# Metacognitive Reading Strategies in EAP and Their Pedagogical Application: Extended Research and Its Implications

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## 要約

EAP において学習者はアカデミックなテキストを読み,分析し要約,議論を記述していく。リー ディングのメタ認知ストラテジーは,EAP のクラスで行うリーディング,ライティングタスク によく適合している。以前クラスルームリサーチにおいて,私はEAP におけるリーディングの メタ認知ストラテジーをケーススタディ,授業への応用について評価を行った。今回の研究で は授業への応用についてさらに詳細な評価を行う。授業は目標,準備,プレゼンテーション, プラクティス,テスト,レポートから構成される。授業評価は2部構成に分かれたアンケート が使用され,授業有効性および学習成果を学生がどのように認識したかが聞かれた。結果はク ラスの大多数が授業と学習について肯定的な見方を示した。今後研究を高めていくのに,質的 な手法を組み合わせることがのぞまれる。これは,授業研究を行うリサーチャーには有益とな るであろう。

## Abstract

In EAP (English for Academic Purposes), learners read texts analytically and apply the analysis for writing a summary and discussion. Metacognitive reading strategies suit the reading and writing activities in EAP classes. In my previous research, I presented metacognitive reading strategies in EAP as a case study and assessed its classroom application. The present study assesses the pedagogical application more elaborately. My teaching procedures are described in terms of teaching purposes, materials, preparation, presentation, practice, tests and reports. A two-part survey is used to evaluate the effectiveness of my teaching and students' learning outcomes. The results indicated that the majority of the students felt positive about the methodological variables and their learning. Future research might be enhanced by adding qualitative methods. It will benefit teacher-researchers concerned with EAP reading and writing.

**Keywords :** EAP, metacognitive reading strategies, educational setting, preparation, presentation, practice, independent tasks, survey, students' perception

## Introduction

In a number of studies, English for Academic Purposes (EAP) researchers analyze genre and discourse-based structures in written texts. These studies have been related to implications for teaching reading and writing for EAP (Swales, 1990; McCarthy, 1991; Dudley-Evans and St. John, 1998; Celce-Murcia and Olshtain, 2001; Gillet, 2008). With regard to teaching reading comprehension through an analytical approach for EAP, learners are taught to understand the written text through identifying text types, structures, discourse features, signal transitions and lexical elements. In addition, they are taught to apply reading analysis for writing tasks. These stages can be defined as reading and writing. Students need to analytically read a text, write an outline and summarize the text. Both analytical reading and summarization should be taught to students in EAP reading classes. For these learning needs, some researchers suggest a framework of metacognitive reading strategies, which includes pre-reading, while-reading and post-reading activities (Allen, 2003; Evans, 2008). Such a framework seems appropriate for the pedagogical approach needed in EAP, as it comprehensively encompasses the phases of reading and writing.

As I studied the methodology of teaching reading indicated by Allen (2003) and Evans (2008), I decided to apply their methodology through classroom research in EAP classes at Ritsumeikan University in 2008 and 2009 (Kamijo, 2009, 2010). In the spring semester from April to July 2009, I began classroom research with the following two steps. First, I presented the framework for analyzing, outlining and summarizing a text as a case study. Second, I described how I taught metacognitive reading strategies. Evaluating student learning was based on a student survey asking about the effectiveness of the classroom activities such as practices, tests and written summaries of readings. The survey showed that the majority of students felt the activities were effective. At the beginning of the course, students were given more assisted tasks, while later in the course, the students used metacognitive reading strategies more independently. The classroom research helped me evaluate EAP theory through practice.

Later I recognized that I would be able to further refine my research, as I referred to the framework of teaching reading strategies by Anderson (1999), Caverly, Orlando and Mullen (2000), Singhal (2001) and others. These researchers argue that reading strategy instruction should be arranged through teaching purposes and methodological steps such as presentation, practice and review. My teaching is related to EAP; therefore more detailed setting and teaching objectives should be explained in the study. My classroom application of EAP consists of preparation, presentation, practice and independent tasks composed of materials, handouts, lectures, written feedback on students' written summaries, and tests and reports. These elements in my teaching are described in this paper. Finally, the evaluation of the teaching approach and students' perceived learning outcomes are analyzed.

In the spring semester 2010, I began classroom research using an extended research design. In the research, I would be able to assess the theory of metacognitive reading strategies and its pedagogical application in the EAP classroom. The research report in an exploratory manner would benefit teachers and EAP course developers and might be valuable for reading and writing teachers in university EAP courses.

Based upon my reflections of my teaching and research related to metacognitive reading strategies in EAP, I posited the following research questions:

- 1) What were the characteristics of my educational setting? What metacognitive reading strategies did I try to teach to students in the class?
- 2) What steps were taken for pedagogical application? How did I apply materials, handouts, lectures, written feedback, tests and reports to the teaching?
- 3) How did the students perceive the effectiveness of the teaching in terms of materials, handouts, lectures, written feedback, tests and reports?
- 4) What were the students' perceived learning outcomes?
- 5) What were the implications for future research?

# Metacognitive reading strategies

Reading comprehension is defined as a constructive process, and in such a process readers actively attempt to use cognitive and metacognitive strategies for comprehending a text (Dole et al. 1991; Pressley and Afflerbach, 1995; Harvey and Goudvis 2000; Allen, 2003; Israel, 2007). In L1 and L2 reading literature, researchers argue that metacognitive reading strategies are generally composed of three stages: pre-reading, while-reading and post-reading strategies (Urquhart and Weir, 1999). As an example, SQ3R (Survey, Question, Read, Recite, and Review) is often regarded as a framework for teaching reading strategies through the phases of pre-reading, while-reading and post-reading.

In education and applied linguistics literature, two researchers provide useful metacognitive reading strategies for pedagogical application. Allen (2003) describes a model of five metacognitive reading strategies, as she reviews the literature of metacognitive reading strategies in L1 and L2 contexts.

Making sense of the text by the reader is also very dependent on the use of metacognitive strategies. It is not enough to simply decode the words. The readers must have inner conversations in which they: (1) relate the text to their own lives, (2) determine which facts are important and unimportant, (3) summarize information, (4) fill in details and draw inferences, and (5) ask questions, — (p. 320).

Allen's literature review of metacognitive reading strategies includes major L1 and L2 researchers in the US who used either experimental or quasi-experimental methods. Researchers compared students who received reading strategy instructions with students who did not. The

results of previous research reviewed by Allen (2003) indicated the effectiveness of teaching metacognitive reading strategies for 'diverse groups of learners, including L1, L2, and learning disabled students' (p. 336).

Evans (2008) evaluates Allen's metacognitive reading strategies, which are slightly modified, and divided the strategies into six elements (p. 241).

- 1. Deciding important points
- 2. Relating ideas to readers' lives
- 3. Summarizing
- 4. Filling in points not explicitly made
- 5. Making inferences
- 6. Asking questions

Evans (2008) mentions Allen's categories to assess the metacognitive reading strategies that might be appropriate pedagogy in EAP courses. Evans (2008) refers to the framework of metacognitive reading strategies, in which 'students summarize and react to the texts they read' (p. 240). The strategies have four stages: outlining, summarizing, noting reactions and referential questioning.

First, Evans (2008) indicates the tasks of outlining and summarizing in comparison to Allen's model of metacognitive reading strategies.

Outlines are visual representations of the overall rhetorical structure of a text. Detailed outlines note ideas contained in a text, and how these ideas relate to each other. Outlining in the RRJs can incorporate the metacognitive strategies of deciding the most important points (strategy 1), filling in points not explicitly made (strategy 4), and making inferences (strategy 5). — In addition, a written summary to accompany an outline should activate strategies 1, 3, 4, and 5 — (p. 241).

Second, writing reactions and referential questioning are noted in the context of Allen's (2003) metacognitive reading strategies.

— students need to note their reactions, and relate ideas to their own experiences, consistent with metacognitive strategy 2. — Referential questions demand greater cognitive involvement with the text and are normally dependent upon the reader's finding 'gaps' in the writer's ideas, and or the reader's understanding of them (p.241).

Evans (2008) applied these metacognitive reading strategies to an L2 EAP course, evaluating

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students' perceived effectiveness of the metacognitive reading strategies. From a survey in his L2 EAP classroom, Evans (2008) found that most students regarded metacognitive reading strategies as useful for reading comprehension and reading-to-write activities, which are essential in EAP.

The frameworks of metacognitive reading strategies that Allen (2003) and Evans (2008) suggest are summarized in Table 1.

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Allen's model (2003)	Evans' approach (2008)
1. Deciding important points	Outlining/Summarizing/Referential questioning
2. Relating ideas to readers' lives	Noting reactions/Referential questioning
3. Summarizing	Summarizing and paraphrasing
4. Filling in points not explicitly	Outlining/Summarizing/Referential questioning
made	
5. Making inferences	Outlining/Summarizing/Referential questioning
6. Asking questions	Referential questioning

Table 1. Metacognitive reading strategies by Allen (2003) and Evans (2008)

Allen's model is applicable to both L1 and L2 contexts, while Evans' approach matching Allen's categories is applicable for L2 EAP programs. Evans' model shows that outlining and summarizing a text might be helpful for student reading comprehension.

# Educational setting and teaching objectives

In the first semester from April to July 2010 at Ritsumeikan University, I taught a reading class for International Business Administration majors. As freshman and sophomores these students intensively study English subjects, including reading, listening, speaking and writing. The students in International Business Administration at Ritsumeikan University are required to participate in a study abroad program. They take the TOEFL ITP from the spring semester and, especially during their freshman year, learn study skills required for English for Academic Purposes. In the sophomore year of their English studies, they shift their learning toward English for Specific Purposes related to business and management. During their junior and senior years, students take specialized and more advanced subjects related to business administration. Students should be able to master academic English and study skills as freshman.

The reading class was organized to meet these student goals. Most students had a proficiency level equivalent to TOEFL ITP scores from 440 to 500. To succeed, students must efficiently and analytically read texts, synthesizing the data they gather into academic writing with a summary and discussion. To address their learning needs, I attempted to help students acquire the strategies to survey and carefully analyze a text, outline the text based upon the analysis, and summarize the text. These strategies are shown in Table 2.

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# Table 2. The metacognitive reading strategies taught in the class

<u>Surveying</u> Skimming a text, understanding the text type Skimming a text to understand the general theme

# Analyzing

Recognizing key features of a text, including the thesis statement and topic sentences Recognizing key words, transitions, and examples Determining important points Understanding inferences

## Outlining

Marking and highlighting key textual and lexical features Briefly outlining a text based upon the text analysis Editing an outline after carefully rereading a text

## Summarizing

Paraphrasing in writing a summary Writing a summary based upon the analysis Using transitions to clarify the logic of a summary Checking grammar and sentence structure

# Classroom teaching in the spring semester

In this section, I refer to the procedures concerned with the pedagogical application of the metacognitive reading strategies in the spring semester from April to July 2010. My teaching methodology was preparation, presentation, practice, and independent tasks. The relevant methodological variables were 21 learners, two main textbooks, preparation (handouts and lectures), presentation (handouts and lectures), practice (lectures and written feedback), three tests and two reports.

# Twenty-one learners

The class had 21 learners. All were freshmen majoring in International Business Administration at Ritsumeikan University and were at the upper-intermediate level. Most learners had studied reading through rapid reading practice and translation exercises for the university entrance examination. Before the course, many of the students were unfamiliar with reading strategies based upon text analysis. Student motivation to master academic English was relatively high.

## Two main textbooks

The material for the course was *World Class Readings 3* (Rogers, B., 2006). The textbook was used for skimming and scanning texts and for understanding the whole text structure and content using fill-in-the-blank summary exercises. The text types used in the textbook are expository, historical/biographical narrative, and argumentative. Passages in each unit are from 800 to 1,000 words.

The second main textbook was a TOEFL ITP practice text, titled *Introduction to TOEFL-ITP Reading* (Kanbe, 2007). This textbook includes approximately 20 passages tailored for preparing for the reading passages in the TOEFL ITP. The passages from this textbook were utilized for activities analyzing and summarizing texts through homework tasks, tests, and reports. The passage text types are expository, historical/biographical narrative, and argumentative. The length of these passages is approximately 300 to 400 words.

# Preparation: handouts and lectures

Two steps were taken to prepare the students. First, there was a lecture with a handout in week 1 of the 15 week class, describing the purposes of the course, the study, and the graded activities. As students study for EAP, they need to develop efficient and analytical reading skills. While these two skills were taught, I told students that analytical reading would be emphasized, since it is related to the essential tasks of reading a text and writing a summary in EAP. Second, students listened to another lecture and received handouts in weeks 1 and 2. The handouts covered paragraphs, thesis statements, topic sentences, supporting sentences and transitions. In addition, I explained the text types and their discourse structures. The text types in EAP include exposition, argumentation, and narrative. The text structures of expository passages may have general/specific sequences, while argumentative passages may include claim/reasons structure. Narrative texts may be composed of a sequence of chronological events.

#### Presentations: handouts and lectures

The stage for presenting a framework for reading strategies included two types of handouts. The first type was handed out in week 3. In the handout, I described how I would utilize metacognitive reading strategies if I read and summarized a passage. I told students to first try to understand the text type. I told students that they should next survey the paragraphs in the passage, identifying the thesis statement and topic sentences. Doing so would help clarify the main idea. Next, they should identify the rhetorical structure from the introductory part to the body paragraphs. Through highlighting key words and transitions, students could understand the passage. I explained these steps in a lecture. The second type of handout was to organize the process in the framework of SQ3R (Survey, Question, Read, Recite, and Review). This second type of handout was used in weeks 4 and 7. Again, the approach was explained in a lecture.

## Practice: lectures and written feedback

One major element in my classroom teaching was summary writing exercises and written feedback on the exercises. Seven summary practices were for the TOEFL ITP reading passages. They were assigned as homework in weeks 1, 2, 5, 7, 8, 11 and 12. Students submitted their written summaries the week after they were assigned, and I returned the summaries a week later with written feedback. The homework assigned to students in weeks 2, 7, 8, 11 and 12 provided the basis for three tests and two reports after the students completed the homework and received feedback. Students needed to understand the written feedback and carefully edit their work. They had to refine the analysis and summaries in their homework to utilize their work for their graded tests and reports. I provided guidance to help the students review their work.

#### Three tests

Tests were administered in weeks 5, 10 and 15 (May 6th, June 10th, July 15th). In the tests, students were required to answer vocabulary questions and complete fill-in-the-gap exercises about the summary. They could not refer to handouts or notes for these exercises. The vocabulary questions and exercises were approximately one-third of the test. For the remaining two-thirds of the test, the students analyzed and summarized a passage from the TOEFL ITP reading. Students' analyses included marking the thesis statement, topic sentences, key words, and transitions, as they identified the introduction, body, and conclusion in the texts. The passages used for analysis and summarizing the tests were their previous homework assignments. They had received my feedback about their summaries. Based upon the feedback, students independently edited their summaries. In the tests, they were permitted to refer to their prepared summaries and notes.

## Two reports

Turning to the student reports, students wrote two reports and submitted them in weeks 11 and 14 (June 17th and July 8th). For these two assignments, students initially submitted their draft summary of the assigned passages. After they received my feedback about their summaries and reviewed their work, students then edited their summaries with the analysis of the texts, submitting their work as their report. I assigned the first report on May 27th in week 8. For the first report students had to analyze a TOEFL ITP reading passage with a chronological text structure. They needed to indicate the text type and identify the thesis statement, topic sentences, key words and transitional phrases and to paraphrase the text to write a summary. Students were also required to evaluate the questions in the TOEFL ITP reading. At the end of the report, students had to reflect on their learning as they analyzed and summarized the text. The first report was submitted on June 17th in week 11.

Next, students had to analyze and summarize an expository text. I gave students this second assignment on June 17th in week 11. In the second report, students needed to read the text, understand the text through marking and outlining, and summarize the text. For this assignment,

students were given sheets divided into pre-reading, while-reading, and post-reading activities. In the pre-reading, students had to write about the stage of surveying a text, identifying the text type and discourse structure. Through the while-reading, they tried to identify the key textual and lexical features such as thesis statement, topic sentences, examples and transitional phrases. With these analyses, students had to write an outline. As a post-reading activity, they referred to their outline and summarized the text. Students submitted the second report on July 8th in week 14.

## Summary

In teaching the metacognitive reading strategies of surveying, analyzing, outlining and summarizing, I guided students through the stages of preparation, presentation, practice, tests and reports. The preparation stage was basic knowledge about text structure and presentation through lectures and handouts concerning the model of metacognitive reading strategies. As students learned about analyzing, outlining and summarizing, they practiced using each skill. Then, students received written feedback on their summary practice; lecturing reinforced their learning. After the practices and feedback on the students' analyses and summarize, students were assigned tests and reports to demonstrate their ability to analyze and summarize a text. They were required to independently edit and submit their work.

# **Data collection**

Researchers such as Caverly, Orlando and Mullen (2000) refer to the methodological variables for teaching reading and study strategies in university settings. The variables include students, materials, instructions and tasks. Reviewing the teaching methodology steps in my classroom context, I defined the methodological variables as materials and handouts (material), lectures and written feedback (instructions), and tests and reports (tasks). Based upon these factors, I developed a two-part survey. First, the survey attempts to assess the variables in my teaching methodology including the materials, handouts, lectures, written feedback, tests and reports. Second, the survey includes comments and student answers to the questions about their learning outcomes, which indicated whether the students thought they learned the metacognitive reading strategies taught in the class.

At the end of the first semester in July, to evaluate my teaching of metacognitive reading strategies and students' learning outcomes, I gave students the survey, asking them to answer the questions and comment about their learning.

# **Findings**

In the survey, students were first asked to rate the usefulness of the materials and handouts with five choices: very useful, useful, somewhat useful, slightly useful and not useful. Second, they were told to assess the effectiveness of the instructional variables such as feedback and lectures. Students also evaluated activities such as tests and reports. Students had five choices to rate the effectiveness: very effective, effective, somewhat effective, slightly effective and not effective.

In addition, students wrote comments and answered questions about what they had learned, especially referring to the two reports that required more independent text analysis and editing the summary of the texts.

# Questionnaire concerning methodological variables

The first two categories of the survey are the usefulness of the materials and handouts used for the reading class.

VARIABLES	VERY USEFUL	USEFUL	000000000000000000000000000000000000000	SLIGHTLY USEFUL	NOT USEFUL
Materials	12 (57.1%)	6 (28.5%)	- (0%)	3 (14.2%)	- (0%)
Handouts	13 (61.9%)	4 (19.0%)	3 (14.2%)	1 (4.7%)	- (0%)

Table 3. Usefulness of the materials and handouts (N=21)

The survey showed that eighteen students (85 percent) indicated that the text was useful, while three students (14 percent) indicated that text usefulness was limited. For the handouts, seventeen students (80 percent) perceived usefulness, while three students (14 percent) thought they were somewhat useful. One student (4 percent) felt that the handouts were slightly useful.

The second set of variables relates to instruction in the classroom, which were lectures and written feedback about student work.

Table 4. Effectiveness of fectures and written feedback (N=21)					
VARIABLES	VERY	EFFECTIVE	TIVE SOMEWHAT SLIGHTLY NOT		NOT
	EFFECTIVE		EFFECTIVE	EFFECTIVE	EFFECTIVE
Lectures	13 (61.9%)	3 (14.2%)	3 (14.2%)	2 (9.5%)	- (0%)
Written feedback	15 (71.4%)	2 (9.5%)	2 (9.5%)	1 (4.7%)	1 (4.7%)

Table 4. Effectiveness of lectures and written feedback (N=21)

The results for lectures and written feedback were as follows: sixteen students (75 percent) regarded the lectures to be explicitly effective, and three students (14 percent) considered them somewhat effective. Two students (9 percent) perceived limited benefits from the lectures. In reference to written feedback, seventeen students (80 percent) indicated that the written feedback was effective, and two students (9 percent) rated it as effective to some extent. One student reported that the written feedback was slightly effective and another reported that it was not effective.

The third set of variables is concerned with student tasks for using metacognitive reading strategies more independently, including tests and reports.

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VARIABLES	VERY	EFFECTIVE	SOMEWHAT	SLIGHTLY	NOT
	EFFECTIVE		EFFECTIVE	EFFECTIVE	EFFECTIVE
Tests	11 (52.3%)	3 (14.2%)	5 (23.8%)	1 (4.7%)	1 (4.7%)
Report 1	10 (47.6%)	6 (28.5%)	3 (14.2%)	1 (4.7%)	1 (4.7%)
Report 2	12 (57.1%)	3 (14.2%)	4 (19.0%)	1 (4.7%)	1 (4.7%)

Table 5. Effectiveness of tests and reports (N=21)

For the tests, fourteen students (66 percent) assessed them as either effective or very effective, while five students (23 percent) indicated that they were somewhat positive about the tests. One student (4 percent) referred to limited effect from tests, and another student (4 percent) felt the tests were not effective.

For report 1, sixteen students (75 percent) rated it as either effective or very effective, and three students (14 percent) evaluated it as effective to some extent. One student felt the effectiveness limited while another student felt it negative. For report 2, fifteen students (71 percent) regarded it as explicitly effective. Four students (19 percent) perceived some effectiveness. Then, two students were not positive with one student considering this report to be limited, and another rating it not effective.

## Description of student learning outcomes

Of the 21 students, 20 commented about their learning. Students were asked what they had mainly learned from the two reports, which consisted of TOEFL ITP reading passages. Comments were written in Japanese; the comments below have been translated into English by the author.

Table 0. Ordering continents about their rearring outcomes $(1 - 20)$						
LEARNING OUTCOMES	NUMBER					
Checking a text, outlining and summarizing it	11 (55.0%)					
Understanding the text structure and reading it	5 (25.0%)					
Improving the ability to read a passage rapidly	2 (10.0%)					
Learning about the structure of a passage	2 (10.0%)					

Table 6. Students' comments about their learning outcomes (N = 20)

Table 6 shows that 20 students commented about the learning outcomes concerning the metacognitive reading strategies related to analytical reading. Among the 20 students, 11 students (55%) wrote that they learned analytical reading and writing by checking, outlining and summarizing. Five students (25%) said that they learned about the text structure, enabling them to read analytically, while 2 students (10%) mentioned that they improved the ability to read rapidly. Two other students (10%) said that they understood the structure of a passage.

In addition to asking for comments about the student learning outcomes, two questions asked students to rate their degree of learning from the report activities. Students were asked whether they believed that through the process of writing their reports they understood the texts and how to outline and summarize them. They were also asked whether they felt they learned about academic reading and writing. Table 7 displays the data.

LEARNING FROM THE TWO REPORTS	YES	SLIGHTLY	NOT WELL	NO
Did you learn to understand texts and how to outline and summarize them?	18 (90.0%)	2 (10.0%)	- (0%)	- (0%)
Did you learn about academic reading and writing?	17 (85.0%)	3 (15.0%)	- (0%)	- (0%)

Table 7. Students' answer to whether they learned from the two reports (N=20)

Regarding the data from the questionnaire above, 18 students (90%) said that they learned to understand the texts, outlining and summarizing them through the two reports, while 2 students (10%) indicated they slightly learned from the two assignments. For academic reading and writing, 17 students (85%) responded positively about their learning, and 3 students (15%) rated their learning as slight.

# **Discussion and conclusion**

In this research report, I provided an account of metacognitive reading strategies and their classroom application in EAP, including research findings about student perceptions toward the teaching and learning outcomes. First, the metacognitive reading strategies by Allen (2003) and Evans (2008) were presented. Second, my educational context was explained. Students in an EAP class and needed to analytically read and write. Thus, the teaching objectives included surveying, analyzing, outlining and summarizing. These strategies are appropriate for the approaches of Allen (2003) and Evans (2008). Third, the pedagogical application was described with the phases of preparation, presentation, practice and independent tasks. I used materials, handouts, lectures, written feedback, tests and reports throughout these phases. Fourth, at the end of the semester students were asked to rate the effectiveness of the teaching and comment on their learning. The majority of the students indicated that they had learned the metacognitive reading strategies, particularly understanding the texts, outlining and summarizing them.

As I investigated my classroom, I understood that teachers need to carefully arrange the metacognitive reading strategies taught in the class, monitor student progress and provide appropriate practice and tasks while teaching. In my classroom, the students initially received guidance and instructions, but in the later stages the students performed the assigned tasks using the metacognitive reading strategies more independently with their own analysis and reflection. The survey seemed to indicate the students' positive perceptions about their learning experience using the metacognitive reading strategies. The research might have been strengthened if I had applied the qualitative data from the logs and journals written by students and teacher throughout the semester. Accordingly, if I continue classroom research in the future, I will use the qualitative

approach to triangulate the data.

For qualitative research in metacognitive reading strategies and their classroom teaching application, the research framework by Auerbach and Paxton (1997) would be helpful for teacher-researchers. Auerbach and Paxton (1997) researched classroom reading strategies and metacognitive awareness of the students through an ESL course in the US. By utilizing qualitative data from logs, interviews, think-aloud protocols, and comprehension tests, Auerbach and Paxton (1997) evaluated students' reflections upon reading strategies and learning at the beginning, middle, and end of the term.

In addition, further research might be conducted through more comprehensive or longitudinal research design. One research direction would be to use a pre-test/post-test analysis to measure actual improvement as well as student perceptions and comments, enabling the researcher to evaluate both learning progress and student perceptions of progress. Another research task might investigate how students could make greater progress through the course of reading and writing in EAP. This research would be appropriate for the Evans (2008) model including such metacognitive reading strategies such as outlining, summarizing, noting reactions and referential questioning. More authentic EAP reading texts could be used for such classroom research. The second research task may be more productive because researching increased student progress could be valuable for many teachers to further EAP development.

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#### Appendix Example of report 1

The passage below is an extract from TOEFL ITP Reading preparation textbook (Kanbe, 2007). It was used for report 1. The analysis, outline, and summary of the passage are described here as an example of the report 1.

#### (1) Analysis and outline

Native American art encompasses a broad spectrum of techniques, materials, and crafts. (thesis

**statement)** The earliest technique is thought to be that of flint-knapping or stonework. This began around **8000 BC** as stone-chipping, a simple method of making darts and spears. By around 2000 BC, it had evolved into the pecking and grinding of stone to make small detailed sculptures. The use of stone in Native American art is still evident in recent Inuit soapstone carvings. These intricate carvings have become the backbone of the Inuit economy since the Canadian government encouraged their production in the 1950's.

Ceramics **also** played an important role in the art of Native American culture, and there are fine examples of pottery dating back from **later than 2000 BC**. Styles differed between cultures, as did techniques. **For example**, the *Moche culture of Peru* favored objects, scenes, images from daily life as well as from mythology, while *the Pueblos of the Southwest* preferred geometric or stylized designs.

**Around 900 BC**, *Peruvian tribes* **also** developed the art of metallurgy, a process involving the smelting of ore, although metalworking of some kind had been practiced in the Midwest **since around 2000 BC**. The initial form of metal working is fundamentally different from true metallurgy due to the process by which the metal is obtained. **However, as early as 900 BC**, Native Americans were using comparatively advanced metallurgical technology.

Native American artistic ornaments **also** show a high quality of craftsmanship. The *Pomo tribe* of the California-Intermountain area designed extremely fine "*Pomo basketry*" which was covered with a geometric form of beads work. They used beads made from a variety of materials such as *bone, shell, wood roots, and dried berries*. They stitched strings of necklaces and decorations as ornament fringes of garments and bags. When colorful glass beads were introduced by white traders **in the seventeenth century**, Native Americans willingly replaced their traditional materials with these new goods. Native American baskets are an example of the craftsmanship and show how advanced their civilization actually was. The basket-making draws on a wide variety of techniques, of which weaving is only one, and they are renowned for their high quality, beauty and refinement.

<u>UNDERLINED</u> thesis statement /topic sentences WORDS IN GRAY key words related to topic

GRAY AND BOLD transitional words (cause/effect, relationships, etc.)

ITALICS examples

The sentence in the first paragraph, "Native American art encompasses a broad spectrum of techniques, materials, and crafts." is the thesis statement (underlined). The passage is written in a chronological manner with major examples (italics), suggesting the various techniques, materials, and crafts Native American used. The art of Native Americans includes the earliest stonework of Native Americans in 8000 BC and 2000 BC, ceramics from later than 2000 BC, metallurgy around 900, and artistic ornaments. The topic sentences (underlined) and key words (marked in gray) in each paragraph help clarify these themes. Transitional words (gray and bold) indicate the time when Native Americans developed their art chronologically.

After analysis and outlining, students begin to write a summary of the passage. In writing the summary, students should write the main topic and text type at the beginning, enumerating essential points of each paragraph by briefly indicating the examples of art and years. The below summary is written based upon the analysis and outline.

## (2) Summary

The passage describes Native American art since 8000 BC, with some major examples. First, the author discusses the earliest Native American art. While simple stone-chipping had been used in 8000 BC, Native Americans later developed stone-chipping further to the grinding of stones by 2000 BC. Second, the writer describes the ways of making ceramics among Native Americans after 2000 BC. The Moche and Pueblo are cited as examples, having contrastive approaches. Third, the passage refers to the art of metallurgy of Native Americans in 900 BC. Peruvian tribes showed more advanced practice for metallurgy than other cultures. Finally, the passage discusses the artistic ornaments made by Native Americans. One major example is Pomo basketry made by the Pomo tribes. They accepted new techniques brought by foreign traders and blended them into their basketry, demonstrating craftsmanship and beauty.