

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the methodology of the study. It describes the research design, restatement of research problems, participants, instruments, and data collection method and analysis.

3.1 Research Design

This study used a survey which belongs to the descriptive research as findings are based on responses given by the respondents (Goodwin&Laura, 1996). This research design is consistent with the research design used by Ozek&Civelek's (2006) previous study. The descriptive quantitative procedure was used to identify the students' cognitive reading strategies as proposed by Ozek&Civalek (2006) as the main theory.

3.2 Restatement of Research Problems

This study attempts to answer problems due to cognitive reading strategies used by university students formulated in the following research questions. First, the study mainly explores cognitive reading strategies frequently used by the university students to enhance their reading comprehension. Second, it also aims to find out which cognitive reading strategies considered the most helpful to be

developed by the university students especially in answering questions in reading comprehension test successfully.

3.3 Participants

This study was conducted at STKIP Garut, one of Universities in Garut. The participants of this study were 76 first year students of English Education Department who participated in the study upon the researcher's giving information on the nature of the study. The students of English Education Department were chosen as they were considered to have a potential to apply the strategies in their academic studies later as they are studying Reading III, Reading IV and Extensive Reading Program the next years. The participants involved in this study had taken the subjects Reading I and Reading II offered in the department, which mostly deal with *skimming*, *scanning*, and reading for comprehension the text by checking true-false statement.

There were 76 students chosen to fill in the questionnaire using simple random sampling. Therefore, everybody had the same chance to be the respondents because "subjects are selected from the population so that all members of the population have the same probability of being chosen" (McMillan&Schumacher, 2001). However, only 15 students were involved in think-aloud component of the study. They were selected using purposive sampling in which the researcher selected "particular elements from the population that would be representative or informative about the topic of interest" (McMillan&Schumacher, 2001). The

fifteen students represented three categories as high achiever, middle achiever, and low achiever derived from five classes. The categorization of high achiever, middle achiever and low achiever was derived from the students' GPA scores in Reading I and Reading II program as well as by consulting to the academic staff.

3.4 Instruments

This section discusses the instruments used to collect the data. The data were taken from questionnaire and TAPs (Thinking-aloud Protocols) administered to the respondents. Meanwhile, data taken from the adapted questionnaire of Yesim Ozek and Muharrem Civalek (2006) in their research entitled, "A Study on the Use of Cognitive Reading Strategies by ELT Students" were used as comparison and support to the result of the study.

3.5 Method of Data Collection and Analysis

This section discusses the research procedures including how data were collected and how the data collected were analyzed.

3.5.1 Questionnaire

The questionnaire was used as one of instruments to collect the data. It was distributed to the respondents in order to collect information about their reading strategies to enhance their reading comprehension in their daily reading activity in their academic setting. The questionnaire was administered to the respondents on

10-15th of June 2010. It was composed of 30 closed-ended items. The close-ended instrument was chosen to free respondents from the stress of having to express their opinions and created an unthreatening ambience for the respondents to give responses. “Closed form items are best for obtaining demographic information and data that can be categorized easily.” (McMillan&Schumacher, 2001).

The questionnaire used consists of 30 items which represent good reading strategies and poor reading strategies based on the theories referred to. (see O’Malley&Chamot, 1990; Oxford, 1990; Ozek&civalek, 2006). There were 22 items of good reading strategies in which 17 items belong to cognitive reading strategies. These 17 items can be grouped in under 10 categories: resourcing, repetition, grouping, deduction, imagery, getting the idea quickly, elaboration, inferencing, note-taking, and summarizing. The strategies represent belong to these categories are explained in chapter 2 section 2.4. Furthermore, complete list of items are presented in appendix 1.

The data were described in the form of simple quantitative description; therefore, the *Likert Scale* was used with the criteria exemplified in Table 3.1 below. Before the questionnaire was administered to the respondents, it was piloted involving 10 students who were at the same grade with those who became the respondents.

Table 3.1

Students’ Reading Strategies Score for Questionnaire

CATEGORY	SCORE
Never	1
Rarely	2
Sometimes	3

Usually	4
Always	5

The students' responses towards the 30 strategies were scored and summed. The students' total scores were regarded as their scores in reading strategies. Furthermore, the scores from students' reading strategies were calculated to find the intensity of use of every indicator in the questionnaire. Regarding to the most frequently used strategy responses, the scores of Usually and Always were combined to be the scores of U+A. The combinations were made to examine the frequency of using strategies in which the responses U+A indicated that the students used the strategy frequently. Such combination is beneficial to measure the students' positive responses towards the learning strategies. The scores, at the end, were presented in the form of percentage.

3.5.2 Thinking-Aloud Protocol (TAP)

The second instrument used in this research was Thinking-Aloud Protocol (TAP). This instrument was used to find out cognitive reading strategies considered the most helpful to be developed by the university students especially in answering questions in reading comprehension test successfully. In the think-aloud session, the participant was asked to think aloud in front of tape recorder as they read the text and did the test. The audio-tape recorder used in this study is a Microcassette - Corder SONY M-475. There were three texts given adopted from Longman Preparation Course for the TOEFL Test (Phillips, 1996). The test of TOEFL was

chosen under consideration that the validity of reliability of the test has been testified.

The texts were chosen after the level of difficulty in each text was analyzed according to Fry system. Fry readability test for level of the text states that if the length of words and sentences is about fewer than 5.5 and above 160, the text belongs to university text book; meanwhile, if the length of words and sentences is about fewer than 7.1 and under 160, the text belongs to secondary text book; however, if the length of words and sentences is above 7.1 but under 140, the text belongs to elementary text book.

As the results of Fry readability test for the three texts chosen in the present study, text 1 has 5.4 sentences per 100 words and 162 syllables per 100 words; text 2 has 4.1 sentences per 100 words and 186 syllables per 100 words; and text 3 has 4.12 sentences per 100 words and 183 syllables per 100 words. This means that the three texts used for TAPs procedure in the present study are valid and reliable to be the instruments.

The level of the three texts was divided into the easy, middle and difficult texts. Each text consists of 10 multiple-choice items including the questions about the topic of the passage, main idea, guessing the meaning of a word, implicit statement, the tone of the passage, the purpose of the text, inferring from the text and some items related to comprehend the text.

The questions asking about the topic or main idea of the passage are available at question number 1, 11, 12, and 21. Then, questions for reading comprehension are

available at number 3, 4, 7, 13, 17 and 26. Meanwhile, being greater part among the 30 items, the questions related to guess the meaning of the unknown words are available at question number 2, 5, 8, 9, 14, 15, 18, 20, 22, 24, 25, and 27. Regarding to questions require inferring from the text and to understand what implies in the text, they can be found in questions number 6, 16, 19, 23, 28 and 30. Finally, the questions about the tone of the passage and the author's purpose respectively can be found in question number 10 and 29.

The Think-Aloud Protocol process took duration of 33 minutes for each respondent. They were given eleven minutes to finish every text under consideration the calculation of time in the real TOEFL test for every reading text is seven minutes and four minutes additional time upon the conversation with the researcher. The researcher interrupted every time the respondent answered the items with the purpose to make it clear those were not recorded by the audio-tape recorder as well as to make sure the strategy used by the respondent as reference in data analysis later.

Furthermore, think-aloud protocols were analyzed qualitatively. First of all the reading strategies used by the participants were identified. Then, the protocols were transcribed and coded to analyze the cognitive reading strategies used and their contribution to help students grasp the understanding of the texts.