, much of the research depends on learners' willingness and ability to describe their internal behaviors or actions (Oxford & Burry-Stock, 1995). The questionnaire can identify "typical" strategies used by an individual and be combined into group results (Oxford, 1996). For this study, the MSQ (Pre and Post MSQ) were designed based on metacognitive strategy components in planning, monitoring or regulating and evaluating (Brown, 1984; O'Malley & Chamot, 1985, 1990; Wenden, 1987, 1999), and the questionnaire items were constructed based on the empirical evidence used in the previous research (Zimmerman & Bandura, 1994; Wallace, 1994; Schraw & Dennisson, 1994; O'neil & Abedi, 1996).

The Format and Description of the MSQ

There were two versions of the questionnaire: the Pre MSQ and the Post MSQ. The Pre MSQ consisted of the additional background questionnaire and Metacognitive Strategies Questionnaire, but the Post MSQ had only the part of the MSQ. The background questionnaire was aimed to obtain the subjects' background information. The background questionnaire was divided into two parts: Part 1 asked about personal information such as gender, age, and year in the university as well as email address and the phone number. Part 2 of the background questionnaire asked for language background including students' grades in the past coursework in writing,

formal schooling in a language other than English and self-assessed proficiency in writing. Appendix A illustrates the Background Questionnaire used in this study.

The Pre and Post MSQ were initially divided into three sections asking about metacognitive strategies students used to plan, monitor, and evaluate in revision before, during and after revising the first draft of an argumentative essay. Pre MSQ was developed to determine how students self-perceived metacognitive strategies before metacognitive strategy training in revision, and Post MSQ was used to obtain the information about what metacognitive strategies they used in revising the first draft. The categories with the detailed description for both questionnaire were adapted from O'Malley and Chamot (1990).

The categories in section A in the main constructs for planning to revise involved Advance Organizer, Organizational Planning, Selective Attention and Self-Management. In section B, the questionnaire was designed to obtain information about metacognitive strategy use in monitoring during revising the first draft consisting of Monitoring Comprehension and Monitoring Production. After revising the first draft, the questionnaire items in section C asked students to evaluate their first draft using Self- Assessment, Self-Evaluating and Self-Reflection.

These built-in categories of metacognitive strategies were adapted to the revising stages, particularly, the first draft revision in which students did four revision sub-tasks including revising for the purpose, the audience, the thesis and the problematic situation, revising for the rhetorical pattern of an argumentative essay such as the claim, reasons and supporting evidence, revising for the paragraph development such as the main idea or topic sentences and the supporting details, and revising for the unity and coherence of each body paragraph and the whole essay.

Therefore, the MSQ measured three main categories of metacognitive strategies, namely planning, monitoring and evaluating and nine sub-categories students employed in doing four revision sub-tasks. A brief description of each category of metacognitive strategies was presented in Table 3.4. Also, see Pre and Post MSQ in Appendix B and C.

Table 3.4 Description of Metacognitive Strategies in Revision and Number of Items Used in the MSQ

Metacognitive strategies	Description of each category of metacognitive strategies in revision	Number of items in the MSQ
Planning	Advance organizer	4 items
Advance organizer	<ul style="list-style-type: none"> • Activating/building background knowledge about revision strategies 	Item 1
Organizational Planning	<ul style="list-style-type: none"> • Identifying/analyzing the nature of revision task including the four revision sub-tasks to consider option. 	Item 2-3
Selective Attention	<ul style="list-style-type: none"> • Reflecting on existing prior knowledge in connection with a specific revision task. 	Item 4
Self-Management	Organizational Planning	5 items
	<ul style="list-style-type: none"> • Planning the organization of the first draft revision/setting the goal and purposes to revise for each revision task. 	Item 5
	<ul style="list-style-type: none"> • Planning to achieve the revision task by using effective strategies. 	Item 6
	<ul style="list-style-type: none"> • Planning in advance regarding to the prior knowledge or strategies. 	Item 7
	<ul style="list-style-type: none"> • Matching their own problems with the revision strategies 	Item 8
	<ul style="list-style-type: none"> • Asking themselves about what they are going to do to achieve the revision task. 	Item 9

Metacognitive strategies	Description of each category of metacognitive strategies in revision	Number of items in the MSQ
Monitoring Comprehension monitoring Production Monitoring	Selective Attention Focusing on a special aspect of the learning task (the first draft revision) <ul style="list-style-type: none"> • Determining a specific task by prioritizing the tasks need to do to complete the first draft. • Selecting the appropriate revising strategies for the specific revision tasks. 	4 items Item 10 Item 11 Item 12-13
	Self-Management <ul style="list-style-type: none"> • Knowing /planning when, where and how to use revising strategies and arrange the appropriate conditions for revision. • Recognizing one or more specific revising strategies relevant to revision task. • Tailor the revising strategies selected to constraint time and energy. • Take time to think about their own revision task. 	7 items Item 14-15 Item 16 Item 17-18 Item 19-20
	Monitoring Comprehension <ul style="list-style-type: none"> • Knowing how to complete the selected strategies to improve the first draft to the second draft (e.g. using enough background information to indicate the issue, the audience and the problematic situation in the introductory paragraphs). • Checking whether the learners are making sense in their writing. • Checking the learners' own abilities and difficulties in each revision task (e.g. articulating specific revising strategies for approaching the revision task). • Matching the revising strategies to the revision task. • Making judgments when it is necessary. 	7 items Item 21 Item 22 Item 23-25 Item 26 Item 27

Metacognitive strategies	Description of each category of metacognitive strategies in revision	Number of items in the MSQ
	Monitoring Production	8 items
	<ul style="list-style-type: none"> Monitoring the effectiveness of the selected revising strategies following the revision tasks. 	Item 28-29
	<ul style="list-style-type: none"> Using the selected revising strategies, the prior knowledge such as the writing strategies, the genre pattern of an argumentative text, linguistic knowledge to improve the first draft effectively by expressing the tasks for improving the first draft 	Item 30-33
	<ul style="list-style-type: none"> Thinking clearly about inaccuracies when failure occurs during the revision. 	Item 34-35
Evaluating	Self-Assessment	6 items
Self-assessment	<ul style="list-style-type: none"> Judging if they have met the requirements for the revision goal. 	item 36
Self-evaluation	<ul style="list-style-type: none"> Making decision about the outcome (the complete revision task) 	item 37
Self-reflection	<ul style="list-style-type: none"> Making an accurate assessment of why they succeed/achieve the goal. 	item 38
	Self-Evaluation	5 items
	<ul style="list-style-type: none"> Evaluating outcome (the complete revision sub-task) and the second draft of an learning task (the first draft revision) essay) based on criteria to judge the quality of his/her own paper in a personalized way by asking themselves about the components making a good learning task (the first draft revision)essay. 	Item 39-43
	Self-Reflection	2 items
	<ul style="list-style-type: none"> Reflecting their own problems whether they need to go back through the revision sub-tasks b considering a clear assessment for a good learning task (the first draft revision)essay. 	Item 44
	<ul style="list-style-type: none"> Viewing themselves as a continual learners and thinkers. 	Item 45

The Construct of the MSQ

The construct of MSQ was operationalized as written statements, of which presented as assertion about the use of metacognitive strategies in planning, monitoring, and evaluating the first draft revision of an argumentative essay. The format of the MSQ was taken from Oxford's SILL as was the five-point Likert scale ranging from 1= never true of me, 2=usually not true of me, 3=somewhat true of me, 4=usually true of me, and 5= always true of me. The last draft of pre-MSQ and post-MSQ items consisted of 45 items. The items were sequenced following the metacognitive strategy components and the revision stages of the writing process (Flower & Hayes, 1987), so as to provide a clear frame of reference to the respondents. The MSQs were compiled in English, and not students' native language as the participants were all English majors who have potential to clearly understand the language used in the MSQs.

The Procedure of the MSQ Construction

The steps for the construction of the MSQ were as follows:

First, the blueprint for the MSQ was developed using metacognitive strategy scheme by O'Malley and Chamot (1990) as a guide, so the content of the questionnaire reflected specific metacognitive strategies in revision that were measured within each of their sub-categories. To determine content coverage for each category of metacognitive strategies and revision task in the MSQ, weight was established based on their importance, and the quantities were transferred into percents.

Then, in the first time of questionnaire construction process, with a

large list of possible items, the researcher checked the relevant content domain construction with a detailed description of metacognitive strategies and reduced the number of statements to 58 items. A summary of the task analysis for MSQ was presented in Table 3.5. (Also see Table 3.4 & Table 3.5 for full detailed description and the content)

Table 3.5 A Task Analysis Blueprint for MSQ

Sub-categories of metacognitive strategies	Revision sub-tasks for the Pre and Post MSQ	Number of items and numeration	Percent
Section A:	Revising at the global level	20 items	44.45 %
Planning to revise			
Advance Organizer	Revising for audience expectation, purpose, thesis	1-4	8.89 %
Organizational Planning	Revising for the whole essay level, organization, unity, coherence	5-9	11.11 %
Selective Attention	Revising for the thesis Revising for rhetorical pattern of an argumentative essay	10-13	8.89 %
Self-Management		14-20	15.56 %
Section B:		15 items	33.33 %
Monitoring during revision			
Monitoring Comprehension		21-29	20 %
Monitoring Production		30-35	13.33
Section C:		10 items	22.22 %
Evaluating after revising			
Self-Assessment		36-40	11.11 %
Self-Evaluation		41-43	6.67 %
Self-Reflection		44-45	4.44 %
		Total = 45 items	Total = 100%

Establishing the Validity and Reliability of the MSQ

The validity and reliability of the data collection instruments are very important to their overall measurement qualities. Since the questionnaire depends on the readability of the statements and the actual wordings used in the items, piloting the questionnaire is a very important step in the questionnaire construction (Dornyei, 2003) to obtain information about reliability and validity of the instrument. That is, the questionnaire should be determined by professional judgment. The researcher then combined more than one method of validation and reliability check for the MSQ, the main instrument for collecting data.

The validation methods for the Metacognitive Strategies Questionnaire involved the content validity, response validity and construct validity. For reliability, Cronbach alpha reliability coefficient, a measure of internal consistency was also chosen for the main reliability check. The researcher had the trial for the pilot study in the various stages as the following:

The Content Validity Check

Item-Objective Congruence Index (IOC)

To check whether the MSQ measured what it has been designed for, the draft of the MSQ (58 items), the description of metacognitive strategies in revision with metacognitive strategies scheme (O'Malley & Chamot, 1990), the task analysis blueprint and the evaluation form for content validity check were given to five experts. These experts are all researchers in the field of metacognitive strategies as well as instructors of academic writing in English, both native and non-native speakers of English. The experts looked at the relevance of each item to the purpose

of the questionnaire and the appropriateness of the content areas, and then checked the evaluation form. The evaluation form used a 3 point scales (1 = relevant, 0 = uncertain, -1 = irrelevant). That is, the experts were asked to use Item Objective Congruence Index (IOC) as a validation method for the relevancy of the content and the objective of Metacognitive Strategies Questionnaire (MSQ). Finally, the values from IOC were calculated using the IOC formula (Tiraganun, 2000, p.129). The result revealed the IOC index for each item. The acceptable value is ranging from 0.5 to 0.9.

The result of the item analysis from the IOC (i.e. calculation of item total correlations) revealed that the values for 13 items ranged from -0.2 to -0.40 referring to unacceptable value and irrelevance between the content in the questionnaire items and the purposes of the questionnaire. Therefore, 13 items that yielded item-total correlation below .40 were discarded resulting in 45 items preliminary version of Metacognitive Strategy Questionnaire. The item-total correlation was obtained by correlating each item under evaluation with the sum of the entire scale item (Cheng, 2004, p.319) revealed the IOC index for each item. The researcher deleted 13 items with irrelevant content to the objectives of the MSQ; therefore, the pool of the items was reduced from 58 to 45 items in a reliable manner.

Response Validity by the Experts

The MSQ was piloted with five experts, who are English instructors. These experts responded to each item of the reduced version of MSQ (45 items), then completed the response sheet. There were two parts of the response sheet. Part one, the Evaluation Form for MSQ consisted of the five-point rating scale for 20 items of statement asking the experts' opinion about the MSQ. The experts rated for the

overall impression, the content, the layout, the instructions, the appropriateness of number of items, length of time, language use, the relevance of the questionnaire to the students' background knowledge. The five-point rating scales include the following scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. The acceptable value for the appropriateness of the MSQ ranges from 3.50 – 5.00.

Part two of the response sheet was the open-ended questions asking for additional comments and opinion for improvements of the MSQ based on the aspects mentioned in the response sheet. As a result of the content validity check by the experts in the response sheet, some changes were implemented, of which the most important ones were unrelated statements addressing a number of ambiguity and impreciseness, and wording problems such as the repeated words.

The findings from the Evaluation Form (Part 1 of the response sheet) revealed that the experts were in agreement about the appropriateness of the MSQ for all the important points since they rated the items in the high level ranging from 3.6 to 4.2. More importantly, the experts were agreed on the appropriateness of the overall and layout of the MSQ, the content areas for the level of the students, the number of items, the directions, the language use and the level of difficulties and the complexities for the statements in each item. The experts also agreed that there was no irrelevant content about metacognitive strategies in revision. In contrast, they thought that the MSQ was relevant to the students' background knowledge. In addition, the experts agreed that there were no too difficult items, the questions with too many theoretical wordings or items that made the respondents uncomfortable to answer or biased items.

All in all, the responses from the experts evidenced that the experts were in agreements about the major themes of the metacognitive strategies in revision included in the MSQ. It could then be concluded that according to the experts' opinions, the MSQ, both Pre MSQ and Post MSQ was valid for using as an instrument to measure the students' metacognitive strategy use.

The Initial Piloting for Content Validity

The MSQ was also piloted with four respondents, third-year English majors who were not the participants of the main study, using think-aloud technique or response (Petri & Czarl, 2003). The respondents were asked to read all the items aloud and verbalized their thoughts while selecting a response for each item of the questionnaire. These respondents also provided the feedback and reactions and asked the questions for unclear and irrelevant statements. The researcher answered regarding the meaning of the items and asked students additional questions if they needed more information to clarify the unclear point, and then made notes for the responses and comments.

As a result of the content validity check by responses from four respondents, the researcher made some changes for the theoretical wordings such as rhetorical situation, assessment, and task analysis by using easy words and explanations. Also, some complicated and unclear items were revised while any irrelevant content in some items was deleted. The revised items of the MSQ then could possibly measure what it purposed to elicit.

Pilot Test with the Students

After the initial piloting, the revised 45 items of MSQ were tried out with 30 students, third-year English majors who participated in the five-week preliminary study. The Pre MSQ was administered the week before the Metacognitive Strategy Model of Revision (before Week 1 of the preliminary study), and the Post MSQ was administered after Week 5 of the preliminary study. Then, the value of the individual items of the Pre MSQ and Post MSQ were used for reliability check.

Reliability Check for the MSQ

To determine the internal consistency of the 45 items of the Pre MSQ and Post MSQ, Cronbach's coefficient α , the most appropriate reliability index was calculated, yielding a reliability estimate of .87 for the Pre MSQ and .97 for the Post MSQ. In addition, a series of α coefficients for the Pre MSQ and Post MSQ were computed with one item being deleted at a time. All of the resulting coefficients for the Pre MSQ centered around .86 and .96 for the Post MSQ, indicating that no improvement in the overall α could be obtained by deleting any item from the Pre MSQ and Post MSQ. The acceptable reliabilities for ESL/EFL SILL (Strategy Inventory for Language Learning) ranged from .87 to .96 which was very high (Oxford & Burry-Stock, 1995) because SILL was employed with a large population. The results showed that the MSQs as a whole were a reliable instrument of high internal consistency and respectable temporal stability.

3.4.2.2 The Semi-Structured Interview

The interview was semi-structured. This instrument was proved to be

effective in the qualitative part of this study. It helped the researcher retrieve information from the respondents' existing answers. In addition, it was more substantive, aiming to understanding the meaning of respondents' experiences (Warren, 2001). In this study, the interview was used with each participant who completed the pre and post MSQ to gain further insights into students' metacognitive strategy use in the first draft revision of an argumentative essay. In this case, this follow-up interview offered the retrospective account of metacognitive strategies the students employed (Victori, 1999; Yeon, 2002). Also, the interview was used to triangulate the individuals' self-report from the MSQ because in-depth interviewing provided "deep" information and knowledge-usually deeper information and knowledge than other instruments such as the surveys, the questionnaire, informal interviewing or focus group (Johnson, 2002).

The interview questions were adapted from Chamot and Kupper (1980); Raphael, Englert and Kirchner (1989), Priorkowski and Schurer (2001), Porte (1997), Victori (1999) and Lee (2002). The interview questions were similar to some of those asked in the self-report MSQ. Some items of the MSQ were chosen as interview questions. The interview questions were also divided into three sections regarding metacognitive strategy components and categories by O'Malley and Chamot (1990) and the revision stages of writing (Flower & Hayes, 1987) including planning before revising, monitoring during revision and evaluating after revising.

The interview questions were carefully checked by five experts, who were asked to check and respond to the MSQ, then revised in accordance with the experts' recommendation from the Expert Response Sheet for the Interview Questions, provided by the researcher. This can be sure that the interview questions would elicit

the actual use of metacognitive strategies in revision. The questions asked in the response sheet were such as “Were any of the questions unclear and ambiguous?, Which question were the most difficult?, Did the questions yield the desired information (metacognitive strategy use in the first draft revision)?, Which questions had too many theoretical wordings?” etc. The response sheet also has open-ended questions asked for improvements of the interview questions.

The results from the expert response sheets revealed that there were two unclear questions and two difficult questions. The experts suggested that two difficult questions should be discarded, so the complicated questions with unclear or ambiguous to the respondents then were deleted. In addition, the expert discussed that the questions were appropriate to the level of respondents and metacognitive strategy process and sub-processes. Since the post interview questions were constructed as paralleled questions to the pre-interview, the researcher used the same procedure of revising to change and adapt the post interview questions as in the pre-interview.

The interview questions, then piloted with three third-year English majors who were from the target population, not participating in the experiment. In the pilot study, the researcher conducted the interview in Thai to make sure that students were not interfered with the linguistic problems when answering the questions. In the pre-interview session, students were asked to imagine that they were going to revise the first draft of an argumentative essay. For example, the students were asked to explain “What will you do before you start to revise, explain it? How does this help you to revise?” The pre and post interview questions were illustrated in Appendix D.

3.5 Metacognitive Strategy Training in the First Draft Revision

3.5.1 The Writing Lesson for EN 431-Composition 2

The EN 431-Composition 2 was a 15-week composition course for English major students who had completed EN 321 (Basic writing) and EN 331 (Composition 1), the prerequisite courses. This course builds on the writing principles and processes focusing on writing different types of essay such as narration, description, cause/effect and arguments appropriate for an academic and general audience. The purpose of this course is to develop effective writing skill with the emphasis critical thinking and analysis. Developing the writing skills based on the writing process involved several stages: pre-writing/pre-planning, drafting/writing, revising, proofreading/editing and publishing.

For the purpose of this study, more emphasis was placed on the first draft revision stages of an argumentative essay. In order to fulfill the requirements of the syllabus and course assessments for EN 431, the experimental study had to be conducted within a 5-week period, from Week 8 to Week 12 of the class schedule.

3.5.2 The Instructional Plan for Metacognitive Strategy Training

in Revision (MSTR)

The instructional model for MSTR involved the writing lesson during Week 8-12 emphasizing on revising the first draft of an argumentative essay. This included four revision sub-tasks in which the researcher integrated metacognitive strategies in planning, monitoring and evaluating in the first draft revision of an argumentative essay.

The procedures for the construction of the MSTR model of this study were as follows:

- a) The researcher constructed the instructional model based on the teaching scheme, the main components of metacognitive strategies, and revision stages in Table 3.6 by dividing the revision tasks into four revision sub-task and allocating time for 5 weeks for training these revision tasks.
- b) The instructional plan consisted of four units of the lessons for developing awareness of metacognitive strategy use in the first draft revision of an argumentative essay. Each lesson was designed and organized based on Chamot, Kupper, Barnhardt, El-Dinary and Robbin's instructional framework (1999) beginning with a description title for each lesson, the focus of metacognitive strategies, objective for each lesson and strategy objective, the rationale for each sub-category of metacognitive strategies, materials for the lesson either student information sheet, the worksheet, and four steps of teaching procedures for developing metacognitive strategy awareness in the first draft revision: preparation, presentation, practice, and evaluation.
- c) The researcher designed the materials, parts of the data collected through these materials were used in the qualitative part of the study.

The teaching scheme and the main components in the instructional model for each units was illustrated in Table 3.6.

Table 3.6 Teaching scheme and the main components in MSTR implementation

Unit	Purpose	Type of revision tasks	Metacognitive strategies used in the first draft revision
1 (Week 8)	<p>1. To develop metacognitive skills in planning (before doing the revision sub-task 1).</p> <p>2. To develop self-monitoring skills by articulating effective revising strategies for Achieving the revision goal.</p> <p>3. To develop self-evaluating skills through the measurement of students' success towards the goal of the revision sub-task</p>	<p><i>Revising for the clear ideas of rhetorical situation</i></p> <ul style="list-style-type: none"> • Revise for the audience expectations, purpose, and the problematic situation. - thesis, thesis statement - introduction (background information) - the overall organization - conclusion <p>(At the whole essay level)</p>	<p><i>Planning:</i> Planning to revise (Before revising)</p> <ul style="list-style-type: none"> • Determining the nature of revision task by setting the goal and purpose of the first draft revision. • Planning for each revision task. • determining their own problems using self-questioning and connecting them with what they are going to achieve for the revision tasks. • Focusing on a specific task to complete the first draft revision of an argumentative essay. • Recognizing one or more specific revising strategies relevant to the revision task and selecting the appropriate revision strategies for the specific purpose of revision task by describing effective or ineffective ones for completing each revision task.
2 (Week 9-10)	<p>1. To develop metacognitive skills before revising for doing the revision sub-task 2.</p> <p>2. To develop self-monitoring skill during revising by having students indicate the selected metacognitive skills revising strategies for the better content and ideas and rhetorical pattern of an argumentative essay.</p> <p>3. To encourage self-evaluation skill after completing the revision sub-task 2 through the measurement of</p>	<p><i>Revising for the better content and ideas and rhetorical pattern of an argumentative essay.</i> (At the whole essay level)</p> <ul style="list-style-type: none"> • Focusing on the important features of an argumentative essay at the whole essay: <ul style="list-style-type: none"> - introductory statement, background information, thesis statement. - reasons for arguments in the 	<p><i>Monitoring</i> Self-monitoring or reviewing their attention by checking their understanding, accuracy and the appropriateness of the overall revision process. (During revising)</p>

Unit	Purpose	Type of revision tasks	Metacognitive strategies used in the first draft revision
3 (Week 11)	<p>students' success toward the goal of revision.</p> <ol style="list-style-type: none"> To develop metacognitive skills in planning to do the revision sub-task 3 - revising for the logical paragraph development. To develop self-monitoring skill during revising by indicating the selected revising strategies for approaching the revision sub-task 3. To encourage students' self-evaluation skill after revision by considering the outcome and judging the quality of their revision task as they complete revising. 	<p>body (Pro and con paragraphs) and the concluding paragraph.</p> <p>Revising for the logical development (The essay's overall organization).</p> <ul style="list-style-type: none"> Revising the introductory paragraph – thesis statement, transitional sentence that implied the organization pattern of the body paragraph. Revising the topic sentence and the concluding sentence main of each paragraph Revising the concluding paragraph. 	<ul style="list-style-type: none"> Checking one's own abilities and difficulties in each revision task by articulating specific revising strategies for approaching the revision task. Using the selected revising strategies, prior knowledge such as writing strategies, the genre pattern of an argumentative text to improve the first draft effectively by expressing the tasks for improving the first draft to the second draft. <p>Evaluating</p> <p>Self-evaluating the outcome of the revision tasks. (After revising)</p> <ul style="list-style-type: none"> Considering the outcome (the complete revision task or the second draft) based on a clear description as criteria to judge the quality of his/her own paper in a personalized way by using the self-evaluating skills. Reflecting one's own problems whether he/she needs to go back through the revision task by providing a clear assessment such as the components of a good argumentative essay.
4 (Week 12)	<ol style="list-style-type: none"> To develop metacognitive skills in planning before revising for revision sub-task 4-the connected ideas in each part of the essay and the whole essay. To develop self-monitoring skills during revising by having students indicate the selected strategies for revising for revision 	<p>Revising for the connected ideas in each part of the essay and the whole essay. (Coherence and unity)</p> <ul style="list-style-type: none"> Revising the topic sentence, supporting 	

Unit	Purpose	Type of revision tasks	Metacognitive strategies used in the first draft revision
	sub-task 4. 3. To encourage self-evaluation skill after revising by measuring the progress towards the goal of revising	details, examples, and the concluding sentence of each paragraph to make a paragraph coherent and unified. <ul style="list-style-type: none"> Revising the transitional words in each paragraph. 	

3.5.3 The Teaching Materials

The list of teaching materials used to enhance metacognitive strategies in the metacognitive strategy training in the first draft revision was as follows:

3.5.3.1. Student Information Sheet (SIS 1-5)

Student information sheet 1-5 concerning five topics of the first draft revision, aimed at building background for students about how to revise their first draft successfully. In addition, SIS 1-5 provided the steps for four revision sub-tasks with the revising strategies and clear examples of revising the first draft to the second draft step by step. The topics for SIS 1-5 were as follows:

- SIS 1 Revising the First Draft of an Argumentative Essay: An Overview
- SIS 2 Revision Sub-Task 1 - Revising for the Clear Ideas of Rhetorical Situation

SIS 3 Revision Sub-Task 2 - Revising for the Better Content and Ideas and Rhetorical Pattern of an Argumentative Essay

SIS 4 Revision Sub-Task 3 - Revising for the Logical Paragraph Development

SIS 5 Revision Sub-Task 4 Revising for the Connected Ideas in Each Part of the Essay and the Whole Essay (Unity and coherence)

3.5.3.2. Self-Question and Answer Worksheet

Self-Question and Answer Worksheet was designed based on the description of metacognitive strategies in planning aiming at developing the planning strategies through self-questioning, self-directing and self-analysis skill (Manning & Payne, 1996)

There were four sets of Self-Question and Answer Worksheet beginning with Self-Question and Answer Worksheet 1 to 4. Each worksheet consisted of the guided questions following the specific tasks students were supposed to do to achieve their revision sub-tasks. The questions were used to guide the students to determine their own problems and find the solution to those problems in their first draft after receiving the feedback from the instructor.

3.5.3.3. Plan Revision Think Sheet

Plan Revision Think Sheet was designed to help students consider revision strategies related to each revision sub task before revising the first draft. This instrument, therefore was used to develop planning strategies after students had determined their own problems in their first draft. For example, they set the

personal revision goal for specific revision tasks, selected the effective revising strategies and gave reasons for those selected revising strategies. “Getting students involved in learning by having them set the language goals for themselves is a crucial step toward learner-centeredness. That is, having students set personal language goals increases their involvement by increasing the important part/plan which lead them to be successful in the learning process.” (Chamot et al., 1999, p.77),

In addition, students described how to use their revising strategies and planned to evaluate toward their progress and outcome and altered their revision plan when the personal revision goal was not achieved. To revise for the clear ideas of rhetorical situation, this Plan Revision Think Sheet was used to help students identify the audience and purpose, retrieve ideas from prior knowledge (schema), and develop a plan for revising the first draft so that it clear focus that met the audience expectations.

In this study, Plan Revision Think Sheet was used in the instructional stage. Students completed Plan Revision Think Sheet for each revision sub-task. The Plan Revision Think Sheet was adapted from Englert and Raphael (1989). Scardamalia and Bereiter (1986) indicated that think sheet served as a form of procedural facilitating, providing students with help in carrying more sophisticated composing strategies while directing their attention to specific cognitive activities.

Plan revision think sheet consisted of the instruction and the questions to prompt students to plan for each revision sub-task. The example of the questions and the guided topic in plan revision think sheet (for revision sub-task 1) included:

- What are your problems? (Identify the problems)

- Suggestion from the teacher's feedback
 - Problems from self-analysis (Self-Question and Answer Worksheet)
- What is your revision goal? (Setting goal)
 - What do you plan to do to make your first draft more interesting?
 - What are the important aspects of revising for the clear ideas of rhetorical situation? (Activating prior knowledge)
 - How can you revise for the clear ideas of rhetorical situation? (Selecting the appropriate revising strategies)
 - How can you alter your plan of revision if you cannot achieve the goal of revision? (Evaluating the progress)

The sets of prompts in Plan Revision Think-Sheet focused students' attention on their first draft and its potential interest to the audience. The data from revision think-sheet served as self-questioning to eternalize the control progress for students. In this way, "think sheet" fostered metacognition by making cognitive operations more overt and provided label for revising strategies to make tacit knowledge more accessible (Englert & Raphael, 1989, p. 132). The data from revision think-sheet revealed students' metacognitive awareness of revising strategies.

3.5.3.4. Self-Revision Think Sheet

Self-Revision Think Sheet was used for revising each revision sub-task. Self-Revision Think Sheet consisted of the questions or revision guides for each specific task and the blank provided for students to change, adapt or add information to improve these unclear parts of the first draft. For example, to improve

the thesis statement, the students responded to the following questions, followed the steps, and wrote a revised version of thesis statement.

- WHAT?** What is your topic? (related to the thesis statement)
- What is the issue related to the topic?
- What is the thesis you are arguing about the thesis?
- What type of claim are you making?
- What do the important phrases or terms in your thesis mean?
(Define the topic or issue)
- WHY?** Why is this topic important to you and the reader?
- What is the relationship between _____ and _____?
(This depends on the topic) or what is the
impact/effect/problem?
- HOW?** How do you explain the relationship between the issue you
address and your own ideas?
- SO WHAT?** What can be done to change the situation?
- What can be done to solve the problem?
- What are the reasons for changing the situation?
- What can be done to improve the situation?
(The answers or reasons for these questions become the reasons
for your argument).

The questions and revision guides in Self-Revision Think Sheet were different for each revision sub-task.

3.5.3.5 Self-Evaluation Checklist

Self-Evaluation Checklist was used after students had finished each revision sub-task. Self-Evaluation Checklist consisted of the criteria for each component of revision task and questions asking about what students did in their revision to make changes in the first draft, whether they followed the plan of revision task, the problems they faced when revising each specific revision task, the extent to which they incorporated metacognitive strategies in revision, and how they self-evaluated the completeness of their own revision.

Self-evaluating and self-assessment abilities are clearly related to setting personal goals. By self-evaluating, students evaluated their own progress, strengths and weaknesses. Similarly, self-assessment entails reflecting on one's prior experiences and knowledge as well as the progress that enables them to get to current status while doing the revision task (Chamot, 1990). As with the personal revision goal through the Planning Revision Think Sheet and self-evaluating through Self-Evaluation Checklist, students can increase motivation and involvement in learning.

Student writers must be able to evaluate whether what they are doing is effective. Since poor learners do not evaluate the success or failure of strategies use or the outcome of the learning task (Anderson, 2002), increasing students' evaluating skills by using Self-Evaluation Checklist therefore helps students learn to assess their revision task using the criteria provided.

3.5.3.6. A Guided Journal

A journal is a kind of diary written to reflect the learner's thoughts around a variety of topics. Students' journal entries could provide the

researchers with rich data on how learners used the strategies in solving problems in the learning process. Also, data from journal entries could allow researchers to understand learner's improvement in their strategies use overtime (Nunan, 1996; Young, 2001). Journals could be used as introspective tools (Myers, 2001).

Written introspection through journals keeping provided the information for the learners' consciousness of their own learning process. Further, this tool helps raising awareness of effective uses of metacognitive strategies (Matsumoto, 1996). For example, students' reflection from journal writing called "a Jamesian model of the stream of thought," in Myer's study (2001) found an increased self-monitoring of writing skills which led to these students to increase insights into the strengths and weaknesses as writers. More importantly, journal writing reveals the learners own learning strategies and provided opportunities for the development of their own individual strategies. In this present study, journal entries revealed the students reflection on metacognitive knowledge SWU third-year English majors experienced in metacognitive strategy training in revision during the five weeks of instruction.

In this study the guided journal asked students to reflect on their cognitive strategies learned in the class, and revising strategies used to revise for a specific revision task. Also, the students described their strengths or weaknesses, difficulties when doing the assignments and the reasons for accomplishment and failure weekly. Students' journals therefore are metacognitive reflections used to assess the effective of strategies or procedures students used, the specific plans for making adjustments to improve effectiveness, and the strategies that worked or did not work.

3.5.4 Teaching Procedure

The instruction for a regular composition course lasted two hours and a half for each session, and it occurred once a week for 14 weeks. Students were taught to write an argumentative essay and did the revision task from the pre-writing stage, drafting/writing, revising, (Also proofreading/editing and sharing/publishing). Since this present study focused on the revision stage, students were taught to revise using Metacognitive Strategies Training Model of Revision (MSTR).

3.5.4.1 Teaching Procedure for a Regular EN 431 Class

The teaching procedure for the regular EN 431 class before using MSTR focused on the writing processes for argumentative essay writing including pre-writing, drafting, and revising. The teaching procedures were summarized as in the following.

1. **Pre-writing:** In pre-writing stage, students in both sections (totally 36 students) were taught the steps in writing a good argumentative essay beginning with
 - a) brainstorming to research for the topic
 - b) choosing the issue or topic
 - c) narrowing the topic and analyzing the issue with a strong case of persuasion or a controversial issue.
 - d) Developing a working thesis, analyzing the audience and writing a thesis statement (claim)
 - e) Making list of arguments

Next, students were taught to

- a) analyze the model of an argumentative essay
 - b) plan the structure of their own essay or structure outline
 - c) explore and generate ideas and put ideas in the structure outline
2. **Drafting/writing:** In the drafting or writing stage, students wrote their first draft based on the structure outline and lists of arguments.

All students were assigned to write journals weekly beginning in Week 2 of the regular class

3. **Revision** Once students finished the first draft, they submitted them to the writing teacher, and then they were trained to revise their first draft at the revision stage.

The revision stage consisted of three main stages of the present study: pre-instructional stage, instructional stage, and post-instructional stage.

The pre-instructional stage: Before metacognitive strategy training, students were asked to complete the Pre-MSQ, then twenty questionnaires, ten from successful students and ten from less successful students were selected for the study. Also, these twenty students were interviewed using the pre-interview questions developed by the researcher. This stage was administered in Week 8 before students were taught to revise the first draft.

Instructional stage: (during Week 8 to 12) In the instructional stage students were trained to revise their essay applying the MSTR model for 5 weeks. Before the English majors were trained, they got returned first drafts with feedback from the writing teacher, in this case, the researcher.

3.5.4.2 The Procedure for Implementing the MSTR Model

The training of metacognitive strategies in revision consisted of five-two and a half hour sessions. In the first session, the students were introduced to four revision sub-tasks and built background about an overview of the first draft revision of an argumentative essay.

The metacognitive strategy training for each sub-process/category of metacognitive strategies included the following activities:

1. Planning (Before performing the revision sub-tasks)

Planning is a crucial first strategy toward becoming a metacognitive awareness learner. The planning process of the revision task is similar to how students plan and organize when writing the first draft. Planning always starts at the beginning of the writing task; however, this process can be applied throughout the task. In revising, students need to rethink about the first draft so that they get back on the writing track. The powerful Planning strategies then revisited at the revision stage.

In this present study, students were trained to use Planning strategies for revising the first draft of an argumentative essay. To apply Planning strategies, students were taught these skills before doing the revision tasks. That is, after they have finished the first draft, and got it back from the teacher with feedback. The sub-skills for Planning strategies the students were taught to incorporate when revising the first draft involved Advance Organizer, Organizational Planning, Selective Attention and Self-Management skills. Students were trained to apply these Planning strategies for each revision sub-tasks including Revision sub-task 1- Revising for the clear ideas of rhetorical situation, Revision sub-task 2 – Revising for the better content and ideas and rhetorical pattern of an argumentative essay, Revision sub-task 3 – Revising for the logical paragraph development, and Revision sub-task 1 – Revising for the connected ideas in each part of the essay and the whole essay (unity and coherence).

Following are the descriptions of class activities using Planning

strategies to plan before starting to revise the first draft.

First, in training Advance Organizer skills, students were taught to:

- Determine or analyze the nature of the revision task (self-analysis skill). For example, they asked themselves what they needed to do to revise for the audience, purpose, the focus or thesis. To do this activity, Self-Question and Answer Worksheet were provided for students.
- Set the purpose or objectives of a specific revision task (self-directed skill).
- Set their personal revision goal depending on personal problems in the first draft (goal-setting)

Then, in planning how to accomplish each revision task, the students were trained to apply Organizational Planning skills as they needed to:

- Plan the content and sequence of the revision task
- Plan the strategies appropriate for the revision task.
- Think about the prior knowledge such as a good thesis, words, rhetorical modes, transitions, elements of a good argumentative essay, etc.
- Connect the prior knowledge such as those with the revision task.

By organizing and thinking before hand by using Selective Attention strategies, the students had certain ideas they could use in the task. After that, they focus attention on a specific task by

- Choosing/deciding to focus on specific aspects of revising strategies that help in performing the revision task. For example,

they used revision outline to help in revising for the overall organization of the argumentative essay.

In planning for a specific revision sub-task, students completed the Plan Revision Think Sheet.

In training Self-Management skills, students were taught to:

- Select the appropriate revising strategies they learned to improve the first draft. For example, they located the topic sentence at the beginning of each paragraph, and they knew that this sentence was one of the reasons that supported the thesis.
- Articulate the revising strategies for completing the revision task. For example, they used cause/effect pattern to discuss the cause and effect of the destruction of the forest which was related to the topic of the essay.

By teaching them to focus on what they learned, help students understand the conditions which also helped them perform to the best of their abilities to revise.

2. Monitoring (During revision)

After students were prepared to revise by Planning strategies, they were trained to use Monitoring strategies to measure their effectiveness while working on the revision task.

In training to use Monitoring Comprehension, the students were taught to:

- Check the understanding, accuracy and appropriateness of the overall revision process. For example, in Revision sub task 1 – to improve the thesis statement which reflects the overall of arguments, students

learned that they could respond to Wh-questions asking about the important aspects of the thesis comprising the debatable issue.

In production monitoring strategies, students were trained to:

- Select the revising strategies learned, matched them with the tasks (problems they needed to fix in the first draft). For example, they stated unclear thesis statement, they needed to go back and look at the sample thesis statement, the topic part, the reasons or the format of a good thesis, then revised their own thesis statement.
- Use selected revising strategies, prior knowledge such as writing strategies, the genre pattern of an argumentative text to improve the first draft effectively. For example, to revise for the ideas at the whole essay level, they read through the introduction and the conclusion to ensure that the essay's arguments were consistent.

To revise each revision sub-task, students used Self-Revision Think Sheet.

3. Evaluating strategies (After completing the revision tasks)

After completing part of all of the revision sub-tasks, students were trained to engage in Evaluating strategies to evaluate on how well the revision process went. Students also evaluated the outcome of the revision tasks, the complete second draft. To do this, students employed Self-Evaluating, Self-Assessment and Self-Reflection skills to evaluate, and judge the quality of their second draft and evaluate and reflect their own existing strategies.

In training Self-Assessment skills, the students

- reconsidered the second draft whether it met the requirements using the criteria provided or their own criteria. For example, they

used Self-Evaluation Checklist for each revision task, structural elements of an argumentative essay or compared the second draft with the first draft.

- used their own revision plan for judging how well they improved the first draft and checking whether they achieved their goal.(s)

In Self-Reflection skill, they were trained to:

- reflect whether they needed to go back to Revision sub-task 1 to Revision sub-task 4. (through the whole revision tasks.)
- write journals in a Guided Journal provided to reflect their own thinking processes and experience in being trained using MSTR to perform the revision tasks.
- set a personal goal for the improvements on the next task. For example, they could sign the contracts to keep promise that they could learn to make more improvements next time.

In Self-Evaluating skills, the students were trained to:

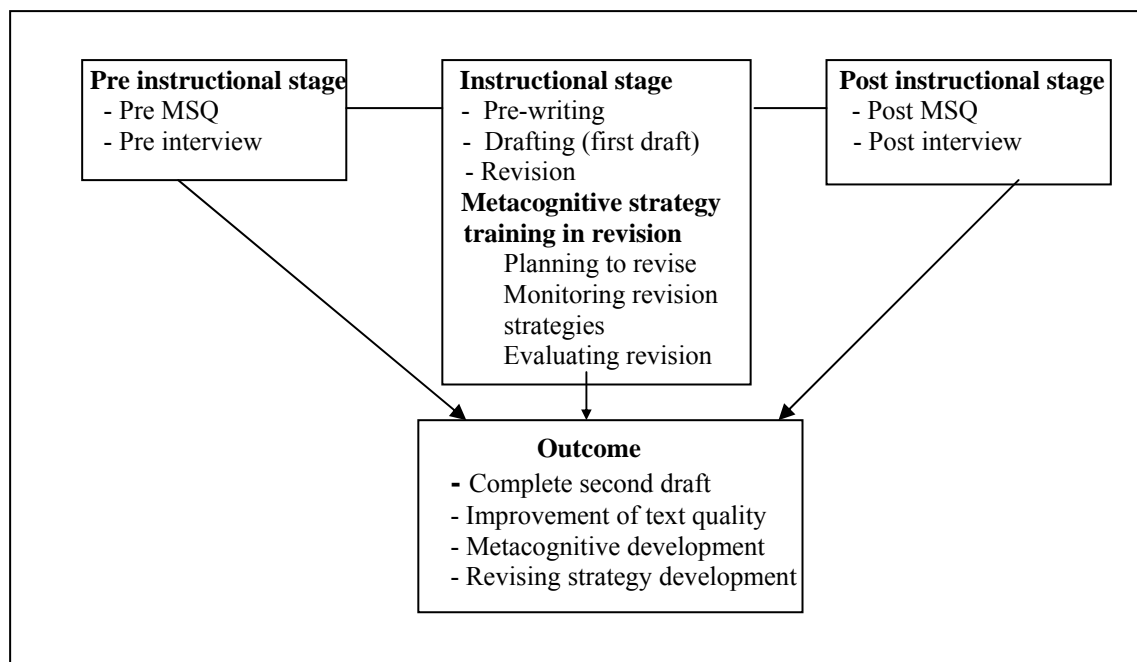
- evaluate how well they learned to revise using the steps, materials and revising strategies.
- evaluate strategies use by judging how well they applied strategies to revise the first draft and judging how effective and appropriate the selected revising strategies to each revision tasks. For example, they reread the whole essay to check whether it contained the components making a good argumentative essay.

Post instructional stage: In the post-instructional stage, after students completed the second draft, they completed the Post-MSQ

and twenty questionnaires were selected for analyzing. Twenty students, ten successful and ten less successful students were interviewed using post interview questions, paralleled to the pre-interview question.

Figure 3.2 illustrates the conceptual framework for the main study and the procedure for implementing the Metacognitive Strategy Training Model of the first Draft Revision (MSTR).

Figure 3.2 The Procedure for Metacognitive Strategy Training in the first Draft Revision



3.5.5 The Pilot Study for the Model of Metacognitive Strategy

Training in the First Draft Revision (MSTR)

The main purpose of the pilot study was to try out the model of Metacognitive Strategy Training in the first draft revision with all the teaching materials created by the researcher. Also, the data collection methods including the scoring rubrics for rating the students' first and second draft were tried out, and the research focus was then consolidated before running a full-scale experiment in the main study conducted in the second semester of 2004 academic year.

The pilot study for MSTR was conducted with 25 third year English majors taking EN431-Composition 2 course for 5 weeks in the first semester of 2004 academic year (during August to September 2004).

In this section, the pilot study is briefly discussed in terms of the trial of teaching procedures and materials used in the metacognitive strategy training in revision, and the scoring rubrics for scoring the students' first and second draft.

3.5.5.1 A Trial of the Teaching Procedure and Materials

The pilot study used one-shot design (pilot study design) in which the subjects received the treatment, metacognitive strategy training for five weeks using the model of MSTR.

The regular class met 2 hours and a half week. As in the regular class, students had to write various types of text including argumentative writing, the researcher and the instructor of the regular class, with the students' permission, collected the copies of the first draft of their argumentative essay. The researcher then read the students' first drafts, gave feedback with the separate comment sheet and

returned to them a week before training students to revise their papers. In addition, the researcher asked these students to complete the Pre MSQ and conducted the pre interview with five purposeful sampling students a week before implementing the MSTR.

The researcher taught students to revise four revision sub-tasks using the teaching scheme and the main components in MSTR implementation, the writing lesson plan, and the teaching materials created to encourage metacognitive strategies use in revision as mentioned in the instrument section (Also see Table 3.6).

In the last session, the researcher gathered the students' second drafts and administered the Post MSQ, followed by the post interview with 5 students who were interviewed before metacognitive strategy training in the first draft revision.

To test whether the training helped students improve their second drafts, the researcher and the instructor of the regular class scored students' second drafts. The findings revealed that students' improve the quality of writing in their second draft. Most of their argumentative essays included the components of a good essay except for the refutation paragraph and citations. Most students had the problems in writing the rebuttal to counter-arguments because it was very new and complicated to them and they could not cite the source effectively and correctly. This is because of the time constraints, so citation in APA and MLA styles were mentioned very briefly in class.

By integrating evaluating strategies at the end of the revision tasks, the students could evaluate how well they improved the second draft and remembered what strategies were more helpful so that they could use those strategies in the future.

3.5.5.2 A Trial of the Scoring Rubrics

This study used two types of scoring rubrics: holistic scoring and analytic scoring for rating students' first and second draft. The rubrics were developed for rating EFL Thai students' argumentative text at the college level by Udomyamokkul (2004). These two sets of drafts were scored by three independent raters, two are native speakers of English instructors who have taught English composition courses at Srinakharinwirot University and Kasetsart University, and one is a Thai instructor who has had long experience in teaching writing to EFL Thai students and research writing course for graduate students. Three raters have more than five years of experience of teaching writing to Thai EFL students.

Holistic Scoring

Holistic rubric scoring was assigned for the five different weighted criteria: 0 equals off task, 1-attempted argument, 2-inadequately developed argument, 3-fairly developed argument, 4- develop argument and 5 – elaborated arguments. In addition, the holistic raters looked at two aspects of the writing expectations: rhetorical control and language control. (See Appendix F)

Analytic Scoring

For the analytical rubric, three main aspects of arguments were employed: claim, reason, and rebuttal to counter argument, and the rubric were assigned five differently-weighted criteria for each aspect, so each receiving totally 15 points for the whole essay; 1 equals low quality of writing while the highest quality of writing equals 5 (See Appendix G).

Scoring for the Sample

To ensure that the three raters can use the scoring rubric provided to rate the students' argumentative essay reliably, and there was an agreement in the measurement among the raters, the three raters were asked to rate the students' first and second drafts collected from the preliminary study. Two sets of the first and second drafts of argumentative essays were then scored as followed:

1. Three raters were trained to rate students' first and second draft using holistic scoring rubric for argumentative writing. First, the raters learned to use scales together with the researcher by studying the high, mid and low values, trying to scale on students' first draft, and then second draft. The scale for holistic rubric was a 5-point scoring guide. Each rater rated 15 first drafts and 15 second drafts, randomly selected from the students' essays in the preliminary study, and all drafts were coded blind. The three raters discussed the results of the first drafts, and then second drafts. Because the raters scored the same paper, the summed scores ranged from 6 to 9, and the mean scores for a given essay ranged from 2 to 3 for the first drafts while the summed scores for the second drafts ranged from 8 to 13 and the mean scores were between 2.67 to 4.30.

The correlation analysis was undertaken to examine the inter-rater reliabilities before using the holistic scoring to rate students' papers in the main study. The correlation of the first draft between three sets of assigned scores of the first draft revealed that the scores by Rater 1 highly correlated with the assigned scores by Rater 2 ($r = .74$) but moderately correlated with rater 3 ($r=.49$). Another pair of assigned scores rated by Rater 2 and 3 also highly correlated ($r = .67$). As for the second drafts, the high correlation analysis demonstrated the high correlation between Rater 1

and 2 ($r = .69$) and Rater 1 and 3 ($r = .70$) while the correlation between Rater 2's scores and Rater nb3 were moderately correlated ($r = .58$)

The correlations among three rater's coring offered evidence of the effective holistic rubric and the inter-rater reliabilities so that this holistic rubric and the rater's method of scoring could be effectively used in the main study providing the reliable quantitative data for the statistical analysis procedures.

2. The raters then rated the same papers using the guide, according to Toulmin's criteria (1958), adapted from Oregon Department of Education's Student Language Scoring (2003-4) by Udomyamokkul (2004) for rating Thai students' argumentative essays. This analytic rubric includes each specific features: Claim, reason, and rebuttal to counter-argument. The scores ranged from 1 (low) to 5 (high). The summed scores of the students' first drafts in this study ranged from 5 to 9 for claim, 5 to 8 for reason and 5 to 9 for rebuttal. The mean scores of the three raters ranged from 1.6 to 3 for claim and rebuttal and 1.6 to 2.67 for reason. Inter-rater reliabilities were calculated using Pearson Product-Moment Correlation as used with the holistic scoring.

Correlation analysis revealed that the correlation for claim between Rater 1 and 2 were high ($r = .67$) and the assigned scores by Rater 1 and 3 was also highly correlated ($r = .63$). Another set of scores for claim was between Rater 1 and 3, the result revealed moderately correlation ($r = .55$). As for reason, the correlation between assigned scores rated by Rater 1 and 3 were, moderately correlated ($r = .56$) and another set of scores between Rater 2 and 3 was low correlated ($r = .38$). The scores for rebuttal were highly correlated. That is, between Rater 1 and 2 ($r = .79$) and

Rater 2 and 3 ($r = .65$). The scores for rebuttal between Rater 2 and 3 were low correlated ($r = .41$)

As for the second draft, the correlation analysis showed the high correlations of all possible pairs of raters for claim (Rater 1 and 2, $r = .67$, Rater 1 and 3, $r = .60$ and Rater 2 and 3, $r = .67$) The scores for reason were also high correlated between two pairs of raters (Rater 1 and 2, $r = .81$, Rater 1 and 3, $r = .65$) and low correlated between Rater 2 and 3 ($r = .45$). The scores for another criteria, rebuttal were highly correlated between Rater 1 and 2 ($r = .81$) and Rater 1 and 3 ($r = .67$). The assigned scores for rebuttal between Rater 2 and 3 were moderately correlated ($r = .52$).

In brief, the correlation analysis of the scores from the first draft and second draft using analytic scoring, though the correlations were not high for all sets of assigned scores, they were mostly highly and moderately correlated. This indicated that the measures of students' argumentative essay in the pilot study were reliable and could be used effectively in the main experiment to examine the effect of metacognitive strategy training in the first draft revision.

3.6 Data Collection Procedure

This present study sought to answer two research questions:

Research Question 1

What metacognitive strategies do successful and less successful SWU third-year English majors use in the first draft revision of their argumentative essay?

Research Question 2

Do less successful English majors improve the quality of the second draft of their argumentative essay after the metacognitive strategy training in revision?

3.6.1 Data Collection for Research Question 1

To answer the first research question with two sub-questions: metacognitive strategies successful and less successful students employed in the first draft revision before and after metacognitive strategy training, two main instruments were used to collect data, and two types of data: numerical and descriptive data were used to answer the questions.

Numerical Data

Students' self-ratings were collected through Pre and Post MSQ. Pre and Post MSQ were intended to discover metacognitive strategies used by third-year English majors EFL students. The Pre and Post MSQ was administered to two groups of students, ten successful and ten less successful.

The Pre MSQ was administered the week before metacognitive strategy training in revision, in the pre-instructional stage of the study during Week 7 of the regular class. This occurred in the second semester of academic year 2004 falling into November 2004 to February 2005. The participants were informed the purpose of the Pre MSQ and asked to complete the background questionnaire asking about students' personal information, the fact about the past writing courses for 10 minutes. The participants then were asked to respond to the Pre MSQ and express their honest opinion by ticking in the box provided for appropriate number printed on the top of the right side of the MSQ. Typically, the participants were able to complete the Pre MSQ in 20-30 minutes, with some of the students taking a slightly longer time. It was later, then followed by the pre-interview session.

The Post MSQ was administered after metacognitive strategy training (After week 12 of the regular class), to obtain the information about metacognitive

strategies English majors used after completing the revision tasks (revising the first draft). The Post MSQ was also developed by the researcher using the paralleled form and with the same purpose and content as the Pre MSQ, but they were slightly different in the use of tenses and some wordings.

Descriptive Data

After the students completed the Pre MSQ, the researcher conducted the pre-interview, and it was conducted in Thai. The interviews lasted approximately 15 to 20 minutes. All the interviews were audio taped (with students' informed permission) and transcribed verbatim very shortly after the interview had taken place. The interviews were in general aimed at getting the participants to talk specifically about the experience of the first draft revision. Some questions of the Pre MSQ were selected as interview questions.

Similarly, after completing the Post MSQ, twenty students were interviewed to examine individual metacognitive strategies use in revision after metacognitive strategy training. The purpose of the post-interview was to gain a more in-depth understanding of individual cases. The post-interview questions were developed as the paralleled form of the pre-interview questions. The interviews were conducted in Thai and also audio taped and transcribed, shortly after the end of the interview session.

Self-Reflection Data from Journal Entries

Self-reflection data from journals reflected on students' experience of writing, and conceptual data, in which students revealed their understanding of

concepts as they engaged with the writing process, revision in particular, from the beginning of the class, were collected, and then analyzed in terms of the person variable of metacognitive knowledge and affective factors the students experienced during five weeks of metacognitive strategy training. The students gave the researcher's permission to analyze their journal entries for the research purpose independently. Students had to submit one entry per class to the researcher, so before metacognitive strategy training, students practiced writing journals to reflect their own thinking and learning for the writing classes since the beginning of the class. The students were not assigned to write journals for Week 1 because it was for the Pretest and the introduction to the course. Therefore, one student wrote totally 13 journals for the whole semester.

The journal entries used for the present study were collected through the metacognitive strategy training in the first draft revision, from Week 8 to 12. Thus, after metacognitive strategy training, there were 50 entries from successful students, and 50 entries from less successful students. These entries were read by the researcher and returned to the students a week later. For the research purpose, journal entries were photocopied with permission. These journal entries were used for qualitative data analysis.

3.6.2 Data Collection for Research Question 2

3.6.2.1 Collecting Students' First and Second Draft

To answer the second research questions, the data came from two sources. One was from less successful students' first draft. They were collected after students were taught to write an argumentative essay regarding the process

approach. The second source of data was from the less successful students' second draft. To obtain less successful students' second draft of an argumentative essay, the researcher conducted the quasi-experiment in which subjects had received the metacognitive strategy training in order to revise the first draft. The training lasted five weeks. During the training, the students were trained to use metacognitive strategies in planning, monitoring and evaluating in the four revision sub-tasks when they revised the first draft of an argumentative essay. The first sub-task was revising for the clear ideas of rhetorical situation including the audience, the purpose, the writer and the overall essay. The second one was revising for the global level of the whole essay for the better content and ideas and rhetorical pattern of an argumentative essay including the thesis, the main ideas in each body paragraph, and the unity and coherence. The third one was revising at the paragraph level including the topic sentence and their supporting evidence. The final sub-task was revising for the connected idea in each part and the whole part of the essay including the unity and coherence.

During the training for the four revision sub-tasks, , teaching materials including Self-Question and Answer Worksheet, Plan Revision Think-Sheet, Self-Revision Think Sheet, and Self-Evaluation Checklist were applied to activate the metacongitive strategies. After each sub-task, the students were asked to respond to a guided journal. The students' journal entries, submitted weekly throughout the semester, were also used to verify their metacognitive strategies, especially during their first draft revision before completing the second draft. Once metacognitive strategies training ended, the students were expected to write a complete second draft. All of the less successful students' second drafts then were gathered for scoring,

followed by quantitative data analysis .

3.6.2.2 Scoring Less Successful Students' First and Second Draft

The two sets of drafts were scored by the three raters who scored in the preliminary study using the same procedures and the same rubrics. Each participant' score was the sum of three raters' scores. All the raters rated the essay separately with the same procedure as in the a practice session in the pilot study.

3.7 Data analysis

3.7.1 Data Analysis Procedure for the Pre and Post MSQ

The first research question was aimed to find out metacongitive strategies in planning, monitoring, and evaluating successful and less successful English majors employed in the first draft revision. To address the first research question, the self-ratings from Pre and Post Metacognitive Strategies Questionnaire (Pre MSQ and Post MSQ) were analyzed as follows:

1. All the items in the questionnaire were classified into three sub-process/categories of metacognitive strategies using O'Malley and Chamot's (1990) taxonomy as shown in Table 2.1, described in Chapter 2.
2. The variables chosen for the MSQ arose from the focus of the study, which was to explore metacongitive strategies use in revising the first draft as mentioned above. The following variables were included in the Pre and Post MSQ.

Variable 1: Advance Organizer - Students' planning strategies to activate background knowledge of the revision tasks and revising strategies, to analyze the revision tasks and to reflect on the problems and connect the problems with the revision task need to do. (self-analysis skill, task analysis skill, self-directed skill, self-reflection skill)

Variable 2: Organizational Planning - Students' planning strategies for the content and sequence of the revision tasks, prior knowledge about strategies connected with the revision task, planning to achieve the goal.

Variable 3: Selective Attention - Planning strategies in selecting the appropriate strategies for the revision task.

Variable 4: Self-Management- Self management skill in selecting the appropriate revising strategies and conditions for revision task.

Variable 5: Monitoring Comprehension - to self-monitor understanding, understanding, accuracy and appropriateness of the overall revision process.

Variable 6: Monitoring Production strategies- to monitor the selected revising strategies to revise the first draft.

Variable 7: Self-Assessment- self-assessment skill to assess the product of the revision task (the complete second draft) and the progress of the revision task toward the revision goal.

Variable 8: Self-Evaluation - to evaluate how well they learned to

revise, evaluate strategies use in revising the first draft, and judge how effective and appropriate the selected strategies to each revision task.

Variable 9: Self-Reflection-Self reflection skill to reflect the revising strategies use, the complete revision task, and the thinking process of experience in learning to use metacognitive strategies in revision.

3. Count the frequencies of students' self-ratings for each variable of metacognitive strategies from the Pre and Post MSQ. Since the Pre and Post MSQ were constructed based on multi item scales (four items targeting the same variable), the summative scales were applied. An item was averaged out during the summative of the item scores (Dornyei, 2003).
4. Descriptive statistical analysis was used with the help of SPSS for WINDOWS to determine Mean and Standard Deviation.
5. Find the difference between the mean scores of self-ratings of successful students before and after metacognitive strategies training in revision using Paired t-test.
6. Find the difference between the mean scores of self-ratings of less successful students before and after metacognitive strategies training in revision using Paired t-test.
7. Find the difference between the overall use (overall mean) of metacognitive strategies by the successful students before and after training using Paired t-test.

8. Find the difference between the overall use (overall mean) of metacognitive strategies by the less successful students before and after training using Paired t-test.
9. The results revealed difference of the types and the frequency of metacognitive strategies that successful and less successful students indicated in the questionnaires. The results were discussed in the next chapter (Chapter 4)

3.7.2 Data Analysis Procedure from the Pre and Post Interview

To verify the metacognitive strategies use before and after metacognitive strategies training in revision, the researcher conducted the semi-structured interviewed to examine individual conceptualization of metacognitive strategies use and reaction to instruction the descriptive data-the interview protocols obtained from 10 successful and 10 less successful students were analyzed as follows:

1. The researcher and the assistant transcribed and coded the interview protocols of the Pre and Post interviews.
2. Identify and count the frequencies and types of metacognitive strategies students mentioned in the interviews based on metacognitive strategy classification scheme (O'Malley & Chamot, 1990), and the categories coding for metacognitive strategies use in revision created by the researcher. (Also see the coding in the Appendix H). The researcher then categorized the data from the transcriptions and tabulated frequency counts, percentages and types of metacognitive strategies use revealed from the pre and post interview protocols.

3. An analysis of pre and post interviews was also carried out qualitatively for confirmation of the generalization concerning third-year English majors response behaviors that emerged from self-reporting in the Pre MSQ and Post MSQ. In addition, the researcher also looked to carefully examine whether metacognitive strategies in planning, monitoring, and evaluating facilitated students revising and helped improve the quality of the second draft.

Once all the data from the pre and post interviews had been assigned to particular categories and sub-strategies of metacognitive strategies, the final result of this analysis (being discussed both quantitatively and qualitatively) was for each individual English major's description of metacognitive strategies used before and after metacognitive strategies training in the first draft revision. This allowed an assessment of the degree of metacognitive strategy development (shift in metacognitive development to writing) and the difference in the metacognitive strategies use of the successful and less successful students before and after training.

3.7.3 Data Analysis Procedures for Journal Entries

The journal entries collected weekly from successful and less successful students during the metacongitive strategy training for five weeks. This made the total of 50 journal entries from successful students and 50 from less successful students. The students gave the researcher oral permission to analyze their journals anonymously or assigned pseudonyms. For this study, the abbreviations were used to replace student's names. The journal entries were analyzed as follows:

1. The journal entries were coded based on a person variable, one aspect of metacognitive knowledge (Flavell, 1979, Victori, 1999). The coding scheme established by the researcher prior to the study. This present study looked at one aspect of metacognitive knowledge, the person knowledge since the learner is “one who has ample metacognitive knowledge about self as learner” (Divine, 1993, p.109). Therefore, the students journals could reflect this knowledge. Some modifications were also made to analyze the person knowledge revealed in the students’ journal entries. The researcher categorized the person knowledge into two sub-categories: the cognitive and affective factors. Cognitive factors consisted of the cognitive activities during the revision task and students own problems or difficulties while doing the revision task. The affective factors consisted of the motivational beliefs, self-confidence and emotions.
2. The results of this analysis reflected the students’ metacognitive knowledge affected by metacognitive strategy training in the first draft revision, change and development of revising strategies use; and how metacognitive strategies helped students revise the first draft of an argumentative essay and improve the quality of argumentative writing.

3.7.4 Data Analysis Procedure from the Rating of the first and Second Draft of an Argumentative Essay

The second research question was to examine whether metacognitive

strategy training in revision helped less successful English majors improve their second draft. The data used at this stage were ratings from the first and second drafts of an argumentative essay from the less successful students. Therefore, there were ten ratings for the first drafts and ten for the second drafts used for analyzing. The analysis procedure was as follows:

1. Three independent raters, all experienced ESL and EFL writing teachers, rated less successful students' first drafts using two types of scoring rubrics: holistic rubrics and analytic one.
2. The second drafts, obtained after metacognitive strategy training were also rated by the same raters using the same rubrics.
3. The mean scores of the first drafts and second drafts from the three raters were calculated and used in the analysis.
4. The inter-rater reliability for the first drafts and second drafts' scores, using holistic and analytic ratings were calculated using Pearson's product moment correlation.
5. Determine the difference between the mean scores from the ratings of the first drafts and second drafts using Paired t-test.

The results of the test indicated the effects of metacognitive strategies training in revision.

3.8 Summary of the Chapter

This chapter first presented the research design, a two-phase, sequential mixed design, combining quantitative data collection and analysis, used for the study. The subjects of this study were third-year English majors taking the Composition 2 course

at Srinakharinwirot University. The Pre and Post Metacognitive Strategies Questionnaire and pre and post interview were used as the main research instrument for collecting data in Phase 1 of the study to examine metacognitive strategies the successful and less successful students used in revising the first draft of their argumentative essay.

Phase 2 of the study, the metacognitive strategy training in the first draft revision aimed to determine whether the less successful English majors improved the quality of writing of the first draft after metacognitive strategy training. The presentation of data collection procedure, metacognitive strategies use by the successful and less successful students before and after training is then explained, followed by quantitative data collecting in Phase 2, the ratings of the less successful students' first and second draft of their argumentative essay. The pilot study for the research instruments and the model of Metacognitive Strategy Training in the first Draft Revision to establish the validity and reliability of the measurement was also described

In addition, this study dealt with qualitative data collected from Pre and Post interview before and after training, and students' weekly journals during the 5 weeks of training were gathered to gain more specific outcome into when, why and how the students used the metacognitive strategies in the first draft revision.

Finally, the data analysis methods concerning descriptive statistics, statistical procedure and qualitative data analysis were applied to find out the results from the types of data: numerical data obtained from the pre and post questionnaires were analyzed using descriptive statistics. In addition, students' ratings from the first and second draft were used to examine whether students improved the quality of writing

after training using Paired t-test to determine the significant difference between the mean scores of students' first drafts and second drafts. The qualitative data analysis was used to analyze the data from the interviews and journals as the triangulated methods with the data obtained the self-report pre and post questionnaires.

Chapter 4 presents the quantitative results for the use of metacognitive strategies in the first draft revision by the successful and less successful students before and after metacognitive strategy training in the first draft revision. The chapter also describes the results showing the effects of metacognitive strategy training in the first draft revision on the less successful students' quality of writing. It also discusses the quantitative analysis of results for two research questions of the study in details.

CHAPTER 4

QUANTITATIVE RESULTS OF THE STUDY

This study was aimed at investigating the effects of metacognitive strategy training on EFL college students' first draft revision of their argumentative essay. Prior to the training, the self-perceived metacognitive strategies in the first draft revision of the successful and less successful students were examined, and they were used as the ground for constructing the metacognitive strategy training model in the first draft revision. After training, the metacognitive strategies the successful and less successful students used in the first draft revision and the possible effects of different metacognitive strategies use on the quality of the less successful students' second draft of an argumentative essay were investigated. To find the answer for the research questions, this study used both quantitative and qualitative methods. This chapter then presents the quantitative results showing students' metacognitive strategy use in revising the first draft of their argumentative essay. Specifically, it describes the quantitative results of the study from analyzing data of the existing Pre and Post Metacognitive Strategies Questionnaire, and the retrospective data from the pre and post interview. The second section of this chapter discusses statistical results from essay ratings of the less successful students' first and second draft of an argumentative essay to examine whether metacognitive strategies training in revision improve students' quality of the second draft.

4.1 Quantitative Results for the Use of Metacognitive Strategies from the Pre and Post MSQ

The following is the descriptive statistical analysis of the Metacognitive Strategies Questionnaire aimed at answering the first research question:

What metacognitive strategies do successful and less successful third-year English majors of Srinakharinwirot University use in revising the first draft of their argumentative essay?

Analysis of successful and less successful students' responses to the two sets of MSQ, Pre MSQ conducted before metacongitive strategy training and Post MSQ, conducted after metacongitive strategy training were examined in terms of three main strategies: planning, monitoring, and evaluating as well as nine sub-strategies identified for metacognitive strategies variables. The nine sub-strategies analyzed include the Advance Organizer, Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, Self-Assessment, Self-Evaluation, and Self-Reflection. In addition, the researcher examined the individual strategies of metacognitive strategies use in the first draft revision so that the data reported by the students from the Pre MSQ revealed the self-perceived use or actual use of strategies before metacongitive strategy training while the strategies reported in the Post MSQ indicated the changes and development of metacognitive strategies use after metacongitive strategy training.

The MSQ is a 45-items Likert scale which measures the frequency of metacognitive strategies use in the first draft revision of an argumentative essay. Each item is scored from one to five, with five being the most frequent and actual use and one being the lowest frequency of metacognitive strategies use. The Pre and Post

MSQ classify the frequency of use for individual items based on SILL (Oxford, 1990) according to the scale value and its interpretation as follow:

Very high metacognitive strategy use mean score between 4.50-5.00

High metacognitive strategy use mean score between 3.50-4.40

Medium metacognitive strategy use mean score between 2.50-3.40

Low metacognitive strategy use mean score between 1.50-2.40

Very low metacognitive strategy use mean score between 1.00-1.40

Metacognitive strategies successful and less successful students employed in planning, monitoring and evaluating their first draft revision before and after metacognitive strategy training are discussed as in the following.

4.1.1 Successful Students' Metacognitive Strategies Use

The following is the sub-problem of the Research Question 1:

What metacognitive strategies do successful students use in planning, monitoring and evaluating their first draft revision before and after metacognitive strategy training in revision?

The results obtained for the first sub-problem of Research Question 1 are presented in Table 4.1. The successful students' metacognitive strategies use in the first draft revision of an argumentative essay before and after training are demonstrated in terms of the mean scores of the students' self ratings for nine sub-categories of metacognitive strategies by using the descriptive statistics. In addition, the averages for metacognitive strategies use based on the SILL scale value by Oxford (1990) mentioned above was applied to indicate the level of usage for the nine sub-categories. Finally, the mean scores of the successful students' metacognitive

strategies use before and after training were also compared by using Paired-t-test. Mean scores, standard deviation, the level of use, and the Paired t-test are presented in Table 4.1. More specific analyses focused on each aspect of nine sub-categories of metacognitive strategies are described in more details below.

Table 4.1 Mean, Standard Deviation, Mean Differences, and Level of Use of Metacognitive Strategies Employed in the First Draft Revision by the Successful Students Before and After Training:

Metacognitive strategies and sub processes/categories	Successful students N=10						t-value 2-tailed	p
	Before training			After training				
	Mean	SD	Level	Mean	SD	Level		
Advance Organizer	3.48	.43	M	3.63	.38	H	-818	.434
Organizational Planning	3.32	.51	M	4.08	.48	H	-3.096	.013*
Selective Attention	3.20	.41	M	4.22	.42	H	-5.156	.001*
Self-Management	3.08	.45	M	3.51	.27	H	-2.666	.026*
Monitoring Comprehension	3.17	.25	M	3.99	.38	H	-4.976	.001*
Monitoring Production	3.26	.21	M	3.99	.23	H	-7.339	.000*
Self-Assessment	3.56	.46	H	4.13	.23	H	-3.366	.008*
Self-Evaluation	2.90	.99	M	4.05	.55	H	-3.146	.012*
Self-Reflection	3.50	.78	H	3.95	.50	H	-1.369	.204

The use of metacognitive strategies marked * is significantly different between the use of strategies before and after training at 0.05 level. ($p < 0.05$)

Table 4.1 shows the mean scores of nine sub-strategies of metacognitive strategies use by the successful students. Before training, the successful students' averages for metacognitive strategies use in the first draft revision revealed a moderate to high level of strategy usage. To be specific, before training, the successful students exhibited the high level of use of the metacognitive strategies in revision for Self-Assessment and Self-Reflection (the mean scores were 3.56 and

3.50). The remaining strategies: Advance Organizer, Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, and Self-Evaluation were at moderate use (the means were between 2.90 to 3.48). After training, nine strategies fell in the high strategy usage (mean scores were from 3.51 to 4.22). The highest level of metacognitive strategies use in the first draft revision for the successful students after training was Selective Attention. Significance differences at the 0.5 level ($p < 0.5$) were found within the successful students' metacognitive strategies use before and after training for Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, Self-Evaluation and Self-Assessment. The results showed no significant differences within this group in the use of metacognitive strategies for Advance Organizer, and Self-Reflection.

4.1.2 Less Successful Students' Metacognitive Strategy Use

The following is the second sub-problem of Research Question 1:

What metacognitive strategies do less successful students use in planning, monitoring and evaluating their first draft revision before and after metacognitive strategy training in revision?

The results obtained for the second sub-problem of Research Question 1 are presented in Table 4.2. As shown in Table 4.2, the less successful students' metacognitive strategies use in the first draft revision of an argumentative essay before and after training are demonstrated using the same analysis of results as the successful students.

Table 4.2 Mean, Standard Deviation, Mean Differences, and Level of Use of Metacognitive Strategies Employed in the First Draft Revision by the Less Successful Students Before and After Training

Metacognitive strategies and sub processes/categories	Less Successful students N=10						t-value 2-tailed	P
	Before training			After training				
	Mean	SD	Level	Mean	SD	Level		
Advance Organizer	3.35	.38	M	3.70	.52	H	-1.871	.094
Organizational Planning	3.28	.40	M	4.08	.42	H	-6.000	.000*
Selective Attention	3.00	.37	M	4.12	.53	H	-10.510	.000*
Self-Management	3.37	.36	M	3.62	.30	H	-2.290	.048*
Monitoring Comprehension	2.98	.26	M	3.87	.21	H	-7.154	.000*
Monitoring Production	3.21	.38	M	4.02	.32	H	-9.690	.000*
Self-Assessment	3.76	.38	H	3.98	.55	H	-1.540	.158
Self-Evaluation	3.35	.47	M	4.00	.67	H	-1.998	.077
Self-Reflection	3.85	.53	H	4.25	.54	H	-1.809	.104

The use of metacognitive strategies marked * is significantly different between the use of strategies before and after training at 0.05 level. ($p < 0.05$)

According to the further analysis of results regarding the nine sub-categories of metacognitive strategies for the less successful students as shown in Table 4.2, before training, the results showed the averages for the high level of strategy usage for Self-Assessment and Self-Reflection (means were 3.85 and 3.76); The remaining strategies: Advance Organizer, Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, and Self-Evaluation were at the moderate level of usage (means were between 2.98 to 3.37). After training, the averages for the nine categories of metacognitive strategies revealed the high strategy usage; the highest level of usage was Self-Reflection (mean = 4.25). Interestingly, after training the reported metacognitive strategies used least (though at the high level of usage) for both successful and less successful students

were Advance Organizer and Self-Management (mean = 3.63 and 3.51 for the successful students; M = 3.70 and 3.62 for the less successful students. Significance differences at the 0.5 level ($p < 0.5$) were found within the less successful students' metacognitive strategies use before and after training for Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, and Monitoring Production. The results showed no significant differences within this group in the use of metacognitive strategies for Advance Organizer, Self-Assessment, Self-Evaluation, and Self-Reflection.

4.1.3 The Individual Strategy Use of Metacognitive Strategies in the First Draft Revision among the Successful Students

With regard to the individual strategy items (45 items), before training, the mean scores of the individual strategies ranged from a high of 4.40 to a low of 2.60 for the successful students. (overall mean = 3.28), indicating a moderate overall use of seven sub-strategies and a high overall use of two strategies of metacognitive strategies in revision before training according to the established strategy usage criteria described above. After training, the mean scores of individual strategies ranged from a high of 4.30 to a low of 2.90 for the successful students (overall mean = 3.93), indicating a high use of all nine strategies. The observed difference in the overall means of metacognitive strategies use by the successful students before and after training was statistically significant ($t = -7.088$; $p < 0.05$).

For the successful students' individual strategies use before training, 12 of the 45 strategies (27%) fell in the high usage group (mean of 3.50 or above), while the remaining 33 strategies (73%) had means between 2.60 and 3.40, indicating

medium usage of these metacognitive strategies. None of the strategies in the Pre MSQ was reported to be used with the low frequency (mean value below 2.50).

After metacognitive strategy training, 41 strategies (91%) fell in the high usage group; and the remaining two strategies (4%) which fell in the medium group; another two strategies which fell in the medium group were negative strategy items.

4.1.4 The Individual Strategy Use of Metacognitive Strategies in the First Draft Revision among the Less Successful Students

Regarding the individual strategy items for the less successful students before and after metacognitive strategy training, the mean scores of the individual strategies ranged from a high of 4.30 to a low of 2.50 (overall mean = 3.31), indicating a moderate use of seven strategies and a high overall use of two strategies like the successful students. After training, the mean scores of individual strategies for the less successful students ranged from a high of 4.30 to a low of 2.70 (overall mean = 3.93), indicating the high use of all nine strategies. The observed difference in the overall means of metacognitive strategies use by the less successful students before and after training was statistically significant ($t = -8.813$; $p > 0.025$).

As for the less successful students' individual strategy use before training, 13 of the 45 strategies (29%) fell in the high usage group (means ranged from 3.60 to 4.30), while the remaining 32 strategies (71%) had means ranging from 2.70 to 3.40, indicating medium usage of these strategies. Similar to the successful students, none of the less successful students reported the low use of strategies.

After training, 42 strategies (93%) fell in the high usage group; and the remaining three strategies (7%) fell in the medium usage group. Table 4.3 presents the

overall means, standard deviation, and significant differences of the metacognitive strategies use in the first draft revision by the successful and less successful students before and after metacognitive strategy training.

Table 4.3 The Overall Mean, Standard Deviation, and the Mean Differences of Metacognitive Strategies Use in the First Draft Revision by the Successful and Less Successful Students before and after Training

Students	Before Training		After Training		t-value 2-tailed	p
	Overall Mean	SD	Overall Mean	SD		
Successful	3.28	.25	3.93	.19	-7.088	.000*
Less Successful	3.31	.21	3.93	.31	-8.813	.000*

The use of metacognitive strategies marked * is significantly different between the use of strategies before and after training at 0.05 level ($p < 0.05$)

4.1.5 The Comparison in the Order of Metacognitive Strategies Use by the Successful and Less Successful Students before Training

The researcher further compared the difference in the order of metacognitive strategies use in the first draft revision of the successful and less successful students before metacognitive strategy training. The order of metacognitive strategies used most to least by the successful and less successful students before training was summarized in Table 4.4

Table 4.4 Comparison in the Order of Metacognitive Strategies Used by the Successful and Less Successful Students before Metacognitive Strategy Training

Successful students				Less successful students			
Order	Metacognitive strategies	M	SD	Order	Metacognitive strategies	M	SD
1	Self-Assessment	3.56	.46	1	Self-Reflection	3.85	.53
2	Self-Reflection	3.50	.78	2	Self-Assessment	3.76	.38
3	Advance Organizer	3.48	.43	3	Self-Management	3.37	.36
4	Organizational Planning	3.32	.51	4	Self-Evaluation	3.35	.47
5	Monitoring Production	3.26	.21	5	Advance Organizer	3.35	.38
6	Selective Attention	3.20	.41	6	Organizational Planning	3.28	.40
7	Monitoring Comprehension	3.17	.25	7	Monitoring Production	3.21	.38
8	Self-Management	3.08	.45	8	Selective Attention	3.00	.36
9	Self-Evaluation	2.90	.99	9	Monitoring Comprehension	2.98	.26

As shown in Table 4.4 it was found that before training, the successful students showed a clear preference for Self-Assessment, followed by Self-Reflection, Advance Organizer, Organizational Planning, Monitoring Production, Selective Attention, Monitoring Comprehension and Self-Management. Self-Evaluation was reported the least strategy use by the successful students.

For the less successful students, before training, they demonstrated the highest use for Self-Reflection, followed by Self-Assessment, Self-Management, Self-Evaluation, Advance Organizer, Organizational Planning, Monitoring Production, and Selective Attention. Monitoring Comprehension was reported the least use by the less successful students.

4.1.6 The Comparison in the Order of Metacognitive Strategies Use by the Successful and Less Successful Students after Training

The difference in the order of metacognitive strategies use in the first draft revision by the successful and less successful students after metacognitive strategy training was also compared. The order of metacognitive strategies used most to least by the successful and less successful students after training was summarized in Table 4.5.

Table 4.5 Comparison of the Reported Metacognitive Strategies Used by the Successful and Less Successful Students after Metacognitive Strategy Training

Successful students				Less successful students			
Order	Metacognitive strategies	M	SD	Order	Metacognitive strategies	M	SD
1	Selective Attention	4.22	.42	1	Self-Reflection	4.25	.54
2	Self-Assessment	4.13	.23	2	Selective Attention	4.12	.53
3	Organizational Planning	4.08	.48	3	Organizational Planning	4.08	.42
4	Self-Evaluation	4.05	.55	4	Monitoring Production	4.02	.32
5	Monitoring Production	3.99	.23	5	Self-Evaluation	4.00	.67
6	Monitoring Comprehension	3.99	.38	6	Self-Assessment	3.98	.55
7	Self-Reflection	3.95	.50	7	Monitoring Comprehension	3.87	.21
8	Advance Organizer	3.63	.38	8	Advance Organizer	3.70	.52
9	Self-Management	3.51	.27	9	Self-Management	3.62	.30

In Table 4.5, the order of reported metacognitive strategies use was different from the report before training (Table 4.4). Interestingly, whereas the

successful students reported the use of Selective Attention the most, the less successful students reported the use of Selective Attention in the second order of importance. Both groups reported the use of Organizational Planning in the same order, (third order), while Advance Organizer and Self-Management were also reported in the same order for both successful and less successful students (eighth and ninth orders respectively).

4.2 Quantitative Results for Metacognitive Strategies Use from the Interview

The metacognitive strategies use mentioned in the pre and post- interview was tallied regarding the three main strategies: Planning, Monitoring, and Evaluating the students use before, during, and after the first draft revision. To categorize the frequencies of metacognitive strategies use, the criterion for determining the levels of use was established. The range of use below 50% was considered to be low, the range of moderate use fell between 51%-65%, and the level of above 70% was considered to be high.

4.2.1 Frequency of Metacognitive Strategies Use by Successful Students

Analysis of retrospective reports revealed the differences between the number of metacognitive strategies use by the successful students before and after training. Table 4.6 shows the frequencies, percentage, and the differences of metacognitive strategies use identified in the successful students' retrospective interview data.

Table 4.6 Frequencies, Percentages, and Differences of Metacognitive Strategies Use by the Successful Students (N=10)

Metacongitive Strategies	Total strategies	Before Training		After Training		Differences	
		No of strategies use	%	No of strategies use	%	No of strategies	%
Planning strategies	11	40	36.36	86	78.18	46	41.82
Monitoring strategies	4	27	67.50	37	92.50	10	25.00
Evaluating Strategies	5	31	62.00	42	84.00	11	22.00

Analysis of retrospective reports revealed that before training, a total of 40 individual strategies of Planning strategies were identified within the successful students indicating the low percentage of use (36.36%); whereas, a total of 86 individual strategies were identified after training indicating the high percentage of use (78.18%) indicating the high percentage of use, which was 41.82 % higher than that of the use before training.

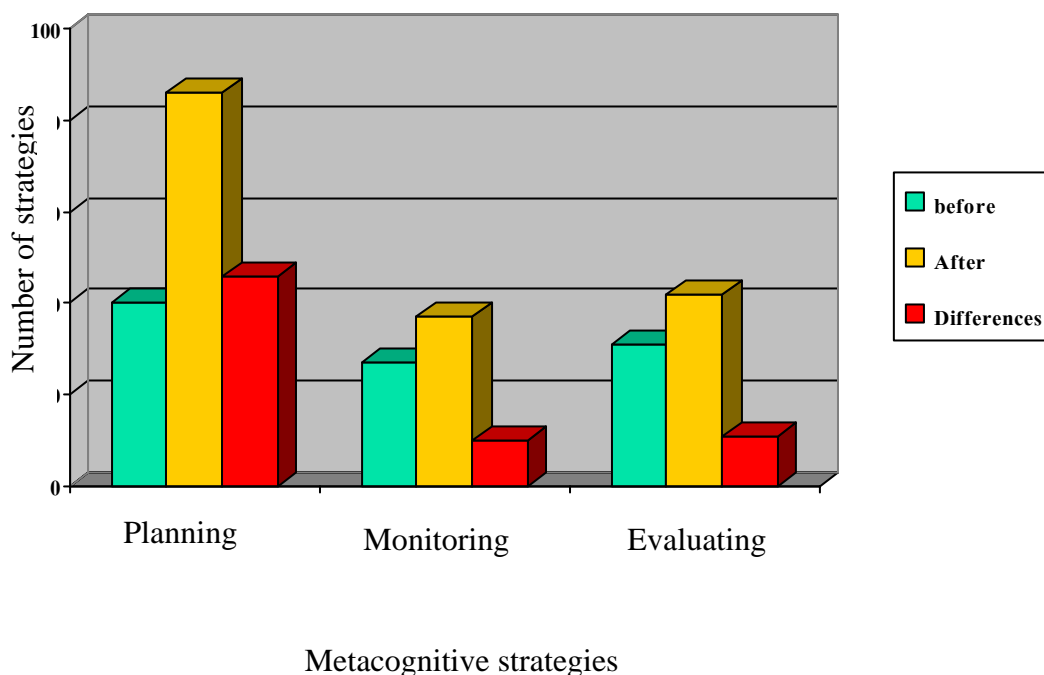
As for the Monitoring strategies, before training, a total of 27 individual strategies were identified indicating the high percentage of use (67.50%) while 37 individual strategies were identified indicating the high percentage of use 92.50%), which was 25% higher than the use before training.

For Evaluating strategies, before training, a total of 31 individual strategies were identified indicating the moderate use (62%), but after training, 42 individual strategies were identified indicating the high percentage use (84%), which was 20% higher than the use before training.

Figure 4.1 also shows the differences between the use of metacognitive

strategies by the successful students before and after metacognitive strategy training in the first draft revision of their argumentative essay in according to the frequencies and percentages of use revealed in the interview data presented in Table 4.6.

Figure 4.1 Differences of Metacognitive Strategies Use by the Successful Students



The above report showed that before training, the successful students possessed a high number of Monitoring and Evaluating strategies while the number of Planning strategies use was low. After training, the number of metacognitive strategies use increased dramatically, specifically the Planning strategies in which the students reported the low use before training increased the most. The increase in the use of metacognitive strategies could signify that metacognitive strategy training impacted the abilities of the successful students leading to the increase in metacognitive strategies use in the first draft revision.

4.2.2 Differences in Frequency of Individual Strategies Use by the Successful Students

The frequencies of metacognitive strategies use by the successful students and the differences between the use before and after training regarding the nine sub-strategies: Advance Organizer, Organizational Planning, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, Self-Assessment, Self-Evaluation, and Self-Reflection. as well as individual strategies were also compared. Table 4.7 shows the frequencies, percentage, and the differences of strategies use identified in the successful students' retrospective interview data.

Table 4.7 Frequencies of Individual Strategies by the Successful Students (N=10)

Metacognitive strategies	Sub-strategies/ No of individual strategies	Frequencies of strategies use				Difference	
		Before training		After Training		No of Strategies	%
		No of use	%	No of use	%		
Planning	Advance Organizer (3)	12	40	23	76.67	11	36.67
	Organizational Planning (4)	17	42.50	35	87.50	18	45
	Selective Attention (2)	-	-	11	55	11	55
Monitoring	Self-Management (2)	11	55	17	85	6	35
	Monitoring Comprehension (2)	15	75	19	95	4	25
	Monitoring Production (2)	12	60	17	85	5	25
Evaluating	Self-Assessment (2)	11	55	18	90	7	35
	Self-Evaluation (2)	10	50	16	80	6	30
	Self-Reflection (1)	10	100	8	80	-2	22
	Total (20)	98	49	164	82	66	33

The results show the big difference of all nine sub-strategies of metacognitive strategies use before and after training. In fact, the successful students increased in the use of all four sub-strategies of Planning strategies: Advance Organizer, Organizational Planning, Selective Attention, and Self-Management. The overall strategy use before training was at the low percentage of use (49%), while after training, the overall use was at the high percentage of use (82%), which was 33% higher than that of the use before training.

Before training, the students reported the low use of Advance Organizer and Organizational Planning with the total of 12 and 17 strategies and the low percentage of use (40% and 42.50 % respectively). They also reported the moderate use of Self-Management when a total of 15 strategies were identified with an average percentage of use (55%). As for Selective Attention, there was no evidence to prove that the students used this strategy before training.

After training, the successful students used four sub-strategies of Planning strategies more frequently. The successful students used 23 individual strategies of Advance Organizer with the high percentage of use (76.67%), 35 individual strategies of Organizational Planning with the high percentage of use (87.50%), 11 individual strategies of Selective Attention with the moderate individual strategies of Self-Management with the high percentage of use (85%).

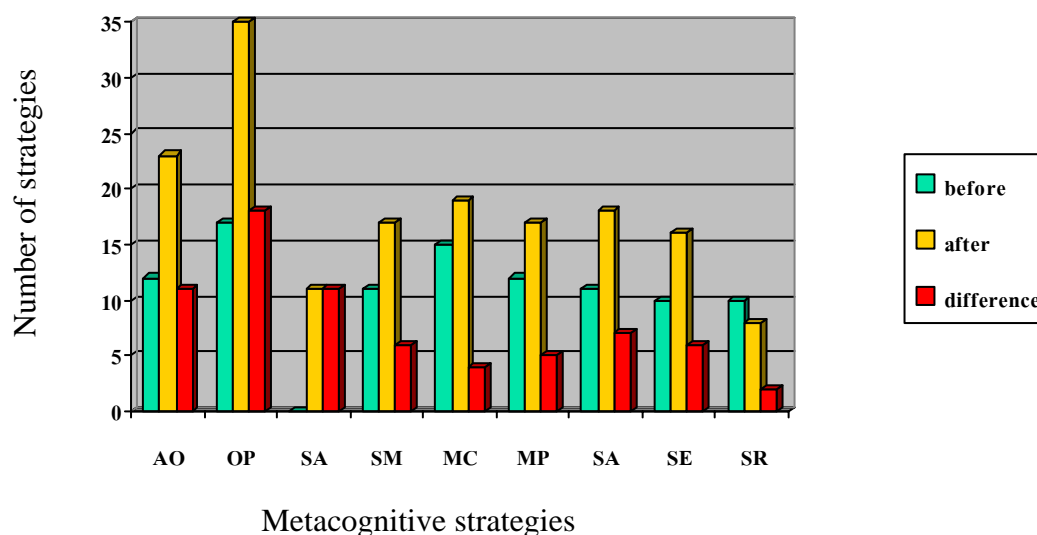
Regarding Monitoring strategies use, before training, the successful students use 12 individual strategies of Monitoring Comprehension with the high percentage of use (75%) and 12 individual strategies of Monitoring Production with the moderate use (60%). After training, the successful students used totally 19

individual strategies of Monitoring Comprehension with the high percentage of use (95%), which was 25% higher than that of use before training, and 17 individual strategies of Monitoring Production with the high percentage of use (85%), which was 25% higher than that of the use before training.

For Evaluating strategies, before training, the successful students used 11 individual strategies of Self-Assessment with the moderate use (55%), 10 individual strategies of Self-Evaluation with the low percentage of use (50%), 10 strategies of Self-Reflection with 100% of use. After training, the students used 18, 16, and 8 individual strategies of Self Assessment, Self-Evaluation, and Self-Reflection respectively indicating the high percentages of use (90%, 80%, and 80%).

Figure 4.2 also presents the differences in the use of nine sub-strategies of metacognitive strategies use by the successful students before and after training based on the frequencies and percentages of use presented in Table 4.7.

Figure 4.2 Differences in the Individual Strategies Use by the Successful Students before and after Training



The interpretation of Table 4.7 and Figure 4.2 suggested that after training, the successful students used metacognitive strategies more frequently except for Self-Reflection in which they reported the less use. However, the results revealed that they used nine strategies of metacognitive strategies with the high percentage.

4.2.3 Frequency of Metacognitive Strategies Use by the Less Successful Students

Analysis of retrospective reports also revealed the differences between the number of metacognitive strategies use by the less successful students before and after training. Table 4.8 shows the frequencies, percentage, and the differences of metacognitive strategies use identified in the less successful students' retrospective interview data.

Table 4.8 Frequencies, Percentages, and Differences of Metacognitive Strategies

Use by the Less Successful Students (N=10)

Metacongitive Strategies	No of total Strategies	Before Training		After Training		Differences	
		No of strategies use	%	No of strategies use	%	No of strategies	%
Planning strategies	11	25	22.73	98	89.09	73	66.36
Monitoring strategies	4	19	47.50	37	92.50	18	45
Evaluating strategies	5	25	50	44	88	19	38

As shown in Table 4.8, before training, a total of 25 individual strategies of Planning strategies were identified in the less successful students' retrospective reports indicating the low percentage of use (22.73%) while after training, 98 individual strategies were identified indicating the high percentage of use (89.09%), which was 66.36 % higher than that of the use before training.

As for the Monitoring strategies, before training 19 strategies were identified indicating the low percentage of use (47-50%), but after training, 37 strategies were identified indicating very high percentage of use (92.50%), which was 45% higher than that of the use before training.

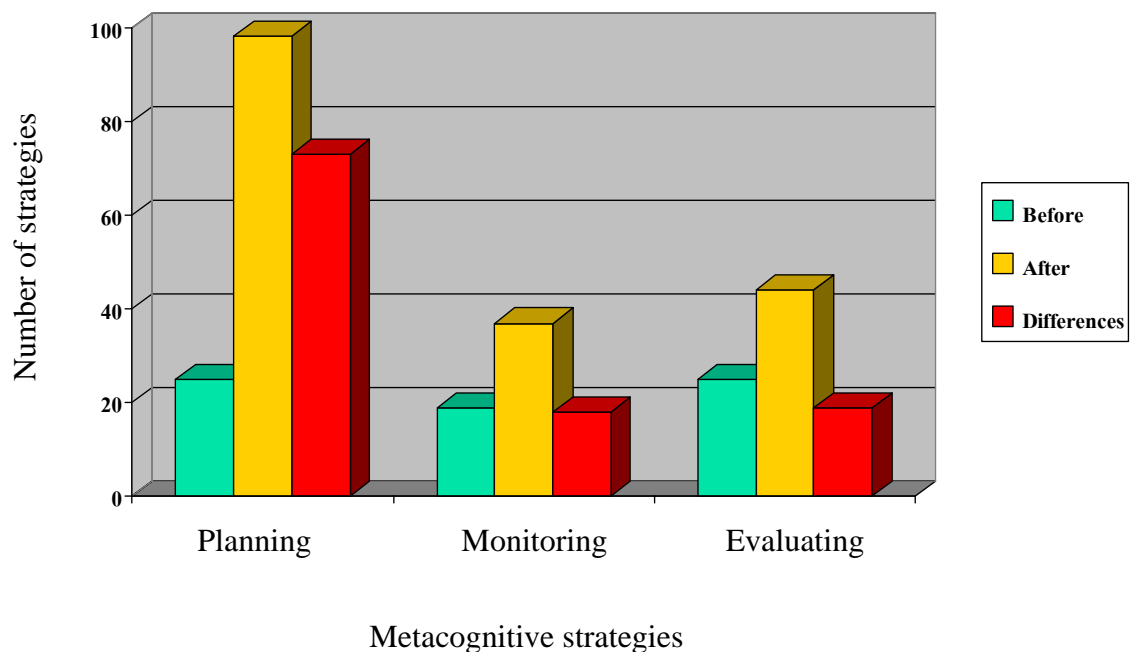
For Evaluating strategies, before training, 25 strategies were identified indicating the average percentage of use (50%) while after training, 44 strategies were identified indicating the high percentage of use (88%), which was 38% higher than that of the use before training.

The above report revealed that before training, the less successful students seemed to use Planning strategies and Monitoring strategies in the low level, but after training, they tended to use these two strategies more frequently with the

very high percentages. In fact, it was found that after training, the students used three strategies Planning, Monitoring, and Evaluating with high percentages of use. The increase in the use of metacognitive strategies in the first draft revision might be affected by the metacognitive strategy training.

Figure 4.3 also shows the differences between the use of metacognitive strategies by the less successful students in according to the frequencies of use revealed in the interview data presented in Table 4.8.

Figure 4.3 Differences of Metacognitive Strategies Use by the Less Successful Students(as reported in the pre and post interview)



4.2.4 Differences in Frequency of Individual Strategies Use by the Less

Successful Students

The frequencies of metacognitive strategies regarding nine sub-strategies and the individual strategies use by the less successful students were also compared.

Table 4.9 shows the frequencies, percentage, and differences of strategies use identified in the less successful students before and after training.

Table 4.9 Frequencies of Individual Strategies by the Less Successful Students (N=10)

Metacognitive strategies	Sub-strategies/ No of individual strategies	Frequencies of strategies use				Difference		
		Before training		After Training		No of Strategies	%	
		No of use	%	No of use	%			
Planning	Advance Organizer	(3)	8	26.67	25	83.33	17	56.66
	Organizational Planning	(4)	3	7.5	40	100	37	92.50
	Selective Attention	(2)	3	15	15	75	12	60
Monitoring	Self-Management	(2)	11	55	18	90	7	35
	Monitoring Comprehension	(2)	9	45	19	90	10	45
	Monitoring Production	(2)	10	50	18	90	8	40
Evaluating	Self-Assessment	(2)	12	60	17	85	5	25
	Self-Evaluation	(2)	7	35	19	95	12	60
	Self-Reflection	(1)	6	60	8	80	2	20
	Total	(20)	69	34.50	179	89.50	110	55

The results revealed the differences in the use of all nine sub-strategies by the less successful students before and after training. The overall strategy use before training was at the low percentage of use (34.50%), while after training, the

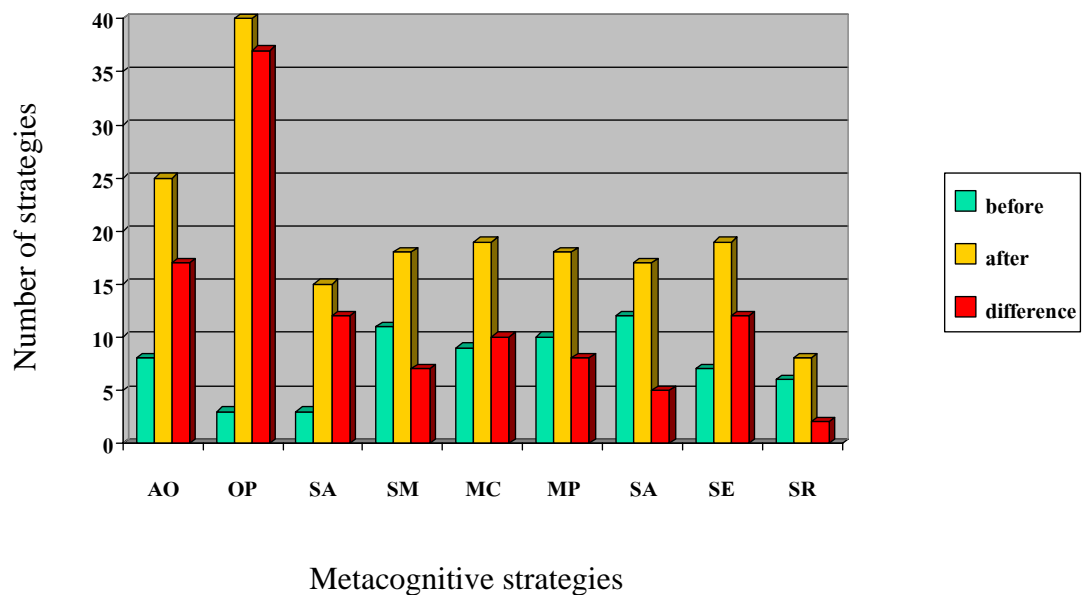
overall use was at the high percentage of use (89.50%), which was 55% higher than that of the use before training. Also, the less successful students increased in the use of all nine strategies after training, specifically Organizational Planning which was 92.50% higher than the use before training.

Evidently, before training, they reported the low level of use for Advance Organizer, Organizational Planning, Selective Attention, Monitoring Comprehension and Self-Evaluation with the total of 8, 3, 3, 9, and 7 strategies respectively and low percentages of use (26.67%, 7.5%, 15%, 45% and 35%) while the use of Self-Management, Monitoring Production, Self-Assessment, and Self-Reflection were used at the moderate level with the total of 11, 10, 12, and 6 strategies respectively (55%, 50%, 60%, and 60%).

After training, they reported the use of Organization Planning most, with the total of 40 strategies (100% of use) while the eight strategies: Advance Organizer, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, Self-Assessment, Self-Evaluation, and Self-Reflection were also used at the high level and the high percentages with the total of 25, 15, 18, 19, 18, 17, 19, and 8 strategies and the high percentages (from 75% to 90% of use).

Figure 4.4 also presents the differences in the use of nine sub-strategies of metacognitive strategies use by the less successful students before and after training based on the frequencies and percentages of use presented in Table 4.9.

Figure 4.4 Differences in the Individual Strategies Use by the Less Successful Students before and after Training



4.3 Quantitative Results for the Quality of the Second Draft of an Argumentative Essay from the Less Successful Students

The following section is the quantitative data analysis of results from the less successful students' first and second drafts of their argumentative essay to answer the second research question.

Research Question 2:

Do less successful English majors improve the quality of the second draft of their argumentative essay after metacognitive strategy training in revision?

4.3.1 Differences between the Mean Scores of the First and Second Draft of the Less Successful Students

To examine the effect of metacognitive strategy training in revision on the less successful students' first draft revision of their argumentative essay, an inferential statistical analysis was established. First, the holistic ratings of the first and second drafts were compared using Paired t-test. The results determined the difference between the mean scores from holistic ratings of the less successful students' first drafts and second drafts of the essay. That is, the extent to which students improves their second draft. Second, the analytic ratings for the first drafts and second drafts were compared for the writing quality of the three main components of arguments: claim, reason, and rebuttal. The results revealed the extent of improvement in the quality of writing regarding those three components. In other words, the results were the effects of metacognitive strategy training in revision. In this study, the metacognitive strategy training was treated as the independent variable while the data from the holistic rating and analytic rating were dependent variable.

4.3.1.1 The Difference between the Mean Scores of the Holistic Ratings

The paired t-test was used to establish the extent of improvement, with a two-tailed test being used to establish non-directionality. The paired t-test run on the holistic ratings of the first drafts and second drafts showed that the trained students improved their argumentative writing from the first draft to the second draft. Table 4.10 illustrates the difference between the mean scores of the holistic ratings of the less successful students' first and second draft.

Table 4.10 Statistics of Paired T-Test with Holistic Ratings of the Less Successful Students' first and Second Drafts

	N	Mean	SD	t-value 2-tailed	p
Pair 1 First draft	10	2.73	0.61	-7.053	.000*
Second draft	10	3.49	0.75		

*Significant at the 0.05 level ($p < 0.05$)

As displayed in Table 4.10, the mean score of the ratings for the less successful students' first drafts and second drafts were significantly different ($t = -7.053$). Therefore, the conclusion could be reached that the less successful students improve the quality of their first draft of an argumentative essay after training. In other words, the results of the Paired t-test suggested that the less successful students were able to effectively revise their first draft and had made a significantly bigger improvement in the quality of the second draft as a whole.

4.3.1.2 The Difference between the Mean Scores of the Analytic Ratings

Table 4.11 shows the difference between the mean scores of the analytic ratings based on three aspects of an argumentative essay: claim, reason, and rebuttal of the less successful students' first and second draft.

Table 4.11 Statistics of Paired T-Test with Analytic Ratings of the Less Successful Students' First and Second Drafts

Argumentative components	First draft		Second draft		t-value 2-tailed	p
	Mean	SD	Mean	SD		
Claim	2.88	.65	3.33	.55	-4.807	.001*
Reason	2.50	.71	2.90	.67	-2.446	.037*
Rebuttal	2.21	.42	2.80	.53	-5.625	.000*

* Significant at the 0.05 level ($p < 0.05$)

The results of the Paired t-test run on the analytic ratings of the first drafts and second drafts suggested that the students appeared to have come to understand three components of an argumentative essay and revise for those components successfully after five weeks of instruction on metacognitive strategies use.

As regards the three aspects of argumentative essay writing, significant results were obtained for claim ($t = -4.807$), reason ($t = -2.446$) and rebuttal ($t = -5.625$). The students obtained the significantly higher ratings on all three components of an argumentative structure. These results were encouraging since they indicated positive trends in the data according to the students' ability to revise for the components of an argumentative essay with greater effectiveness after metacognitive strategy training. In other words, the results of the Paired t-test suggested that the less successful students were able to successfully activate their existing background knowledge for the first draft revision and argumentative writing to revise their own paper, producing arguments that exhibited more explicit claim, well-developed reason and more logical rebuttal to counter-arguments in the second drafts.

4.3.2 Comparison of the Less successful Students' First and Second Drafts

4.3.2.1 The Comparison of the Holistic Ratings

The holistic scoring with a 5-point scale ranging from 1 (low) to 5 (high), was used to evaluate the less successful students' first and second draft. The criteria for rating include two categories: the rhetorical control and the language control. The rhetorical control considered the content, the overall quality, the degree to which the writing task was addressed, the rhetorical pattern of an argumentative essay such as claim, thesis and the rebuttal. The language control looked at the expression (usage and vocabulary), and sentence structure. The raw scores for holistic ratings of the less successful students' first and second drafts rated by three raters before and after metacognitive strategy training are shown in Appendix I (A). Table 4.12 illustrates the average holistic ratings of the less successful students' first and second drafts with gains in writing

Table 4.12 Statistics of Writing Quality Scores: the Mean Scores, and Mean Gains from Holistic Scoring of Less Successful Students' First and Second Draft

No	Students	First draft	Second draft	Gains
1	LSS1	2	3	1
2	LSS2	2.67	3.33	0.66
3	LSS3	2	2.17	0.17
4	LSS4	2.17	3	0.83
5	LSS5	2.33	3.33	1
6	LSS6	3	3.17	0.17
7	LSS7	3	3.83	0.83
8	LSS8	3	4.17	1.16
9	LSS9	3.33	4.33	1
10	LSS10	3.83	4.67	0.84

Note: Values are means of the holistic ratings by three raters

As shown in Table 4.12, mean scores of the holistic ratings of the less

successful students who were trained to use metacognitive strategies in the first draft revision made an improvement in the quality of writing. The less successful students' second draft increased substantially after training, particularly for the two students in the group, LSS5 and LSS9. For LSS9, she obtained the highest scores in her second draft (4.33-the score pattern of the essay ranged from 1 to 5, (5 for the strongest and 1 for the weakest) and made the most overall gain in writing (+1). For LSS5, although she had not scored the highest, she also made the most gain in the quality of the second draft (+1 more). As the data shown in Table 4.12, it can be seen that the individuals have made considerably more gains. The results revealed that six students made a gain exceeding +0.50 demonstrating the modest to big gain, except for two students, with the least gain in the group, LSS3 and LSS6 made smaller gains (+0.17).

The average holistic ratings suggested that the second drafts were substantially improved over the first draft. Furthermore, one paper, LSS9's paper appeared to be the most successful of the ten papers; it showed improvement both for the higher rating and more overall gain.

To make it clear that the less successful students obtained the higher ratings of the second draft, Table 4.13 presents the mean ratings for the quality change of writing with the mean gain for individual students.

Table 4.13 Statistics of Mean, Standard Deviation and Mean Gain for the Less Successful Students' First and Second draft

Students' papers	N	Mean	SD	Mean gain
First draft	10	2.73	0.61	
Second draft	10	3.49	0.75	0.76

As displayed in Table 4.13, the second research question of whether the less successful English majors improve the quality of second draft writing after metacognitive strategy training in revision was supported by the results of this study in that trained students improved their writing from the first draft to the second draft. The mean scores for the second draft was higher than the mean scores of the first draft with the smallest standard deviation (Mean = 3.49, SD = 0.75) when the mean quality ratings of the second drafts for individual students ranged from 2.17 to 4.33. Also, the trained students (N=10) obtained an average improvement of 0.76. (76 %) The 0.76 point difference in degree of improvement that existed between the first draft and second draft of the less successful students is possibly due to the training treatment in metacognitive strategies use in the first draft revision.

4.3.2.2 The Comparison of the Analytic Ratings

Analytic scoring includes three argumentative traits: claim, reason and rebuttal, adapted from Toulmin system (1958) and the scores range from 1 (low) to 5 (high). The raw scores of the analytic ratings of the less successful students' first and second drafts before and after metacognitive strategy training in revision rated by three raters are shown in Appendix I (B). Table 4.14 shows the average analytic ratings of the less successful students' first and second drafts with gains in writing.

Table 4.14 Statistics of Writing Quality Scores: the Mean scores, from Analytical Scoring for the Less Successful Students' First and Second Draft

No	Students	Claim			Reason			Rebuttal		
		1 st draft	2 nd draft	Gain	1 st draft	2 nd draft	Gain	1 st draft	2 nd draft	Gain
1	LSS1	2	2.67	0.67	2	2	0	1.33	2	0.67
2	LSS2	3	3	0	3	3	0	2.33	3.33	1
3	LSS3	1.67	2.33	0.66	1.67	2	0.33	1.67	2	0.33
4	LSS4	3.33	4	0.67	2.67	2.67	0	2.33	3.33	1
5	LSS5	2.83	3.67	0.84	1.17	2.33	1.16	2.17	2.33	0.16
6	LSS6	2.67	3.33	0.66	2.67	3	0.33	2.33	2.67	0.34
7	LSS7	3	3.33	1	3	3	0	2.33	3.33	1
8	LSS8	3	3.33	0.66	1.67	3.33	1.66	2.33	3	0.67
9	LSS9	3.67	4	0.33	3.67	4	0.33	2.67	3	0.33
10	LSS10	3.67	3.67	0	3	3.67	0.67	2.67	3	0.33

As shown in Table 4.14, based on the analytic ratings for the first and second draft of all less successful students, the results showed that not all of the students performed better in all aspects of scale following the metacognitive strategy training in the first draft revision. As regards the three aspects of an argumentative essay, not all of the ten students obtained higher scores on claim; eight of them (80%) did. However, it appeared that the outperformed students had made a modest to high improvement. They made gains in writing from +0.33 to +0.83 except for LSS2 and LSS10 who had made zero gain. Therefore, LSS 2 and LSS10 showed no improvement in ratings for claim.

For reason, although six students obtained significantly higher scores in the second draft than the first draft on reason, four of them had made zero gain. It appeared that the four students in the group had made no improvement of their writing quality on reasonings of an argumentative essay after training while one of all

students, LSS8 was the most successful when she had made +1 gain in reasonings. The others had made gains exceeding 0.33 ranging from 0.33 to 0.83.

Further results of analytic ratings showed that all of the ten students obtained higher scores on rebuttal although two students, LSS5 and LSS7 had not made significant gain (+0.16). Surprisingly, LSS2 who had made no gain in both claim and reason had made the most gain in rebuttal of all students (+1 gain). This showed that all students had made improvement on revising for rebuttal after training.

According to the data from analytic ratings and all three aspects of an argumentative essay including claim, reason and rebuttal, the students improved the quality of their second draft as a whole after metacognitive strategy training. Yet, there were some students who had no improvement on some aspects, but they did improve on the other aspect of an essay. Therefore, the training in revision had a positive effect on students' writing in a way that improved their writing proficiency.

Table 4.15 also illustrates the mean scores and standard deviation of analytic ratings of the less successful students' first and second drafts. In addition, the mean gain difference between the two drafts was provided.

Table 4.15 Statistics of Writing Quality Scores: the Mean scores, Standard Deviation from Analytic Ratings for the Less Successful Students' First and Second Draft

Writing	N	Claim		Gain	Reason		Gain	Rebuttal		Gain
		Mean	SD		Mean	SD		Mean	SD	
First draft	10	2.88	0.65		2.50	0.71		2.21	0.42	
Second draft	10	3.33	0.55	0.45	2.90	0.67	0.40	2.80	0.53	0.59

Returning to Table 4.15 and the results for mean scores on claim, reason and rebuttal, it can be seen that the mean scores of students' second draft were considerably higher than the mean scores of their first draft on all aspects. In addition, all the less successful students made mean gains between the first draft and second draft. Interestingly, the students made the high gain in rebuttal (+0.59), the moderate gain in claim (+0.45), and they made the least gain in reason (+0.40). The results suggested that all students made improvement in the quality of writing, though they had not made the big gain between the two drafts. This confirmed the results from the analysis of the average analytical ratings for individual students. This would imply that students were making more successful in revising the first draft for claim, reason and rebuttal of an argumentative essay after metacognitive strategy training.

4.3.2 Correlation of the Holistic and Analytic Ratings

Essentially, in the first part of the quantitative analysis of results from the ratings revealed the raters' evaluation of the less successful students' first draft and second draft based on two measures: the holistic scoring and analytic scoring. The results suggested that the less successful students' second drafts improved on both systems. The improvement was measured by gains made between the first draft and second draft. The ratings from the holistic and analytic scoring then were examined to determine the correlation between the ratings scored by three raters before establishing the statistical test. Therefore, Pearson-product moment correlation was used for both measures.

4.2.2.1 Correlation of the Less Successful Students' Holistic Ratings

The correlation analysis for the holistic ratings of the less successful students' first draft was calculated using Pearson-product moment correlation. Also, coefficients of determination were calculated to examine the extent to which the variance in one set of the rater score can be accounted for the others. The first draft's holistic ratings were also calculated for all three possible pairs of raters. The results of the correlations for the three scorings from the first drafts and the second drafts were summarized in Table 4.16.

Table 4.16 Holistic Ratings of the Less Successful Students' first and second Draft Correlation Coefficients (r)

First draft N=10	r	Second draft N=10	r
Rater 1 – Rater 2	.85	Rater 1 – Rater 2	.71
Rater 1 – Rater 3	.72	Rater 1 – Rater 3	.59
Rater 2 – Rater 3	.76	Rater 2 – Rater 3	.55

As illustrated in Table 4.16, the results of the correlation analysis for the three sets of holistic ratings of the first drafts rated by three independent raters calculated by Pearson product-moment correlation revealed the high correlations within all ratings. To be specific, the correlations between the ratings rated by Rater 1 and Rater 2 were found to be .85. In addition, the correlations for ratings between Rater 1 and Rater 3 and Rater 2 and Rater 3 were .72 and .76. The correlations among and between the raters suggested that the raters' assigned ratings on the students' first draft using holistic scoring were related positively. This reflected the consistencies

within the raters' assigned ratings for the students' first draft of their argumentative essay.

The results of correlations for the three sets of holistic ratings of the second draft were also summarized in Table 4.16. The correlations were significant but in the moderaterange for two pairs of raters: Rater 1 and Rater 3, and Rater 2 and Rater 3 ($r = .59$ and $.55$). The correlation of ratings between Rater 1 and Rater 2 was quite high ($r = .71$). Similar to the results from the holistic of the first draft, the correlation analysis for the holistic ratings of the students' second draft revealed the consistencies within the raters' assigned scores.

4.3.2.2 Correlation of the Less Successful Students' Analytic Ratings

The analytic ratings of the less successful students first and second draft were also calculated separately to determine the correlation coefficients between each component scored by three raters. Table 4.17 shows the correlation matrix for the less successful students' first and second draft of their argumentative essay.

Table 4.17 Analytic Ratings of the Less Successful Students First Draft Correlation Coefficient (r)

N=10	r (Claim)	r (Reason)	r (Rebuttal)
Rater 1 – Rater 2	.68	.77	.41
Rater 1 – Rater 3	.70	.75	.87
Rater 2 – Rater 3	.25	.83	.45

As shown in Table 4.17, the results of the correlation analysis for the three sets of analytic ratings of the less successful students' first draft were found to be significant in the moderate or high range for claim between two pairs of the raters'

assigned scores. More specifically, analytic ratings for claim rated by Rater 1 and Rater 2 were moderately correlated ($r = .68$) and the assigned scores rated by Rater 1 and Rater 3 were highly correlated ($r = .70$). The low correlation was found in assigned scores for claim by Rater 2 and Rater 3 ($r = .24$). This suggested the inconsistencies within analytic ratings for claim between Rater 2 and Rater 3. Further, the correlations for the three sets of analytic ratings for reason were significant in the high range ($r = .77, .75$ and $.83$). This showed that the assigned scores for reason rated by three raters were positively related. Also, the correlation for the analytic ratings for rebuttal were significantly related in the moderate range for two pairs: between Rater 1 and Rater 2 ($r = .41$) and Rater 2 and Rater 3 ($r = .45$), and high for one pair, between Rater 1 and Rater 3 ($r = .85$).

The correlation analysis from analytic ratings of the first draft revealed that that most of the correlations were significant in the high range; there was only one low correlation for analytic ratings for claim, two moderate correlations for rebuttal. Therefore, the analytic ratings for the first drafts were reliable numerical data for further inferential statistics. Table 4.18 shows the correlation matrix of analytic ratings of the less successful students' second draft.

Table 4.17 Analytic Ratings of the Less Successful Students Second Draft Correlation Coefficient (r)

N=10	r (Claim)	r (Reason)	r (Rebuttal)
Rater 1 – Rater 2	.50	.58	.79
Rater 1 – Rater 3	.85	.88	.61
Rater 2 – Rater 3	.26	.58	.65

As shown in Table 4.18, the correlations for analytic ratings of the second

drafts assigned by three raters were also calculated for all three aspects: claim, reason, and rebuttal. The results of correlation analysis were significant in the low, moderate and high range, but most of the correlations were in high range. The high correlations fell into the assigned scores for claim ($r = .85$) between Rater 1 and Rater 3 and assigned scores for reason ($r = .88$) between Rater 1 and Rater 3. The low correlation was the analytic ratings for claim rated by Rater 2 and Rater 3 ($r = .26$).

In brief, the correlation analysis of results for the ratings of the first drafts and second drafts assigned by three raters using two measures: holistic and analytic scoring rubrics were undertaken to assess the degree of relationship among the three sets of assigned scores. Most of the correlations correlated positively and significantly within the three sets of ratings for each of the scoring method. The correlation analysis of results exhibited the consistencies within each set of assigned scores. The results were in support of the consistencies of the three independent raters; therefore, the data (the ratings) were reliable for investigating the second research question of the present study.

4.4 Summary of the Chapter

This chapter presents the quantitative analysis of results from the Pre and Post Metacognitive Strategies Questionnaire and pre and post interview data, demonstrating metacognitive strategies the successful and less successful students used in the first draft revision of their argumentative essay before and after metacognitive strategy training. In addition, it discusses the findings from the quantitative analysis of the less successful students' first and second draft of their argumentative essay to examine the effects of metacognitive strategy training in the

first draft revision and prove whether the metacognitive strategy training improved the quality of students' writing.

Chapter 5 presents the qualitative results from the pre and post interview data and journal entries as the triangulation method for the quantitative results examined in the present study.

CHAPTER 5

QUALITATIVE RESULTS OF THE STUDY

This research study investigated the effects of metacognitive strategy training on third-year English majors' revision of their argumentative essay. The researcher wanted to seek the answer to the first research question: "What metacognitive strategies do successful and less successful third-year English majors of Srinakharinwirot University use in revising the first draft of their argumentative essay?" The previous chapter presented the quantitative results showing students' metacognitive strategies use in the first draft revision from the analysis of the Pre and Post Metacognitive Strategies Questionnaire. This chapter then describes the qualitative results showing the students' use of metacognitive strategies as identified in their interview protocols as the methodological triangulation to promote a more comprehensive metacognitive strategies use. The researcher also provides the analysis of the students' journal entries regarding the cognitive and affective factors reflecting the students thinking toward metacognitive strategy training in the first draft revision as a compliment to the quantitative result.

5.1 Successful Students' Use of Metacognitive Strategies in the First Draft Revision

Qualitative analysis of the successful students' retrospective interviews before and after metacognitive strategy training revealed both similarities and differences in

the three main categories of metacognitive strategies use: 1) the Planning strategies, 2) Monitoring strategies, and 3) Evaluating strategies.

5.1.1 The Use of Planning Strategies

The Planning strategies represents the planning process that the students plan before beginning the revision task so that they can reflect how they are going to approach and carry out the first draft revision. The students who take part in the first draft revision can use Planning strategies through four sub-strategies: Advance Organizer, Organizational Planning, Selective Attention, and Self-Management.

5.1.1.1 The Use of Advance Organizer

Advance Organizer is used in the first draft revision when the students can understand the revision task by analyzing and determining the nature of the revision task, and develop personal revision objectives or goals of the revision task.

Before training, Advance Organizer was identified in eight reports from the successful students since they reported that they would read the returned first draft to determine the problems identified in the first draft, so they would know how they were going to approach and carry out the revision task (AO1). Only one student (SS10) reported another aspect of Advance Organizer, planning the objective or purpose of the task (AO2), and three students reported on planning objectives of the revision task (AO3).

After training, not surprisingly, all participants used
Advance

Organizer as they exhibited an awareness of analysis strategy and determining the nature of revision task clearly (AO1). Five students knew what to plan for the first draft revision (AO2), and eight of them were aware of setting a personal revision goal and purpose of the revision task (AO3). Table 5.1 summarizes the number of the successful students who reported the use Advance Organizer in the first draft revision.

Table 5.1 The Use of Advance Organizer by the Successful Students

Individual strategies of Advance Organizer	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Advance Organizer(AO)</i>				
1. Analyze/determine the nature of the task. (AO1)	8 (SS2,4,5,6,7, 8,9,10)	2 (SS1,3)	10 (SS1-10)	-
2. Set a personal revision goal. (AO2)	1 (SS 10)	9 (SS1-9)	5 (SS1,2,4,9, 10)	5 (SS3,5,6, 7,8)
3. Plan objective/ purpose of the revision task (AO3)	3 (SS3,5,6)	7 (SS1,2,4,7, 8,9,10)	8 (SS1-8)	2 (SS9,10)

Before training, most of the successful students reported the use of Advance Organizer in a similar way such as SS7 and SS9.

AO1-SS7 “...I’ll read the feedback, then I’ll make list of my problems in the first draft identified by the teacher. If my problem is about insufficient details to support the thesis, I’ll do more research. I’ll maintain the good part in the paragraph...”

AO1-SS9 “I’ll reread the first draft to see mistakes, what should be revised? Where to find out more information...”

The above reports revealed that the students would use self-analysis skill to determine the nature of the task needs to be done for completing the first draft revision at the beginning of revising by rereading the returned first draft and looking for their mistakes and problems. They also reported that they would consider the content and ideas, the focus of the first draft revision, in the first place.

In contrast, SS1 and SS3's report showed that they did not use AO1.

SS1 "I will look at the sentences with the wrong grammar usage..."

SS3 "I'll read the first draft, and then find our mistakes and correct them."

This shows that these two students' reports were not involved understanding the nature of the revision task.

When asked if they thought of setting the personal revision goal and strategies of how to approach and carry out the task, SS10 mentioned her own problem with supporting details, so she had a specific purpose for her revision, she said:

AO2-SS10 "...because I think that I didn't put the concrete supporting details, I put some, but, but some parts of the essay I didn't put it so I'll find the weak part and add more concrete examples..."

However, SS8 did not report the use of AO2 and AO3 because she would never think of any particular strategies to help them through the revision task, and they would not set the goal sequentially or have well-planned objectives before doing the revision task as she stated that:

SS8 "...I have no idea about revising strategies. One thing I know is that I am a writer for the first draft so I need the other reader to read or I can improve the second draft because if I read it myself, I'll think that this paper is always perfect. Also, I'll ask a friend to read it and check whether he/she understands what I am going to communicate..."

SS2 would revise by following the teacher comments and feedback. She did not report the use of Advance Organizer. She states that:

SS2 “ I’ll read the first draft and look at the comments and feedback from the teacher. List the problems identified by the teacher. Look at the sentences that were grammatically correct.”

After training, SS4 used Advance Organizer as they exhibited awareness of analysis of strategy and determining the nature of revision task clearly since they all knew what kind of the tasks needed to be done to improve their first draft effectively.

AO1-SS4 “I reread the returned first draft with feedback. I followed the revision sub-tasks starting by revising the thesis, content and ideas. I considered the audience, overall organization, paragraph development, and unity and coherence...”

SS4 described the sequence of the revision task according to the revision sub-tasks beginning with the thesis, the content and ideas, the overall organization, paragraph development, and unity and coherence.

SS1 only said that her plan was to revise for the purpose and audience.

AO2-SS1 “I reread..., make notes about the problems identified by the teacher...I know that I had to revise for the purpose and audience...”

More importantly, SS5 and SS3 showed that they were aware of setting a personal revision goal and purposes of the revision task.

AO2/AO3- SS5

“Yes, I set my personal revision goal based on the teacher’s comments...I tried to reach the goal-the problem points indicated by the teacher...”

AO3-SS3 “...The first thing is the content and ideas, they should have directly related to the thesis...that is, the unity of the whole essay...”

In short, the students’ utilization of Advance Organizer, specifically by analyzing and determining the nature of the revision task before training was high

because the students thought they would reread the first draft before doing the revision task. Rereading the first draft would probably help them better understand the task. However, when asked whether they would set personal revision goal and develop the purpose and objectives of the revision task, very few students knew how to set the goal and purpose of revision, and they haven't decided what they should plan to do to complete the first draft revision.

Apparently, after training, all participants clearly reported the use of Advance Organizer as they stated that they could understand, and analyze the task of revision for an argumentative essay correctly. In addition, the number of students who reported the use of goal setting and thinking of the objectives for the first draft revision increased.

5.1.1.2 The Use of Organizational Planning

Organizational Planning involves planning how to accomplish the first draft revision and plan the sequence of the first draft revision task.

It was found that, before training, three successful students reported the use of Organizational Planning to plan the content appropriate for the revision task (OP1) while four of them thought about strategies learned in class and planned to brainstorm these strategies to use in the revision task (OP2). Moreover, three students stated that they would bring into their mind the revising strategies to help them do the revision task such as outlining (OP3). Finally, with the high number, seven students reported how they would relate what they have already known about revising strategies to help them revise their first draft (OP4).

After training, data from the post interview protocols indicated the high use of Organization Planning. The students used the Organization Planning to plan for the content sequence to fit the purpose of the first draft revision, and think of strategies being used to complete the first draft revision (OP1). Similarly, they described how they thought about strategies they have already learned in class (OP2), and they planned to bring this background knowledge (OP3) and relate it with their own problems in a specific revision task (OP4). Table 5.2 summarizes the number of the successful students who reported the use of Organization Planning in the first draft revision.

Table 5.2 The Use of Organizational Planning by the Successful Students

Individual strategies of Organizational Planning	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Organizational Planning</i> (<i>OP</i>)				
1. Plan the content sequence of the revision task (<i>OP1</i>)	3 (SS3,6,7)	7 (SS1,2,4,5,8 ,9,10)	9 (SS1,2,3,5,6,7 ,8,9,10)	1 (SS4)
2. Plan strategies(<i>OP2</i>)	4 (SS1,3,,6,7)	6 (SS2,4,5,8,9 ,10)	8 (SS1,2,4,5,7,8 ,9,10)	2 (SS6,3)
3. Think about the prior knowledge (<i>OP3</i>)	3 (SS3,6,10)	7 (SS1,2,4,5,7 ,8,9)	8 (SS1,2,,4,5,6, 8,9,10)	2 (SS3,7)
4. Elaborate the prior knowledge connected with the revision task (<i>OP4</i>)	7 (SS1,2,3,6,7, 8,10)	3 (SS4,5,9)	10 (SS1-SS10)	-

The interview data below are representative of how the successful students thought that they would use Organizational Planning.

OP1-SS3 “For me, I’ll leave the first draft for a while, find the mistakes and reoutline the first draft... Yes, I know that I have to revise the content and ideas and rewrite my essay...”

SS3 pointed out that she would plan to use outlining, and then reorganize the ideas. SS3 also showed her readiness for completing the revision by prioritizing the revision strategies she has already learned to improve the first draft.

OP2-SS3 “...Yes, I always know what I am supposed to do...First, I reread the first draft. Then I marked the weak points or mistakes and looked at the feedback. Third, reoutline and finally rewrite the essay based on reoutlining...”

This shows that SS3 would try to bring the strategies that she knows about the first draft revision, connects them with the task to help her do the revision task.

SS6 also knew how to use her prior knowledge connected with the existing revision task.

OP3-SS6 “...Yes,...my problem is the content and ideas. My arguments are not strong...I’ll have to use strong arguments to support my thesis...I reread and rethink about what I’ll do to make the arguments strong so my essay will be argumentative... I’ll look for more information and choose the one that suits my main point...”

In contrast, SS2 and SS10, in responding to the question of whether they thought of any kind of planning, in their protocols, they said:

SS2 “Yes, I know that planning is useful but I’ve never planned before...”

SS10 “...kind of planning. Honestly, I can say that I’ve never planned because I don’t know how to plan.”

These three students did not report the use of any aspect of the Organizational Planning and it appeared that they had no experience in planning how to complete the first draft revision.

Some responses illustrate how the successful students integrated Organizational Planning in the first draft revision.

OP1-SS3 "...Yes, I did. Before I learned with you, I didn't think of planning, but now I planned to revise using the Plan Revision Think Sheet..."

OP1/OP2-SS1

"...I think about two things: what to revise and how to revise. For example, when I revised for the content and ideas, I know that I have insufficient details so I plan to search for more information about my topic..."

OP3/OP4-SS7

"...The important thing in the first draft is the content and ideas. I ask myself questions. For example, in the introduction, I ask whether I have background information or whether my thesis statement was clearly stated..."

It was evident that after training, successful students consistently demonstrated how they planned the parts and sequenced ideas which they applied in their revision task. Most of them displayed their prior knowledge of revising strategies they experienced in class and mentioned the instructor's materials and methods used for developing the metacognitive strategy ability.

5.1.1.3 Selective Attention

Selective Attention refers to the strategy the students use to attend to focus on specific aspects of the first draft revision.

Before training, no sign or evidence showed that students involved the Selective Attention. When asked whether they knew the key aspects of the first draft revision of an argumentative essay, none of the students reported the involvement of choosing to focus on specific aspects of the first draft revision or the situational details that will help them perform the revision task.

Differently, after training, the students exhibited the awareness of using Selective Attention by indicating the various aspects of improving the first draft (SA1), and their decision they have made in advance to choose the important one for their own revision task (SA2). Five of the ten students used Selective Attention, but five of them did not report their attention on a particular aspect of the revision task in order to make easier for them to solve their own problems in the first draft. Although the number of students who used Selective Attention was not high, but they demonstrated how they used this strategy clearly. Table 5.3 presents the number of the successful students who reported the use of Selective Attention in the first draft revision.

Table 5.3 The Use of Selective Attention by the Successful Students

Individual strategies of Selective Attention	Successful students (SS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Selective Attention (SA)</i>				
1. Focus on a specific aspect of the task (SA1)	-	10 (SS1-10)	5 (SS3,4, 7, 9,10)	5 (SS1,2,5,6, 8)
2. Sequence or prioritize revising strategies to be used to complete the revision task (SA2)	-	10 (SS1-SS10)	6 (SS1,3,5,7,9, 10)	4 (SS2,4,6,8)

To understand the extend to which successful students use Selective Attention before training, the successful students responded to three questions: “ Do you know what the important aspects of the first draft revision are,” ? “What are your own problems in the first draft?” and “How did you do to deal with these problems?” Some of the students’ responses were as follows:

SS7 “...I’ll search for more information...”

SS8 “...I have no ideas about the important aspects of revision I’m supposed to do...But I know that I have to reorganized the ideas and add more information...”

SS1 “...It was about grammar such as articles...”

These three students reported the revision tasks needed to do, but they did not attend to the key aspects of the first draft revision such as the thesis, the reasons or the main idea of the paragraph. This may be probably because they felt that their job in revising was to use the teacher’s red marks and comments to correct the mistakes, eliminating ungrammatical sentences or just add more sentences. They were not familiar with planning to revise by prioritizing the main aspects of the essay and revising strategies to be used. Therefore, none of the students reported revise using Selective Attention before training.

In contrast, after training, some students learned how to focus their attention to the aspects of the first draft revision. For example, SS4 chose to attend to the introduction and the conclusion to check whether they matched and contained the same thesis.

SA1-SS4 “...My problem is the unity and coherence so I think of the sentences I wrote in the first draft...I plan to use transitional words to connect the sentences to make them coherent...”

SS7 decided to focus on transitional words to connect the sentences within paragraph to make it a coherent paragraph.

SA2-SS7 “...I plan to revise each revision sub-task starting from the introduction and conclusion. I plan to check whether the introduction and the conclusion matched and whether thesis was clearly stated in both the introduction and the conclusion...”

SS9 selectively revised the first revision sub-task, the introduction by focusing on the thesis.

SA1/SA2-SS9

“...In my first revision task, in the introduction, I checked whether I stated the thesis clearly...” (SS9)

It was found that after training, the successful students have tried to use Selective Attention that helped them perform the revision task by selectively concentrating on the specific parts of the first draft revision such as the thesis. This can make it easier for them to identify the important task needs to be done for their revision goal and ignore the distractions.

5.1.1.4 Self-Management

Self-Management involves seeking or arranging the conditions that help in the first draft revision, and knowing when, where and how to do the revision task successfully and unsuccessfully.

Before training, two of them think of planning to use the appropriate revising strategies for a specific purpose of the revision (SM1), and nine successful students reported the use of Self-Management to plan when, where and how to revise successfully (SM2). The results also revealed that most successful students thought that when revising the first draft, they could manage the condition to help them revise effectively by focusing on a specific revision task at a time, and they thought that they would revise separately, not do the whole thing in one sitting.

After training, the number of students who reported using Self-Management increased; seven of them demonstrated an awareness of Self-

Management by selecting appropriate revising strategies for each revision task (SM1) while three out of the ten students felt that it was not necessary to plan when, where and how to revise systematically and sequentially (SM2). Similarly, all of the students chose to revise each revision sub-task separately.

Table 5.4 presents the number of the successful students who reported the use of Self-Management in the first draft revision.

Table 5.4 The Use of Self-Management by the Successful Students

Individual strategies of Self-Management	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Self-Management (SM)</i>				
1. Select the appropriate revising strategies for the specific purpose of the revisions	2 (SS 5,7)	8 (SS1,2,3,4,6,8,9,10).	7 (SS1,2,5,7,8,9,10)	3 (SS3,4,6)
2. Describe when, where and how (conditions) to use revising strategies for completing the revision task)	9 (SS1,2,3,5,6,7,8,9,10)	1 (SS4)	10 (SS1-SS10)	-

Below are the examples of students' report on two aspects of Self-Management before and after training.

Before training, SS5 thought that she would decide to search for more information because she knew that her first draft was not well-supported.

SM1-SS5 "... Yes, the content; it's not enough. I'll search for more information. I'll have to use some more facts or examples to support my argument..."

Before revising, the successful students also reported their use of Self-Management as they said that they would choose to revise each revision task. To do this, they said that they would think of their own problem through revising.

SM2-SS7 “I’ll focus on one thing at a time, not do the whole thing...I’ll think of my own problem through the revision task...My problem is about the content and ideas. I don’t know how to use strong arguments to support my thesis. I think about this all the time...”

The only student, SS4 reported that she would do the whole thing in one time when revising. SS4 did not think of a specific revision sub-task. She was used to correcting the whole mistakes after she got back the teacher’s feedback and she has never thought of any kind of planning before starting to revise because she has never reflected her own problem before.

SM2-SS4 “...I never think of my own problem in the first draft...I’ll focus on the whole thing at one time.”

SS1 and SS2 did not demonstrate their knowledge about using Self-Management strategy related to their own problems in the first draft. These students also reported that they did not try to choose any revising strategy for a specific purpose of the revision task

SS1 “No, I don’t know what I am going to accomplish the first draft revision. In the past, I revise as soon as I got the draft back.... Actually, I corrected most of the grammar...”

SS2 “I’ll get confused what to do first, second or third to revise my first draft.

As shown below were the examples of students’ report after training. They reported on when, where and how to use Self-Management strategy to do a separate task.

SM1-SS2 "...I had the problem in refutation paragraph. I failed to give reasons for the counter-arguments. I had to revise this part..."

SM2-SS1 "...I revise separately. For example, I revise the introduction, and then moved to the body and the conclusion..."

SM1/SM2 -SS7

"I planned to revise each revision task starting with the introduction and the conclusion by matching them to check the main point or the thesis of my essay."

The above results indicated that before revising, while the successful students used the Organizational Planning to plan the parts of specific revision tasks, they also used the Self-Management strategy when they decided to choose the revising strategies to effectively complete their first draft revision. However, these students also needed to activate the prior knowledge about revising strategies and argumentative writing they stored in their schema. That is, students have adequate knowledge related to the new task; therefore, they can decide to choose the appropriate strategies to suit a specific purpose of the new task.

5.1.2 The use of Monitoring strategies

Monitoring strategies are used during performing the task to measure the effectiveness of the first draft revision. Monitoring strategies include two sub-strategies: Monitoring Comprehension and Monitoring Production.

5.1.2.1 Monitoring Comprehension

Monitoring Comprehension involves the strategies used during the first draft revision by checking the understanding, accuracy, and appropriateness of

the revision task, and the students who take part in this strategy could also check their own abilities and difficulties while doing the revision task.

The results revealed that before training, most successful students (eight of them) reported that they expected to check their own abilities and difficulties in doing the first draft revision, and seven students further indicated that they would also try to check their understanding of those problems and difficulties when doing the revision task.

Apparently, after metacognitive strategy training, nine students pointed out that they used Monitoring Comprehension to measure their effectiveness while revising. Also, after training, all of them used Monitoring Comprehension by thinking about whether they understood the task or if they were making sense when revising. Table 5.5 shows the use of Monitoring Comprehension by the successful students.

Table 5.5 The Use of Monitoring Comprehension by the Successful Students

Individual strategies of Monitoring Comprehension	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Monitoring strategies				
<i>Monitoring</i>				
<i>Comprehension(MC)</i>				
1. Check one's own understanding, accuracy and the appropriateness of the overall revision task. (MC1)	8 (SS1,3,4,5,7,9,10)	3 (SS2,6,8)	9 (SS1-SS9)	1 (SS10)
2. Check their own abilities and difficulties in doing the revision task (MC2)	7 (SS1,3,4,5,7,8,9)	2 (SS6,10)	10 (SS1-SS10)	-

In the following are students' responses before training showing the use of Monitoring Comprehension.

When asked if she had difficulties in doing any revision task, SS4 reported that she would try to check what her problems and difficulties before revising are. However, this student did not point out how she would manage to use particular methods or strategies to help.

MC1-SS4 "...Yes, I had difficulties in using my ideas to support the point to make it stronger....I don't know much about the structural elements of a good argumentative essay, organization and paragraph development..."

SS7 felt that her problem was about the content and ideas.

MC2- SS7 "...My problem is about the content and ideas. I don't know where to put the content and ideas in the essay to make persuasive and convince the reader..."

Apparently, after training, the successful students demonstrated understanding about their obstacles in doing the revision task.

MC1-SS3 "...I had the problem when I wanted to revise for the audience because I am not sure whether the audience understands what communicated o them..."

MC1 -SS7 "...My difficulties is revising the body paragraph to connect the ideas in each sentence to make it coherent...I had the problem in using transitional word..."

It was evident that SS3 had difficulties in revising for the audience while SS7 got into difficulties while revising the body paragraph for coherence.

When asked how they decided to make changes or adapt the first draft, students exhibited their understanding about the aspects of good argumentative writing. SS3 described her problem, the paragraph development first, and then explained how she revised to fix weaknesses.

MC1/MC2-SS3

“For example, when I revise the body paragraph, I know that I didn’t have the topic sentence, so I wrote the topic sentence for this paragraph. Also, I didn’t give the clear examples in my supporting evidence so I tried to add more examples. If there were some irrelevant details, I cut it. I also did this based on my new outline you told me to do...”

SS1 felt that focusing on the purpose helped her improve the content and ideas of the essay.

MC1/MC2-SS1

“...I have the purpose in mind about what I want to communicate so I made changes based on the purpose. For example, I changed the content and ideas to make them more persuasive so the readers would agree with my arguments. My topic is about smoking, the smokers would believe that smoking does not really bring relief and they would quit smoking...I guess...”

This suggested that SS1 attended to the purpose, the audience and the thesis and elaborated on how she argued to make her essay more argumentative and convincing

In brief, before training, the successful students reported the perception of the Monitoring Comprehension when they demonstrated the understanding of the overall revision task such as revising for the audience and the coherence within a paragraph. They also knew whether they were capable to do the revision task. Although the successful students claimed that before revising they would try to check their own understanding the abilities and difficulties in revising, some students did not have much to say about the components of a good argumentative essay and what strategies they would bring to use with these problems when revising.

After training, it is quite clear that the successful students had prepared to approach their revision task by thinking about the abilities based on their prior knowledge and experiences related to argumentative writing when they elaborated on

how they revised those problems in their first draft. This result suggested that the successful students selected or adapt strategies learned to help in revising more effectively.

5.1.2.2 Monitoring Production

Monitoring production is used to select revising strategies or writing strategies learned, and then match them with their problems identified in the first draft to accomplish the first draft revision.

It was found that before training, six successful students reported that they would use Monitoring Production by selecting the revising strategies learned from class (MP1), and six of them would also try to match the selected revising strategies with their own writing problems in the first draft (MP2). However, not all of them could monitor when four students did not know how to approach and carry out the revision task by selecting or adapting the appropriate revising strategies with the revision task.

After training, eight successful students exhibited the awareness and the use of Monitoring Production by saying that they focused their attention on revising the thesis and at the whole essay level (MP1), and nine students reported that they have relied on the revision guides to help them performing the revision effectively. Table 5.6 illustrates the use of Monitoring Production by the successful students.

Table 5.6 The Use of Monitoring Production by the Successful Students

Individual strategies of Monitoring Production	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use

<i>Monitoring Production (MP)</i>				
1. Select revising strategies/writing strategies learned to complete the revision task (<i>MP1</i>)	6 (SS1,2,3,5, 8, 9)	4 (SS4,6,7,10)	9 (SS1-SS9)	1 (SS10)
2. Use and match the selected revising strategies with the writing problems in the first draft(<i>MP2</i>)	6 (SS1,2,3,,5, 7,10,)	4 (SS4,6,8,9)	8 (SS.1,2,3,4, 5,9)	2 (SS6,8)

In the following are the illustrations of successful students who reported the use of Monitoring Production before training.

MP1-SS3 "...Yes, I'll focus on one thing. For example, the first time I'll revise, I'll revise...I'll revise for the overall essay..., revise the content and ideas to make sure that they relate to the thesis and go at the same directions..."

SS3 expressed her opinion toward the main focus of the first draft revision by considering the overall essay particularly the content and ideas, but they she did not say how she would monitor the revising strategies when revising.

MP1-SS9 "...Yes, the thesis needs to be well-supported...I'll also ask myself The questions like: What is the purpose of the essay?, What does the writer want to tell the reader about?...I used these questions when I started writing the first draft...I remembered."

SS9 responded to the question about how she would select or adapt the methods or strategies learned to complete the first draft revision. SS9's response showed how she would use the Monitoring Production as she thought that she could monitor what she has learned from class to fit in her specific revision task when performing the task.

Unfortunately, SS10 did not understanding about how to improve the first draft to make a good argumentative, and show any sign for the use of Monitoring

Production. She only said: What she perceived was to follow the feedback and comments from the teacher.

SS10 "...How to select or adapt revising strategies learn from class...?
I think I'll reread the first draft, make list of the mistakes and revise step by step. I won't do the whole thing."

After training, students responded to the questions asking what students considered the main focus of the first draft revision. SS2 pointed out:

MP1-SS2 "...Actually, I used all revising strategies but the important one is revising the thesis first...because when I had a strong thesis, I know what I had to revise in the body. It made revising the body paragraph easier... The other one is using Self-Revision Think Sheet with two tables for original text and the revised text. It helped me develop the ideas logically. After I reoutlined for the second draft, I used the table for rewriting the revised version. The table helped me see the problems in the first draft clearly...and I compared the revised text with the original one..."

SS2 revealed that she focused on the specific aspect of the first draft revision -the thesis statement about whether death penalty should be abolished in Thailand, and then she revised by monitoring all the revising strategies and knowledge about argumentative writing learned. SS2 also applied the Self Revision Think Sheet that she practiced in class to help when revising for the thesis and the reasons to support her opinion why death penalty should be abolished.

SS7 used Monitoring Production to connect her knowledge about revising strategies to help performing each specific revision task hoping that these strategies help her regulate the revision task.

MP2-SS7 "...the main focus...? The main focus of the first draft is trying to persuade and convince the reader to agree with my essay."

Furthermore, SS7 explained how she changed or adapted the methods to improve her first draft while she was revising.

MP1/MP2-SS7

“...How did I make changes...? First, I reread the first draft and the feedback and then I revised the introduction by adding more background information about the entrance examination system in Thailand. After that I looked at the thesis statement and tried to match the conclusion with the introduction. I checked whether I restated the thesis and whether I ended the conclusion with powerful ending or persuade the reader to take action-to change or abolish the entrance system in Thailand.”

SS10 emphasized on providing reasons for her argument:

MP2-SS10 “...Yes, my topic is about whether the hilltribes should be subsidized

by the government or organizations for more opportunities in education...I had to provide more reasons to convince the concerned people and authorities to agree with me so I quoted the experts and illustrated the real problems of hilltribes from daily newspaper.”

SS3 felt that the focus should be placed on the content and ideas when revising the first draft. She also reported the successful strategies she used. SS3 stated that:

MP2-SS3 “ ...Yes, I know that the most important thing in the first draft revision is the content and ideas and the overall organization...I had to concentrate on the whole essay level...I used An Analysis of the essay...I like it. It helped me see clearly about the weak and the strong point.”

SS1 also pointed out about the focus of the essay she needed to attend to. She used Monitoring Production strategy to monitor her Revision Sub-Task 1 while revising for the clear content and ideas.

MP2-SS1 “ Yes, I know that the focus of the essay is the content and ideas that persuade the reader...(SS1)\

It could be concluded that although most successful students reported the high use of Monitoring Production, there was the difference in the use before and after training. Before training, they did not show their knowledge about revising strategies comprehensively and variably while after training they reported how they used the variety of strategies to revise successfully. This might be because the retrospective

interview asked about their perception of these strategies before performing the revision task; thus, it is difficult for them to think ahead. The results suggested that the metacognitive strategy training in revision was very useful in affecting a change in the use of metacognitive strategies.

5.1.3 Evaluating Strategies

Evaluating strategies are used after completing the first draft revision to check the outcome of the task against the criteria, and the students who use these strategies can also judge and reflect on how well they accomplish the revision task. The Evaluating strategies involve three strategies: Self-Assessment, Self-Evaluation, and Self-Reflection.

5.1.3.1 Self-Assessment

Self-Assessment is used to assess whether the students meet the revision goal and to make a decision about the revision outcome (the second draft) based on a clear description of criteria for a good argumentative essay.

Before training, five successful students reported that they would make a decision about the outcome (their second draft) and judge the quality of their second draft, but they did not describe the criteria for judging the paper clearly (SA1). In addition, six of them said that they would check whether they achieve or succeed in the revision goal (SA2). The students' responses before training demonstrated that they were aware of using Self-Assessment to assess whether they would meet their goal for the task although they could not explain how to self-assess their task and give the reasons why they would or would not meet the goal.

After training, Self-Assessment was used by nine successful students. These students made a decision about their complete second draft based on the components of a good argumentative essay. By using the components of an argumentative essay as the criteria to judge the quality of the second draft, they could tell whether their essay met the requirements (SA1). These students further reported that they examined whether they met the revision goal by comparing the second draft with the first draft, the same method as they thought of using before training, therefore they knew that they revised the first draft successfully (SA2). They also had the personalized way to make an assessment of their own success. Table 5.7 illustrates the use of Self-Assessment by the successful students.

Table 5.7 The Use of Self-Assessment by the Successful Students

Individual strategies of Self-Assessment	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Assessment (SA)				
1. Make a decision about the outcome based on a clear description to judge the quality of the paper. (SA1)	5 (SS1,3,4,7,9)	5 (SS2,5,6,8,10)	9 (SS1-SS9)	1 (SS10)
2. Make an assessment of success or failure (SA2)	6 (SS2,3,4,5,7,10)	4 (SS1,6,8,9)	9 (SS2,3,4,5,7,8,9,10)	1 (SS6)

As shown below were the retrospective interviews from the successful students who reported their awareness of Self-Assessment before training.

SA1-SS4 “I’ll reread my second draft and I’ll judge the quality of my paper by comparing it with the first draft to see if it’s better than the first one

or I'll ask a friend to read my second draft..."

SS4 reported that she would judge the quality of her second draft by comparing it with the first draft or asking a friend to read her revised draft. That is, she thought of creating her personalized way to assess the task.

SS10 thought that she would succeed in her revision goal as she stated:

SA2-SS10 "Yes, of course...I believe that if students have one more chance to revise their own paper and they have somebody or strategies to guide them and help them write, write in the process, they will enjoy the composition class and the second draft will be much better..."

The other successful students reported their use of Self-Assessment in a similar manner. They would assess their own second draft by comparing it with the first draft and they would also try to make an assessment of their success hoping that they would achieve their revision goal. That is, they would check whether their expectation while doing the revision task is met.

After training, SS9's responses showed that she used Self-Assessment to check whether she met the requirements of a good argumentative essay. She stated:

SA1-SS9 " Yes, I reread the second draft to check whether my essay met the requirements of a good argumentative essay. The components of a good argumentative essay...Sure...A strong thesis, the introduction that attracts the reader's attention, body paragraphs with my arguments and the opposing views, conclusion, transitional words, and good organization..."

SS5 described how she made an attempt to assess her second draft using Self-Assessment.

SA1-SS5 "...Yes, I did. I reread through the second draft one or two times and looked at the comments to check whether I fixed all the problems indicated in the first draft and whether it had the components of a good persuasive essay...The components...First, content and ideas must be concise and support the thesis, sufficient supporting details, the writer takes the position on one side, either negative or positive,

reasons and refutation paragraph...”

SS5 also pointed clearly how she assessed her success of revision task and how well she judged the quality of her writing. In her protocols, she thought that she achieved the revision goal because she supported her position with strong reasons about the negative effect of computer games.

SA2-SS5 “...I checked to see if I met my revision goal. My goal...is to revise for the clear content and ideas so when I reread it I felt that the ideas are clear and better than the first one...I think I achieved my revision goal. Why?...Because I can find the reasons to support the thesis strongly...My essay is about the negative effect of the computer games, and I argued why the computer games are not suitable for children. For example, I talked about the aggressive content and the violence of the computer games...I think my reasons are OK...”

SS4 used Self-Question and Answer Worksheet to check whether she met the revision goal and later, she explained that she thought she achieved the revision goal.

SS4 used Self-Question and Answer Worksheet to check whether she met the revision goal and later, she explained that she thought she achieved the revision goal because she felt that her essay changed a lot.

SA1-SS4 “...Yes, I did. I checked to see if I met my revision goal. I used Self-Question and Answer Worksheet and looked at the responses that I wrote at the end of each question about the problems in my first draft and the things I had to do to revise...I am sure that I achieved my revision goal because my second draft changed a lot. For example, I had a clear thesis, more supporting details and examples in the body paragraphs. When I read I felt that it’s better and it’s convincing...”

The above analysis showed that after training, the successful students used Self-Assessment to assess their second draft based on the clear description of criteria for a good argumentative essay, namely the components of a good argumentative essay after completing all of the revision sub-tasks, and then they made an

assessment of their success by confidently reporting that they achieved their revision goal. In addition, they felt that their second draft met the requirements of a good argumentative essay. After training, the students also exhibited how they monitored the revising and writing strategies they have learned while performing the specific revision task. The findings suggested that students activated the prior knowledge related to the revision tasks needed to be done and connected it with those tasks. In other words, the students combined Organizational Pattern with Self-Assessment.

5.1.3.2 Self-Evaluation

Self-Evaluation involves the strategies used to evaluate how well the students applied the revising strategies and how effective and appropriate the strategies are for the first draft revision.

It was found that before training, when asked to think of the kind of things they will do after completing the first draft revision, not many students reported the use of Self-Evaluation. A few students expected to evaluate how well they learned to revise or how well they would revise (SE1) while the number of students who thought that they would evaluate the effectiveness of revising strategies was higher (SE2). Four students would use Self-Evaluation to evaluate how well they learned the task and *six* students would use this strategy to evaluate the use of strategies and the effectiveness of those strategies.

After training, most successful students evaluated how well they learned to revise and how well they improved the first draft (SE1). These students also evaluated the effectiveness of strategies used to perform the revision task (SE2). Two aspects of Evaluating strategies were identified in eight students while two of them did not say

clearly how well they did the revision or whether they revised their first draft successfully or effectively. Table 5.8 shows the use of Self-Evaluation by the successful students.

Table 5.8 The Use of Self-Evaluation by the Successful Students

Individual strategies of Self-Evaluation	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Evaluation (SE)				
1. Evaluate how well one learns to revise (<i>SE1</i>)	4 (SS4,7,9,10)	6 (SS1,2,3,5, 6,8)	8 (SS2,3,4,5, 7,8,9,10)	2 (SS1,6)
2. Evaluate the strategies used to revise the first draft (<i>SE2</i>)	6 (SS3,4,5,8, 9,10)	4 (SS1,2,6,7)	8 (SS1,3,4,5, 7,8,9,10)	2 (SS2,6)

As shown below are the retrospective data showing the use of Self-Evaluation by the successful students before and after training.

Before training, SS10 reported that she thought she would use Self-Evaluation to evaluate how well she learned to revise by using the teacher feedback and comments.

SE1-S10 “ I can’t tell how well...but I know that my second draft should be better than the first one because I get the feedback and know my problems, based on your comments and feedback and by rereading the first draft...”

SS9 pointed that she thought about using self-questioning.

SE2-SS9 “Yes, I think I can use self-questioning as we used when we wrote the first draft. You taught me to ask so as to prepare to write the first draft. I think it’ll work well when we revise, too. ”

After training, SS7 admitted that she used self-evaluation and described the steps and process she used for self-evaluation.

SE1-SS7 “Yes, I self-evaluated my second draft and I know that it is better than the first draft. As I mentioned before, in the introduction, and in the body of my essay, it is not coherent or a unified paragraph, but...in the second draft I revised all of these parts and I know that it is more complete. I used the feedback and checked whether I revised based on the feedback and I used Self-Evaluation Checklist”

As for other successful students, they reported the use of Self-Evaluation in a similar manner. They revealed that they self-evaluated their task by relating their background knowledge to new task. For example, SS9 used Self-Questioning and Self-Evaluation Checklist they practiced for each specific revision task to evaluate her own second draft., and she could apply this method in a new situation. That is, she could possibly use the same method to evaluate other’s second draft. Below was SS9’s report.

SE2-SS9 “ Yes, I did. I used the questions in the Self-Question and Answer Worksheet and compared the part that I revised. I also checked my second draft using Self-Evaluation Checklist...Yes, I think I can do it by using the same criteria and Self-Evaluation Checklist or the Self-Question and Answer Worksheet...”

SS5 organized the ideas based on the rhetorical pattern of an argumentative essay.

SE2-SS5 “Successful strategies for me, I think when I used the components of a good essay, I mean the Plan, it helped me how to organize the ideas in each part of the essay such as the introduction, the body and the conclusion...”

SS4 said that she revised in according to the revision sub-tasks and she thought it was a success.

SE2-SS4 “I used all the strategies you taught me. To be specific, first I started with the first revision sub-task by considering the audience and

purpose, and then I revised the thesis. After that I followed the step of the revision sub-tasks...”

SS3 used an Analysis of the Essay to plan for revising.

SE1/SE2-SS3

“I think Analysis of the Essay worked well for me. I like it...For unsuccessful one, I got confused when I used Plan Revision Think Sheet to plan. Sometimes I didn't understand the question...”

SS10's preference was the reoutline. By using this strategy, she felt that it helped her focus on the content and ideas and she could make the ideas stronger.

SE2-SS10 “I think my successful strategy is when I used reoutlining because I know where to add the ideas to make the essay stronger and I can compare the new outline with the old one. It helped me a lot...”

In summary, the retrospective data showed the differences in the use of Self-Evaluation among the successful students before and after training. Before training, they could find a few ways to evaluate how well they would learn to revise and evaluate how well they would revise the first draft. However, after training, they demonstrated that they had many ways to self-evaluate their first draft revision and to evaluate the applied revising strategies. Specifically, some preferred to use the criteria proposed for evaluating a good argumentative essay, others used all the effective strategies learned appropriate for revision sub-task including an Analysis of the Essay, the Plan Revision Think Sheet, and reoutlining. According to the students' reports, the students revealed the high usage of Self-Evaluation which was in line with the results reported from the Post MSQ in the quantitative data analysis. All in all, they indicated that Self-Evaluation made her essay more persuasive.

5.1.3.3. Self-Reflection

Self-reflection is used to reflect on one's own problems whether he/she

needs to go back through the first draft revision task or the revision processes.

It appeared that before training all of the successful students reported that they could reflect their thought towards their own problems, and they would also need to go back through the revision task/process. After training, eight students use Self-Reflection. They indicated that they knew their own strengths and weaknesses in the second draft. In addition, they described the reasons why they could make a strong or weak revision task. Table 5.9 shows the use of Self-Reflection by the successful students.

Table 5.9 The Use of Self-Reflection by the Successful Students

Individual strategies of Self-Reflection	Successful students (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Reflection (SR)				
Reflect on one's own problems whether he/she needs to go back through the revision task/process. (SR)	10 (SS1-SS10)	-	8 (SS1,2,3,6,7, 8,9,10)	2 (SS4,5)

Before training, when asked if they think of going back through the revision task, SS3, one of the students who reported the use Self- said that she would have to review all.

SR-SS3 “Yes, I think I’ ll have to review all to see whether I revise all the points that I listed from the returned draft...”

SS4, SS7 and SS10's responses were similar when they reported that they would go back to see whether what they have done was complete and whether they need to do those tasks again.

SR-SS7 "Yes, I'll have to go back through it to see whether there are some incomplete parts or the missing ones so that I'll have a chance to revise it again."

SR-SS4 " Yes, sure. I think I'll have to go back through the revision task o make sure that I include all the missing parts or the mistakes I'll revise but not as carefully as the time I revise..."

SR-SS10 "Yes, I will have to go back and see whether I revise all the problem points identified by the teacher. Why so I think I'll have to go back through the revision task?...Because I am not sure if I write a clear and good second draft."

The above analysis from the students' protocol before training showed that these students thought of how they could learn to make better ones for their tasks next time. They considered themselves as continual learners (Chamot et al.,1990) when they reported reflection on their own problems, so they can make improvements on the text task. It is also implied that these successful students might need the Planning Strategies in order to plan to revise parts or all their work if it does not meet the requirements of a good argumentative essay or the revision goal.

After training, when asked if they could reflect on their own problem in revising an argumentative essay, successful students' reported the use of Self-Reflection by focusing on various aspects of argumentative essay writing. As illustrated below are the students' responses showing the use of Self-Reflection.

SR-SS10 "Yes, I did. For strong arguments, I checked whether I had concrete examples, facts or quotations to support the reasons..."

SR-SS3 " Yes I think I know. I used the structural pattern or plan of the argumentative essay. I compared my essay with the plan. I

remembered that there are four plans in your handouts. I checked which plan my essay was...”

SR-SS2 “Yes, I think I could tell which point is weak. I felt that I didn’t have strong reasons for my topic “Death Penalty.”

SR-SS9 “Yes, I think I know. I looked at the purpose of my essay and read The second draft again. I also considered whether I had enough supporting evidence with the examples, facts or other sources such as expert’s opinion about my topic. My topic is about whether young Thai couples should live together before marriage so I had to give the examples of a couple who used to live together and then separated to support my position for the negative side.”

It was found that after training, the successful students revealed better understanding of how to revise for a good argumentative essay by reflecting on the writing problems in their first draft. Their changing perceptions of the first draft revision, attempt to be involved in the first draft revision task, and self-reflection suggested that encouraging the students to participate in metacognitive strategies might contribute to the development of their positive concepts as ESL student writers.

5.2 Less Successful Students' Use of Metacognitive Strategies in the First Draft Revision

Qualitative analysis of the less successful students' retrospective interview data before and after training also revealed both similarities and differences in the three main categories of metacognitive strategies use: 1) the Planning strategies, 2) Monitoring strategies, and 3) Evaluating strategies.

5.2.1. The Use of Planning Strategies

The results showed the differences in Planning strategies use within the less successful students' reports before and after training. Before training, the participants reported the low use of the strategies except for Advance Organizer in which they might use to analyze the task and determine the nature of the task, and Self-Management they claimed they might use to arrange the conditions to help in doing the revision task successfully.

On the contrary, after training, the students' reports revealed the high level use of the Planning strategies of all four variables: Advance Organizer, Organizational Planning, Selective Attention and Self-Management. The interview reports suggested that after metacognitive strategy training the less successful students' actual use of Planning strategies surpassed that of the perceived use before training. Data from the protocols after training also showed that students exhibited the Planning strategies before starting to revise the first draft in order to help them plan to improve the first draft and revise the first draft effectively.

5.2.1.1 The Use of Advance Organizer

The results revealed that before training, the Advance Organizer was identified in eight retrospective reports from the less successful students. These students showed the understanding of the revision task by analyzing the tasks needed to be done for completing the first draft revision of an argumentative essay (AO1). However, they did not mention setting the personal goals, or planning the objectives of the revision task (AO3).

After training, in contrast, the less successful students showed a more thorough understanding of the revision task needed to be done for improving the first draft. *Nine* students used Advance Organizer before planning to revise the first draft since they stated they understood the revision task (AO1) and set their own revision goal at the beginning of the revision (AO2). In addition, seven students reported that they planned the specific purpose of each revision sub-task (AO3). Table 5.10 summarizes the number of the less successful students who reported the use Advance Organizer in the first draft revision.

Table 5.10 The Use of Advance Organizer by the Successful Students

Individual strategies of Advance Organizer	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Advance Organizer(AO)</i>				
1. Analyze/determine the nature of the task. (AO1)	8 (LSS1,2,3,5,6, 8,9,10)	2 (LSS4,7,)	10 (LSS1-LSS10)	-
2. Set a personal revision goal. (AO2)	-	10 (LSS1-10)	9 (LSS1,3,4,5,6,7, 8,9,10)	1 (LSS2)
3. Plan objective/ purpose of the revision task (AO3)	-	10 (LSS1-10)	7 (LSS1,2,3,5,6,8, 10)	3 (LSS4,7,9)

Below were the illustrations of how the less successful students used and did not use Advance Organizer.

Before training, LSS5 seemed to understand the revision of an argumentative essay and determine the nature of the tasks she needs to do before performing the revision task.

AO1-LSS5 "...I will read the first draft to find out the mistakes and the weak points in my first draft. I will look at the thesis and supporting details so that I will see if the content and ideas supports the thesis..."

Similarly, in her retrospective interview, LSS9 said:

AO1-LSS9 "I think I will reread the first draft to see my own problems identified in the teacher feedback. Then I will search for more information so I can have more content and ideas to support the thesis in the first draft. The supporting details will make my essay reliable and convincing. Also, I will review about the structural elements of an argumentative essay. I'll need to look at the coherence of my essay. For example, I'll need to add more transitional words."

LSS 9 was the only student who appeared to demonstrate the more understanding of the revision task of an argumentative essay than other students in the group. Whereas the other students described the nature of the revision in general, LSS9 specified the revision task of an argumentative essay.

It should be noted here that although the less successful students reported the understanding of the revision task, they did not make reference to the goal setting and objective planning for each revision task. That is, the students would not try setting their personal revision goal and planning the objective of the revision task in the first place.

Below are the less successful students' responses showing how they used Advance Organizer after training.

AO1-LSS9 "First, I looked at the feedback carefully. Then, I reviewed the handout about a good argumentative essay to find out how my problems could be revised and then I planned what I had to revise in the first draft and how. For example, coherence and organization in my first draft were not completely done. I know that I did not have topic sentence of each body paragraph. Also, I did not use transition words. I pretended to be the reader and read my own first draft on the reader perspective...."

LSS9, the student who revealed more awareness of Advance Organizer in her response to the interview question before training, exhibited her effectiveness in the use of Advance Organizer to analyze the task in a combination with planning the objective of the revision task regarding her own problems such as coherence, organization and paragraph development.

LSS4 demonstrated her actual use of Advance Organizer as she reported that:

AO1-LSS4 "Before I started to revise, I reread my first draft focusing on the feedback and comments from the teacher and then I marked and underlined the mistakes and the problems indicated by the teacher. I made list of my own problems in the first draft. ...After that, I tried to answer my questions why I did the mistakes or made the weak points. I gave reasons for these. For example, my content and ideas were not clear and they were not logically developed.. Yes, I did this and I didn't get lost. I know what I had to revise. For example, if it is about thesis, I tried to narrow the thesis to make it arguable, not too broad and not too narrow..."

LSS4 reported on how she analyzed the task needed to do before revising. Also, LSS4's response suggested that she used Advance Organizer in a combination with Selective Attention as she emphasized on the content and ideas which is the main focus of the main focus of the first draft revision.

Analysis of the interview data above revealed the less successful students'

utilization of Advance Organizer before and after metacognitive strategy training in revision. Before training, the less successful students' responses suggested that before starting to revise, they would do the activities such as rereading the first draft, analyzing the task, identifying their own problems, and determining the nature of the revision task. This is similar to the finding from the successful students of which the strategic behaviour was identified. However, the successful students seemed to understand the revision task of an argumentative essay more profoundly since they could list the revision tasks sequentially. This might be because the successful students have more background knowledge related to the argumentative writing than the less successful students and thought of connecting this knowledge with the new task. In addition, both the successful and less successful students did not realize how to develop personal revision goals and identify the purpose of the revision.

After training, the number of the less successful students who reported the use of Advance Organizer also increased. This suggested that the explicit metacognitive strategy training directly affected students' use of metacognitive strategies.

5.2.1.2 The Use of Organizational Planning

The less successful students' responses showed that before training, the Organizational Planning was identified in three students. These students reported that they might plan to revise their first draft (OP2). However, they did not explain how they would plan to accomplish the first draft revision of an argumentative essay. Instead, they were thinking of correcting the minor mistakes such as spelling, grammar or mechanics. They did not pay attention to the content and ideas and the overall essay.

In contrast, after training, the retrospective interview data from all of the less successful students exhibited the use of Organizational Planning by planning the content and the sequence of the first draft revision (OP1). In addition, seven of them described how they planned the parts and sequence of the revision task which they would perform and set their own personal goal (OP2). Further, a combination of two Planning strategies was identified in some students.. All in all, all students agreed that by using the Plan Revision Think Sheet, they could plan to revise each revision sub-task separately and sequentially (OP3). The students further reported that the activities through the Plan Revision Think Sheet helped them generate the sequences of the task need to do and brainstorm the revising strategies learned to use in the existing revision task leading to successful revision (OP4). Table 5.11 summarizes the number of the successful students who reported the use of Organization Planning in the first draft revision.

Table 5.11 The Use of Organizational Planning by the Less Successful Students

Individual strategies of Organizational Planning	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Organizational Planning (OP)</i>				
1. Plan the content sequence of the revision task (<i>OP1</i>)	-	10 (LSS1-LSS10)	10 (LSS1-LSS10)	-
2. Plan strategies(<i>OP2</i>)	3 (LSS,4,5,7)	7 (LSS1,2,3,6,8,9,10)	10 (LSS1-LSS10)	-
3. Think about the prior knowledge (<i>OP3</i>)	-	10 (LSS1-LSS10)	10 (LSS1-LSS10)	-
4. Elaborate the prior knowledge connected with the revision task (<i>OP4</i>)	-	10 (LSS1-LSS10)	10 (LSS1-LSS10)	-

In the following are some of the less successful students' responses before training To be specific, when asked about whether they have thought of any kind of planning before starting to revise, LSS4's response reflected the lack of knowledge about planning.

LSS4 "No, I've never thought of it before. Usually, when I got back my draft from the teacher, I'll revise or correct the mistakes..."

LSS6 did not have much to say about planning to revise because she had no experience about how to plan.

LSS6 "Yes, I think of planning but I don't know how to plan to revise sequentially. When I revised, I just corrected all the mistakes marked with the red pen. Mostly the grammar and sentences...Honestly, I think I've never planned..."

In addition, when questioned about how to accomplish the revision task, all students could not describe how they were going to do to complete the first draft revision, and they said they have never thought of planning to revise. LSS10 revealed a lack of ideas about planning to revise for her accomplishment.

LSS10 "No, I don't know what I am going to accomplish..."

"I can't tell what I am going to do and accomplish in the first draft except when somebody tells me what I should do..."

LSS3 only said that he could not tell what to do before starting to revise.

LSS3 "No, but I think I'll accomplish what the teacher commented in the comment sheet..."

LSS8 stated that she just wanted to follow the teacher comments.

LSS8 "No, I've never thought of planning to revise before. As I used to do in the past, I just turned in my paper and got it back and sometimes I did not have to do anything after that. When I revised I corrected all the grammar mistakes and sentence structures. That's all. So planning is not necessary because I followed what the teacher marked for mistakes in my paper..."

LSS8 reported that she has never thought of planning to revise before and thought that planning was not necessary for her because she could correct the mistakes by following the teacher feedback.

Three less successful students reported the use of Organizational Planning before training, to plan the strategies before revising; however, they did not reveal insightful knowledge about Organizational Planning.

OP2-LSS4 “Yes, I’ll need to change the first draft to make it more persuasive

OP2-LSS5 “Yes, I think I will have to rearrange the ideas in my first draft...”

OP2- LSS7 “Yes, I think I’ll have to revise for the clear ideas, more examples, add the concrete examples...”

These three students’ reports revealed that they knew the parts of revision task they needed to do, but no aspects of an argumentative essay and revising strategies for the first draft of an argumentative essay were mentioned.

It was noted that before training, all the less successful students did not perceive the Organizational Planning in order to have the initial plan for the content of the revision task, or even the parts of specific revision tasks. Also, they could not connect their prior knowledge related to argumentative writing with the revision, and thought about how to complete the revision task. The students learned how to write a good argumentative essay and about the revising strategies, so they have stored this knowledge in their cognitive state (Flavell, 1979), but they could not retrieve the information they know to do the revision task.

In the following are some of the less successful students’ responses’ after training showing the use of Organizational Planning together with Self-Management.

OP1-LSS5 “ Yes, I reread the first draft, then planned to revised separately.
For example, I planned to revise the introduction, body paragraphs

and conclusion. I didn't do everything at the same time..."

SS5's reports the use of Organizational Planning with Self-Management.

LSS4 used the Organizational Planning after Advance Organizer.

OP2-LSS4 "...Yes, I did. The first time I reread, I looked through the whole essay, and then I looked at each paragraph: the introduction, the body paragraphs and the conclusion. I also looked at the overall essay for the content and ideas..."

LSS4 further stated that:

OP1/OP4-LSS4

"...Sure, I did plan. In the Plan Revision Think Sheet, I planned to revise for the content, the unity and coherence within paragraph and between paragraphs. I also planned to revise for the supporting details to make sure that they support the thesis...I had my personal goal...Yes, I had to make my first draft better..."

This shows that LSS 4 combined the use of Organizational Planning with Selective Attention when she described that she analyzed the tasks and planned to revise for the content and ideas of the overall essay since the main focus of revising the argumentative essay is to revise for the clear content and ideas.

LSS7's retrospective data showed that she used Organizational Planning strategy after Advance Organizer. LSS7's responses also revealed that she set her personal goal clearly.

OP1/OP3-LSS7

"Sure, this time I planned by using the Plan Revision Think Sheet...Yes, I had to plan for each revision sub-task... Yes, I also set my goal. My goal was to write a good argumentative essay. That is, I had to convince the reader to agree with me. My topic is about whether teenagers should diet so I tried to persuade the reader such as parents and teenagers to believe me that diet is not good for many reason including their health...I had to give them the reasons for this in my arguments..."

LSS2's responses are a good illustration of the students who planned the content sequence of the revision task and parts of the specific revision task

systematically and sequentially.

OP1-LSS2 "...Yes, I planned before. First I planned to revise the supporting evidence. I don't have problem with the thesis but the reasons or arguments that support the thesis were not strong so I planned to revise for supporting details by cutting irrelevant facts or examples and add relevant information to support the topic sentence which was the main reason for each paragraph. Then I planned to revise the overall essay-that is the unity at the whole essay level from the main reasons to the thesis to the body paragraph..."

LSS2's report also suggested that he could apply the revising strategies and the knowledge learned to connect with the task he was going to do. That is, he demonstrated using the Organizational Planning by doing the activity that activated his prior knowledge to use with the revision task.

For LSS10's protocol, it was evident that she thought of revising strategies and knowledge about argumentative writing learned from class when she described how she planned in accordance with the Plan Revision Think Sheet.

OP2-LSS10 "Yes, I did plan. After I made list of my problems and weaknesses, I thought how I could revise these parts to make them better, stronger, more supportive and well-development. I revised each revision sub-task and plan for each revision task based on the Plan Revision Think Sheet. That was what I plan for revising. ...My goal, yes, I intended to make my first draft better and improve it.

The above analysis suggested the difference between the use of Organizational Planning by the less successful students before and after training. Before training, none of the less successful students reported the use of this strategy to plan the sequence of the revision task such as planning to revise for the rhetorical pattern of an argumentative essay (OP1). In contrast, after training, all students used the Organizational Planning to plan for both the content sequence of the revision task and strategies for completing the revision task (OP1, OP2). Whereas there were individual

differences in their approaches to the revision task, all students perceived the need for using and activating the prior knowledge about good argumentative essay writing to accomplish the revision task (OP3,OP4)). The high usage of the Organizational Planning after training has been probably affected by the kind of metacognitive strategy training in revision.

5.2.1.3 The Use of Selective Attention

Before training, three students perceived the use of Selective Attention by focusing on a specific aspect of the first draft revision of an argumentative essay such as the clear content and ideas (SA1). The rest of them reported never considering the focus of an argumentative essay and revising strategies before revising. For another aspect of Selective Attention, sequencing the revising strategies to be used to complete the revision task, there was no evidence to support that the less successful students would emphasize on various aspects of the first draft revision of an argumentative essay such as concerning for the audience or purpose.

In contrast, after training, the extent to which the less successful students used Selective Attention increased to the high level of usage. The Selective Attention was identified in seven students when they chose to focus on the argumentativeness of the overall essay, the reason or supporting evidence that support the thesis and the strong thesis (SA1). In addition, eight out of the ten students used Selective Attention by making a decision in advance to attend to a particular task of the first draft revision including the overall organization, the thesis, the unity and coherence, and the connected ideas in each paragraph (SA2). Table 5.12 presents the number of the less successful students who reported the use of Selective Attention.

Table 5.12 The Use of Selective Attention by the Less Successful Students

Individual strategies of Selective Attention	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Selective Attention (SA)</i>				
1. Focus on a specific aspect of the task (SA1)	3 (LSS2,4,5)	7 (LSS1,3,6,7, 8,9)	7 (LSS1,2,4,5,6 ,7,10)	3 (LSS3,8,9)
2. Sequence or prioritize revising strategies to be used to complete the revision task (SA2)	-	10 (LSS1- LSS10)	8 (LSS2,3,4,5,6 ,7,9,10)	2 (LSS1,8)

LSS4's report before training revealed that she would focus attention on the content and ideas before revising, and she has decided in advance that she would reorganize the ideas in her first draft.

SA1-LSS4 " I'll read, and then mark the incomplete ones and the mistakes. Most of the time I made the mistakes about the content and ideas in the draft so I'll see what I can do to change the way I arrange the the draft so I'll see what I can do to change the way I arrange the ideas..."

This showed that LSS4 use Selective Attention to make a decision beforehand to focus on revising the content and ideas by rearranging the ideas in her first draft.

Like LSS4, LSS 5 emphasized the content and ideas as she reported that she had the problem with the content and ideas so that she would revise for the content and ideas. However, she did not have much to say about how she would revise the content and ideas of her first draft.

SA1-LSS5 "I don't have any particular methods or strategies, but I think I will make list of things from the first draft and follow the list. ...And I know that I'll have to revise the content and ideas as I know that I have the problems with this. ...Also supporting details. I need more information for my paper..."

After training, when asked about the important aspects of the first draft revision, the less successful students emphasized the content and ideas and the thesis whereas some of them decided to focus on the thesis and supporting details. As shown in the following are some of the less successful students showing how they used Selective Attention before training.

SA1-LSS2 “Yes, revise each paragraph and the whole essay. I started with revising the introduction, body, the opposing views and the conclusion.”

SA1-LSS5 “Yes, the important aspects of the first draft revision-the clear content and ideas, the overall organization and the unity and coherence, I think.”

SA1-LSS7 “Yes, I know that the important aspects of the first draft revision...the main thesis, coherence and unity...”

Furthermore, the less successful students reported the use of another process of Selective Attention, making decision in advance before performing the first draft revision. They stated that they prioritized the specific tasks they had to do to complete the revision task. LSS10 described her revising steps according to her own weaknesses in the first draft beginning with revising the thesis statement, the development of ideas and supporting details.

SA2-LSS10 “My own problem, I think I had a lot of problems in my first draft as commented by the teacher. The first thing is the thesis statement which was not clearly stated. I also had the problem about the development of ideas. I argued about whether we should stop drunk driving. I didn’t give strong reasons for my arguments and I didn’t discuss about the negative effect and give sufficient examples to support why we should try to stop this behavior. ..”

LSS5 demonstrated the use of Selective Attention by prioritizing the task needed to do comprehensively.

SA2-LSS5 “Yes, I was supposed to improve the introduction, the paragraphs and the conclusion. First, as I told you, I revised for the clear content and ideas to make them more persuasive and all the ideas had to support the thesis statement...and the organization of the essay....”

LSS2's sequence of the revision task started with the content and ideas in the introduction, the body paragraphs, the refutation paragraph, and the conclusion.

SA2-LSS2 “Yes, I had to revise each paragraph and the whole essay. I started with revising the introduction, body, the opposing views and the conclusion...”

LSS2 further described the sequence of his revision task in accordance with his own problems. For LSS2, it appeared that he chose to attend selectively to the structural elements of a good argumentative essay.

SA2-LSS2 “Yes, I thought of my problems. My problem is about the content and ideas. First, the ideas in the body paragraphs didn't support the thesis and in the body paragraph, the details didn't support the main idea of each paragraph. Also, I didn't have the concluding sentence to link my ideas to the next paragraph... Yes, I tried to change some parts and add some sentences...”

LSS7's protocol also included her strategic behavior for Selective Attention and the understanding of the nature of an argumentative essay.

SA1/SA2/AO1-LSS7

“...I was supposed to revised all of the things indicated by you to make my essay more interesting, convincing and persuasive.

I had to revise the main thesis and the overall essay and also at the paragraph level for the development of ideas...”

“...I know my own problem is about reasonings. My supporting evidence was not clear so the thesis was not well-supported. I had to find the reasons to support why teenagers should not diet. I didn't have enough details and examples for this.”

LLS7's report seemed to combine the use of Advance Organizer with Selective Attention.

According to the less successful students' interview protocols after training, the conclusion can be drawn in the same way as the successful students' reports. Although not all of the less successful students became strategic, the strategic students reported the higher use of Selective Attention than before training. This has been probably influenced by the kind of feedback and training these EFL student writers reported having received from the researcher-the writing teacher. Not surprisingly, the less successful students who reported the use of Selective Attention have made references to the prior knowledge about argumentative writing and tried to connect this knowledge with the new task. After training, when asked about the important aspects of the first draft they were going to do. In addition, paying attention to their own problems has led them to the retrieval of background knowledge and experience (Victori, 1999) in order to carry out the new task. That is, the problem-solving skill should come into play at this step.

5.2.1.4 The Use of Self-Management

The results revealed that before training, only three less successful students reported the use of Self-Management to select the appropriate revising strategies for the specific purpose of the revision task (SM1). However, these students did not reveal the deep understanding about the important aspects of the first draft revision at the onset of the revision task. For the second dimension of the Self-Management use to plan when, where and how to revise successfully or unsuccessfully (SM2), this strategy was identified in eight students.

After training, the less successful students' protocols did confirm the use of Self-Management of perceived plan to arrange the conditions that help in

performing the revision task. All of the ten less successful students indicated the use of this strategy to do such activities before they started to revise. Also, the protocols suggested that the less successful students appeared to select revising strategies relevant to their revision tasks. This aspect of Self-Management use was identified in *eight* less successful students. Table 5.13 shows the number of the less successful students who reported the use of Self-Management in the first draft revision.

Table 5.13 The Use of Self-Management by the Less Successful Students

Individual strategies of Self-Management	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Planning strategies				
<i>Self-Management (SM)</i>				
1. Select the appropriate revising strategies for the specific purpose of the revisions (<i>SM1</i>)	3 (LSS3,6,7)	7 (LSS1,2,4,5,8, 9,10)	8 (LSS2,3,4,6,7, 8,9,10)	2 (LSS1,5)
2. Describe when, where and how (conditions) to use revising strategies for completing the revision task (<i>SM2</i>)	8 (LSS2,3,4,5,7,8, 9,10.)	2 (LSS1,6)	10 (LSS1- LSS10)	-

Below are illustrations of the less successful students use of Self-Management in the first draft revision before training.

SM2-LSS2 “I’ll focus on thing. After that I’ll look at the whole essay and revise it entirely...”

SM2-LSS4 “I’ll focus on one thing and I think I will think of my problem through the revision task...”

What LSS2 and LSS4 described was the condition in which they would manage for revising the first draft, but they did not say what aspect of an argumentative essay they would focus on such as the audience, purpose, thesis or the

rhetorical pattern. LSS2 and LSS4 used Self-Management to plan how they would approach the revision task. These two students chose to do one revision task at a time.

LSS6 planned to revise the introduction since she reflected on her own problem about it. LSS6 also knew herself that it would be easier for her to revise one thing in one sitting. In her interview protocol, LSS6 pointed out:

SM1-LSS6 “I think I will focus on one thing at a time. It should be easier than doing the whole thing. I’ll get confused and bored with it when I have a lot of mistakes. For example, my introduction is not good, I should revise the introduction then revise the paragraph, something like this.”

Like LSS6, LSS7 thought of planning to revise one revision task which was her own problem.

SM1-LSS7 “I think I will focus on one thing at a time. For example, I’ll focus on organization because it’s my problem in the first draft....”

LSS8 also thought of her own problem and planning to revise for that point by revising it separately at a time, and then she could move to do another revision task.

SM2-LSS8 “Sure...I will focus on one thing at a time. I think it should be better. For example I think I will revise for organization, and then revise for coherence...”

Furthermore, LSS9 reported the use of Self-Management to plan to revise by focusing on her own problem and describing the condition that will help her revise effectively.

SM2-LSS9 “Well, I’ll focus on one thing at a time. As I told you in the first question. I have many things to do to revise and I’ll have to do it separately. I think it will work well and it is easy to complete one thing then move to the next when the first done is done....”

Not surprisingly, before training, most responses were limited to the arrangement of conditions that will help in revising because the less successful students only said that they would revise separately by focusing on one thing at a

time. They did not describe in details about when, where and how to revise the first draft of an argumentative essay successfully, and they generally discussed all types of essay. Therefore, the less successful students' retrospective data could be referred to only the general learning environment because the protocols provided little evidence of concern for the kind of argumentative essay writing.

After training, the less successful students' retrospective reports revealed more understanding of how they used Self-Management in the first draft revision.

LSS2's responses are a good example of the students who planned to revise according to a specific revision task at one time.

SM1/SM2-LSS2

"I revised separately. I started with the introduction. As I told you before I followed the four revision sub-tasks..."

LSS7 stated clearly about her own problem and how she planned to deal with her own problem. Like LSS2, LSS7 revised by following the four revision sub-tasks.

SM1/SM2-LSS7

"I revised when I got the first draft back. Before this, I mean before I turned in the first draft, I didn't revise because I didn't know what, where and how to revise. When you gave me the feedback, I know all of my problems and mistakes..."

LSS10 was the one who demonstrated the use of Self-Management, and she also expressed her opinions on this precisely.

SM1/SM2-LSS10

"I began to revise the whole first draft when I got the first draft back with feedback from the teacher. While I was writing the first draft, I didn't revise it. I did it separately. I mean I revised each specific revision task as I mentioned above. For example, I revised the introduction, the background information and thesis. Then, I revised the body paragraphs for the supporting details..."

It could be seen from the above analysis that after training, while the less successful students used Self-Management to plan how and when to complete their

first draft revision, they tended to manage their own conditioned to facilitate revising in a similar manner (SM2). These students depended on their experience and knowledge learned from class while the successful students used this strategy in a different way and in a combination with other Planning strategies. As the recent review about good learner's metacognitive strategies use concluded that "experts have varying levels of flexibility in their approaches to new situations" (Bradford, Brown & Cocking, 1999, p.8 as cited in Rivers, 2001, p.280).

5.2.2 The Use of Monitoring Strategies

The results also showed the differences in Monitoring strategies use in the first draft revision by the less successful students before and after training. Before training, the less successful students reported the low to moderate usage in both Monitoring Comprehension and Monitoring Production while after training, the use of these two sub-strategies of Monitoring strategies increased.

5.2.2.1. Monitoring Comprehension

Before training, four less successful students said that they would check their own understanding of the overall revision task (MC1) whereas the use of this strategy was reported by nine students after training. In addition before training, half of the less successful students reported that they might use Monitoring Comprehension to check their own abilities and difficulties when doing the revision task (MC2), but all of them used this strategy after training. Table 5.14 demonstrates the use of Monitoring Comprehension in the first draft revision by the less successful students.

Table 5.14 The Use of Monitoring Comprehension by the Less Successful Students

Individual strategies of Monitoring Comprehension	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Monitoring strategies				
<i>Monitoring Comprehension(MC)</i>				
1. Check one's own understanding, accuracy and the appropriateness of the overall revision task. (MC1)	4 (LSS2,5,7,9)	6 (LSS1,3,4,6,8,10)	9 (LSS2-10)	1 (LSS1)
2. Check their own abilities and difficulties in doing the revision task (MC2)	5 (LSS2,6,7,8,9)	5 (LSS1,3,4,5,10)	10 (LSS1-LSS10)	-

Although students' reports before training revealed the low usage of Monitoring Comprehension, some students expressed their concerns about their abilities, difficulties and understanding of the first draft revision clearly. For example, LSS2 described his problems concerning the audience, unity and coherence and development of ideas.

MC1-LSS2 "My problem is how to communicate my ideas or messages to the readers and my ideas must be meaningful to the reader. The second problem is about how to connect the ideas to relatively support the thesis because in my first draft, I included irrelevant details. That is, my content and ideas are out of topic. It is very difficult for me; I tried my best in the first draft but it turned out to irrelevant and being out of topic."

LSS9 reported on how she checked her own abilities and difficulties.

MC2-LSS9 "My problem and difficulties when I revise...I think it will be about the supporting details. I can't use the supporting evidence to support the thesis clearly and strongly. I also have the problem about how to develop the ideas logically. It's about the development of ideas...Right?"

LSS9's remarks revealed that her first draft was not well-supported and well-developed. In addition, LSS9's report also showed that she used the Monitoring Comprehension to check her understanding of the overall revision task as she described the steps for revising her first draft appropriately and accurately as she further said:

MC1-LSS9 "Well, if you ask me now, I think I'll choose to revise the introduction and the conclusion by examining whether they match. I'll make the introduction and conclusion more interesting. In the conclusion, I think I will end with the powerful ending, so the reader will agree with my opinion. My topic is about the effect of harmful ads on TV, I think I will end by persuading the parents to concern about the effects of harmful ads and so something to protect their children from this...."

Once again, the retrospective interviews were conducted before the students revised their first draft, so it seemed that the less successful students' protocols provided little evidence of the important aspects of revising an argumentative essay. However, what emerged before training was that the less successful students who did not report the use of Monitoring Comprehension did not perceive the need for checking their own abilities, difficulties and understanding of the revision task because they could not retrieve their background knowledge related to the new task they were going to perform. This may be due to a lack of the use of Self-Management to plan or select the strategies appropriate for a specific purpose of the revision task leading to a failure to monitor the revising strategies while revising the first draft.

On the contrary, after training, the retrospective data displayed the high usage of both aspects of Monitoring Comprehension. Moreover, the students appeared to reflect their own problems in revising and know how to deal with these problems

using the prior knowledge about the content sequence of revision task and revising strategies. For example, LSS4, in her protocols, she reported:

MC1-LSS4 “My problem is about paragraph development. I don’t know how to develop paragraph logically. Also, my paragraph was not well-organized...OK. The main problem is about organization so I followed the method suggested by the teacher. I looked at the thesis and the overall organization of the essay, and then I looked at the main ideas of the body paragraphs to see whether the supporting detail support the main idea...”

LSS4 further described her comprehension of the important aspects of the first draft revision of an argumentative essay and narrated what she did with her first draft.

MC2-LSS4 “As I did in my first draft, my thesis was not clear; it was not specific so I revised the thesis to make it clear and narrow. After that I reorganized the content and ideas in the body paragraphs to make them relate to the thesis...”

LSS7 discovered that her main problem was about structural plan of an argumentative essay; therefore, she revised according to the rhetorical plan of an argumentative essay.

MC2-LSS7 “I had difficulties about how to organizing my ideas...What did I do? I tried to prioritizing the problems in the first draft and used the plan about rhetorical pattern of argumentative writing in the handout...”

LSS9 and LSS 10 faced the same difficulties. That is, when revising for paragraph development. LSS9 decided to remove the content and ideas in the body paragraphs according to the structural elements of an argumentative essay whereas LSS10 used reoutling.

MC1-LSS9 “ For me, I removed the ideas from Body paragraph 2 to Body paragraph 1 because I thought that the ideas in paragraph 2 was much stronger and they related to the main idea of paragraph 1...”

MC1/MC2-LSS10

“I had the difficulty when revising for paragraph development. As I told you that I had the problem with the development of ideas. I

don't know how to develop the ideas logically. What did I do to solve the problem?...I used *reoutlining* to organize the ideas. When I looked at each part of the outline, I know where I could add the ideas and examples to support the main idea or the main reason..."

It could be seen from the above discussion that the less successful students who reported the use of Monitoring Comprehension seemed to express their concerns about their own ability and difficulties when doing the revision task. Also, they thought of the way to understand the existing revision by themselves. To do this, they tried to retrieve the prior knowledge already known and connected it with the new task needs to be done. The less successful students displayed the effective use of Monitoring Comprehension when they have difficulties at anytime during performing the revision task. The results from the retrospective interviews suggested that the students might use this strategy to solve the problem by applying resource available to them. The first resource comes from within themselves, their prior knowledge. Therefore, explicit metacognitive strategies training, particularly Monitoring Comprehension could help the students develop the problem solving skill leading to solve the problem autonomously.

5.2.2.2 Monitoring Production

The analysis of quantitative data from self-report questionnaire before training revealed the low use of Monitoring Production within the less successful students. The interview protocols also confirmed the use of this strategy when four less successful students reported that they would monitor their first draft revision by selecting revising strategies learned including the self-questioning, the rhetorical pattern of an argumentative essay or linguistic knowledge to apply in the first draft

revision (MP1). The retrospective data before training also revealed the moderate use of another aspect of Monitoring Production among the less successful students, six students said that they would monitor their first draft revision by using the selected strategies and matching them with their own problems and weaknesses indicated in the first draft (MP2).

After training, all the less successful students were found using Monitoring Production during performing the revision task. These self-monitoring students expressed their opinions towards the main focus of the first draft revision and about what decisions they have made in order to select the strategies that helped them revise successfully such as revising at the overall essay level (MP1). The results also revealed another strategic behavior of Monitoring Production use in revising the first draft when the use of this strategy was identified in eight less successful students. These students used Monitoring Production by matching the selected revising strategies with their own problematic points and weaknesses from the teacher feedback (MP2). Above all, when they confronted difficulties, they reported on changing the particular methods to match their own problems in the first draft (MP2). Table 5.15 illustrates the use of Monitoring Production by the less successful students.

Table 5.15 The Use of Monitoring Production by Less the Successful Students

Individual strategies of Monitoring Production	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
<i>Monitoring Production (MP)</i>				
1. Select revising strategies/writing strategies learned to complete the revision task (<i>MP1</i>)	4 (LSS2,5,6,7)	6 (LSS1,3,4,8,9,10)	10 (LSS1-LSS10)	-
2. Use and match the selected revising strategies with the writing problems in the first draft(<i>MP2</i>)	6 (LSS1,2,5,6,8,9)	4 (LSS3,4,7,10)	8 (LSS2,4,5,6,7,8,9,10)	2 (LSS1,3)

Before training, the less successful students responded to the question that asked about the particular methods or strategies they would select for completing their first draft revision, they reported using some kinds of strategies including reorganizing the ideas, revising each specific revision task at a time, and comparing the problems in the first draft with the example of good writing. However, the students' responses were too general for the researcher to learn about their real intention and the aspects of revising an argumentative essay they were supposed to do. The following examples illustrate this regard.

MP1-LSS7 "I'll use the examples in your handout and compare with my first draft..."

SS7 only said shortly that she would look at the examples provided in the handout and compare with her first draft. This means that she would follow the revision guide but she failed to select the appropriate strategies for the specific revision task even the overall revision task.

LSS9's reports showed that they would revise the introduction of the essay by

making it more interesting to attract the reader's attention.

MP2-LSS9 "If the introduction is interesting and attracts the reader's interest and the conclusion, I'll also make it more interesting. This will make my essay persuasive and convincing. Right..."

LSS9 also revealed knowledge related to a good argumentative essay as she indicated that she would match the introduction with the conclusion to make essay more persuasive and convincing.

As for a particular use of Monitoring Production by matching the selected strategies with the problem parts needed to be revise (MP2), LSS5 reported that she used self-questioning as she experienced using this strategy when drafting the essay. In her retrospective interview, LSS5 pointed out:

MP2-LSS5 "I used self-questioning when I started to write the first draft. I used to ask the questions like: "What is the topic of my essay?, What is my thesis?, Who is my reader?"

LSS6's response did confirm LSS5's report. To be specific, when asked what she would do if the selected strategies do not work, and whether she would select other strategies such as self-questioning for completing the first draft revision, LSS6 said that she decided to choose self-questioning.

MP1-LSS6 "I'll change the strategies or methods I revise or I'll ask the teacher and friends. I'll also ask myself questions like: "Is the body paragraph support the thesis?, Is the supporting evidence supporting the main idea?..." (LSS6)

To elaborate the use of Monitoring Production after training, the students responded to the question asking what they considered as the main focus of the first draft revision, all students emphasized the thesis, the content and ideas and the global level of the essay. In addition, they all agreed to select both the revising and writing strategies learned to use for completing the task. The students chose to revise by

doing each revision sub-task. For example, LSS4 revised the thesis in the first place because she thought that it affected the content and ideas.

MP1-LSS4 “OK. First I revise the thesis because it affected the whole content and ideas of the essay, and then I checked my arguments to make sure that they support the thesis by looking at the main idea of each paragraph. After that, I looked at each body paragraph to check whether all the supporting details support the main idea...Also, I checked whether I had the examples for the topic sentence. Finally, I rechecked the overall essay by looking through the introduction, the body paragraph, the opposing views, and the conclusion...”

LSS2 pointed out specifically that he thought of revising the revision sub-task and placed the emphasis on his own problems or the parts in the first draft needed to improve.

MP2-LSS2 “I thought of revising strategies for the four revision sub-tasks. I followed Revision Sub Task 4. That is, revising for the connected ideas of each paragraph-unity and coherence within paragraph and the whole essay. I had the problem with the coherence and unity in my essay. I did not use transitional words to connect sentences and ideas...”

LSS5 further described that she started with revising the introduction.

MP1-LSS5 “For me, successful strategies, I think when I revised separately-not do the whole thing. I mean I did a specific revision sub-task. When I finished revising the introduction, I moved to the body to see the coherence. It’s easy to do like this...”

LSS5 decided to revise separately as she said that this method helped her revise successfully.

LSS10 felt that the strategies that facilitated revising for her was by using self-questioning and reoutlining.

MP2-LSS10 “Successful strategies for me, the Self-Questioning and the reoutlining. For self-questioning, I used the questions to ask myself when I completed each specific revision sub-task and the whole second draft. For reoutlining, it helped me see the whole content and ideas of the essay...”

To sum, after training, the less successful students demonstrated the high use of Monitoring Production; the number of students who self-monitored their first draft revision increased.

5.2.3 Evaluating Strategies

It was found that before training, the less successful students reported the moderate use of Self-Assessment, low use to moderate use of Self-Evaluation and the moderate use of Self-Reflection. After training, the students increased in the use of three sub-strategies of Evaluating strategies: Self-Assessment, Self-Evaluation, and Self-Reflection.

5.2.3.1 Self-Assessment

Before training, the less successful students' protocols showed that five students perceived the needs to use Self-Assessment to assess the second draft based on different criteria they would create (SA1) . Seven students reported that they would also assess the success or failure of the revision task when it is completely done (SA2).

Evidently, after training, the number of the less successful students who reported the use of Self-Assessment increased in both aspects of Self-Assessment. Seven students believed that based on the clear description of criteria including the components of a good argumentative essay, the structural plan and the main focus of the argumentative essay, they could assess the quality of their own second draft (SA1). These strategic students also used their personalized ways such as rereading, comparing and reviewing the list of the problems in the combination with

the systematic criteria provided in the Self-Evaluation Checklist. In addition, all of the ten students used Self-Assessment to make an assessment of their success or failure according to the personal revision goal and the requirements of an argumentative essay including the strong thesis, good reasonings, sufficient evidence and the clear content and ideas (SA2). All of these students were confident that they achieved their revision goal and could rate their own writing proficiency. Table 5.16 illustrates the use of Self-Assessment by the successful students.

Table 5.16 The Use of Self-Assessment by the Less Successful Students

Individual strategies of Self-Assessment	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Assessment (SA)				
1. Make a decision about the outcome based on a clear description to judge the quality of the paper. (SA1)	5 (LSS3,4,6,7,10)	5 (LSS1,2,5,8,9)	7 (LSS1,2,3,5,7,9,10.)	3 (LSS2,8)
2. Make an assessment of success or failure (SA2)	7 (LSS1,2,3,4,6,7,10)	3 (LSS5,8,9)	10 (LSS1-10)	-

To find out whether the less successful students would assess their second draft, the students were asked whether they would reread the second draft; and they were also asked to describe how they would judge the quality of their writing. All five students agreed that when revising the second draft, they would reread to examine whether accomplish the revision tasks, specifically the weak points and problems commented by the teacher. In addition, these students described their own criteria, though not a clear description, to judge the quality of the second draft

In the following are illustrations of this.

SA1-LSS3 “I can compare my second draft with the first draft and focus on the problems suggested by the teacher. I think this way will make sure that I improve my second draft...”

SA1-LSS7 “I’ll check if I develop and complete the elements of a good Argumentative essay in the introduction, body, supporting evidence and the conclusion...”

SA1-LSS10 “I will look at the comment and feedback from the first draft and see if I include the points listed as my weaknesses and revise all these points I need to do as suggested by the teacher.”

LSS3 and LSS7 would consider the persuasiveness of the ideas and compare the first draft with the second draft while LSS10 would try making a decision about the problems in the first draft and check whether all these problems have been revised. LSS7 and LSS9 said that they would consider the rhetorical pattern of an argumentative essay.

In responding to the question of whether they would use Self-Assessment to assess whether they succeed in the revision task and why or why not, the protocols from seven less successful students revealed their concerns of assessing the success or failure. However, these students provided different reasons for their assessment and their reasons merely showed their general thoughts; only one or two students expressed the opinions toward the revising steps and the revision tasks substantially.

SA2-LSS3 “Yes, I am sure that I will achieve in my revision goal because I have time to do it again and now I know what I need to fix...”

SA2-LSS6 “I will...Why?...Because I have time and a chance to know my mistakes and problems so that I can fix them. I am sure that I can do better than the last time...”

LSS3 and LSS6 hoped that they would accomplish the revision task because they have more opportunities to rewrite the first draft according to their mistakes or

or problems.

In contrast, LSS9 and LSS10 revealed that they would do the revision task successfully because they would revise based on the clear goal, steps and a well-planned sequence of the revision tasks. The following interview protocols would support this notion.

SA2-LSS7 “Yes, I think I will achieve in my revision goal. I will rewrite my paper for the second time. How can I make it worse than the first one?...I know the weaknesses and which parts I will improve. Sure I will succeed. More importantly, if you have a well-planned revision task, you will revise your first draft successfully...”

SA2-LSS10 “Yes, if I follow the steps and revise systematically. I will focus on a specific goal at a time. For example, if my goal is to revise the body paragraph, I’ll read the body and focus on revising the body paragraph...”

In brief, before training, the less successful students provided the evidence of such assessment of the text by rereading, rethinking and comparing the first draft with the second draft. However, they could not describe the criteria to judge the quality of an argumentative essay; they merely talked about using the holistic impression to check the complete second draft. Additionally, they were thinking of assessing their success or failure in the protocols regarding their strengths and weaknesses. Finally, there was a similarity in the pattern of Self-Assessment strategy use emerging from the description the successful and less successful students made before training. That is, both groups of students have their own personalized way of assessment which characterized their approach to the revision task as they were familiar with in the past. Also, both successful and less successful students were incapable to retrieve the prior knowledge related to the components of a good argumentative essay to use as the criteria for assessing the quality of their own writing.

After training, when asked how he would describe his second draft, LSS2 said that his paper was “Good.”

SA1-LSS2 “Well, I have three levels: good, fair, and poor. So I think my paper is good.”

In his protocol, LSS2 stated that he reread his second draft before the submission to check whether he met the requirements of an argumentative essay and the revision goal by answering the questions in the Self-Evaluation Checklist and reexamining the overall essay.

SA2-LSS2 “Yes, I had to check before I submit the second draft to the teacher...I used Self-Evaluation Checklist. I didn’t have any parts mentioned in the checklist, I had to revise again. However, I found that most of the questions that I checked, I answered with “Yes.” It means that I met my personal revision goal even it was not a hundred percent but I was satisfied with my second draft...”

Moreover, LSS4 said that she assessed her second draft by rereading the whole essay and examined the thesis, the main focus of the essay. Her interview protocols explicitly evidence the knowledge of argumentative writing.

SA1/SA2-LSS4

“I reread through the whole essay to see whether it contained a strong thesis in the introduction. The introduction provided background information about the topic. I used the questions in the worksheet to ask...just followed the questions in and answer “Yes or No.”... I know that the thesis or for an argumentative essay must be debatable. In the body paragraphs, as I just mentioned, have the main ideas and details. In the refutation paragraph, I know it has the opposing views. In the conclusion, it summarized the main points of the essay.”

LSS9 described how she checked her second draft as she said:

SA1-LSS9 “I read paragraph by paragraph-I mean I compared the second draft with the first draft. Actually, I used Self-Revision Think Sheet because it’s easy to check. I can see both original draft and the revised draft. If there were some incomplete ideas in any parts of the essay, I revised again part by part...”

LSS9 further pointed out that she used different methods to help facilitate the assessment of the second draft.

SA2-LSS9 “I use Self-Revision Think Sheet, the Plan Revision Think Sheet and reoutline, and then compared my second draft with the first draft...”

All in all, LSS9 said that her paper was good.

SA2-LSS9 “Yes, I think I achieved the goal. I added important information, deleted the irrelevant details. My second draft was a lot better than the first one. I’m sure...My paper was good...” (LSS9)

According to LSS9, after completing her second draft, she expressed concerns about making an assessment of her success. She self-assesses her paper to examine whether it met the requirements of a good argumentative essay and whether she achieved her revision goal by comparing the revised draft and the first draft in the Self-Revision Think Sheet for the overall essay. LSS9 also assessed each part of the revised text by using the Plan Revision Think Sheet and the reoutline.

LSS7 assessed her paper using the criteria provided in the Self-Evaluation Checklist while LSS10 used reoutlining.

SA1-LSS7 “I checked to see if my second draft met the requirements of a good argumentative essay. I can use the criteria in the checklist and look at the plan as I told you before... Yes, I am sure I achieved the goal of revision. Why? ...My second draft is better than the first draft. I would rate my paper as “a good paper.”

SA1/SA2-LSS10

“ I checked to see if the second draft contained the components of a good essay. How? I used the outline and compared my second draft with the first draft and focused on the feedback and comments to make sure that I revised, changed or adapted all the problem points and mistakes...”

For LSS7 and LSS10, they believed that they revised successfully because their second draft met the requirements of a good argumentative essay.

The analysis of the less successful students' interview protocols before and after training revealed the difference of pattern in the use of Self-Assessment. Before training, the students anticipated the use of this strategy after revising by applying the methods they used to do to assess their outcome without the clear description of criteria but they depended on the others' help such as friends or the teacher. In contrast, after training, the students reported how they made a decision about the quality of their own writing using the criteria provided, though they did not create the criteria, by clearly mentioning those criteria and the reasons why they thought they succeeded in the first draft revision. The results suggested that when students recognized the criteria for assessing the learning outcome, they could self-assess their work or do their work autonomously, without the teacher's help. Therefore, it is possible that the teaching of cognitive task, specifically writing strategies and types of writing will broaden students' schemata available for retrieval.

5.2.3.2 Self-Evaluation

Before training, the retrospective reports of the less successful students revealed that two of the ten students reported the use of Self-Evaluation to evaluate how well they learned to revise (SE1); and five students said that they would use this strategy to evaluate the effectiveness of the strategies use for revising the first draft (SE2). According to the interview data, students reported the low use on the first aspect of Self-Evaluation strategy. Also, the students reflected a lack of general knowledge about how to self-evaluate their experience in learning and the degree of abilities in revising and learning. For the effectiveness of strategies use after completing the first draft revision, although half of the students reported the use of

Self-Evaluation for this, they did not report their decision making about whether they would meet the goal of the revision. That is, the reports also made evidence of the less successful students' inexperience with Self-Evaluation involving the decision making about their revision process and task at the end of the task.

After training, the less successful students reported a broader range of experiences in self-evaluating the outcome of the revision task and the revising strategies (SE2). They also reported the high use of Self-Evaluation although most of them depended on the Self-Evaluation Checklist and other teaching materials they have practiced in class. Regarding the retrospective reports, all of the ten less successful students indicated that they self-evaluated how well they revised their first draft using different methods including the Self-Evaluation Checklist, the rhetorical plan of an argumentative essay and the components making a good argumentative essay (SE1). Also, nine less successful students reported that they used Self-Evaluation to evaluate the strategies used after completing the second draft (SE2). These students found that they were successful when they revised separately according to the revision sub-tasks. Table 5.17 shows the use of Self-Evaluation by the successful students.

Table 5.17 The Use of Self-Evaluation by the Less Successful Students

Individual strategies of Self-Evaluation	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Evaluation (SE)				
1. Evaluate how well one learns to revise (<i>SE1</i>)	2 (LSS1,5)	8 (LSS2,3,4,6,7, 8,9,10)	10 (LSS1- LSS10)	-
2. Evaluate the strategies used to revise the first draft (<i>SE2</i>)	5 (LSS1,2,8,9,10)	5 (LSS3,4,5, 6,7)	9 (LSS1,2,3,5, 6,7,8,9,10)	1 (LSS4)

To illustrate how the less successful students used Self-Evaluation, before training, the students were asked whether they know how well they revise the second draft, LSS5 was confident that she would do a better job than the first one since she got the feedback and would revise based on their weaknesses and problems indicated in the first draft.

SE1-LSS5 “Yes, I think I’ll do better than the first draft because when I read the first draft with feedback, I know my own problems, and then I can revise based on these problems...”

For most of the students, the responses for this question were similar as in the reports from LSS3, LSS4 and LSS6.

LSS3 “No, I don’t think I’ll know how well I revise but I’ll ask others to read and tell me how well my second draft is...”

LSS4 “I don’t know how well I will do...”

LSS6 “I think I can’t tell how well. Maybe you can tell me when I complete my second draft...”

When questioned about what strategies would help them revise successfully or unsuccessfully, the students’ responses did not reveal much knowledge about how they might self-evaluate the effective of their own strategies use. However, half of them reported the perception of this strategy. Some of their responses are illustrated.

SE2-LSS7 “For me, successful strategies that helps should be rereading because when I reread I know what is weak or strong in my essay. I can feel that...”

SE2-LSS8 “Successful strategy for me, I think I can use Self-Questioning.”

SE2-LSS9 “The successful strategy for me, I think I like outlining because I can put the information in the outline and see the overall ideas of the essay...”

SE2-LSS10 “Successful strategies? For me, I think revising based on the teacher’s comments, searching for more information...”

In short, before training, LSS7 only said that rereading might help her know what is weak or strong in her essay. No other aspects of strategies were mentioned. LSS8 thought that she would expect the use of Self-Questioning while LSS9 hoped that reoutlining could help her see the overall ideas of the essay. LSS10 insisted on using the teacher comments and searching for more information.

The less successful students' response after training also showed two aspects of the use of Self-Evaluation. LSS4 said that she used Self-Evaluation Checklist to evaluate how well they revised the first draft. LSS4 also explained that she used the criteria in the checklist to check whether she has completed the tasks of a good argumentative essay. However, LSS4 felt that it was difficult to tell the extent to which the second draft improved.

SE1-LSS4 "Yes, I did but I couldn't tell how well I did. One thing I could say-it's better. ...I used Self-Evaluation Checklist, there were criteria in the checklist that I could use to see if my second draft had those good things. Components of a good essay..."

Besides using Self-Evaluation Checklist, LSS7 self-evaluated how well she revised the first draft on the reader's perspective. In addition, with self-confidence, she thought of using the same method and strategy to evaluate her friend's paper effectively.

SE1-LSS7 "Yes, I did. I compared the second draft with the first draft. I also used Self-Evaluation Checklist... I will be the reader and evaluate my friend's paper and I will need to use Self-Evaluation Checklist.

Interestingly, LSS9 combined the plan she did before starting to revise with the criteria in the checklist when evaluating how well her second draft improved and how well she revised. Also, LSS9 exhibited her insights into the important aspects of an argumentative essay.

SE1-LSS9 “I used Self-Evaluation Checklist. I also used Planning Sheet to check whether I followed the plan I had before starting to revise...”

When asked whether she could possibly evaluate her friend’s paper, LSS9 further pointed out:

SE1-LSS9 “ Yes, I think I can. I will look at the topic and the introduction first. Then I will look at the thesis statement and check whether it is strongly stated. If the thesis is strong, I’ll look at the reasons, the body paragraphs respectively...”

LSS9’s comments suggested that while she thought of evaluating, she recognized how she monitored her writing task and she could bring the prior knowledge to connect with the new task-the revision task she was going to do.

The less successful students’ reports after training also revealed students’ strategic behavior in self-evaluating to check the effectiveness of the strategies use. There were differences within nine students who reported the use of this strategy when these students chose to use a variety of revising strategies depending on their success and experiences in using these strategies (SE2). LSS2 believed that he was successful because he revised each revision sub-task separately before combining all revision tasks together for the overall essay.

SE2-LSS2 “I revised each revision sub-task separately, and then combined the whole thing and I think they worked well together. I used to correct the mistakes only once, and then my work was done. But now, I did the revision many times, but I know that my paper was much better than the first draft. This is a success, right?”

LSS2’s strategies use, as revealed in his interview data limited to the revision sub-task, he did not elaborate on what each revision sub-task was like since he mentioned the revision tasks clearly when he talked about his plan before revising.

LSS5 felt that she succeeded in doing the revision task when she focused on

one thing. She also gave the reason for this.

SE2-LSS5 “My successful strategies-yes, I told you before this. Right? I revised separately by focusing on one thing. It worked well because I didn’t get confused...”

(LSS5 mentioned the revision sub-tasks including the introduction, the body and the conclusion before this.)

LSS7 thought that using the Self-Revision Think Sheet helped her revise effectively while LSS9 used both reoutlining and Self-Questioning successfully.

SE2-LSS7 “My successful strategies...I used Self-Revision Think Sheet with the table...”

SE2-LSS9 “My successful strategies, I like to use reoutlining and self-questioning...”

5.2.3.3 Self-Reflection

The retrospective reports of the less successful students before training revealed that six students indicated the use of Self-Reflection strategy. These students thought of reflecting on their own problems after completing the revision; and they saw the need of going back through the revision tasks and processes. The students also reported that they may have to rethink about the revision task and revise the parts of the essay when completing the second draft because they thought that the task might not be well-done.

After training, the use of Self-Reflection to reflect one’s own problem was indicated in eight less successful students. The results revealed the high use of this strategy. In addition, the students who reported the use expressed their opinions toward their strategic preference more substantially than before training. For example, LSS2 he could tell his strong or weak points of the second draft by elaborating the

components of a good essay such as logical development of ideas, well-supported thesis and sufficient supporting details. Table 5.18 shows the use of Self-Reflection by the less successful students.

Table 5.18 The Use of Self-Reflection by the Less Successful Students

Individual strategies of Self-Reflection	Less Successful students (LSS) (N=10)			
	Before training		After training	
	Use	No use	Use	No use
Self-Reflection (SR) Reflect on one's own problems whether he/she needs to go back through the revision task/process. (SR)	6 (LSS4,6,7,8,9,10)	4 (LSS1,2,3,5)	8 (LSS1,2,3,4,5,6,8,10)	2 (LSS7,9)

Before training, LSS4 gave the reason for reflecting on the task briefly.

SR-LSS4 “because it is still not complete, I’ll need to revise that part again...”

LSS7 made her point clear about self-reflection as she explained that she might go back through the revision task to check whether she followed the plan of revision. Also, she would like to know whether she would improve the second draft.

SR-LSS7 “Yes, I think I’ll have to go back through the revision task. Why?...To see whether I follow the plan or to examine if I improve my second draft...”

It appeared that LSS7 would self-assess her own abilities for revising. That is, she expected to use Self-Reflection in a combination with Self-Assessment.

LSS8 stated that she needed to go back through the revision task to make sure that she completed all parts of the revision task.

SR-LSS8 “Yes, I will have to go back through the revision task or process to check whether I have revised all the parts I need....”

To find out whether the less successful students reflected on their own problems, after training, they responded to the question: “Did you know why you could make a strong or weak arguments in your essay?” LSS2 said:

SR-LSS2 “Yes, I did but when I did the first draft I can’t tell my strong or weak points. Why did I know?...I reread through the essay and I felt that it flowed and developed logically. Also, the reasons supported the thesis and the details support the main idea. I felt that. It’s not the same as the original one...”

For LSS4, although she asked someone to read the second draft to help her reflect on her strengths and weaknesses, she also used the rhetorical plan of an argumentative essay when reconsidering her second draft.

SR-LSS4 “ I had to ask someone to read it and tell me if I did the strong argument or weak. OK. Sometimes I know. I looked at the plan. Plan A or Plan B-the rhetorical pattern of an essay-I can use it-the diagram for the essay...”

LSS5 reported that she reflected on her own problems by comparing the second draft with the feedback, the typical method most students did right after they completed the first draft revision.

SR-LSS5 “When I checked and compared with the feedback, I also checked whether I changed all the problems or mistakes listed...”

In summary, after training, the less successful students appeared to see their own problems, strengths and weaknesses more clearly. This showed that they have tried reflecting on their cognitive processes while performing the revision task. The application of Self-Reflection might help to develop the sense of self-reflection. Therefore, the metacognitive strategy training in the first draft revision made the students aware of their own revision process and how they might approach the revision task in a way that might help to improve the second draft.

CHAPTER 6

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The purpose of the present study was to measure SWU third-year English majors' metacognitive strategies use in revising the first draft of their argumentative essay. The study was focused on three related issues: (a) metacognitive strategies in the first draft revision the successful students used before and after metacognitive strategy training in the first draft revision, (b) metacognitive strategies in the first draft revision the less successful students used before and after metacognitive strategy training, and (c) whether the less successful students improved the writing quality of the second draft of their argumentative essay after metacognitive strategy training in the first draft revision.

To find out metacognitive strategies used by the successful and less successful students, the self-reports from the Pre and Post MSQ, and the retrospective data from the pre and post interviews were analyzed based on metacognitive strategy categorization by O'Malley and Chamot (1990). The ratings from the less successful students' first drafts were also compared with the ratings of their second drafts to prove whether the less successful students improved the quality of writing of the second draft.

The subjects participating in this study were 20 third-year English majors in Srinakharinwirot University. The Pre and Post MSQ and the pre and post interview were administered to the subjects before and after metacognitive strategy training. Also, the less successful students' first and second drafts were rated using holistic and analytic scoring. The data from the questionnaires and the ratings were then analyzed statistically and

compared. Finally, the retrospective data from the interviews were analyzed both quantitatively and qualitatively. The major findings, discussion, explanation and justification for the future research are discussed below.

This chapter includes the summary, discussion, and conclusion of the significant findings of the present study. The implications and recommendations for the future research are also discussed.

6.1 Summary and Discussion

Summary of the Findings

6.1.1 EFL Students' Metacognitive Strategy Use in the First Draft

Revision: Quantitative Results from the Pre and Post MSQ

In this study, the first research question aimed to explore metacognitive strategies successful and less successful students used in the first draft revision before and after metacognitive strategy training in revision.

The results from the quantitative data analysis revealed the major findings worthy of notes.

1. Before training, the successful students reported a moderate overall use of seven sub-strategies and a high overall use of two strategies of metacognitive strategies in the first draft revision. The metacognitive strategies reported at the high level of usage were Self-Assessment and Self-Reflection, and the reported metacognitive strategies of the moderate use were Advance Organizer, Organizational Planning, Monitoring Production, Selective Attention, Monitoring Comprehension, Self-Management and Self-Evaluation.

2. After training, the successful students used all nine strategies at the high level of usage. The metacognitive strategies used most to least were Selective Attention, Self-Assessment, Organizational Planning, Self-Evaluation, Monitoring Production, Monitoring Comprehension, Self-Reflection, Advance Organizer, and Self-Management.
3. The overall mean for metacognitive strategies use of the successful students after training was considerably higher than the overall mean for metacognitive strategies use before training (statistically significant difference).
4. The less successful students' reported usage of metacognitive strategies before training was at the moderate level for seven strategies including Self-Management, Self-Evaluation, Advance Organizer, Organizational Planning, Monitoring Production, Selective Attention, and Monitoring Comprehension. The less successful students reported the high level use of two strategies including Self-Reflection, and Self-Assessment.
5. After training, the less successful students reported the use of all nine metacognitive strategies at the high level of usage starting from Self-Reflection, Selective Attention, Organizational Planning, Monitoring Production, Self-Evaluation, Self-Assessment, Monitoring Comprehension, Advance Organizer, and Self-Management.
6. There was a significant difference between the less successful students' overall mean for the use of metacognitive strategies before and after training (statistically significant difference).

7. Both successful and less successful students attributed different orders of metacognitive strategies use before training. However, after training, both groups seemed to attribute the similar pattern of use, particularly Organizational Planning, Advance Organizer, and Self-Management, which fell into the same orders. Both groups appeared to consider Selective Attention and Organizational Planning important after training since the students made the greater use of these two strategies. In contrast, the least frequency of use for both successful and less successful students after training fell into Advance Organizer and Self-Management.

6.1.2 EFL Students' Metacognitive Strategy Use in the First Draft

Revision: Quantitative Results from the Pre and Post Interview

1. Before training, the successful students reported the high use of Monitoring and Evaluating strategies (high percentages of use), and low use for Planning strategies while the less successful students reported the low use in all three strategies: Planning, Monitoring, and Evaluating strategies. However, after training, it was found that metacognitive strategies use by the successful and less successful students increased dramatically (high percentages of use for all three metacognitive strategies). It appeared that the differences between the use of metacognitive strategies before and after training for both groups of students were significantly high, particularly among the less successful students.
2. In terms of use of nine sub-strategies of metacognitive strategies, it was

clear that the successful students also possessed more strategies than before training except for the Self-Reflection while the less successful students used higher number of strategies than before training for all nine sub-strategies with the high percentages of use from 75 % to 100% of use.

The findings from quantitative analysis (the questionnaire study) mentioned above are worthy of further discussion.

Discussion

6.1.3 Pattern and Type of Metacognitive Strategy Use

An examination of the metacognitive strategies use in the first draft revision for both successful and less successful students before and after training revealed the wider and increased use of metacognitive strategies. In terms of the three dimensions of metacognitive strategies use: planning, monitoring and evaluating, before training, the less successful students had made the greater use of Evaluation: Self-Assessment and Self-Reflection, than those of the successful counterparts. However, after training, both groups had already possessed these two strategies and made the similar proportionately use of Self-Assessment and Self-Reflection (at the high level of usage).

Evaluation Strategies

Firstly, one explanation for the high use of Self-Assessment and Self-Reflection, sub-categories of Evaluating Strategies after training was that both successful and less successful students were asked to respond to the Pre Metacognitive Strategies Questionnaire related to revising the first draft right after

they got the returned first draft with the teacher feedback. It was then possible that they considered evaluation the most important strategy before they started to revise. These students also had some experience in evaluating their own first draft or friend's before turning in the paper to the writing teacher. Evaluation skill is related to the student writer's ability to recognize weakness in their work (Anderson, 2002), in order to revise successfully, these students reported using this strategy to reflect on their own problems and weaknesses in the first draft.

A second possible explanation had to do with the nature of the metacognitive strategies. The three strategic processes of metacognitive strategies are not linear but the recursive ones. The students might use the strategies when it is necessary depending on the needs or demands of the task and the interaction between the task and the learner (Chamot et al., 1999). According to the questionnaire study, the students might see the need to think about the problems in their own first draft before engaging themselves in revision, the next cognitive and metacognitive activities of writing that will take place. Not surprisingly, both groups were particularly concerned with Self-Assessment and Self-Reflection since these students were assigned to write a weekly journal at the start of the course so that they were able to reflect on their own prior knowledge and experience about writing a argumentative essay and to identify their existing problems in the text by focusing on Self-Assessment and Self-Reflection.

Planning Strategies

Secondly, after training, both successful and less successful students had made a greater use of Selective Attention and Organizational Planning, parts of the Planning

strategies (except for Self-Assessment and Self-Reflection in which they had reported the high use before training). Interestingly, before training both groups reported the moderate use of Selective Attention; this strategy was placed in the sixth order for the successful students and the eighth for the less successful students. It appeared that the use of Selective Attention had substantially increased between the two groups. Selective Attention, as defined earlier, is used to attend and maintain attention during performing the task, in this case the revision task. It includes what Chamot et al. (1999) stated “choosing to focus on specific aspects of language or situational details that will help perform the task” (p.21). The Selective Attention was closely related to the successful management; therefore, the students reported that they chose to focus on specific aspects of the first draft revision, the thesis of the argumentative essay when planning to revise for the overall content and ideas.

Another reported dimension of Planning strategies, Organizational Planning had also increased, particularly for the less successful students. It was evident that, before training, the less successful students did not take time to prepare for the revision task or plan what they needed to be accomplished. Planning according to Chamot et al. (1994) included setting the goals and objectives and connected the prior knowledge with the task. However, after training the less successful students’ reported strategy use revealed that they were able to plan to successfully approach the revision task by setting the personal goal and purpose, determining the tasks needed to be accomplished, and connecting the revising strategies learned with their own problems in the composed first draft. For the successful students, Organizational planning, when it was used, was frequently used both before and after training. The results of the present study support the main assumption of the study and the previous

research (Anderson, 2002; Chamot et al., 1999; White, 1995), that students can be trained to use metacognitive strategies and to utilize them in doing the academic task, namely the revision task, and that the successful students utilized metacognitive strategies in doing the academic task more effectively than the less successful.

Monitoring Strategies

Thirdly, Monitoring Strategies, with regards to the previous research (Nisbet & Schucksmith, 1986; White, 1999); O'Malley & Chamot, 1999), have been demonstrated to be the most important strategy which distinguishes the successful from less successful learners. In the questionnaire study, the results did not show clear evidence for this because both groups reported the moderate use of monitoring before training. However, the successful students' average use was placed in the higher order (fifth) while the less successful students' order for this strategy was in the seventh order. The Monitoring strategies of which the successful students were more particularly concerned than the less successful counterparts were Monitoring Production. That is, they monitored the first draft in terms of the problems in the text and aspects of an argumentative essay leading to the successful completion of the second draft.

After training, the less successful students had made the greater use of Monitoring Production than the successful students. The increased use of Monitoring Production by the less successful students in the study can be attributed to a lack of prior knowledge and experience related to the important aspects of argumentative essay writing. To be specific, before training, the less successful students revealed that they did not check up their understanding of the current revision task. Monitoring

Comprehension was used least of all nine strategies. Since they were not well-equipped with the sources or materials of the argumentative essay and revising strategies at a level appropriate to their own powers of understanding, they have to decide for themselves whether the materials or strategies were within their comprehension abilities. In addition, the less successful students must put more efforts than the successful students to monitor the understanding for themselves, so when they were taught to use Monitoring Production, they could develop more abilities of this strategy use in compensation to accomplish the task. The successful students, on the other hand, could monitor by selecting the revising strategies and matching them with the problems in their own first drafts.

6.1.4 The Difference in the Metacognitive Strategies Use between the

Successful and Less Successful Students before and after Training

The analysis of the differences in metacognitive strategies use between the successful and less successful students before and after training showed that after training both groups reported using certain strategies more frequently than before training. Additionally, the means of the six metacognitive strategy categories for the successful students and four for the less successful students after training were higher than the means before training, with statistically significant differences. Furthermore, the overall means for both groups after training were higher than the overall means of strategy use before training, with statistically significant difference.

In summary, the results seemed consistent with a number of studies on metacognitive strategies which have suggested that metacognitive ability increased overtime (Hacker, 1998), and that through metacognitive strategy instruction,

particularly explicit instruction, the independent use of metacognitive strategies was developed gradually (Hacker, 1998; Elaine, 1990; Livingston, 1997; Divine, 1993; Paris & Winograd, 1990). In addition, the findings of the present study were in agreement with the assumption of the study that students could be trained to use metacognitive strategies in doing the learning task, in this case the first draft revision of a argumentativeessay.

Summary of the Findings

6.1.5 Successful and Less Successful Students' Metacognitive Strategy

Use in the First Draft Revision: a Qualitative Analysis of Results

The qualitative analysis revealed that before training both the successful and less successful students reported a wide variety of metacognitive strategies use in revision as in the quantitative analysis, but they might not try to incorporate them in the first draft revision effectively. After training, they reported the higher level of all strategies use. These results confirmed the findings from quantitative analysis. Additionally, the qualitative analysis from the retrospective interviews revealed more insights into students' self-perceived and the actual use of metacognitive strategies before and after training. These are now discussed.

The present study showed the similarities and differences in metacognitive strategies use in the first draft revision between the successful and less successful students and among individuals before and after training.

Discussion

The Planning Strategies

To begin with, as for the Planning strategies, both successful and less successful students reported the similar number of Planning strategy Advance Organizer to determine the nature of the first draft revision needed to be done, so there was little difference in the increased use of this strategy before and after training. Unlike the use of Advance Organizer to set the revision goal and plan the purpose, and objective of the revision task, the results revealed the substantial increase in the use of this strategy, specifically among the less successful students. The results revealed that the less successful students use Advance Organizer to plan to revise for the purpose of the essay and the audience expectation, and set the personal revision goal and plan the objective task regarding the problems identified from the teacher feedback.

In addition, there was a significant difference in the use of Planning strategy Organizational Planning between the two groups before and after training. Before training, a few successful students knew how to plan the content of revision task, but after training most successful students used these strategies effectively to prepare and plan for the forthcoming revision task (an increase of 100%).

Another dimension of Planning strategies that both groups increased in the use most was Selective Attention. The students used Selective Attention when they selectively attended to the most important aspect of the first draft revision (an increase of 50% for the successful students and 40% for the less successful students), and sequenced the various methods or strategies to complete the first draft revision task (an increase of 60% for SS and 80% for LSS). Before training, both SS and LSS

pointed out that they had never used Selective Attention to prioritize or sequence the revising strategies for completing the task before. Thus, after training, this strategy was increasingly developed among them. Selective Attention was specifically useful for these students because it helped them understand the complexities of the incoming revision task before revising, pinpoint the problem, and expand the learning task (Chamot et al., 1999; Young, 2002).

Further, qualitative analysis showed that before training the students in both groups reported the high use of Self-Management to plan when, where, and how to revise but the low use in another dimension, selecting strategies appropriate for a specific revision task. However, after training both groups increased in the use of Self-Management in both dimensions, particularly in selecting the strategies for the specific purpose of the revision task (an increase of 50% for both groups). The use of Self-Management required the students to arrange the conditions to help themselves perform the task successfully, and to manage or control their own cognitive processes (Rivers, 2001; O'Malley et al., 1999).

The results of the present study suggested that both successful and less successful students were more able to manage the learning environment than to control the cognitive before training. That is, the individuals knew how they could learn or perform best. Once they were trained to use Self-Management to manage their own learning by using the cognitive strategies, in this case the revising strategies to establish the learning condition, the students in both groups then exercised more executive dimension of Self-Management after training. For example, they focused on the content and ideas of the whole essay first, and then moved to the body paragraphs to see whether they supported the thesis.

It can be concluded that the results of qualitative analysis provided the clear picture of the successful and less successful students, who were taught to use Self-Management and later developed the knowledge of how they can manage the revision process of the first draft revision for themselves.

Monitoring Strategies

In addition to Planning strategies, both successful and less successful students reported the use of Monitoring strategies: Monitoring Comprehension and Monitoring Production. It appeared that the successful students made the greater use of the Monitoring Strategies than the less successful students. According to the metacognitive research, monitoring has been shown to significantly differentiate the effective from ineffective learners (Nisbet & Shucksmith, 1986; O'Malley et al., 1999). O'Malley et al. (1999) also stated that for good learners, when they performed the task and feel frustrated, they could give themselves encouragement by thinking about the learning tool, or strategies and seek help from others or outside while completing the task. That is, they could use Monitoring Strategies to control their own learning. Therefore, results from this study revealed the higher use of Monitoring strategies of the successful students than those of the less successful students before training. The findings reported in this present study then supported the notions that the experts in the metacognitive theory have established.

Regarding the use of Monitoring Strategies, after training, the individuals specifically, the successful students increased in the use of both Monitoring Comprehension (an increase of 50%) and Monitoring Production (an increase of 20%

and 40%). The less successful students had a more substantial increase in the use of both dimensions of Monitoring than the successful students.

One explanation for this result had to deal with Vygotsky's (1978) Zone of Proximal Development (ZDP). In this study, metacognitive strategy training served as a tool to stimulate the potential development level. Based on Vygotsky's notion, there are two aspects of ZDP, the zone between what students can already accomplish on their own (the actual development level) and what they can accomplish only when they receive appropriate help (potential development level). In the explicit metacognitive strategy instruction, the materials provided such as Self-Question and Answer Worksheet, Plan Revision Think-Sheet, Self Revision Think-Sheet became internalized to serve the students in a cognitive capacity. These materials provided assistance in the learning situation where students were encouraged to perform cognitive activities. The effect of metacognitive strategy training was the condition that might increase the less successful students' internalization of metacognitive strategies use in the revision process by activating necessary strategies and transferred to the existing revision tasks. Therefore, the less successful students could understand the revision task and monitor the strategies appropriate to the first draft revision when the stimulus became part of their repertoire of understanding, and then revised the first draft effectively.

Evaluating Strategies

Finally, as for Evaluating strategies, it appeared that before training Self-Reflection was the most concerned by the successful students while Self-Assessment was used most by the less successful students. Another dimension of Evaluating

strategies, Self-Evaluation was used in a similar number by both groups. After training, the results showed that both groups developed metacognitive ability to use three sub-categories of Evaluation: Self-Assessment, Self-Reflection, and Self-Evaluation in revising the first draft to the high use like the results revealed in the questionnaire study. The less successful students substantially increased in the ability to use Self-Evaluation to evaluate the appropriateness of expectation while carrying out the first draft revision by 60% and an increase of 40% in evaluating themselves in the strategies used to revise the first draft.

To be specific, after completing the task, ones need to check whether they meet the goal or expectation. For the successful students, though they stated that they did not have the revision goal in minds before training, all of them reported the use of Self-Reflection by comparing the first draft with the second draft and decided whether they had to do the same revision task. This suggested that before training the successful students were able to reflect on their own revision process including the problems they encountered while carrying out the revision task, the time when they performed the revision task, and to recall some of the strategies they found helpful. For the less successful students, although not all of them used Self-Reflection before training, more than half of them reported the use of this strategy. The use of Self-Reflection for both groups before training may be due to the academic value of journal writing. These students were assigned to write a weekly journal to reflect on their learning process at the outset of composition class. Journal writing then could be a part of individuals' consciousness (Myers, 2001). The students' self-reflection on the learning activities by writing a journal could also generate an overall awareness of the learning process in which the students can transfer to other subjects or learning

situations (Chamot et al., 1999). Therefore, the successful and less successful students could consciously reflect on how they learned to revise and different methods or strategies they used in doing the specific revision tasks.

Summary of the Findings

6.1.5 The Effects of Metacognitive Strategy Training in Revision

The second research question of this present study purposed to examine the effects of metacognitive strategy training in revision on the less successful students' quality of writing.

The results from the students' essay ratings revealed five major findings:

First of all, metacognitive strategy training in revision appeared to account for greater writing improvement of the students' revised draft. In other words, the less successful students' second drafts improved; the second drafts were rated better than the first drafts.

Secondly, the Paired t-test analysis between the students' mean scores of the first and second drafts using holistic ratings suggested that the metacognitive strategy training made the difference. On the other hands, the less successful students made more improvements in the quality of writing after they were trained to revise by using metacognitive strategies in planning, monitoring and evaluating.

Third, the results of the analytic ratings of the students' argumentative essay showed that the students made the improvement in the quality of writing in three aspects of argumentative writing: claim, reason and rebuttal.

Fourth, the Paired t-test analysis between the mean scores of the first and second drafts' analytic ratings showed the significant differences for the means for claim and rebuttal, but there was no difference between the mean scores for reason.

Fifth, taken together, these results of the improvements in the quality of the writing among the less successful students implied that metacognitive strategy training in revision was effective and could lead to more successful revision, which in turn, may result in the better quality of writing in the second draft of an essay.

These results need further discussion.

Discussion

To begin with, since the focus of metacognitive strategy training was based on the first draft revision of the four revision sub-tasks including the content and ideas, the thesis, purpose and the audience, the rhetorical pattern of an argumentative essay, the paragraph development, and the unity and coherence. The metacognitive strategy training produced increases in the quality of the second drafts. Quality, according to the criterion used in this study was defined broadly to include the aspects of the rhetorical and language control. The first involved the content and ideas, the structural elements of an argumentative essay such as the strong thesis, the reasonings, supporting evidence, and the opposing views, overall organization, paragraph development, and the connected ideas between and within the paragraph. That language control dealt with the language use including vocabulary, word forms, sentences and grammar.

Findings in the second investigation lent support to the work involving in cognitive and metacognitive strategies instruction cited in the literature (Sacrdamalia

& Bereiter, 19987; Zellermayer, Salomon, & Globerson, 1991; Graham & Harris, 2000; Graham, Mac Arthur & Schwartz, 1995; Graham, 1997; Englert & Raphael, 1989; Englert, Raphael, Anderson, Anthony, Stevens, & Fear, 1991; Stoddard & Mac Arthur, 1993). These studies revealed the effectiveness of the explicit strategy instruction in task-specific strategies in improving the writing performance of students and the positive effect of instruction in metacognitive strategies in helping students revise more effectively leading to improving the paper.

The improvements in the overall the quality of writing may be due to any of these factors: first of all, before revising the first draft, the students were taught the Planning strategies for analyzing the task and identifying the problems in the first draft by using the self-questioning (a set of questions as the evaluation criteria aimed at evaluating the first draft). The students were also assigned to use the questions in the Plan Revision Think-Sheet to guide their cognitive process as well as to promote awareness and management of their own problems. That is, to develop the students' metacognitive skills. The students then made list of the problems and planned to revise by setting the personal revision goal for each specific revision task, and they clarified the problems by accessing their existing knowledge and cognitive strategies relevant to the problems needed to be revised. For example, the students may have responded to the question "What do you plan to do to make your first draft more interesting?" or "How can you alter your plan of revision if you cannot achieve the goal of revision?" In responding to these questions, the students had to determine the nature of the task and the problems in the first draft more precisely. The purpose of teaching the Planning strategies was to help students know what they needed to

sequentially do following the revision plan. With the Plan Revision Think-Sheet, students may have applied the plan to self-regulate the next revision task.

The second reason for the increase in the quality of writing was that, during revising students learned to revise four revision sub-tasks at a time. It was possible that the students did substantive revisions for the four revision tasks. Also, revision is a recursive process that occurs throughout the composing process (Emig, 1971 as cited in Zamel, 1982; Murray, 1984), so the students may have revised more during rewriting the second draft.

Third, the students were encouraged to use Monitoring strategies during the training and the findings revealed that they reported greater use of Monitoring strategies than before training. It would then evidenced that the students have internalized this component of metacognitive strategies explicitly provided by the tool, Self-Revision Think-Sheet; therefore, it was convenient for them to monitor and direct their own revising and composing process (Graham & Harris, 2000). This, in turn, resulted in improving the quality of the second draft.

Fourth, the students were able to evaluate whether each revision sub-task they had completed was effective by using Self-Evaluation Checklist, the metacognitive tool used to develop Evaluating strategies use. Usually, the poor students do not evaluate the success or failure of strategy use (Anderson, 2002). Evaluating strategies were connected with the students writer's ability to recognize weaknesses in their work, to reflect whether they need to go back through the task, to decide whether they meet the goal, and to evaluate the effectiveness of the strategies use (Chamot et al., 1999; Anderson, 2002). Once the students self-evaluated each completed revision sub-task and identified their own strengths and weaknesses, they might need to go

back through the task and plan to revise any sub-task that they failed to achieve. In doing the same revision task, the students altered the strategies from the ineffective to effective ones for the particular task. Following the evaluating process, the students revised their first draft several times in order to make it better. This assured that the students' second drafts have improved.

Further, regarding the analysis of the second drafts based on the text-based measures using Toulmin criteria: claim, reason and rebuttal to counter-arguments, it was interesting to note that the less successful students made more substantial improvements for all those three components. The results revealed that they made the moderate to high gains (mean gains) for claim, reason and rebuttal although the mean scores for reason between the first and second drafts were not significantly different whereas the mean scores for claim and rebuttal were significantly different. More specifically, the Paired t-test analysis suggested that the students produced more explicit claim, more specific and strong reasons, and reliable rebuttal to counter-argument. The results from analytic ratings were in line with the findings from holistic ratings, that the less successful students made statistically significant improvement in their abilities to revise particularly revise for the structural elements of a good argumentative essay (Cornor, 1990; Crowhurst, 1988).

6.2 Conclusion

In summary, this study provided a great understanding of the metacognitive strategies use of the successful and less successful third-year English majors in Srinakharinwirot University as well as empirical evidence for the effects of

metacognitive strategy training on students' first draft revision of an argumentative essay.

The major concern of the present study was to explore metacognitive strategies used by the students in revising the first draft of an argumentative essay, and the effects of metacognitive strategy training on the first draft revision of the EFL learners. Both quantitative and qualitative parts of this study pointed towards the fact that the students who received metacognitive strategy training increased in the use of metacognitive strategies and learned how to use them to plan, monitor and evaluate themselves throughout the learning efforts.

Taking the results of the study together, the most substantial findings are summarized below.

First of all, the explicit metacognitive strategy training in revision seems to have contributed to the increase in the use of metacognitive strategies. In other words, after training, as it was demonstrated, the successful and less successful students reported the higher use of metacognitive strategies in the first draft revision than before training. Students in both groups used a wide range of metacognitive strategies to help them accomplish the revision task. However, the students did not possess the same strategies. Certain strategies may be more suitable for some students and some tasks than others. Therefore, it is necessary for the teachers to help the students select the appropriate strategies for the task. In this way, metacognitive strategy training comes into practice.

Secondly, it was shown that after training, the less successful students' argumentative essays outperformed those written before training. The explicit instruction and practice the less successful students received about how to plan to

revise, set the personal revision goal, select the most appropriate revising and writing strategies, monitor the strategy use, manage the time to do specific revision tasks, and finally evaluate the whole revision process, contributed to the improvement of the first draft.

The findings of this study indicated that explicit metacognitive strategies instruction has positive effects on the first draft revision of an argumentative essay of EFL student writers. The findings of this study support the metacognitive strategy research on writing (Bereiter & Scardamalia, 1987; Raphael, Englert & Kirschner, 1989; Zellermayer, Salomon, Globerson, & Givon, 1991) and EFL research literature on metacognitive strategy training of other components and skills of language such as listening, reading and vocabulary (Dhieb-Henia, 2003; Goh, 1996; Li & Munbi, 1996). In addition, the findings of this study, despite of its limitation, provided new evidence in teaching metacognitive strategies to EFL students writers who are taking the academic writing or advanced composition courses in their major areas, and the training model used to develop metacognitive strategies use in this study was practical and effective.

6.3 Limitation

A number of limitations of the study was worthy noted and might be addressed in the future research.

First, the metacognitive strategy training had its own drawbacks. Since the main instrument applied in this study was self-report questionnaire, the validity of the findings from the Pre and Post Metacognitive Strategies Questionnaires(Pre and Post MSQ) depended on the participants' willingness to precisely respond to the items on

the questionnaire. Also, the Pre MSQ were administered before students' revising when the students had no experience revising the argumentative essay, so the self-perceived responses might have been inconsistent.

Second, the main limitation in the experiment was the absence of a control group. The research design was a single group pre-test-post test design.

Third, the small size and its selective nature of the subjects may limit the generalizability of the results to other writers in other contexts. Thus, the findings should be triangulated with a larger sample of participants. It is also important to confirm the results with different groups of students and different types of the writing tasks other than argumentative writing.

Fourth, the time period for metacognitive strategy training was not long enough to show the clear picture of development in the use of metacognitive strategies since the independent use of metacognitive strategies develops gradually through experience (Flavell, 1979, Kluwe, 1987); and students can be taught to better apply their cognitive resources through metacognitive control (Livingston, 1997). Further, the short period of time in the metacognitive strategy training was not sufficient to reveal the real difference between the use of metacognitive strategies within the successful and less successful students.

Fifth, the limitation concerns the heavy academic focus and the lack of experience in the global-level revision of the multiple draft contexts. First, in order to revise the first draft to the second draft, the students were trained to revise four revision subtasks separately. Second, according to metacognitive strategy training, they needed to revise systematically and sequentially by analyzing the task, setting the revision goals, planning for the content and revising strategies so that the students

found the lesson boring and overwhelming. They expected something less academic from the writing class as they used to do. Third, the participants had little background experience in writing argumentatively, so they thought that the given task was too complicated for them. All in all, the participants appeared to have a limited view of revision, limiting their efforts to sentence level comments and minor mistake correction and making surface-level changes in the first draft rather than paying attention to the content and ideas or the overall quality of the essay in the multiple draft setting.

6.4 Implications

6.4.1 Theoretical Implications of the Study

The present study investigated the effects of metacognitive strategy training in the first draft revision of EFL students who participated in an instructional setting in which metacognitive strategies use was enhanced. This study found significant effects of metacognitive strategies training in improving the less successful students' quality of writing. In addition, the results provided substantial information about the increase in the use of metacognitive strategies in revising the first draft of an argumentative essay within both successful and less successful students in all three sub-processes of metacognitive strategies: planning, monitoring, and evaluating. This includes nine sub-categories: Organizational Planning, Advance Organizer, Selective Attention, Self-Management, Monitoring Comprehension, Monitoring Production, Self-Assessment, Self-Evaluating, and Self-Reflection. The results also provide support for other metacognitive research and have important implication for metacognitive development. For example, the prediction that metacognitive strategy training in

revision has a greater effect on students' quality of their argumentative essay has been made by many researchers including Zeller Mayer, Salomon, Globerson and Givon (1991), and Raphael, Englert and Kirschner (1989). In addition, many writing researchers agree that novice writers employ what they called "knowledge telling" approach to writing. In contrast, expert writers use "knowledge transforming" model of intentional writing to achieve their goal through the composing process (Berreiter & Scardamalia, 1987).

The findings of this present study suggested that engaging less successful students in metacognitive strategies contributed to the development of metacognitive ability pertinent to the improvement of their argumentative essay. The important goal of metacognitive strategy training is to help students incorporate metacognitive strategies in planning, monitoring, and evaluating into the executive control of revising process. This study proposed the notion of metacognitive strategy training in the first draft revision as an instructional model of enhancing metacognitive processes in revising. The main steps of metacognitive strategy training in revision involve identifying the metacognitive strategies in planning, monitoring, and evaluating, which belong to the expert performance, describing these metacognitive mechanisms as explicitly as possible, designing a way of incorporating these strategies at the onset (before), during, and after performing the revision task, and designing the materials to help students take control over the initiation of the first draft revision. The procedure of metacognitive strategy training in the first revision (MSTR) was closely connected with "Procedural Facilitation" proposed by Bereiter & Scardamalia (1987), "Metacognitive-Like Guidance" by Zeller Mayer, Salomon, Globerson, and Givon

(1991), and a special tool called “Cognitive Strategy Instruction in Writing (CSIW) by Englert, et al. (1991). These previous studies have been made with the L1 students.

Also, in the field of ESL and EFL writing instruction, a number of techniques used to develop students metacognitive control have been proposed and practiced. One study is to enhance students awareness of self-monitoring by giving them the control over the initiation of feedback (Cresswell, 2000). This study suggests that the self-monitoring technique with learner training is a valuable way of increasing the element of student autonomy in the learning of writing.

Based on the findings previously discussed, the merits of metacognitive strategies in helping the student writers to revise the first draft of their argumentative essay cannot be ignored. The application of metacognitive strategies such as planning, monitoring, and evaluating might help to develop the sense of self-regulation or autonomy. Generally, in ESL or EFL writing class, the teacher often takes responsibility for students’ writing (Ferris, 1995, Silva, 1993). Many student writers fail to engage themselves in the writing processes towards the cognitive goals. Therefore, enhancing students’ metacognitive awareness of the writing performance, specifically the revision task might help to reduce the teacher’s burden of taking all the responsibility for evaluating students’ writing, and to enable students to revise effectively and improve their own texts.

6.4.2 Pedagogical Implications for Writing Instruction

The findings of the present study also have numerous important pedagogical implications for student writers, collegiate writing teachers and teacher educators in EFL context. The most obvious pedagogical implication of the study is derived from

the findings that metacognitive strategy training in revision increased the use of metacognitive strategies leading to improvement on the writing quality of an argumentative essay. These findings are important in two aspects.

First, they suggested that metacognitive strategy training may be an effective tool for EFL writing teachers, particularly those teaching the undergraduate students the academic writing courses. That is, metacognitive strategy training has the potential to support the success of students and might be profitable to remediate less successful students' ineffective approaches to writing, specifically revising.

Second, the findings that students' use of metacognitive strategies can be enhanced by the explicit instruction were increasingly important for both writing teachers and student writers. For the most part, as for the teachers, in order to support students' academic success, instruction that explicitly promote metacognitive strategies use in writing is needed. Instructors can help learners use different metacognitive strategies that research has shown to be effective to facilitate the writing processes. Research has found that enhancing students to self-regulate their own cognitive processes, namely writing by planning, monitoring, and evaluating are effective. Therefore, in establishing the metacognitive activities for the writing class, the teacher can do as in the following:

1. First, in the pre-writing stage, the teacher can teach the students to plan the approach to the writing task by promoting students' construction of conceptions of tasks and the writing process (task performance). The students then set the goals for writing after they have been told what they are going to write and the type of writing task they have to accomplish. The teacher also allows the time for students to discuss with a

partner about writing strategies, the content and ideas, which might be appropriate for the particular writing task.

2. When drafting or writing the first draft, the teacher actively encourage the students to monitor their own writing by checking whether they are making sense when writing and whether they could write based on their own experiences.
3. At the revising stage, the teacher allows the time for the students, after doing the writing task, to talk about the effectiveness of the strategies they used in writing as well as factors that affect their writing. In this way, the students have opportunities not only to use a variety of strategies but also to evaluate the strategies use and the writing outcome.

The instructional model described above can be developed to promote students to take control over their cognitive processes when performing the writing task by planning, monitoring ongoing activities, and to make judgment about the cognitive outcome based on the standard criteria. This can help students make a decision about their own success or failure and how to improve their writing (Chamot et al, 1999; Goh, 1996).

In short, teachers can help learners become more aware of metacognitive strategies through explicit instruction so that they can self-control their own learning process (Brown, 1987, Harris & Graham, 1996; Graham & Harris, 1992, Butler, 1998). The main objective of such attempts is to allow students to become more aware of planning, monitoring, and evaluating strategies leading to becoming more responsible for meeting their learning goal. Such objectives can be achieved when

students are trained in metacognitive strategies use so that they become more independent and effective learners.

Another pedagogical implication of this study is intended to deal with the students' problems identified in the retrospective interview data. The findings from the interview protocols revealed that every student possessed a number of cognitive strategies about writing. It also appeared that these students wanted to have greater control over their own writing, but they did not know how to, and some of them lacked of knowledge about how they could write more successfully and effectively.

Therefore, a good EFL writing program should:

1. include not only effective writing strategies but also the knowledge of metacognitive strategies by integrating them into the regular writing classes.
2. include instruction in the use of metacognitive strategies such as planning, monitoring and evaluating which allow students to regulate their writing more efficiently (Victori, 1999)
3. establish the activities that improve the students' linguistic knowledge (e.g. grammar, vocabulary) and the knowledge about the rhetorical pattern of a particular writing task such as the components of the type of essay. Since some students reported the language related problems and the lack of knowledge about the structural elements of a particular writing specifically argumentative writing, such activities would help the students improve the better quality of writing.

Further, the pedagogical implication of this study emerged from the students'

journal entries. The discussion of results revealed the various aspects of students' person knowledge including a repertoire of cognitive strategies related to writing, emotional and affective nature within the successful and less successful students. The findings also suggested that journal writing has engaged students in an increased self-monitoring of their revision skills, which help them identify their strengths and weaknesses as writers. Since journal writing provided the opportunities for students to reflect on their cognitive resources as well as themselves as learners (Lin, 2001; Myers, 2001), enhancing the knowledge of self-as a learner or the person knowledge should be considered the important goal of the writing instruction.

It also appeared that keeping journals was effective in raising the writers' consciousness of their own writing processes (Matsumotoi,1996; Goh, 1997, Hallbach, 2000). The writers need to learn to know themselves better. For example, they should know their own writing proficiency, writing problems, (i.e. language related problems) and the motivational beliefs about learning to write such as their ability to write, the difficulties, the expectations, their personal goals, utility and interest in the writing task, and emotional reactions to EFL writing (Victori, 1999, Lin, 2001). That is, the writers should become aware of their strengths or weaknesses. If the particular problems are brought into mind, they will have a more realistic picture of their deficiencies they have to cope with and know the steps they will have to take to improve them. Therefore, EFL writing instruction, based on the process-based approach, should incorporate journal writing as part of the writing activity to raise students' awareness of their own writing process. In this case, journal writing can play an important role as an appropriate tool in encouraging students to think about their own writing process and consider ways of improving their writing ability.

Another pedagogical implication concerning the journal writing is derived from the findings that the understanding about oneself as a learner may increase self-confidence and motivation for writing, which in turn affects the kind of personal goals. Supporting the high motivation for learning to write leading to significant use of approach for completing the writing task requires attending to students' positive motivational beliefs. The writing teacher could give the students' the opportunities to share with one another the thoughts and beliefs written down in their journals. The group discussion about learning could be useful because the students become more aware of their own strategies use and other students' strategies, beliefs and attitudes. Through discussion, the students could possibly learn what other students do in their writing so that they can evaluate and improve their writing.

6.4.3 Methodological Implications

This study has triangulated data collection techniques including self-report questionnaire, retrospective interview, and self-reflection from journal writing and essay ratings. Triangulation through multiple measures enabled the researcher to verify the research findings (McGroarty & Zhu, 1997). In investigating the effects of metacognitive strategy training in the first draft revision of an argumentative essay, quantitative data analysis of self-report questionnaire before and after training, and qualitative analysis of students' retrospective interview protocols as well as self-reflection of journal entries all support the findings that metacognitive strategy training is effective in increasing metacognitive strategies use for both successful and less successful students. Results from different data sources then would provide the corroborate evidence for the research hypothesis.

Also, qualitative data from both retrospective interview and journal entries revealed that metacognitive strategy training in revision improve students' metacognitive knowledge, specifically person knowledge and motivational beliefs that influence students' strategic approach to the revision tasks. The results derived from different data resources then corroborated each other. Finally, analysis of students essay ratings supported the finding that metacognitive strategy training significantly improved the less successful students' second drafts. This showed that metacognitive strategy training is effective in increasing students' ability to revise leading to the better quality of writing. Therefore, results derived from different data and methods corroborated each other.

Data and methodological triangulation also helped the researcher to clarify the research findings. That is, qualitative data analyses were specifically important in describing some of the phenomenon producing some of the quantitative results. First of all, quantitative results from the Pre and Post MSQ revealed that both successful and less successful students trained for metacognitive strategies in revision increased in the use of metacognitive strategies. The students reported the significantly higher level of all strategies use. Qualitative analysis from interview data before and after training helped explain the quantitative findings. Both successful and less successful students trained for metacognitive strategies used metacognitive strategies in planning, monitoring, and evaluating in the higher level because they were engaged in metacognitive activities more actively in the training while performing the task through Self-Questioning, Plan-Revision Think Sheet, Self-Revision Think Sheet, and Self-Evaluation Checklist.

Similarly, quantitative analysis of students' essay ratings revealed that less successful students trained for metacognitive strategies use demonstrated the better quality of their second draft. Qualitative analysis of students' journals on the effects of metacognitive strategies training helped explain why the less successful students have greater improvement in their revised draft of an argumentative essay. Qualitative data analysis from journal entries suggested the cognitive factors including cognitive activities and students own problems or difficulties while performing the revision tasks, and affective factors influencing students metacognitive awareness (Mutsumoto, 1996, Goh, 1997).

Therefore, triangulating quantitative and qualitative data and methods contributes to a better understanding of the effects of metacognitive strategy training in the first draft revision, and of the research questions examined in this study.

6.5 Recommendations for Future Research

Despite the limitations, the results of the present study indicated directions for future research. Most importantly, research into the use of metacognitive strategies in writing, particularly revision of EFL students is very new and still lacking, future studies could provide a more complete picture of the relative contribution of cognitive and metacognitive strategies use when performing the writing task. In this study, the methodology used for training focused on metacognitive ability to plan how to approach the revision task, to monitor comprehension and to evaluate progress towards the completion of the revision task of an argumentative essay. Further research is needed to explore how metacognitive strategy training affects the writing quality of other types of text such as narration or description. In addition, it would be

interesting to investigate which strategy among those three main strategies and nine sub-categories can be used most successfully to improve the writing quality.

Furthermore, it is important to train student writers to use metacognitive strategies at the outset of the writing process, the pre-writing in which the Planning strategies come into play so that the students can plan the content and strategies to carry out the writing task successfully. In this case, it would be useful to study the effects of teaching the Planning strategies on the writing outcome, especially with students of different levels of language proficiency. The quasi-experimental study could also be conducted to find out whether there is a causal relationship between the Planning strategies use and students' writing.

Additionally, it is important to study the prospect of using self-monitoring and self evaluation in students' writing. The interesting questions are such as, "Can self-monitoring and self-evaluation be used separately or in combination to improve students' writing?" or "Can self-monitoring and self-evaluation can be used effectively to improve students' writing?"

The other suggestion is that since this study is limited to revising one argumentative essay while the students were trained to use metacognitive strategies, the long-term effects of metacognitive strategy training need investigation so that the teacher would know how training affects the subsequent writing outcome and changes or the development in metacognitive strategies use.

Another issue of concern is that metacognitive strategy training is limited to global-level revision of a argumentativeessay from the first draft to the second draft. Further research is needed to determine how metacognitive strategy training affects the sentence-level revision of other types of writing. More importantly, in order to

write effectively based on the process-oriented approach; the students need to revise multiple drafts before they can complete the final draft. Thus, it is interesting to explore which other types of metacognitive strategy training can be used successfully to develop students' ability to revise the multiple drafts of the essay.

This study has triangulated data collected techniques such as Pre MSQ and Post MSQ, and pre interview and post interview; therefore, future research could investigate other aspects or research methods that were not included or documented in this present study as in the following.

6.5.1 The Use of Quantitative and Qualitative Data Analysis

This study used quantitative data analysis from the pre and post questionnaire and the pre and post interview as the qualitative data analysis to obtain the information about metacognitive strategies use. The quantitative data analysis enables the researcher to understand the frequencies of metacognitive strategies use before and after training. However, it evidenced that this approach did not consistency in the metacognitive strategy use because of the small number of the participants. Therefore, future research may explore the metacognitive strategies use within a large number of subjects at various levels.

For qualitative data analysis, a small sample size, as in this study appeared to be valuable. Future research then should combine the qualitative analysis of data and be valuable. Future research then should combine the qualitative analysis of data such as retrospective protocols to demonstrate the use of certain metacognitive strategies. In addition, future research should include some case studies to follow the writing

process of the subjects so that a clearer and more comprehensive picture can be revealed.

6.5.2 The Comparative Study

In this study, the students had been trained to revise the first draft of a argumentativeessay using the metacognitive strategy training model of revision for five weeks. Future research within a long time period and the comparative studies such as a longitudinal and ethnographical design are necessary to confirm the findings of the study and to investigate the students changing in metacognitive strategies use in the writing process over time. To ensure the success of such studies, the students should be carefully selected before being assigned in the experimental group and the control group so that the two groups would be representatives of all students with similar language experiences, cultural background and writing skills.

6.5.3 The Use of Computer

Although data from the present study suggested that a wide range of factors may influence the students' revision, this study was not designed to investigate those factors except for the metacognitive strategies use. Since all the students used computers, and they wrote in their journals that revising on the computer helped them see their own problems clearly, it would be interesting to investigate how the students plan, monitor and evaluate their writing with the assistance of computer. In addition, the future studies could compare between the students who do revise using the computer-based revision and the paper-based revision.

A final suggestion for future research is to both widen and limit the focus of this study. That is, a larger size of sample than this study with the experimental and control group is needed to provide substantial results. Also the focus should be on one area to find out more precisely about what will take place throughout the metacognitive strategy training. All in all, the results of this study provide a number of different areas for future investigation.

This study trialed the effect of metacognitive strategy training on students' first draft revision of their argumentative essay using Metacognitive Strategy Training model of Revision: planning to revise, monitoring revising strategies, and evaluating the revision outcome.

The results revealed that the training was effective in increasing the metacognitive strategies use and creating a context in which the students were able to perform the revision task not only regarding their various needs and preferences but also in that while seeking help on the writing problems they encountered while revising the first draft and composing the second draft. More specifically, this study found that the nine sub-categories of metacognitive strategies (O'Malley and Chamot, 1994) had been moderately used by both successful and less successful students before training and highly used after training.

In addition, the results revealed that the less successful students had made a big improvement in their writing proficiency. This result was consistent to the findings of the previous research which found that significant improvements in writing quality of the second draft can be attributed to the explicit meacognitive strategy instruction using different methods or approaches (Flower, 1987; Bereiter & Scardamalia, 1986; Raphael, Englert & Kirschner, 1989; Zellermayer, Salomon, Globerson & Givon, 1991; and Hung, 1993). The results of the present study have also supported the theoretical research indicating that the development of metacognitive strategy awareness in the learner is of vital importance in enhancing language learning efficiency, particularly writing which is the complex process in which numerous cognitive activities take place (Anderson, 2002).

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APPENDICES

APPENDIX A

Metacognitive Strategies Questionnaire

BACKGROUND INFORMATION

1. Personal information

Please fill in the information or tick (/) in the space provided

Name: _____

Gender: () Male () Female Date of birth: ____/____/____
M D Y

E-mail address: _____ Phone number: _____

Major: _____ Academic status _____

Year you enter SWU: _____

2. Language background

1. How many years have you been studying English?

2. Can you write in any language (s) other than English and or Thai? If yes, which language (s)? () Yes
() No

3. Did you attend a course in writing in English before taking this composition course? () Yes
() No
If yes, what was the main focus of the course?

4. Other than your assigned writing, do you regularly write outside the classroom? () Yes
() No

If yes, what type of texts do you generally write in English? () e-mails
() letters
() notes
() essays
() article

- reports
- journals
- others

Please identify. _____

5. Do you like writing in English?

- I don't like it at all
- I don't like it.
- I like it.
- I like it a lot.

Why or why not?

6. How important is it for you to become proficient in writing in English?

- Very important
- Important
- Not so important

7. How do you rate your proficient in writing in English?

- Excellent
- Good
- Fair
- Poor

Please indicate the letter grade you received in English Composition (previous writing courses).

EN 231- Basic writing: _____

EN 331-Composition 1: _____

Your GPA: _____

THANK YOU FOR YOUR COOPERATION

APPENDIX B

Metacognitive Strategies Questionnaire (MSQ)

Pre-questionnaire

Directions: In this part, you will find the statements about revising the first draft of an argumentative essay. Imagine that you are going to revise the first draft of your argumentative essay, think about what kind of things you will do *before*, *during*, and *after* revising. Take time to carefully examine each item and check the responses by ticking (/) in the box that best indicates how well the statement describes you.

- 1 = Never or almost never true of me
- 2 = Usually not true of me (less than half of the time)
- 3 = Somewhat true of me (about half of the time)
- 4 = Usually true of me (more than half of the time)
- 5 = Always or almost always true of me

Example: Consider the following item and choose the response by ticking (/) in the box.

Item	Content	Never true of me	Usually not true of me	Somewhat true of me	Usually true of me	Always true of me
		1	2	3	4	5
	Before beginning to write the paper, I go to the library and search the websites to get as much information as possible concerning the topic					

If you go to the library or search the websites to get as much information as possible concerning your topic before you begin to write the paper all the time or almost always, you **check 5**.

Part 1: The following statements tell you what you will do *before* revising the first draft of your argumentative essay.

Before I start revising the first draft of my argumentative essay,

Item	Content	1	2	3	4	5
1	I have considered the important aspects of a good argumentative essay such as the clear thesis, strong arguments with supporting details.					
2	I have a good idea of what I am supposed to do to improve the first draft and I can explain in my own words.					
3	I have no idea of what are the important aspects of the first draft revision.					
4	I will think carefully of how to revise globally at the whole essay level and at the paragraph level.					
5	I will come up with a list of revision task and set my personal goal and purpose for a specific revision task in a short time.					
6	I determine what to make changes to improve the first draft and plan to use revision outline or graphic organizer.					
7	I will determine the major points I will improve such as the focus, thesis, overall organization and development of ideas.					
8	I will check my problems and mistakes after I get back the first draft with feedback from the teacher and think of revising strategies I already learned then connect with my mistakes.					
9	I will ask myself these questions: - <i>What will I have to do?</i> <i>How can I go about completing this task?</i> <i>What revising strategies do I need to complete my the revision task?</i>					

Item	Content	1	2	3	4	5
10	I usually get focused on the important aspects including the purpose, the audience, the thesis, the organization, and the paragraph development respectively.					
11	I will pay attention on reordering the main points, cutting irrelevant sections, adding or making arguments stronger.					
12	I think of revising for the clear ideas of the essay, getting focused on the thesis and consider whether I have a strong thesis.					
13	I usually reconsider the overall structure of an argumentative essay such as main arguments with supporting details that support the thesis.					
14	I can find a way to concentrate on my revision task even when there are many distractions around me.					
15	I cannot refocus my concentration on revision task when I find myself thinking about how difficult the task is.					
16	I realize that my major concern is coming with the better content and ideas and well-organized paragraph.					
17	I generally think of revising the whole essay from the beginning in one sitting.					
18	I generally think of revising on revision sub-tasks separately at various times.					
19	I will spend time to motivate myself to improve my essay even when I find my first draft holding little interest for the reader.					
20	I end up doing little planning because I don't have time for it.					

Part 2: The following statements tell you what you will do *during* revising the first draft of your argumentative essay.

While revising the first draft of my argumentative essay,

Item	Content	1	2	3	4	5
21	I can think about the effective revising strategies for completing the first draft revision. For example, I will think about my original audience and purpose.					
22	I first concern myself to revise for the clarity of the content and ideas.					
23	I can think of and list different ways to complete the revision task. One way to improve the first draft is to look at the focus of the text and the thesis. Another way would be to check whether the introduction and the conclusion match.					
24	I cannot think of the way to communicate my ideas to the readers in the main thesis of my paper.					
25	I cannot find ways to overcome the problems when I get stuck revising for the connected ideas at the whole essay and the paragraph level.					
26	I have selected or adapted methods, approaches or revising strategies before considering to revise for each specific revision task.					
27	I will see if I state the reasons that become the topics of each paragraph and relate ideas among different paragraph.					
28	I keep thinking about using effective transitions to lead the reader to move from one idea to the next within and between paragraphs. This can ensure that I can revise for coherence and unity of the essay.					
29	I consider whether I present the information in a logical way to ensure that my paper is well-organized.					

Item	Content	1	2	3	4	5
30	I think about how I write a brief but informative background information in my introduction that will lead the readers well for the main thesis of my paper.					
31	I have focused on one specific revision goal at a time. For example, first I concern with the clear ideas of rhetorical situation. Next, I will revise at for the better content and ideas and rhetorical pattern of a persuasive					
32	I can revise for the logical paragraph development when I follow the revision outline, tree diagram or graphic organizer.					
33	I have considered the important elements of an argumentative essay including the introduction, the thesis or claim, the arguments, the opposing views of the opponents, and the concluding paragraph to ensure that I can revise for the better content and ideas and rhetorical pattern of an argumentative essay.					
34	I check the paragraphs whether they develop in a logical order, with proper transitions to guide readers to follow what I intend to point out.					
35	I focus my attention on the larger issue-global revision such as the overall focus, organization and development of ideas in the paper					

Part 3: The following statements tell you what you will do to help improve the first draft of your argumentative essay *after* you revise it.

After revising the first draft of my argumentative essay,

Item	Content	1	2	3	4	5
36	I check to see if my second draft matches the requirements of a good argumentative essay.					
37	I use my own revision plan for making judgments of how well I improve my first draft.					
38	I keep referring to the revision goal to test if I achieve the revision goal					
39	I reread the whole essay so that I can check to see if my essay contains the components making a good argumentative essay.					
40	I usually ask myself the following questions? <i>What revising strategies and skills did I use?</i> <i>How well did they work?</i> <i>What might I keep or change to make an improvement on my paper next time?</i>					
41	I can compare my second draft with the first draft to check if I improve the second draft using the criteria related to my personal revision goal.					
42	I am able to evaluate how well I revise my first draft using my own revision plan.					
43	I am able to use the elements of a good argumentative essay as criteria to evaluate my own paper or the works of others.					
44	I reread the second draft to see if I need to go back through the revision sub-tasks.					
45	I can set my personal revision goals for next time based on what worked best this time and what I think I should keep or change.					

APPENDIX C

Metacognitive Strategies Questionnaire (MSQ)

Post-questionnaire

Directions: Think about what kind of things you did *before, during, and after* revising the first draft of your argumentative essay. Take time to carefully examine each item and check the responses by ticking (/) in the box that best indicates how true of you the statement is.

- 1 = Never or almost never true of me
- 2 = Usually not true of me (less than half of the time)
- 3 = Somewhat true of me (about half of the time)
- 4 = Usually true of me (more than half of the time)
- 5 = Always or almost always true of me

Example: Consider the following item and choose the response by ticking (/) in the box.

Item	Content	Never true of me	Usually not true of me	Somewhat true of me	Usually true of me	Always true of me
		1	2	3	4	5
	I know what I am supposed to do when I was given a topic of a writing assignment.					

If you always know what you are supposed to do when you were assigned to write about a given topic, you check 5.

Part 1: The following statements tell you what you did *before* revising the first draft of your argumentative essay.

Before I started revising the first draft of my argumentative essay,

Item	Content	1	2	3	4	5
1	I was aware of what I had already known about revision strategies.					
2	I had a good idea of what I was supposed to do to improve the first draft and I could explain in my own words.					
3	I had no idea of what were the important aspects of the first draft revision.					
4	I thought about how to revise globally at the whole essay and at the paragraph level.					
5	I came up with a list of revision tasks and set the purpose for each task in a short time.					
6	I realized that my planning consists of thinking about what I would revise, how I would revise and what revising strategies I need.					
7	I considered several points I would improve such as the audience expectations, the purpose, the organization, the unity and the coherence.					
8	I made a list of revision tasks to complete in a particular sequence quickly then determined revising strategies for each task.					
9	I checked my mistakes after I got back the first draft with feedback from the teacher and thought of revising strategies I already learned and connected them with my mistakes.					
10	I focused on the content and ideas and used my first attempt to refine my ideas on the topic rather than specifics.					

Item	Content	1	2	3	4	5
11	I focused my attention on reordering the main points , cutting irrelevant sections, adding or making argument stronger.					
12	I thought of revising for the clear ideas of the essay, getting focused on the thesis and considered whether I had a strong thesis					
13	I considered different alternatives to the first draft revision. For example, using the revision map, question and answer worksheet, the argumentative analysis form and a revision outline.					
14	I could find a way to concentrate on my revision task even when there are many distractions around me.					
15	I could not refocus my concentration on revision task when I find myself thinking about how difficult the task is.					
16	I focused on one thing at a time such as the content and ideas, then organization.					
17	I thought of revising the whole essay from the beginning in one sitting.					
18	I thought of revision sub-tasks separately at various times.					
19	I spent time to motivate myself to improve my essay even when I found my first draft holding little interest for the reader.					
20	I did not have time to think about my problems through and how to adapt my paper to meet the writing standards of an evaluators/writing teacher who is very demanding.					

Part 2: The flowing statements tell you what you did *during* revising the first draft of your argumentative essay.

While revising the first draft of my essay,.....

Item	Content	1	2	3	4	5
21	I thought about the effective revising strategies for completing the first draft revision. For example, I focus on the audience expectations.					
22	I first paid attention to revise for the clarity of the content and ideas.					
23	I consciously focused my attention on revising strategies learned to complete each revision task such as writing an effective topic sentences in the body paragraph referring to the thesis.					
24	I did not know how to communicate my ideas to the readers in the main thesis of my paper.					
25	I could not find ways to overcome the problems when I got stuck revising for the connected ideas in each paragraph.					
26	I selected or adapted methods, approaches or strategies learned before considering the specific revision task.					
27	I stopped to see if I stated the reasons that become the topics of each paragraph and relate ideas among different paragraphs.					
28	I found myself having difficulties in making changes for the better content and ideas to meet the needs of the audience.					
29	I considered whether I presented the information in a logical way to ensure that my paper is well-organized.					

Item	Content	1	2	3	4	5
30	I could use effective transitional sentences from one idea to another to ensure that I revise for coherence and unity.					
31	I thought about the structural elements of an argumentative essay to help me decide to revise globally for the better content and ideas.					
32	I thought about the rhetorical pattern of an argumentative essay to help me decide what I was going to revise.					
33	I focused my attention on the larger issue-global revision such as the overall focus, organization and development of ideas.					
34	I could find other people who would give me the feedback after I completed the first draft revision.					
35	I tried to answer the questions I asked myself as a guide to both local and global revisions. For example, "What should I add and cut and how?"					

Part 3: The following statements tell you what you did to help improve the first draft of your argumentative essay after you revise it.

After revising the first draft of my argumentative essay,.....

Item	Content	1	2	3	4	5
36	I checked to see if my second draft matches the requirements of a good argumentative essay.					
37	I used my own revision plan for making judgments of how well I improve my first draft.					
38	I referred to my personal revision goal to test if I achieve the revision goal.					
39	I reread the whole essay so that I can check to see if my essay contains the components making a good essay.					
40	I asked myself the questions to check whether the strategies I used work well and checked the outcome of my revision task.					
41	I compared my second draft with the first draft to see if I improve the second draft using the criteria related to my personal revision goal.					
42	I evaluated how well I revised my first draft using my own criteria and the checklist					
43	I considered the elements of a good argumentative essay to self-evaluate how well I revise my first draft.					
44	I reread the second draft to see if I need to go back through the revision sub-tasks.					
45	I set my personal revision goals for next time based on what worked best this time and what I think I should keep or change.					

APPENDIX D

Pre-interview questions

Interview questions	Metacognitive strategies
<p>Before revising: Imagine that you are going to revise the first draft of your argumentative essay, what kind of things you will be before revising?</p> <ol style="list-style-type: none"> 1. What will you do before you start to revise? Can you explain it? How does this help you to revise? 2. Have you thought of any kind of planning before starting to revise? Do you think planning is a useful strategy? 3. Do you always know what you are going to accomplish in the first draft ? Describe what will you have to do in order to complete the first draft? 4. Do you always know what you are supposed to do to improve your first draft? What will you do first, second, third, and so forth? 5. Do you think of your own problems in the first draft? If yes, what will you do with this/these problem (s)? 6. Do you think of any particular methods or strategies that help you revise the first draft of your argumentative essay? What are they? Do you think you will use these strategies to revise? 7. Do you think you'll focus on one thing or the whole thing at a time when you revise? Will you think of you problem through the revision task? <p>During revising: Think of the time while revising the first draft of your argumentative essay, what kind of things you will do to complete the revision task?</p> <ol style="list-style-type: none"> 1. What do you think your own problem and difficulties in revising an argumentative essay? Describe them. 	<p><i>Planning strategies: Advance Organizer</i></p> <p><i>Organizational Planning</i></p> <p><i>Organizational Planning</i></p> <p><i>Organizational Planning</i></p> <p><i>Selective Attention</i></p> <p><i>Selective Attention</i></p> <p><i>Self-Management</i></p> <p><i>Monitoring strategies: Monitoring Comprehension</i></p>

Interview questions	Metacognitive strategies
2. Do you think you will select or adapt methods or strategies that you have learned to complete the first draft revision? What are they? How would you select them?	<i>Monitoring Comprehension</i>
3. What of those methods or strategies will help you revise better? How and Why?	<i>Monitoring Production</i>
4. When the selected strategies do not work, what do you think you will do next? Do you think you'll use self-questioning strategy as a guide to help you revise? What kind of question you'll ask yourself?	<i>Monitoring Production</i>
After revising: Think of the time you finish revising the first draft of your argumentative essay, what kind of things you will do after you complete the first draft revision?	
1. Do you think you will reread the second draft to see if it meets the requirements—that is it makes a good argumentative essay? If yes, describe how you will judge the quality of your paper?	<i>Evaluating strategies: Self-Assessment</i>
2. Do you think of going back through the revision task? Why?	<i>Self-Reflection</i>
3. Do you always refer to your personal revision goal?	<i>Self-Evaluation</i>
4. How can you ensure that you will improve the second draft?	<i>Self-Assessment</i>
5. Do you think you know how well you revise the first draft? Describe it.	<i>Self-Evaluation</i>
6. Can you tell me what strategies help you revise successfully or unsuccessfully? Give the examples of those strategies.	<i>Self-Evaluation</i>
7. Do you think you will achieve or succeed in your revision goal? Why or why not?	<i>Self-Assessment</i>

Post-interview questions

Interview questions	Metacognitive strategies
<p>Before revising: Think of the time you did before starting to revise the first draft of your argumentative essay. What kind of things did you do before you started to revise?</p> <ol style="list-style-type: none"> 1. What did you do before you started to revise? Could you explain it? How did this help you to revise? 2. Did you think of revising strategies you've learned before? If yes, how did these strategies help you to revise? 3. Did you plan before revising the first draft? How? What was your plan? What was your personal revision goal? 4. Did you begin to revise right after you finished your first draft or while you were still writing? 5. Did you know what the important aspects of the first draft revision are? Describe them. 6. Did you know what you were supposed to do to improve your first draft? Describe it/them. 7. Did you think of your own problems? What were your problems? What did you do to deal with this/these problem(s)? 8. Did you think of doing the revision sub-tasks separately at various times or doing the whole revision tasks at a time (in one sitting)? 	<p>Planning strategies: <i>Advance Organizer</i></p> <p><i>Organizational Planning</i></p> <p><i>Organizational Planning</i></p> <p><i>Self-Management</i></p> <p><i>Selective Attention</i></p> <p><i>Selective Attention</i></p> <p><i>Selective Attention</i></p> <p><i>Self-Management</i></p>
<p>During revising: Think of the time while you were revising the first draft of your argumentative essay. What kind of thing did you do to complete the revision task?</p> <ol style="list-style-type: none"> 1. Did you have difficulties in any revision task? What if you had difficulties, what particular methods or strategies you used to complete each revision task? Describe them. 2. How did you decide to make changes or adapt your first draft? Describe it. 	<p>Monitoring strategies <i>Monitoring Comprehension</i></p> <p><i>Monitoring Comprehension:</i></p>

Interview questions	Metacognitive strategies
3. What did you consider the main focus of the first draft revision? (i.e. phrase, sentence level or the whole essay level)	<i>Monitoring Production</i>
4. What were the revising strategies that help you revise successfully? Why did they help? How? Please explain.	<i>Monitoring Production</i>
5. When you got stuck revising each revision task, what did you do?	<i>Monitoring Production</i>
After revising: Think of the time when you finished revising the first draft, and got a complete second draft of your argumentative essay, what did you do after you completed the first draft revising.	
1. Did you reread the whole essay draft to see if your second draft contains the components making a good argumentative essay? What are those components?	<i>Evaluating strategies:</i> <i>Self-Assessments</i>
2. Did you check to see if you met your revision goal? How did you know that you met your personal goal?	<i>Self-Assessments</i>
3. Did you know why you could make a strong or weak argument in your essay? Describe your reasons.	<i>Self-Reflection</i>
4. Did you create your own criteria to judge the quality of your paper? What are your criteria?	<i>Self-Evaluation</i>
5. Did you self-evaluate how well you revised the first draft? Describe the process you used for self-evaluation.	<i>Self-Evaluation</i>
6. Could you possibly evaluate your friend's paper? How?	<i>Self-Evaluation</i>
7. What are your successful or unsuccessful revising strategies?	<i>Self-Evaluation</i>
8. Did you check to see if your second draft met the requirements of a good argumentative essay? Explain.	<i>Self-Assessment</i>
9. Did you think that you achieved your revision goal?	<i>Self-Assessment</i>
10. How would you describe your second draft	<i>Self-Assessment</i>

APPENDIX E

LESSON PLAN

EN 431- Composition 2

Week 08

Metacognitive Strategy Training in Revision

Revise for the Clear Ideas of Rhetorical Situation

Introduction:

Students will be trained to use metacongitive strategies to plan, monitor and evaluate their revision sub-task and practice adapting revising strategies and writing strategies to the first draft revision for the clear ideas of rhetorical situation including the writer's purpose, the audience expectation, the thesis or the main idea of the argumentative essay and the context of the problem situation.

Objectives:

1. To develop metacognitive skills in planning for the revision sub-task 1- Revising for the clear ideas of rhetorical situation.
 - 1.1 Develop self-analysis skills by questioning students about the revision tasks needs to be done in revising for the clear ideas of rhetorical situation.
 - 1.2 Encourage self-directing skills by asking students to describe the purpose of the first draft revision for the clear ideas of rhetorical situation.
 - 1.3 Develop planning skills by asking students to set the goals for revision connected to their own problems in the first draft through the use of Plan Revision Think Sheet.
 - 1.4 Develop the planning skills by asking students to determine revising strategies for a forthcoming revision
 - 1.5 Develop self-management skill by asking students to describe appropriate revising strategies for the purpose of their revision task.
2. To develop self-monitoring skills by asking students to articulate specific revision strategies for achieving the goals.
3. To develop self-evaluating skills through the measurement of students' success towards the goal the revision sub-task.
 - 3.1 To encourage self-assessment through the revision checklist.
 - 3.2 To encourage self-evaluation through journal writing

Materials:

- Handout – Revision sub-task 1: Revising for the clear ideas of rhetorical situation
- Self- Question and Answer Worksheet
- Plan Revision Think Sheet
- Revision Sheet
- Self-Evaluation Checklist
- A Guided journal

Teaching procedure:

1. Now that the first draft of the essay has finished the first draft and students are set to begin revising the first draft of their argumentative essay. Ask students to read through the first draft and get focused on the important aspects of the first draft revision using “Self-Question and Answer Worksheet.”
2. Students determine how best to revise their first draft.
The first major concern will be the aspect the clear ideas of rhetorical situation.
3. Ask students to think about their own strengths and weaknesses suggested by the teacher from the returned draft.
4. Have students fill in Plan Revision Think Sheet. The questions and points in the worksheet are designed to help students set the goal to revise and get focused on the important aspects of revising for the clear ideas of rhetorical situation such as:
 - The situation
 - The audience
 - The purpose
 - The writer
 - The thesis
 - The organization
 - The overall

The students will also focus on the strategies they may use to achieve their revision goal and ways to measure their progress in revising this revision sub-task (See Plan Revision Think Sheet).
2. Students work in small groups and ask each group to explain the revision goal, the revision strategies and the measurement for the progress they have chosen that will work.
3. Ask the whole class whether they agree that the proposed goals, revising strategies and the methods of measurement would be appropriate.
Also ask for additional suggestions and an explanation of why and how the additional suggestions might be better.
4. Suggest to students the revision strategies for the rhetorical situation through Handout.
5. Students take time to revise their work using the ideas listed in their own plan and choose the revising strategies learned from the discussion.

6. Ask students to respond to the revision checklist including in the Self Revision Think Sheet.
7. Students keep a journal log for this week. Ask them to note whether they are able to revise the first draft using the revising strategies learned, why and why not, how they learn to revise the first draft etc.

Evaluation:

Students will be evaluated on

- The ability to revise their own paper.
- The individual worksheet (Self-Question and Answer Worksheet , Plan Revision Think Sheet, Self-Evaluation Checklist).
- The discussion in small groups and the whole class discussion.

LESSON PLAN**EN431- Composition 2****Week 09-10****Metacognitive Strategy Training in Revision****Revise for the Better Content and Ideas and Rhetorical Pattern of an Argumentative Essay (Revise at the whole essay level).****Introduction:**

Once students revise for the clear ideas of rhetorical situation of the whole essay, they need to consider the individual paragraphs: the introduction, the body and the conclusion for the better content and ideas of rhetorical pattern of a persuasive/argumentative essay. Now, the students will be trained to use metacognitive strategies in planning, monitoring and evaluating before, during and after they do their revision sub-task 2. That is revising for the better content and ideas and rhetorical pattern of an argumentative essay.

Objectives:

1. To develop metacognitive skills before doing revision sub-task in revising for the better content and ideas and rhetorical pattern of an argumentative essay.
 - 1.1 Develop self-analysis skill by asking students about the specific tasks need to be done in revising for the whole essay for the content and ideas and rhetorical pattern of an argumentative essay.
 - 1.2 Encourage self-questioning skill through Self-Question and Answer Worksheet.
 - 1.3 Develop self-directed skill by having students set the purpose for revising the individual paragraph for the better content and ideas and rhetorical pattern of an argumentative essay.
 - 1.4 Develop organizational planning skill by asking to match their own problems (from the first draft) with the revising strategies to revise for the better content and ideas and rhetorical pattern of an argumentative essay.
 - 1.5 Develop planning skill by having students prioritize the revision tasks and revising strategies for achieving the goal of revising for the better content and ideas and rhetorical pattern of an argumentative essay.
 - 1.6 Develop self-management skill by having students describe the effective and ineffective revising strategies and explain when, where and how to use those strategies to revise for the better content and ideas and rhetorical pattern of an argumentative essay.
2. To develop self-monitoring skill during revising by having students indicate the selected revising strategies for the better content and ideas of and rhetorical pattern of the individual paragraphs of a good argumentative essay.

3. To encourage self-evaluation skill after completing revision sub-task through the measurement of students' success towards the goal of revision for of revising for the better content and ideas and rhetorical pattern of an argumentative essay through Self-Evaluation Checklist and A Guided Journal.

Materials:

- Handout –Revision sub-task 2: Revising for the better content and ideas and rhetorical pattern of an argumentative essay
- Self-Question and Answer Worksheet
- Plan Revision Think Sheet
- Revision Sheet
- Self-Evaluation Checklist
- A Guided Journal

Teaching procedure:

1. After students revise the ideas of rhetorical situation at the whole essay level, now they need to consider the content and ideas and the rhetorical of an argumentative essay. That is, the students need to focus on the important features of an argumentative essay in each part of the essay: the introductory paragraph including introductory statement, background information, thesis statement, reasons for argument; the body paragraph including argument 1, 2 and 3 (the pro paragraph), the opposition argument (the refutation paragraph or the con paragraph) and the concluding paragraph.
2. Provide the guided questions so that students can ask themselves to review their first draft and think of specific tasks they need to accomplish in doing this revision sub-task such as analysis of structural elements of an argumentative essay, using logical reasoning to formulate an opinion, establishing facts to support views etc.
3. Students then ask and answer the questions through Self-Question and Answer Worksheet.
4. Distribute Plan Revision Think Sheet and ask students to set the goal of revising for this revision sub-task, identify their own strengths and weaknesses in their first draft. The students complete the Plan Revision Think Sheet. The questions and points in the Plan Revision Think Sheet focus on the important aspects of revising globally for the better content and ideas and rhetorical pattern of an argumentative essay.
5. Students match the revision tasks to be done with the revising strategies being used for this revision sub-task. Also, students provide the methods of measuring their success in revising for the better content and ideas in each part of the essay: the introductory paragraph, the body paragraphs, the refutation paragraph, and the concluding paragraph.

6. Students work in small group sharing their worksheet, explaining their revision goal, the revising strategies and the ways to self-evaluate their revision outcome.
7. Each group presents the revision plan, the revising strategies (when, where, how and the reasons for each revising strategies) they choose using OHP and transparencies.
8. As the whole class share revising strategies and ways to measure the outcome suggested by small groups, they may add other revising strategies to the lists, but most provide reasons for the additions.
9. Distribute Handout – Revision sub-task 2(Revising for the better content and ideas and rhetorical pattern of an argumentative essay), students read before revising their own paper.
10. Students take time to revise each paragraph conforming to the prompts and guidelines and example in the handout and from the discussion.
11. Provide Self-Evaluation Checklist and students to respond to it. Also, they decide whether they achieve the goal of revision sub-task and consider the effectiveness and completeness of applying the selected revising strategies to revise globally for the better content and ideas and rhetorical pattern of an argumentative essay
12. Students complete a Guided Journal for this revision sub-task. Ask them to describe in their journal whether they are able to revise the first draft for the revision sub-task 2 using revising strategies learned from the class, why or why not, how they learn to revise their first draft at this level and whether they finish it and feel it is a success.

Evaluation:

Students will be evaluated on

- The ability to revise globally for the better content and ideas and rhetorical pattern of an argumentative essay.
- The individual worksheets including Self-Question and Answer, Plan Revision Think Sheet, Revision Sheet, and Self-Evaluation Checklist.
- The discussion in small groups and the whole class discussion.
- The ability to reflect their writing and revising process through journal writing.

LESSON PLAN**EN 431- Composition 2****Week 11****Metacognitive Strategy Training in Revision****Revise for the Logical Paragraph Development (The essay's overall organization)****Introduction:**

A persuasive/an argumentative essay consists of four main individual parts: the introductory paragraph, the body paragraphs, the refutation paragraph (the opposition argument) and the concluding paragraph . Each part has its own function making a good argumentative essay. Once students concern with the content and ideas of rhetorical situations and the rhetorical pattern of an argumentative essay in their first draft revision, students then will need to focus on the logical paragraph development of each paragraph because is likely to be sketchy. An effective paragraph contains a topic sentence expressing the main idea, and adequate supporting details using specific information, examples, facts and logical patterns of development (organizational patterns). This lesson will train students to revise for the logical paragraph development (the essay's overall organization) by employing metacognitive strategies to plan, monitor and evaluate their revision before, during and after the revision.

Objectives:

1. To develop metacognitive skill before revising for the logical paragraph development.
 - 1.1 develop self-analysis skill by training students to analyze their own first draft in accordance with the four main parts of an argumentative essay and their functions: the introductory paragraph, the body paragraphs, the refutation paragraph (the opposition argument) and the concluding paragraph through the Plan Revision Think Sheet.
 - 1.2 develop self-directed skill by setting the purpose of revising for the logical paragraph development connected to the problems in the first draft.
 - 1.3 develop the organizational skill by having students match the revision tasks with the goal of revision.
 - 1.4 develop the planning skill by having students prioritizing the specific revision tasks and revising strategies for achieving the goal of revision for this revision sub-task.
 - 1.5 develop the self-management skill by describing the revising strategies: effective and ineffective ones and explain when, where and how to use these strategies to revise for the logical paragraph development.

2. To develop self-monitoring skill during revising by indicating the selected revising strategies for approaching the revision sub-task through Self-Persuasive Revision Sheet.
3. To encourage self-evaluation skill after revision by considering the outcome and judging the quality of their revision task as they complete revising.

Materials:

- Handout-Revision sub-task 3: Revising for the logical paragraph development (the essay's overall organization)
- Self-Question and Answer Worksheet
- Revision Outline
- Plan Revision Think Sheet
- Self-Persuasive Revision Sheet
- Self-Evaluation Checklist
- A Guided Journal

Teaching procedure:

1. Students read through the first draft paragraph by paragraph, then complete the Revision Outline.
2. Students ask themselves and also complete the Self-Question and Answer.
3. Students set the purpose of revising for the logical paragraph development connected to their own problems by completing the Plan Revision Think Sheet.
4. Students make list of revision tasks, then match them with revising strategies. This will be also done through the Plan Revision Think Sheet.
5. In a small group, students share their worksheets and define the goal of the revision for this revision sub-task and brainstorm what revising strategies will work well to achieve the goal of revision and why.
6. Each group formulates the present goal of revising and the appropriate revising strategies. For example, to revise for the logical paragraph development, you need to have a revision map or revision outline or focus on the structural model of an essay.
7. In the whole class, each small groups present its outcome-the revision plan, the revising strategies (when, where and how and the reasons for each selected strategy) using OHP and transparencies.
8. The whole class propose the methods for self-evaluating the outcome of revising for the logical paragraph development.
9. Ask the whole class whether they agree with the revision goal, the revising strategies and the method of measurement the revision progress and whether they would be appropriate.

10. Also, ask students for additional suggestions of revising strategies and explanations, why and how the additional revising strategies and the proposed method of measurement the progress might be better.
11. Students read the Handout for revision sub-task 3: *Revising for the logical paragraph development* (the essay's overall organization), then take time to revise their paper (using Self-Persuasive Revision Sheet) conforming the Revision Outline, proposed goal and revising strategies learned from the whole class discussion and the Handout.
12. Students measure their progress towards the revision goal using Self-Evaluation Checklist after they complete revising their first draft for the logical paragraph development.
13. Students write complete a Guided Journal for this class.

Evaluation:

Students will be evaluated on

- The ability to revise globally for the logical paragraph development using criteria proposed by the whole class.
- The individual worksheets (The Revision Outline, Self-Question and Answer, Plan revision Think Sheet, Self-Persuasive Revision Sheet and Self-Evaluation Checklist).
- The discussion in small groups and the whole class discussion.
- The ability to reflect their own writing and revising process through journal writing.

LESSON PLAN**EN 431- Composition 2****Week 12****Metacognitive Strategy Training in Revision****Revise for the Connected Ideas in Each Part of the Essay and the Whole Essay
(Unity and coherence)****Introduction:**

A good paragraph of a persuasive/argumentative essay also consists of its unity and coherence. In a unified paragraph each sentence develops the main idea. That is, if a paragraph begins with a certain focus (main idea), the rest of paragraph has to include the supporting details of that focus. Also, coherence makes a paragraph easily understandable to a reader. If the paragraph is coherent, the reader can see how the paragraph holds together and how sentences are related to each other. The students can achieve paragraph coherence by using logical organizational patterns and clear transitions of ideas in the individual paragraphs and the whole essay. In this lesson, students will be taught to revise their first draft paper for the connected ideas in each part of the essay and the whole essay (Unity and coherence) using metacognitive strategies in planning, monitoring and evaluating their revision process.

Objectives:

1. To develop metacognitive skills before revising for the connected ideas in each part of the essay and the whole essay.
 - 1.1 develop self-analysis skill by examining revision tasks need to be done for the unified paragraph and paragraph coherence.
 - 1.2 develop self-directed skill by setting up purpose of revising for revision sub-task.
 - 1.3 develop organizational planning skill formulating plans for achieving the purpose of revising for the unity and coherence.
 - 1.4 develop planning skill by prioritizing the revision tasks and revising strategies for achieving the goal of revising for the unity and coherence.
 - 1.5 develop self-management skill by describing effective and ineffective revising strategies for the unity and coherence, and when, where and how to use these strategies.
2. To develop self-monitoring skill *during* revising by having students indicate the selected strategies for revising for the connected ideas in each part of the essay and the whole essay (unity and coherence).
3. To encourage self-evaluation skill *after* revising by measuring the progress toward the goal of revising through Self-Evaluation Checklist and a Guided Journal

Materials:

- Handout-Revision sub-task 4:Revising for the connected ideas in each part of the essay and the whole essay (Unity and coherence)
- Revision Outline
- Self-Question and Answer Worksheet
- Plan Revision Think Sheet
- Self-Persuasive Revision Sheet
- Self-Evaluation Checklist
- A Guided Journal

Teaching procedure:

1. Students review their first draft by completing Self-Question and Answer Worksheet
2. Students analyze paragraph by completing the Revision Outline to show different ideas in each part of the essay: the introductory paragraph, the body paragraphs, the refutation paragraph and the concluding paragraph and show how each sentence develops the main idea and relates to supporting details. Also, the students analyze paragraphs to show how the paragraph holds together and how sentences are related to each other. For example, in the introductory paragraph the thesis statement indicates the writer's point of view about the issue (statement of position) and will relatively indicate the main reasons that the writer has to support the thesis as well as the opposition as the remainder of the opening paragraph. These reasons become the topics of each of the three body paragraphs.
3. Students set the purpose of revising for the unified paragraph and coherent paragraph based on the paragraph analysis using the Plan revision Think Sheet.
4. In the Plan Revision Think Sheet, students make list of revision tasks need to be done then match them with the revising strategies for a unified paragraph and paragraph coherence.
5. Students work in a small group sharing the worksheet to define the revision for this revision sub-task, brainstorming what revising strategies will work well to achieve the goal of revising for this revision sub-task and why.
6. Each group presents the present goal of revising and revising strategies for the unity and coherence using the OHP and transparencies.
7. Have the whole class propose the method for self-evaluating the outcome and their progress for revising this sub-task.
8. Ask the whole class whether they agree with the current revision goal, the revising strategies and the method of assessing the progress and whether they would be appropriate for the revision sub-task.
9. Ask the whole class for additional suggestions and explanations and why and how the revising strategies and the proposed methods of assessing the progress might be more effective.

10. Students read the Handout for the revision sub-task 4: Revising for the connected ideas in each part of the essay and the whole essay (Unity and coherence) before revising their first draft for the unity and coherence.
11. Students take time to revise their first draft conforming the plan: the proposed goal and revising strategies learned from the whole class discussion and the guidelines in the Handout.
12. Students complete Self-Evaluation Checklist after they finish revising.
13. Assign students to keep writing a journal for this class following the guided questions in a Guided Journal Form.

Evaluation:

Students will be evaluated on

- The ability to revise for the unified paragraph and coherent paragraph using the proposed method of assessing their progress by the whole class.
- The individual worksheet (Paragraph Analysis Form, Self-Question and Answer, Plan Revision Think Sheet, Self-Evaluation Checklist)
- The discussion in small groups and the whole class discussion.
- The ability to reflect their own writing and the revision process through journal writing.

APPENDIX F

Holistic Rubric for Scoring Student Argumentative Writing

(Adapted from Oregon Dept. of Education’s Student Language Scoring Guide 2003-4)

Scale Score	Rhetorical Control	Language Control
5 Elaborated Argument	An essay at this level fulfils the writing task expectations successfully. A typical essay in this category:	
	<ul style="list-style-type: none"> • clearly addresses the topic with thoughtful thesis • is well focused, organized, and developed with effective and appropriate use of transitions • demonstrates thorough understanding of the issues presented; extensive use of specific, well-developed data of a variety of types to support the thesis • acknowledges and responds to major objections adequately and effectively • provides effective and complete closure to the essay 	<ul style="list-style-type: none"> • is clearly written with few errors; errors do not interfere with comprehension • includes academic vocabulary that is rarely inaccurate or repetitive • includes generally accurate word forms and verb tenses • uses a variety of sentence types accurately • contains source texts language that is well integrated with student-generated language
4 Developed Argument	An essay at this level fulfils the writing task expectations but not at the highest level as a 5 rated essay. A typical essay in this category:	
	<ul style="list-style-type: none"> • addresses the topic with clear thesis • is generally well organized and developed, using effective and appropriate transitions • demonstrates competent understanding of the issue presented; extensive use of specific, well-developed data of a variety of types to support the thesis, but more detail may still be desirable • acknowledges and responds to major objections generally well • provides competent conclusion that reinforces and comments on the thesis 	<ul style="list-style-type: none"> • is clearly written with few errors; errors do not interfere with comprehension • includes academic vocabulary that is rarely inaccurate or repetitive • may include inaccurate word forms and verb tenses • uses a variety of sentence types • incorporates ideas from readings or outside sources without plagiarism; most sources are documented correctly using varied styles
3 Fairly Developed Argument	An essay adequately meets the task expectations, though it may fulfill some parts of the task more effectively than the others. An essay in this category:	
	<ul style="list-style-type: none"> • addresses the topic adequately with thesis, though it could have been more focused • is adequately organized and developed though development may be thin at times or some transitions among parts may be desirable • demonstrates adequate understanding of the topic presented; some variety in use of the data to support the thesis, though some supports are less compelling or could have been better developed • adequately acknowledges and responds to some important counter-arguments • provides conclusion that reinforces and comments on the thesis 	<ul style="list-style-type: none"> • is generally clearly written with some errors; errors may interfere with comprehension occasionally • demonstrates occasional problems with word choice • includes some inaccurate word forms and verb tenses • uses a variety of sentence types with occasional errors • incorporates ideas from readings or outside sources; most sources are documented correctly <p style="text-align: right;">(Rubric continues on next page)</p>

Scale Score	Rhetorical Control	Language Control
2 Inadequately Developed Argument	The task is attempted but not adequately achieved or only partially successful. An essay:	
	<ul style="list-style-type: none"> • may not address the topic adequately or be sufficiently focused • may not be adequately organized or developed or is organized in parts but other parts are disjointed or lack transitions; may lack development in parts • may demonstrate lack of understanding of the issue presented; may be illogical or have insufficient or inappropriate support for the thesis; may use limited range of information to support the thesis; may fail to cite sources of ideas or quotations • takes into account somewhat important objections which may not be responded adequately • provides conclusion summarizing the main parts but may neither reinforce nor comment on the thesis 	<ul style="list-style-type: none"> • contains many errors; some errors may interfere with comprehension • includes limited vocabulary or examples of inappropriate word choice • includes a number of inaccurate word forms • contains some problems with verb tenses • uses limited types of sentences • may not incorporate ideas from readings or outside sources without plagiarism; sources may not be cited correctly
1 Attempted Argument	The task is attempted but slightly fulfils the expectations. An essay:	
	<ul style="list-style-type: none"> • does not deal adequately with the topic; may be unclear or poorly focused • may have serious problems with organization and development; some parts may be missing or underdeveloped; has few or no transitions among parts • demonstrates lack of understanding of the issue presented; may have irrelevant specifics or unsupported generalizations; supports lack in amount or variety or both; may fail to cite sources of ideas or quotations • takes into account less important objections with responses given but not seriously • provides conclusion that summarizes the main parts but neither reinforce nor comment on the thesis 	<ul style="list-style-type: none"> • contains numerous errors • contains errors that often interfere with comprehension • uses simple and repetitive vocabulary that may not be appropriate for academic writing • uses inappropriate word forms and verb tenses • does not vary sentence types sufficiently • does not incorporate ideas from readings or outside sources without plagiarism; most sources are not cited correctly
0 Off Task	<p>An essay at this level fails to fulfill the writing task expectations. A student writer has not produced an assessable argumentative essay. A paper is rated 0 if it reads as non-argumentative prose or reveals one or more of the following weaknesses:</p> <ul style="list-style-type: none"> • is descriptive • deals with the issue which is not arguable or can only be viewed as facts • is severely underdeveloped or contains inadequate, incoherent, or illogical presentation of ideas that does not orient the reader sufficiently to the topic or thesis • contains severe and persistent errors that interfere with understanding throughout the reading • demonstrates serious disregard of English writing conventions including correct spelling, capitalization, punctuation, paragraphing, and documentation of information source • contains no in-text citations or references 	

APPENDIX G

Analytic Rubric for Scoring Student Argumentative Writing

(Adapted from Oregon Dept. of Education's Student Language Scoring Guide 2003-4)

CLAIM	5	The introduction orients the reader sufficiently and effectively to the topic and to the author's thesis.
	4	The introduction addresses the topic clearly but may not be as effective as a 5-rated paper in this category.
	3	The introduction addresses the topic clearly. Its parts are developed and organized in a way that orients the reader adequately to the topic and to the author's thesis, though some parts of the paragraph could have been better developed or elaborated.
	2	The introduction may be brief or inadequately developed and not orient the reader sufficiently to the topic and to the author's thesis, rendering the proposed solution somewhat practical and the problem somewhat real. Topic should be more focused with respect to audience and purpose. Some elements in the paragraph are underdeveloped.
	1	The introduction is brief and less than adequate and does not orient the reader sufficiently to the topic and to the author's thesis, making the feasibility of the proposed solution highly questionable or raising only superficial argument. Problem may not exist at all. Topic lacks clarity and focus and some elements are missing or undeveloped.
	0	The introduction lacks clarity and focus and does not orient the reader to the topic and to the arguable thesis.
REASON	5	Supporting points and details are exceptionally well chosen and appropriate to audience and purpose and in amount and variety. Details are clearly and insightfully developed and organized providing the strongest possible justification for the claim. Where appropriate, use of resources provides strong, accurate, and credible support to the claim. Sources are well integrated and documented.
	4	Supporting points are strong, relevant, and important. Developmental details are well chosen, developed, and appropriate in amount and variety though may not be as effective as a 5-rated paper in this category. When needed, use of resources provides strong, accurate, and credible support to the claim. Sources are generally well integrated and documented.
	3	Support is relevant, important, and appropriate in amount and variety though some of which, relative to other reasons, may be less compelling or not strongly related to the claim. Some supporting details could have been better developed or made clearer. Documentation is used properly most of the time when appropriate.
	2	Support is relevant but some points may be weak, or unimportant. Developmental details may occasionally be descriptive, less than adequate, or not be varied enough. Some selected details are perhaps not consistently well chosen for audience and purpose, and may not be based on reliable sources. Documentation is sometimes used to cite sources of information.
	1	Support is attempted but developmental details are often limited in variety and amount, uneven, predictable, irrelevant, or unimportant. Most details may not be well grounded in credible resources; they may be based on biased or uninformed generalizations, or questionable sources of information. Documentation is frequently neglected or not used properly when appropriate.
	0	All the reasons stated are overly broad or simplistic, predictable, irrelevant or not grounded in credible resources. (Rubric continues on next page)

REBUTTAL TO COUNTER- ARGUMENT	5	Important counter-arguments are acknowledged and responded adequately and effectively.
	4	Important counter-arguments are generally well acknowledged and responded.
	3	Some important counter-arguments are stated and refuted adequately.
	2	Somewhat important counter-arguments are stated but may not be refuted adequately.
	1	Some relatively unimportant counter-arguments are stated but may not be refuted adequately.
	0	No possible counter-argument is identified.

Type of metacognitive strategies with description	Description of metacognitive strategies use in revision	Examples
<p><i>Evaluating strategies</i> <i>Self-assessment</i></p> <p><i>Self-evaluation</i></p>	<p>Statements indicating that students:</p> <ul style="list-style-type: none"> • make a decision about the outcome based on the clear description of criteria to judge the quality of the paper • make an assessment of success and failure. <p>Statements indicating that students:</p> <ul style="list-style-type: none"> • evaluate how well they learn to revise • evaluate the strategies use for revising the first draft 	<p>“...Well, how well did I revise the first draft? I think I got across the ideas I wanted to present to support my claim, so I met my revision goal. Good!...”</p> <p>“...Another time, I also wanted to set goal before I plan o write the first draft not just the revision goal...”</p> <p>“...It is difficult for me to judge my own paper whether it’s a good argumentative essay...”</p> <p>“...I had some improvements in my second draft when comparing to the first draft. I read through the second draft. I read through it, I feel like that...”</p> <p>“...Here, I have self-Evaluation Checklist, so I checked the revised paper and I learned that it’s much better. I had important aspects of argumentative writing...”</p> <p>“...Of course, when I revise at the paragraph level, I had the feeling that I was making mistakes about sentence structures and some word choices, so I checked them and correct them. It’s a good way to learn from this kind of mistakes. Good! I could learn by that. I become aware of my mistakes.</p> <p>“...But here, as far as I’m concerned, the criteria provided in the checklist helped me a lot. I know that my second draft was well organized, well-supported, convincing and more persuasive...”</p>
<p><i>Self-reflection</i></p>	<p>Statements indicating that students:</p> <ul style="list-style-type: none"> • reflect on their own revision process and the problems of whether they need to go back through the revision task/process. 	<p>“...Maybe I didn’t have to go back through my revision tasks although my paper was not excellent. It included the elements of good an argumentative essay ...”</p> <p>“...Well, next time I will set my goal before revising. I like the planning sheet the teacher provided. It’s very useful; though I had to work harder...”</p>

APPENDIX I

A: Statistics of Writing Quality Scores: Holistic Scoring for the First and Second Draft

No	Students N=10	First draft scores			Second draft scores		
		Rater 1	Rater 2	Rater 3	Rater 1	Rater 2	Rater 3
1	LSS1	2	2	2	3	3	3
2	LSS2	2	3	3	3	3	4
3	LSS3	2	2	2	2	2	2.5
4	LSS4	2	2	2.50	2	4	3
5	LSS5	2	2	3	3	3	4
6	LSS6	3	3	3	3	3	3.50
7	LSS7	3	3	3	4	4	3.50
8	LSS8	3	3	3	5	4	3.50
9	LSS9	3	4	3	4	5	4
10	LSS10	4	4	3.50	5	5	4

B: Statistics of Writing Quality Scores from Analytic Scoring for the Less Successful Students' First and Second Draft

No	Students N=10	First draft scores									Second draft scores									
		Claim			Reason			Rebuttal			Claim			Reason			Rebuttal			
1	LSS1	2	2	2	2	2	2	2	1	1	1	3	3	2.50	2	2	2	2	2	2
2	LSS2	3	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	4	3
3	LSS3	1	2	2	1	2	2	2	2	1	2	2	3	2	2	2	2	2	2	2
4	LSS4	3	4	3	2	3	3	2	3	2	4	4	4	2	3	3	3	4	3	3
5	LSS5	3	2.5	3	1	1.5	1	2	2.5	2	4	3	4	2	2	3	2	2	3	3
6	LSS6	3	3	2	2	3	3	2	3	2	3	4	3	3	3	3	2	3	3	3
7	LSS7	3	4	2	3	3	3	2	3	2	3	4	3	3	3	3	3	4	3	3
8	LSS8	3	3	3	2	1	2	2	3	2	4	3.50	4	4	2	4	3	3	3	3
9	LSS9	4	4	3	4	4	3	3	2	3	4	4	4	4	4	4	3	3	3	3
10	LSS10	4	3	4	3	3	3	3	3	4	4	3	4	4	3.50	4	3	3	3	3

CURRICULUM VITAE

Walaiporn Chaya was born in Uthai Thani. She graduated from Srinakharinwirot University, Pisanulok with a B. Ed in English (2 nd class honours) in 1976. She started her teaching career in a secondary school in Uthai Thani, and then moved to Bangkok in 1978. She was given an opportunity to study for a master degree, and she obtained an M.A. in Teaching of English from Kasetsart University in 1987. After she had taught in Bangkok Government High School for a while, she transferred to Srinakharinwirot University, Prasanmitr. She has worked for the Western Languages Department, Faculty of Humanities, Srinakharinwirot University since 1998.

She studied in the co-supervision programme between the School of English, Institute of Social Technology, Suranaree University of Technology, Thailand and the Teaching and Learning Department, College of Education, Washington State University, United State of America for the Degree of Doctor of Philosophy in English Language Studies. Her interests include reading, writing, research in ELT , and metacognitive strategies.