

The Important Role of Input and Output in the Acquisition of L2: A Case Study in Osaka Electro-Communication University

Masahiro Yoshimura*

Abstract

This article discussed how I taught reading strategies to students of English and the effectiveness of using reading strategies. First, I planned what to teach in this class and determined the course schedule for the class in view of ESP education. After analyzing students' needs, I decided to teach reading strategies and help students to effectively and appropriately use these strategies when they read English. I helped them organize and write an outline of the passage they read. Then, in class, the students received a 30-minute session of explicit strategy instruction using the textbook (*Reader's Ark Basic*) in every class, which met once a week for 90 minutes during the thirteen-week period. A total of ten reading strategies were introduced to the students. In the fourteenth week of class, I presented the final test to this class. The final test had 24 questions: 12 multi-choice comprehension questions and 12 questions for finding and organizing the main idea in the reading passage. Finally, I analyzed the results of the final test and questionnaire. The results of the final test and questionnaire showed that almost all students in the class understood and could appropriately use these strategies.

For the next semester of this class, I will teach how to read and understand the reading passage in a shorter time by using the reading strategies and writing a summary of the reading passage. As many critics suggest, organizing the reading passage and then outputting (write or speak) the input (read or listen) is effective for language acquisition. Therefore, writing an outline and summary of the reading passage is useful for L2 in acquiring language skills and will be effective for my students in their study of English both next semester and in the future.

1. Introduction

Over the past few years a considerable number of studies have examined English for Specific Purposes (ESP). Central to ESP is an analysis of needs. The term “analysis of needs” can be defined as an investigation in which a teacher predicts how learners will use a foreign language in the future and what language abilities they need to develop (Miyama, 1996: 12). To prompt learners to effectively study English by enhancing their motivation, English education should meet specific student needs. A teacher should carefully design the English course, considering these specific needs. Designing a course is “a dynamic mix of juggling and doing jigsaw puzzles” (Dudley-Evans and St. John, 1998: 62). In brief, a teacher needs to

* Ritsumeikan University, Language Education Center, Lecturer

provide a clear purpose for the course and then choose an English textbook that best meets the needs of the students, as if the teacher were completing a jigsaw puzzle.

In view of this ESP research, I designed the English reading class (English Reading 5) at Osaka Electro-Communication University. Before the class started, I noted that almost all students in this class were sophomores majoring in engineering. In considering their needs, I decided to teach them the language skills needed for efficient English reading. When these students are juniors and seniors, they will be required to read a significant number of engineering essays in English. They will also be required to organize the information gleaned from their reading and write a paper or give a presentation.

This paper presents my practice in EAP education, which is a step to ESP education in this reading class. Wallace wrote that recent trends in ESP seem to share an assumption that readers' strategies can be generalized across subject boundaries. He argued that even where they are clearly defined specific requirements, students of English still need and want to be general readers. Dubin also argued that more specialized knowledge can be developed through reading a wide range of general interest texts of related genres and topics at the early stages of an ESP reading course. The difficulties ESP learners encounter are largely connected with the demands on their background knowledge. Effective general interest may enable readers to simultaneously develop their background knowledge and general language ability (Kani, 1995: 36-37).

Therefore, I supported a view of reading as involving generalizable strategies across languages and situations as the first step to ESP education rather than specific skills. My aim was to show how the students can outline a reading passage using their acquired reading skills and how doing so can be useful for the students in writing an outline of the reading passage and understanding it.

2. Text and reading skills

When students read a passage in English, many critics argue that there are positive gains in using reading strategies. Barnett's defines reading strategies as the reader's effective approach to the text and their understanding of what they read. He concludes the following:

The results of the main experiment show that, as common sense suggests, students who effectively consider and remember context as they read understand more of what they read than students who employ this strategy less, or less well. Moreover, students who think that they use those strategies considered most productive actually do read through context better and understand more than do those who do not think they use such strategies. The correlation between these two variables tells us that, predictably, as strategy use increases, student perception of strategy use also

increases. (Barnett,1988:156)

In addition, Carrell concludes that students at advanced proficiency levels in English tend to be more top-down in their perceptions in both effective and difficulty-causing reading strategies. In contrast, students at lower proficiency levels tend to be more dependent on bottom-up decoding skills. Carrell argues that students should properly learn the reading strategies and be able to effectively and intentionally use them.

I used *Reader's Ark Basic: Setting out on a Voyage* (Ushiro, Nakagawa, Pavoux: 2009) to help the students efficiently acquire reading skills in this class. Using this textbook, the reading strategies I taught my students in the first semester were as follows:

- Predicting the content of the reading passage at pre-reading activities
- Deducing the meaning and use of unfamiliar lexical items
- Identifying the main idea
- Understanding supporting details
- Distinguishing the main idea from supporting details
- Understanding relations within the sentence
- Using signal words to predict ideas
- Using reference words to follow ideas
- Skimming
- Scanning to locate specifically required information

These strategies play important roles in reading either L1 or L2, as long as reading is 'a process whereby one looks at and understands what has been written,' and 'the reader does not necessarily need to look at everything in a given piece of writing (to obtain meaning)' (Williams, 1984: 3). From the listed strategies, I stressed predicting the content of the reading passage as a pre-reading activity, identifying the main idea and supporting details, and distinguishing the main idea from supporting details.

The subjects were 45 Osaka Electro-Communication University students studying engineering. During the thirteen-week period, the students received a 30 minute session of explicit strategy instruction using the textbook in every class. The class met once a week for 90 minutes. A total of ten reading strategies were introduced to the students. The schedule of instruction is in Table 1. During the instruction, the students learned one reading strategy in each class using handouts that I prepared as well as the textbook. The handouts included the purpose and suggestions for using the strategies, an example of strategy use, and practice exercises for applying the strategies to reading. In the last class, the students reviewed the strategies learned at the beginning of the class from Week 3.

Table 1. Schedule of the class and instruction

	Reading Strategies
Week 1	Introduction to the reading strategies
Week 2	Checking your English level
Week 3	Predicting the content of the reading passage
Week 4	Deducing the meaning and use of unfamiliar lexical items
Week 5	Identifying the topic sentence in each paragraph
Week 6	Understanding supporting details
Week 7	Distinguishing the topic sentence from supporting details
Week 8	Scanning and skimming
Week 9	Understand relations within the sentence
Week 10	Using signal words to predict ideas
Week 11	Using reference words to follow ideas
Week 12	Using visual aids in a title and attached questions
Week 13	Reviewing the strategies introduced from Week 3 to Week 12
Week 14	Final Test

In this class, the primary focus was on understanding the outline of the passage, using these 10 reading strategies. The homework was writing an outline of the passage read in class so that I could check the students' understanding.

3. Purpose of writing the outline

Block (1986) concluded that effective strategies are those that help the reader understand the main idea and organize the information in the reading passage. Williams (1984) indicated the importance for lower intermediate students to practice writing the outline of the reading passage as well as increasing reading speed. As we have seen, repetition of input and output is a prerequisite for L2 study and the acquisition of a second language.

Consequently, before the students write an outline of the reading passage, they must complete three stages. The first stage is identifying the topic sentence in each paragraph; the second is understanding the supporting details; and the third is understanding the difference between the topic sentence and supporting sentences in the reading passage. By Week 7, I had completed teaching students these three steps. From Week 8 to Week 13, students practiced outlining the passage they read in class.

4. Final test and results

Students practiced the final test in Week 14. I created the final test to measure the students' language ability, especially, their ability to understand the main idea of a reading passage and organize the passage in the given time. The final test had two sections; one section required them to answer multiple-choice comprehension questions about the passage and the other to organize the passage. Both sections were related to the reading strategies taught in class. Takahashi (2000) stated that the more directly the students' abilities are measured, the higher the general validity of the test. On the basis of these theories, I created the multiple-choice comprehension questions to confirm whether or not the students understood the main idea and supporting details of the reading passage. I also prepared questions so that students filled in the blanks on the outline of the reading passage to confirm whether or not they could appropriately organize the passage. Students had to find the topic sentences for each paragraph and organize them, and then fill in the blanks on their answer sheet.

The final test which I gave them in the final class of the semester is listed in Appendix 1. Ultimately, 36 students took the final test. The final test has a total of 24 questions: 12 multi-choice comprehension questions and 12 questions for finding and organizing the main idea of the reading passage. The results of this final test are presented in Table 2.

Table 2

	Multiple questions	Questions for main idea
Maximum	12 / 12	12 / 12
Minimum	3 / 12	6 / 12
Average	7.31 / 12	9.14 / 12

The results of the final test were that students earned a higher score for answering the questions for the main idea than they did for answering the multiple questions, which were about the detailed information in the reading passage. This result may mean that the students did not fully understand the supporting details in the reading passage even if they vaguely understood the passage. These figures might suggest that students could achieve the goal of understanding the main idea in the reading passage during this semester.

5. The results of the questionnaire

I surveyed 36 students in Reading 5. The whole contents of the questionnaire are listed in Appendix 2. The results of the questionnaire are listed in Table 3 below.

Table 3

	5 (think strongly)	4 (think on the whole)	3 (think generally)	2 (don't think very much)	1 (don't think at all)
Q1	6	13	13	3	1
Q2	5	18	9	3	1
Q3	6	14	8	7	1
Q4	2	10	16	8	0
Q5	6	12	14	4	0
Q6	2	10	14	9	1
Q7	4	9	15	7	1
Q8	5	8	14	9	0
Q9	4	9	14	8	1
Q10	3	9	15	8	1
Q11	1	10	18	7	0
Q12	2	13	15	5	1
Q13	3	9	18	5	1

As noted before, the focus of the class was instructing the students in predicting the content of the reading passage during pre-reading activities, identifying the main idea and supporting details, distinguishing the main idea from supporting details, and organizing the main idea and supporting details in order to write an outline of the reading passage. The questionnaire can be classified into three main groups: (1) Q1-Q4 refers to predicting the content of the reading passage; (2) Q5-Q8 refers to understanding the main idea and supporting details; and (3) Q11-Q13 refers to writing the outline of the reading passage. Q9 and Q10 are about whether or not the students can understand the reading strategies. What should be noted is that approximately 80-90 percent of the students answered all these questions affirmatively.[†] These results mean that almost all students in this class understood the reading strategies and could use the strategies in reading the English passage.

6. Summary and conclusions

I have reported a case study for an English reading class at Osaka Electro-Communication University and the steps important to ESP education. When students are juniors and seniors, reading skills they learned in this class will be useful for them. As Kani argued, strategy instruction must be useful for Japanese university students who seem

[†] I counted the students who chose 5, 4, and 3 for each question as answering it affirmatively.

less motivated but have a considerable amount of declarative knowledge. Through strategic instruction, students learn the important factors in the procedural knowledge they can acquire through reading. In addition, teachers should encourage and help their students acquire those skills and strategies which facilitate their reading comprehension through extensive reading. Given the results of the final test and questionnaire I presented in section 5, it appears that almost all the students in my class understood the reading strategies and through such understanding achieved some efficiency via learning the reading strategies and writing the outline of the reading passage. EAP education is essential for L2 learners to proceed to the next step: ESP education.

Now that we are sure that my students can use the reading strategies they learned, and understand the main idea of the reading passage, the next step is to read and understand the passage in a shorter time by using the reading strategies and writing a summary of the reading passage. Writing the outline and summary of the reading passage is useful for L2 to acquire the necessary language skills. To organize the reading passage and then output (write or speak) the input (read or listen) is effective for language acquisition. In the recent Interaction Hypothesis, critics suggest that repeated input and output plays an important role in SLA (Second Language Acquisition) (Long, 1996: Deguchi and Morita, 2005). In addition, the students would be able to prepare for their required presentation as juniors and seniors if they learn to use these strategies and skills. These teaching plans will also meet the students' needs in accordance with ESP research. Therefore, the teaching plan I practiced in the class will be very effective for my students in studying English both next semester and in the future.

Works Cited

- Barnett, M.A 1988 'Reading through context: How real and perceived strategy use affects L2 comprehension' in *Modern Language Journal* vol.72(2): 150-162
- Carrell, P.L. 1983 'Three components of background knowledge in reading comprehension' in *Language Learning* vol.33(2):183-207 Ann Arbor, MI: University of Michigan Press
- . 1989 'Metacognitive awareness and second language reading' in *The Modern Language Journal* 73, 121-134
- . 1992 'Awareness of text structure: effects on recall' in *Language Learning* vol.42(1): 1-20 University of Michigan Press
- Deguchi, M and Morita, M. 2005. The Role of Input and Output in the Acquisition of L2 Word Meanings : A Classroom Study in a Japanese University. *Educational Studies* 47, 187-198
- Ikeda, M and Takeuchi, O. 2000. Tasks and Strategy Use : Empirical Implications for Questionnaire Studies. *JACET bulletin*, 31: 21-32.
- . 2003. Can Strategy Instruction Help EFL Learners to Improve Their Reading

- Ability? : An Empirical Study. *JACET bulletin*, 37: 49-60.
- Kani, Y. 1995 'teaching English Reading Skills and Strategies: Exploring Methodologies and Their Possible Applications for the Japanese University EFL Reading Classroom' in *The bulletin of the Foreign Language Center* vol. 16: 31-43 Tokai University
- Munby, J. 1978 *Communicative Syllabus Design: A Socio-linguistic Model for Defining the Content of Purpose-Specific Language Programmes* Cambridge: Cambridge UP.
- Oxford, R. 1989 'Use of Language Learning Strategies: A Synthesis of Studies with Implications for Strategy Training' in *System*, 17:2, 235-247.
- . 1990. *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle Publishers.
- Shishido, M and Nordyke K. 2008. *Reading Expert 1*. Tokyo: Seibido.
- Takahashi, M. 2000. *Introduction to English Education*. Tokyo: Kinseido.
- Williams, E. 1984 *Reading in the Language Classroom* London: Macmillan Publishers Ltd.

Appendix 1

English Reading 5

Final

ID:

NAME:

I. Read the passage below and choose the best answer for each question.

The 500 Series Shinkansen is a very stylish train. There is a practical reason for the design of the front. The train made a loud noise when it entered tunnels at high speed. However, the designers worked hard to find a solution for reducing this noise.

One of the solutions they found was to make the nose of the train very long like a kingfisher's beak. The kingfisher is a kind of bird that is very good at diving into the water and catching fish. The shape of its beak enables it to dive with very little resistance to water. Similarly, the nose of the train acts like a kingfisher's beak to reduce the air resistance that causes noise in tunnels.

There are many other products that have been created by studying living creatures. In Africa there is an air-conditioning system that uses very small amounts of energy. The buildings with this eco-friendly air-conditioning system have specially designed chimneys, and windows with hoods. When wind blows, these chimneys and windows let out hot air from inside the building. Also, the walls are made with different thicknesses to absorb heat during the daytime, which they let out in the evening. This system imitates the natural ventilation system of a mound made by white ants. In Africa, the air temperature changes from about 10°C to 40°C, but the temperature inside the mounds always stays around 30°C.

1. Complete the following chart. Write the topic sentence for each paragraph.

Outline

Paragraph 1: ① _____

Supporting sentence: The train made a loud noise when it entered tunnels at high speed.

Paragraph 2: ② _____

Supporting sentence: the nose of the train acts like a kingfisher's beak to reduce the air resistance that causes noise in tunnels.

Paragraph 3: ③ _____

Supporting sentence: The buildings with this eco-friendly air-conditioning system have specially designed chimneys, and windows with hoods.

2. What is the best title for the passage?

- a) The 500 series Shinkansen's development b) Learning from Nature
- c) Animal versus Shinkansen & buildings d) eco-friendly system about the air-conditioning

3. Which statement is NOT true according to the passage?

- a) The walls of African buildings have different thicknesses because the buildings need them to have natural air-conditioning and heating system.
- b) Roofs of African buildings have the same thicknesses to absorb heat.
- c) Some African buildings have walls with different thicknesses, so they make the rooms warmer at night.
- d) The kingfisher's beak is similar to the nose of the Shinkansen.

II. Read the passage below and choose the best answer for each question.

There are two different kinds of animals. First, there are animals without backbones. These were the first animals. These are animals like starfish, bugs, and crabs. Other animals have backbones. There are many different animals with backbones.

Fish were the first animals with backbones. Fish live in the water. They cannot take in air like humans. They have to take in water to breathe. There are many different kinds

of fish. Some fish live in the sea, and some live in lakes and rivers. Some fish, like sharks, are very large, but other fish are tiny. A very unusual kind of fish is eels. Eels look like snakes, but they are fish.

For a long time, fish were the only animals. Then, some fish became able to get out of the water and move on land. These fish became “amphibians,” which means “having two lives.” One life is in the water, and the other life is on the land. A young amphibian lives in water. A fully grown amphibian lives on land and can take in air. The best known amphibian is the frog. At first, amphibians had their babies in water. Eventually, some amphibians became able to have their babies on land.

The first animals to have their babies out of water were reptiles. Reptiles are animals like lizards, snakes, and crocodiles. Dinosaurs were reptiles, too. Dinosaurs were very large lizards that lived on the earth million years ago. They all disappeared around 65 million years ago.

Some reptiles became very light and developed feathers. These became birds. Birds are light and can fly. Some birds swim or run instead of flying. The next animals to come along were mammals. Mammals have hair and produce milk for their young. Mammals are animals like dogs, cats, horses, and humans.

1. Complete the following chart. Write the topic sentence for each paragraph.

Outline

Paragraph 1: ① _____

Supporting Sentence: There are many different animals with backbones

Paragraph 2: ② _____

Supporting Sentence 1: Fish live in the water(in the sea, in lakes, and rivers) to breathe.

2: Fish— large(sharks), tiny, and unusual(eels)

Paragraph 3: ③ _____

Supporting Sentence: Some fish became amphibians (live in the water and on land)→ frog

Paragraph 4: ④ _____

↓ Supporting Sentences

birds ← lizards, snakes, crocodiles

↓

mammals (have hair and milk for young) < dogs, cats, horses, humans >

2. What is the main idea in this reading passage?

- a) reptiles and dinosaurs
- b) animals and how they developed
- c) how fish breathe
- d) kinds of animals

III. Read the passage below and choose the best answer for each question.

Today Vincent Van Gogh is one of the most famous painters of all time. In 1990, 100 years after his death, one of his paintings sold for \$82.5 million. At the time, it was the most money ever paid for a work of art.

Unfortunately, Van Gogh never knew his own fame. When he died at the age of 37, he was poor and unsuccessful. He failed as a church minister and art seller. He even failed as an art student. He entered an art school but quit a few months later.

For the last five years of his life, Van Gogh studied art on his own. He painted many pictures and tried many different styles. One of his famous styles is based on Impressionism. Impressionism uses bright colors and short, thick brush marks. In Van Gogh's paintings, these lively brush marks seem to move. He used this style to express his deep feelings.

Van Gogh often felt lonely and sad. His closest friend was his brother, Theo. Because Van Gogh focused only on his paintings, Theo often gave him money. He even tried to sell Vincent's paintings. The two brothers wrote many letters to each other during their lifetime. These letters show Van Gogh's thoughts about paintings, his relationship with Theo, and his deep depression.

His mood became worse over the years. One day he even cut off half of his left ear. Then in 1890, Vincent shot himself in the chest. He died two days later in bed in his brother's arms. Though Vincent never knew it, people will always admire his great talent and sad, beautiful works.

1. What is the best title for the passage?

- a) Vincent Van Gogh: The Sad Fate of a Genius
- b) Vincent Van Gogh: The Most Famous Painter
- c) Vincent Van Gogh: The Father of Impressionism
- d) Vincent Van Gogh: An Unsuccessful Art Student

2. What are the characteristics of Impressionism mentioned in the passage?
- Impressionism uses bright colors and long, thin brush marks.
 - Impressionism uses bright colors and short, thick brush marks.
 - Impressionism uses dark colors and short, thick brush marks.
 - Impressionism uses dark colors and long, thin brush marks.
3. According to the passage, which is Not true about Vincent Van Gogh?
- He didn't finish art school.
 - He didn't work much to make money.
 - He could sell many pictures thanks to Theo.
 - He shot and killed himself.
4. What are the best words for the blanks (A) and (B) in the following summary sentence?
 Vincent Van Gogh had great (A) but only became (B) after his death.
- (A) talent (B) famous
 - (A) wealth (B) respected
 - (A) ideas (B) successful
 - (A) fortune (B) well-known
5. Match each main point to the correct paragraph in the passage.
- | | |
|----------------|---|
| 1. Paragraph 1 | a) Van Gogh's life of failure |
| 2. Paragraph 2 | b) how famous Van Gogh is |
| 3. Paragraph 3 | c) Van Gogh's style of painting |
| 4. Paragraph 4 | d) how Van Gogh's life got worse |
| 5. Paragraph 5 | e) Van Gogh's relationship with his brother |

IV. Read the passage below and choose the best answer for each question.

On January 24, 1848, James Marshall discovered gold near Placerville, California. Although he tried to keep the discovery a secret, the news spread quickly. It was the beginning of one of the largest population movements in history.

When news of the discovery reached San Francisco, two-thirds of the male population left the city to seek gold. It took almost a year for the news to reach the East Coast. When it did, thousands of men caught "gold fever." They left their homes and families to travel west and join the Gold Rush. The gold-seekers became known as the 49ers because most of them went in 1849.

The trip to California was long, hard, and dangerous. Many 49ers took the Oregon-California Trail; others traveled by sea. Either way, 49ers suffered and many died from cholera, yellow fever, or malaria. But this did not stop people. They felt it was worth the time and risk because they were sure they were going to become rich. However, few of them did.

Gold-seekers also came from Mexico, Chile, Europe, China, Russia, and many other countries. (A) They planned to get rich quickly and then return home. (B) In 1850, one quarter of the people living in California were from foreign countries. (C) This changed California forever. (D) California became the most racially mixed state of its time and became famous around the world.

The adventurous spirit of Californians and their efforts to make money have lasted. Great fortunes have been made in the industries of space travel, cinema, computer science, and biotechnology. People continue to travel to California from all over the world, pursuing their own dreams of fame and riches. In some ways, the Gold Rush seems to have never ended.

1. According to the passage, the 49ers are

- a) the men who left California in 1849
- b) the men who discovered gold in 1849
- c) the gold-seekers who were in their 40s
- d) the gold-seekers who traveled west in 1849

2. Look at the four blanks: (A), (B), (C) and (D) that indicate where the following sentence could be added to the passage. Where would the sentence best fit?

But many stayed in California. Answer: ()

3. In paragraph 5, the underlined part means...

- a) California is still famous for its gold.
- b) people don't think they are happy enough.
- c) people from all over the world still try to find gold in California.
- d) people still come to California to try to make their dreams come true.

4. All of the following are mentioned in the passage EXCEPT

- a) how the gold-seekers went to California
- b) where the gold-seekers came from
- c) how many gold-seekers went to California
- d) how the Gold Rush affected California's development

5. Which sentences are appropriate for the main idea in the passage? Choose THREE answers from the sentences below.

- a) Many gold-seekers traveled to California to become rich, but it wasn't easy.
- b) Two-thirds of males in San Francisco left home to try to find gold.
- c) The 49ers became famous because they succeeded in finding gold and getting rich.

- d) Many of the gold-seekers died of malaria or other illnesses.
- e) People from many countries went to California trying to find wealth and many remained there.
- f) With people still coming to California, it seems the Gold Rush is continuing.

Appendix 2: Questionnaire

5: I think that strongly 4: I think that on the whole 3: I think that generally
2: I don't think that very much 1: I don't think that at all

1. I was able to predict the content of the reading passage looking at the illustrations, graphs and pictures
2. I was able to predict the content of the reading passage from the title.
3. I was able to predict what the topic of the reading is about.
4. I was able to predict the meaning of the words and sentences I don't know from the context.
5. I was able to think about the topic sentence for each paragraph.
6. I am able to understand the topic sentence for each paragraph.
7. I am able to understand the difference between the topic sentence and supporting details.
8. I am able to understand the main idea in the reading passage.
9. I am able to understand the reading strategies that I learned this semester.
10. I was able to write the outline of the reading considering both topic sentence and supporting details.
11. I am able to understand the main idea of the reading by writing an outline of the reading.
12. I am able to understand the content of the reading by writing the outline of the reading.
13. I am able to understand the structure of the reading better than the conventional English learning by writing an outline of the reading.