

Chapter Three

Methodology

The present study intends to examine the effect of two storybook reading techniques on children's vocabulary learning in an EFL elementary school. The technique of labeling is applied to the control group and the technique of a combination of questioning and labeling is practiced in the experimental group. A pretest-posttest comparison group research design serves as the framework of this study. The following section provides details of the participants' background, group assigning method, materials used for the study, and instruments required to elicit data in answering the research questions.

Participants

The research was conducted in a primary school located in Taipei County. The primary school represents a middle-sized school in the suburbs of Taipei County. It is neither too large, nor too small; there are 36 classes and about 1100 students. Another reason for choosing the primary school is that diversities are shown in students' social-economical status, intellectual quality, and after-school care, because the school offers different programs (regular program, special program on gifted children and mentally challenged children), and because newly established building in the community brings residents from other areas. Fifty-four participants were drawn from two 5th-grade classes to participate in the research, and Taipei County Student English Proficiency Test—6th Grade (TCSEPT-6G) served as English proficiency test for group assigning. TCSEPT-6G was slightly above the participants' current English proficiency at the time when the experiment was conducted, but for the purpose of

group assigning, it should serve the goal. After the test was conducted, mean scores of TCSEPT-6G were run through Independent-samples *t*-test to check if the two groups are homogenous in nature. The result showed there are no significant differences between English proficiency of the two groups ($t = -.634, p > .05$). Then the two classes were randomly assigned into control group (CG) and experimental group (EG). Table 3.1 shows the number and gender of the participants in each group.

Table 3.1

The Number and Gender of Participants

Group	N	Male	Female
Control Group	27	14	13
Experimental Group	27	15	12

Instruments

Several instruments were utilized in the study. Storybooks were used in shared storybook reading sessions. Taipei County Student English Proficiency Test – Grade 6 served the purpose of group assigning before the experiment took place. As for student’s vocabulary gain, Picture Vocabulary Test was conducted for measurement of students’ vocabulary knowledge. Details of each instrument are described as following.

Storybooks

Three storybooks were used in the study. The book titles are *Joselina Piggy Cleans Her Room*, *Dancing Class*, and *Henry’s Wrong Turn*.

They were selected for several reasons. For one thing, they belong to a series of reader published by Sterling Publishing Co., Inc. All books are 26 pages in length,

level 3, and contain vocabulary up to 200 words. Secondly, the books are illustrated with vivid and colorful pictures that appeal to children. Themes of the books are also close to children's everyday life, so children would find it easy to relate to story plots. Thirdly, each novel word picked from the books only occurs once in the text, and is accompanied by lively illustrations. The illustration is an important element in children's book; it provides clues to the referent as well as maintaining children's interest. When illustrations are supportive and not redundant to the text, they can help children in interpreting, organizing, and retrieving the information (Just & Carpenter, 1987). Therefore, when novel words appear in both the text and the illustrations, children are provided with opportunity to acquire them (Hargrave & Senechal, 2000). Thus, it would be adequate to utilize illustrations for vocabulary learning during shared storybook reading. Eight vocabulary were selected from each book; a total of 24 words were chosen from three storybooks.

Taipei County Student English Proficiency Test —Grade 6 (TCSEPT-G6)

TCSEPT-6G is drawn from a testing database established in the school year of 2002, through the participation of Teaching Effecting Committees, and assessment specialists from related learning areas in Taipei County. It is based on 9-year curricula, and aims to locate student's English proficiency up to grade 6 in the purpose of providing testing result for schools to adjust their English program if necessary. TCSEPT-G6 served in the present study as an instrument to test on students' English proficiency in order to make sure all groups were homogeneous in nature.

Picture Vocabulary Test (PVT)

PVT was the instrument used for vocabulary assessment in the present study. The

procedure and format of the material used in PVT were similar to Peabody Picture Vocabulary Test-III (PPVT-III).

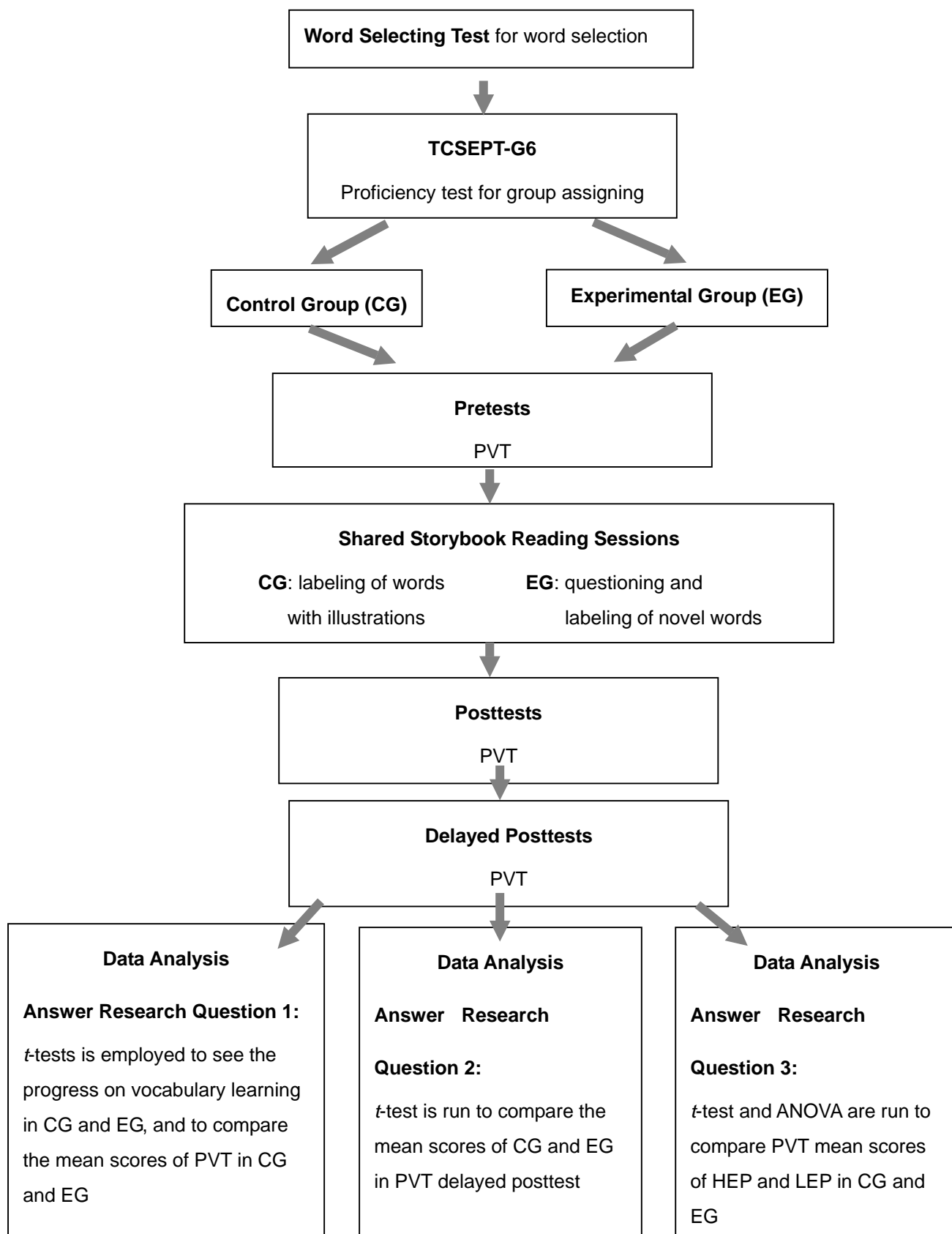
Established by Dunn & Dunn (1997), PPVT-III is a standardized instrument which has been widely used to evaluate the relative strength of children's single-word receptive vocabulary.

The test design and the procedure of PVT were adapted from PPTV-III, but the words tested were taken from the storybooks, and picture cards were color copied from the storybooks. The test consists of one plate for each target word. On each plate there are 4 illustrations, one presenting the target item and three presenting foils. Students were asked to listen to the word the teacher says and choose the word from the plate. In each question, the word was read three times so that students were given time to find the corresponding picture in the plate. There were a total of 24 questions in PVT. Each correct answer received one point. As mentioned earlier, 24 words were selected from three storybooks to be emphasized during shared storybook reading sessions. One practicing item was administered before the pretest so students were familiar with the testing procedure. Students were tested in groups before and after the shared storybook reading sessions. Then, the same test was conducted a month later to examine students' retention of their vocabulary knowledge.

Procedures

Procedures of the study included Word Selecting Test for word selection (refer to p.20), English proficiency test, PVT pretest, shared storybook reading sessions, PVT posttest, and PVT delayed posttest (see Figure 1). Details are further illustrated in the following sections.

Figure 1 Procedure of the Study



Word Selecting Test for word selection

The Word Selecting Test was conducted during October 2008 to a fifth-grade class in the same school where the experiment took place. The materials of the Word Selecting Test were words taken from the three storybooks, more than 8 words from each book. The form was similar to PPVT-III. It is to assert that in order to examine the effect of the two vocabulary teaching techniques on students' vocabulary learning, words that students might be familiar with are not picked from the storybooks. It means words that belong to the 300 vocabulary list according to Grade 1-9 Curriculum for elementary school students were not chosen from the storybooks to begin with. After the Word Selecting Test, each word was ranked and listed by how many correct answers were drawn from students, from the most to the least. Then, words that were known by most students were eliminated until a total of 24 words were selected, 8 words per storybook (see Table 3.2).

Table 3.2

Word Selected from Storybooks

Title of the Storybook	Words Selected
Josselina Piggy Cleans Her Room	stack, peer, dusty, fold, wipe, pile, sweep, broom
Henry's Wrong Turn	harbor, coast guard, bridge, aircraft carrier, statue, horn, ferry, dive
Dancing Class	grin, slippers, unzip, pirouette, barre, curtsy, twirl, stage

English Proficiency Test

To screen participant's English proficiency, TCSEPT-G6 was used as the instrument. It was administered in October 2008 prior to the shared storybook reading

sessions. Scores of TCSEPT-G6 were categorized. 33% of the participants of the highest scores were HEP, and 33% of the lowest scores were LEP. In both the CE and EG, there were 10 students defined as HEP, and 9 students as LEP. Details are displayed in Table 3.3.

Table 3.3

Statistic Description of HEP and LEP in CG and EG

TCSEPT-G6	N	Mean	SD
CG HEP	10	94.80	4.131
LEP	9	60.22	8.808
EG HEP	10	93.20	3.676
LEP	9	55.78	11.20

Pretest, Posttest and Delayed Posttest

Pretests and posttests were conducted to collect data on how shared storybook reading influenced students' vocabulary acquisition. Pretests were carried out before the shared storybook reading sessions were applied. Posttests were held right after the shared storybook reading sessions ended. Finally the delayed posttests were held a month later to record students' retention of their vocabulary gain. It would enable us to see if those vocabularies stayed in students' mental lexicon.

For the pretests, PVT examined students' word knowledge preceding shared storybook reading session. Additionally, posttests of PVT was conducted following the shared storybook reading sessions. Scores were compared with pretests to answer the research questions, and possible effect that shared storybook reading might have on participant's vocabulary learning was revealed. As for the delayed posttests, which was conducted a month after PVT posttest, students' retention of vocabulary

knowledge between CG and EG was compared to examine whether vocabulary teaching techniques had effect on students' vocabulary retention rate.

Shared Storybook Reading Sessions

The shared storybook reading sessions lasted 6 weeks. They were performed from late November to mid January 2008. Three storybooks were read during shared storybook reading sessions. It is necessary to clarify how the book reading of the present study was arranged. Different methods were conducted in previous studies relating to storybook reading and children's vocabulary growth. Some read only one storybook during the intervention (Whitehurst et al., 1988; Senechal & Cornell, 1993; Ewers & Brownson, 1999; Justice, 2002.); however, they were done with younger children or children with reading difficulty in a short period of time (1-2 weeks). Others indicated that two storybooks been read three times (Elley, 1989) or even ten storybooks been read two (Hargrave & Senechal, 2000) and four times (Justice et al., 2005) were effective for novel words learning for children of 8 and 6 years of age. In seeking an appropriate method for conducting shared storybook reading, the result found by Robbins & Ehri (1994) suggested that when vocabulary words were presented four times in storybook reading, greater vocabulary acquisition was shown as apposed to two-time exposure. Therefore, the researcher adopted Walsh and Blewitt's (2006) presentation of books; that is, all three storybooks were read four times, which allowed four exposures of each novel words. Also, book presentation is counterbalanced (i.e. book 1 & 2 are read in week 1; book 2 & 3 are read in week 2; book 3 & 1 are read in week 3, then the cycle continues). This arrangement was suitable for several reasons. First of all, three storybooks provide a good variety of topics, writing styles, and illustrations. It is needed for older children to maintain their

interests in book reading. Secondly, three storybooks are read in a cycle so that students are able to receive repeated exposures of texts, and reviews the three storybooks through a 6-week session. The reading session of the study lasted for 6 weeks. The three storybooks were read four times repeatedly.

For CG, labeling of novel words was applied during shared storybook reading session. After the teacher read the text in the storybook containing the target word, she proposed the labeling statement while pointing to the illustration depicting the target word. Examples of labeling question of the word *antelope* might be “This is an antelope.” or “That’s an antelope.” As for EG, questioning of novel words was applied after the teacher labeled the word and pointed to the illustration. The reason for applying both labeling and questioning techniques to EG is that labeling is a technique often used by parents as an attention-getting device when reading to children (Ninio, A. & Bruner, J.S. 1978); it is also widely practiced when teachers teach vocabulary and read stories to students (Shieh, 2005). Thus, it is unnatural to leave labeling out. Meanwhile, storybook illustration is often used by EFL English teachers to support text during reading, so the technique remains in EG. It is important to assert that the administration of the present study is not to violate students’ learning by taking away what has been done in the classroom, but to see whether adding the technique of questioning to labeling would prompt students’ vocabulary acquisition. As suggested in previous studies (Whitehurst et al., 1988; Senechal, 1997; Walsh & Blewitt, 2006; Lane & Wright, 2007), questions starting with *wh-* and *how* that require participants to answer them with the target words might facilitate vocabulary learning. So questions about the word antelope might be “What color is the antelope?” “How does the antelope feel?” Students answer the question with the target word in it while the teacher points to the illustration in the storybook. Again, questions in EG were

proposed by the teacher after sentences containing the target words in it were read.

Written scripts of questions to be asked during shared storybook reading sessions dedicated to each novel words were preplanned. It aimed to make sure that every word is focused and exposed in equal time. The researcher read the questions on the scripts when conducting the shared storybook reading sessions, both in CG and EG.

Data Analysis

To answer research question (1) How do the two techniques – labeling alone and a combination of questioning and labeling of novel words, influence children’s vocabulary acquisition, *t*-tests were employed using SPSS 12.0 to determine the progress of vocabulary gain within CG and EG, and the mean scores of PVT of CG and EG are put into comparison. Results show how the techniques of labeling and questioning help students in vocabulary acquisition.

To answer research question (2) How do the two techniques – labeling alone and a combination of questioning and labeling of novel words, affect children’s retention of vocabulary gain during the shared storybook reading, *t*-tests were run to compare the mean scores of PVT delayed posttest of CG and EG. It expects to take a closer look on whether students’ retention on their vocabulary knowledge of novel words is differed from different instruction received.

To answer question (3) How do the two techniques – labeling alone and a combination of questioning and labeling of novel words, affect children with high English proficiency (HEP) and low English proficiency (LEP) in EFL context, *t*-tests were run to compare the mean scores of PVT between HEP and LEP of CG and EG. ANOVA was also conducted to examine possible main effects for group interactions. Students’ performance on vocabulary gain is yield to find which group progresses

better after the shared storybook reading sessions.