

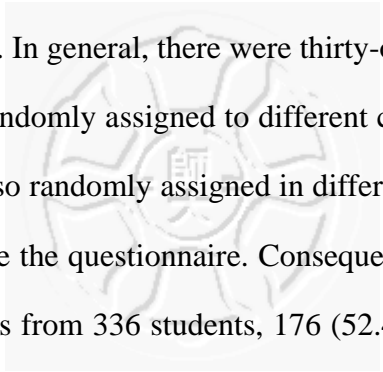
Chapter Three Methodology

The present study was mainly designed to explore Taiwanese EFL students' preferences for textbook activities in terms of their perceptual learning styles and motivational intensity and the relationship between teachers' and students' preferences for textbook activities. Variables that may be related to students' preferences for textbook activities, such as students' language achievement and gender were also investigated in the study. This chapter describes the method and procedure used in the present study. First, the researcher discussed the characteristics of the subjects participating in the study. Then, the instruments adopted in the study and the ways to implement the research were introduced. At last, the researcher explained the statistical methods employed for analyzing the collected data.

Participants

A total of 345 students and 11 teachers in a junior high school in Taipei were invited to take part in the study. This school is similar to most of other junior high schools in Taiwan in many aspects. First, English teaching and learning is greatly emphasized at the school. Second, English is a required course and three monthly exams are administered every semester, as in other junior high schools in Taiwan. Third, the senior high school entrance examination also executed an impact on English curriculum and instruction and the major goal of the school policy is to help students enter their ideal senior high schools.

The participants included 11 classes of second-year students and their teachers. The 11 English teachers participated in the present study included all the English teachers teaching the second grade. At the time of the study, there were 24 classes at the second grade. The researcher chose 11 classes of students to participate in the study because at the school there were totally 11 English teachers responsible for the



second-year English classes. In general, there were thirty-one students in a class. Male and female students were randomly assigned to different classes. Students of different English proficiency were also randomly assigned in different classes. 9 students in the 11 classes failed to complete the questionnaire. Consequently, the data were analyzed on the basis of the responses from 336 students, 176 (52.4%) males and 160 (47.6%) females included. The second-year student population is different from the third year students in that they started learning English in their fifth year in elementary school. Therefore, these students have learned English for at least 4 years. According to the background information collected from the questionnaires, 66.4% of the participants go to cram school after school, 33.6% do not go to cram school after school. As to the year of English learning, 35.1% of the participants have learned English for four years, 21.1% of the participants have learned English for five years, 24.1% of participants have learned English for six years, and 19.6 % of the participants have learned English over 6 years. Also, in 2002, commercial textbooks replaced the unified version issued by the National Institute for Compilation and Translation. So the students participated in this study are the first group that used the new commercial textbooks selected by their English teachers and school administrators.

Instruments

A student questionnaire was used to collect information on language learners' perceptual learning styles, their motivational intensity, their preferences for textbook activities, and background information. The questionnaire, which was implemented in Chinese, can be divided into four parts. The first part of the questionnaire concerns students' individual background information. The second part consists of 30 items concerning perceptual learning styles. The third part including 10 items concerns students' motivational intensity for language learning, and the final part is composed

of 34 items concerning students' preferences for textbook activities. A teacher questionnaire was adapted according to the final part of the student questionnaire and was distributed to teachers of the participants to see if there is any relationship between teachers' and students' preferences for any particular types of textbook activities.

PLSPQ

The instrument used to assess students' perceptual learning styles in the present study is Reid's (1987) Perceptual Learning Style Preference Questionnaire (PLSPQ). It is a self-report questionnaire and consists of 30 randomly ordered statements. The researcher chose to use the PLSPQ because it is one of the only three known normed survey instruments in the ESL/EFL field, the authors of which permit these instruments to be used in replication studies; for nonnative speakers of English, Reid's PLSPQ is the earliest and most widely used learning style instrument. Besides, of all the learning style elicitation instruments, only Reid's PLSPQ has been normed on nonnative speakers of English, with reliability and validity established on intermediate or advanced ESL classes (Reid, 1987). The reliability of the PLSPQ was .81 in Cheng's (1997) study and the internal reliability for each subscale was also calculated in Tso's (2002) study: kinesthetic learning style: (.85), individual learning style (.85), group learning style (.83), auditory learning style (.73), and visual learning style (.62). Moreover, the PLSPQ is neither long nor time-consuming to complete and had pre-established cutoff scores for major, minor, and negligible learning style categories, which will be easier for teachers to implement in their classes, and it is based on the concept of perceptual learning style preferences which are divided into six categories described as follows:

1. Visual: Visual learners learn better through the eyes—seeing. They need more visual aids, like handouts, notes, and pictures to remember and

understand information and instruction in a more effective way.

2. Auditory: Auditory learners learn more effectively through the ears—hearing. They benefit from activities involving auditory stimuli like hearing audiotapes, lectures, class discussion, or reading aloud.
3. Kinesthetic: Kinesthetic learners learn better by complete, concrete experience, by being actively involved physically in classroom activities. They prefer to take part in whole-body activities and experiences, such as field trips, role-playing. A combination of stimuli, like an audiotape combined with an activity, will help them understand new material.
4. Tactile: Tactile learners learn best when they have the opportunities to do hands-on activities. For example, handling and building models, touching and working with materials, and writing notes or instructions can help them remember information.
5. Group: Group learners learn more easily when studying with peers or in pairs. They will be more successful completing work well when they work with others. The stimulation they receive from the group work helps them learn and understand new information.
6. Individual: Individual learners learn more effectively when studying alone. They remember information and understand material best when they work by themselves.

Students were asked to respond to each question on a five-point Likert scale, ranging from strongly agree to strongly disagree. The answers on the scale were given 1 point for “strongly disagree”, 2 for “disagree”, 3 for “undecided”, 4 for “agree”, and 5 for “strong agree”. The 30 questions in PLSPQ are distributed in six parts: visual learning style consisting of Items 6, 10, 12, 24, 29, auditory learning style including Items 1, 7, 9, 17, 20, kinesthetic learning style composed of Items 2, 8, 15, 19, 26,

tactile learning style including Items 11, 14, 16, 22, 25, group learning style consisting of Items 3, 4, 5, 21, 23, and individual learning style including Items 13, 18, 27, 28, 30. After the subjects completed this survey, the researcher divided subjects into seven different perceptual learning styles: visual, auditory, kinesthetic, tactile, group learning, individual learning, and multiple styles. In the present study, students were asked to complete the PLSPQ in Chinese, which was translated by Tso (2002). Translation of the questionnaire into students' native languages can prevent possible misunderstandings caused by the learners' limited English (Tso, 2002; Wintergest, 2003). Three English teachers and two Chinese teachers were invited to examine the Chinese version of the questionnaire before it was administered in order to make sure the statements in the questionnaire fit junior high school students' Chinese reading comprehension ability.

Motivational Intensity Questionnaire

The second part of the questionnaire, the Motivational Intensity Questionnaire (MIQ), ranging from Item 31 to Item 40, consists of 10 items. Students were asked to indicate their agreement or disagreement on a five-point Likert-type scale -- ranging from "strongly disagree" (one point) to "strongly agree" (five points). The Chinese version used in the study was translated by Peng (2002), which was originally designed by Gardner (1985). Three English teachers and two Chinese teachers were also invited to examine the Chinese version of the questionnaire before it was administered in order to make sure the statements in the questionnaire fit junior high school students' Chinese reading comprehension ability. Some researchers have used the MIQ, and the coefficients of the internal consistency was .75 in Hsiao's (1997) study, .78 in Liao's (2000) study, and .78 in Peng's (2002) study. Item 32, 33, 34 are negatively worded and were reverse coded for the analysis.

Textbook Activity Preference Questionnaire for Students

Items 41 to 74 are the third part of the questionnaire, which describes activities in the textbook (Kang Hsuan Version, tentative edition), Book One to Book Four, and are written in Chinese. Before designing items in the third part of the questionnaire, the researcher asked all the second-grade English teachers to see if they gave students any supplementary material or activities to do. The results indicated that they seldom designed their own teaching/learning activities, and although some of the teachers gave students extra assignments, most of them were mainly grammar practices or sentence pattern exercises. This means almost all of the teaching/learning activities taking place in the classroom are from the textbook. In order to explore students' preferences for textbook activities, the researcher examined all the activities from Book One to Book Four, and found that most of the activities appeared repeatedly in the current textbook, such as dialogue practice, reading comprehension exercises, intonation practice, sentence pattern practice, and so on.

The selection of the questionnaire items, thus, is based on the 34 types of activities covered in Book One to Book Four of the current textbook. After working out the textbook activity preference questionnaire, three English teachers, two Chinese teachers, and six second-year students in the researcher's school were invited to examine the questionnaire in order to see if there is any inappropriate description or ambiguous item in the questionnaire, and the questionnaire was revised accordingly. Because of the repetitive characteristics of the textbook activities, the second-year students in the study were supposed to be familiar with those activities. Even so, referential pages were provided following some questionnaire items just in case students were not sure what activity the statement refers to. Besides the 34 questionnaire items, the researcher also asked the student participants to answer one open-ended question about why they liked or disliked an activity.

According to Reid (1987), students learn through six different learning styles, which include perceptual learning mode—visual, auditory, kinesthetic, and tactile learning style, and social learning mode—group and individual learning style. Similarly, the activities involved in the real classroom usually require students to take part in the activities by using their different perceptual channels and by interacting with others. Thus, the questionnaire items in the Textbook Activity Preference Questionnaire (TAPQ) are divided into two parts that include seven types of activities in total, so as to have a clear picture of the relationship between style and the type of activity.

The first part includes five types of activities that require students to learn through their perceptual channels:

1. Aural activities—students participate through the ears, such as listening to audiotapes, lectures, class discussion, or reading aloud.
2. Visual activities—students learn through the eyes, such as reading handouts, reading a text, or learning by pictures, or diagrams.
3. Kinesthetic activities—students have to be physically involved, such as role-playing or field trips.
4. Tactile activities—students do hands-on activities, such as handling and building models, touching and working with materials, or writing notes.
5. The composite activities—activities that involve more than one type of activity, such as the combination of visual and tactile activities, or the combination of tactile, visual, or auditory activities.

The second part includes two types of activities that require students to learn in different social learning modes:

6. Group activities—let students work or study with peers or in pairs.
7. Individual activities—let students work and learn by themselves.

Moreover, according to Hunt (1961) and Crozier (1997), the difficulty level of activities may have an effect on students' motivation or personal involvement in the learning/teaching activities. Scarcella and Oxford (1992) also confirmed that motivation determines the extent of learners' active, personal involvement in their language learning process. Therefore, the TAP questionnaire items are also classified according to their difficulty level in order to see if there is any relationship among the difficulty level of activities, students' motivational intensity, and their preference for textbook activities. Based on Schmidt (2000), activities that require students to possess deeper understanding of English structures, to be capable of applying them at will, or to be able to express their thought or feelings in English fluently usually appeared to be more difficult for students to complete. The researcher invited three English teachers to examine items on the TAPQ and to make a mark on the activities that they thought were difficult based on Schmidt's (2000) definition. Afterwards, the researcher interviewed the three teachers to see if they labeled the difficult activities for any other reason different from Schmidt's. To ensure satisfactory classification of textbook activities, the researcher also consulted the opinion of one TESL expert who has ripe experience in TESL learning and textbook designing. The TAP questionnaire items classified according to perceptual learning mode, social learning mode, and difficulty level are presented in Chart 1.

Chart 1

The Classification of TAPQ Items

Item	Perceptual					Social		D
	V	A	K	T	Composite	G	I	
1. Reading aloud together after CD		V				V		
2. True or False Listening Practice		V					V	
3. Role-play (the dialogue)			V			V		
4. Predicting with pre-reading Qs or pictures					V+A		V	
5. Reading aloud alone		V					V	
6. Cloze practice after reading				V			V	
7. Sentence making with pictures					V+T		V	
8. Sentence making with pictures & reading					V+A		V	
9. Repeating words after CD or the teacher		V				V		
10. Classifying words based on phonics	V						V	
11. Tongue twister		V					V	*
12. Reading aloud together		V				V		
13. Listening to English songs together after		V				V		
14. Reading word conjugation together after		V				V		
15. Practicing intonation together after CD		V				V		
16. Story telling based on pictures					V+A		V	*
17. Transferring the reading into charts					V+T		V	
18. Writing a passage by a picture alone					V+T		V	*
19. Describing a picture orally					V+A		V	
20. Oral presentation of one's favorites		V					V	*
21. Filling in after listening with pictures					V+A+T		V	
22. Writing a Christmas card				V			V	
23. Games in groups			V			V		
24. Responding to Qs with provided sentences				V			V	
25. Surveying after class and fill in tables					V+T		V	
26. Story telling in groups based on pictures					V+A	V		*
27. Paragraph writing in groups about pictures					V+T	V		*
28. Singing English songs together		V				V		
29. Discussing pre-reading questions		V					V	
30. Writing down answers to Qs after reading					V+T		V	
31. Playing crossword games					V+T		V	
32. Making a sentence following examples					V+T		V	
33. Group writing following examples					V+T	V		*
34. Graphic illustration of grammar	V						V	
Total	2	12	2	3	9 (V+T) 5 (V+A) 1 (V+A+T)	12	22	7

Notes. 1. V= visual, A=auditory, K= kinesthetic, T=tactile, G=group, I= individual,

D=difficult

2. Full TAP item description is in Appendix C.

Textbook Activity Preference Questionnaire for Teachers

The Textbook Activity Preference Questionnaire (TAPQ) designed for teachers also includes 34 items describing activities in Textbook A, Book One to Book Four and are written in Chinese. The 34 questionnaire items are almost the same as the TAPQ items for students, except for the beginning address. For instance, almost all of the TAPQ items for students begin with ‘I like to ...’ while the questionnaire items for teachers mostly begin with ‘I like my students to...’ In addition to the 34 questionnaire items, the researcher also asks the teacher participants to answer one open-ended question that asks teachers to write down the activities that they had ever skipped for the pressure of the monthly exam and the reason why they chose to skip the activity.

Procedure

Since a high reliability and validity of the PLSPQ and MIQ has been indicated in previous studies (Tso, 2002; Peng, 2002), a pilot study appeared unnecessary. However, the researcher still asked three English teachers and two Chinese teachers to examine the questionnaire and modify the questionnaire used in the formal study. Also, in May 2004, the original questionnaire was distributed to six second-year students in the researcher’s school before the formal study. The researcher administered a 74-item questionnaire including scales of perceptual learning styles, motivational intensity, and textbook activity preference in the third week of May. The subjects received uniform instructions on how to fill out the questionnaire. It took about fifteen minutes for the respondents to finish the questionnaire. Student feedbacks on the questionnaire were also elicited to improve on the ambiguous items and were used as a reference to modify the questionnaire used in the formal study.

Formal study

The administration of the formal study took place during the last week of May 2004. The researcher contacted the instructors of the students individually and briefly explained the purpose of the study. They were also given the directions for the implementation of the study. First, they explained the purpose and procedure of administration to the students. Then, they told students the teacher would not check students' responses to the questionnaire and the responses would not affect their course grades. Students were also encouraged to complete the questionnaire forthrightly without discussing with their classmates. It took about twenty minutes for the students to complete the entire questionnaire and they were asked to return the questionnaire to the teacher right after completing it. During the first week of June, teachers of the 11 classes were also asked to complete the textbook preference questionnaire in their free time and returned the questionnaire to the researcher after they finished it.

Data Analysis

The results of the questionnaire were analyzed through descriptive and inferential statistics by the SPSS statistic package for Windows 8.0. First, descriptive analyses of all questionnaire items in terms of frequency, means, and standard deviations were implemented. The comparisons of raw scores of the subjects' background information, overall perceptual learning style preferences, motivational intensity, and their preferences for textbook activities were illustrated step by step. Next, post-hoc test was computed to examine if there is any significant differences among each perceptual learning style.

Moreover, the effects of learning style, motivational intensity, students' English achievement, and gender on students' preferences for textbook activities were

examined by performing a series of ANOVA, and t-tests. An acceptable significance level was set at .05. Since multiple comparisons were also computed, Bonferroni adjustment was made to adjust the potential inflated Type I error rate. In addition to descriptive and inferential statistics, the information gathered from the open questions in the students' and teachers' Textbook Activity Preference Questionnaire is adopted as the reference for the result discussion.