CHAPTER 3

METHODOLOGY

In this chapter, the research design of the present study is presented. To examine the possibility and the necessity of teaching language functions, empirical tests were developed. First, based on the linguistic variables of a questionnaire was designed to obtain the American norm. Next, a pilot test is presented to collect data from the Chinese subjects to check if the research questions are workable. Then, in this study, a four-unit program of teaching language function in EFL classroom was designed and conducted. In order to measure the efficiency and effectiveness of this program, pre-test and post-test were given. Quantitative analysis, together with statistic tests, was adopted to offer bases for interpretation and discussion. At the very end of the teaching program, all the students and the five related teachers were invited to evaluate this teaching program.

Subjects

The Subjects for the American Norm

To obtain the American norm, 20 of the 48 valid questionnaires were selected to, which, in turn, served as the base of the American norms of indirectness, politeness, and the appropriateness of the linguistic correspondences to these two functional factors.

The questionnaires were released and collected in Taiwan by this researcher and his friends. In order to enhance the reliability of the data collected, the instructions of the questionnaire were consistently given by the researchers. Originally, 80 native speakers of American English were invited to offer their judgments. Among the 80 questionnaires, 54 were returned, with 48 of them being valid, and six of them (five of them leaving too many question unanswered, and one done by a non-native speaker of American English) were excluded from this study. Moreover, since these valid questionnaires were not evenly distributed to a social stratification by age and gender,

to remove inaccuracy due to quantitative asymmetry, it was determined that each cell contains only two subjects. These subjects were equally distributed to two genders and five age groups. The social distribution of them is given in Table 3.

Table 3 *Distribution of sample population*

Age Gender	20'~29'	30'~39'	40'~49'	50'~59'	60'~69'
Male	2 (24', 26')	2 (34', 38')	2 (44', 47')	2 (55', 57')	2 (63', 68')
Female	2 (23', 26')	2(32', 37')	2 (44', 47')	2 (54', 58')	2 (63', 68')

Note. The numbers in the parentheses are the subjects' age.

There are two reasons for choosing subjects of these ages as listed in Table 3. First, in order to cover each age group from 20 to 69, two subjects from each age group were selected. Secondly, two ages in the middle of each age group were chosen to keep similar interval (approximately ten years) between two neighboring age groups.

The Subjects of the Pilot Test

In the pilot test, originally, 38 first-grade senior high school students of a public Senior High School in Taipei County were invited to join the pilot test. However, two of them failed to finish the pre-test, therefore, were excluded from this study. The other 36 subjects completed the whole procedure of this teaching program. They took the pre-test, attended the three-unit program (with each unit lasting for 50 minutes), and then took the post-test. The teaching materials were designed according to the American norm obtained.

The Subjects of This Study

The subjects in this study were first grade students of two senior high schools in Taipei Area, with one being a public school (hereafter, School One), and the other being a private school (hereafter, School Two). According to the two schools' thresholds of The Basic Competence Test for Junior High School Students in 2008, students of School One are achievers higher than those of School Two. Among 138 student subjects, 64 students were from two classes of School One (27 and 37, respectively); 74 students were from two classes of School Two (35 and 39, respectively). Also, in each of the two schools, one class was offered function-based

method, and the other structure-based method. In this study, all of the subjects were required to take the pre-test and the post-test.

The Tools

Two kinds of questionnaires were used in this study. The first kind of questionnaire was used to obtain the American norm, and test students' sociopragmatic competence before and after receiving the teaching program. The other kind of questionnaire was used to collect the students' and their English teachers' evaluations of this teaching program.

The Questionnaires for the Tests

The questionnaires for the American norm. A questionnaire was used to collect data from native speakers of American English (see Appendix A, p. 118). This questionnaire aims at identifying the correspondence among the eight target linguistic forms, indirectness and politeness. These eight sentences were randomly rearranged to avoid the bias. The informants were asked to rate each item on a seven-point semantic differential scale, on which the larger the number, the stronger the force, and the smaller the number, the weaker the force.

The questionnaires for the pilot test. A pilot test which are identical in content and format to the questionnaire for obtaining American norm, were delivered. In the test, there are two parts to measure the appropriateness of participants' use of invitation forms (see Appendix B, p. 119). The first part was designed to collect the subjects' ratings of the strengths of indirectness, and the second part was used to collect the subjects' ratings of the strengths of politeness. In these two parts, the students were told to circle their answers on a seven-point semantic differential scale for their evaluations. The higher the number is, the stronger the force is. The results of these parts were compared with those given by the American subjects in order to examine cross-cultural differences and to measure the students' improvement.

The questionnaires for the pre-test and the post-test. A pre-test and a post-test were conducted by using the questionnaire exactly the same with that used to

obtaining the American norms and that used in the pilot test (see Appendix B, p. 119).

The Questionnaires for General Evaluations of the Whole Program

The questionnaires for students' evaluations. The questionnaires were used to collect the Chinese students' and their English teachers' evaluations of the whole program in this study. Two questionnaires were designed on the basis of two different teaching methods (see Appendix K and Appendix L, p. 161 and p. 164). In order to answer the sixth research question concerning the feasibility, necessity, and effectiveness of the program of teaching language functions, the two questionnaires for students include ten main dimensions of evaluation. First, (1) difficulty, and (2) complexity of the contents aim at exploring the feasibility of this teaching program of language function; next, (3) helpfulness, and (4) need of the program aims at investigating the necessity of this teaching program; then, (5) teaching speed, (6) clarity of explanation, (7) illustration, and (8) interaction between the teacher and students aims at evaluating the researcher' performance and teaching effectiveness; and lastly, (9) fun, and (10)liking aims at evaluating whether the students are interested in this teaching program. There were two parts in each item. In the first part, students were required to circle the number on a semantic differential seven-point scale for evaluation. In the second part, students put checks or crosses to evaluate the teaching for each day. The teaching contents for each day differ based on the teaching sequences.

The questionnaires for teachers' evaluations. As to the English teachers' evaluation, the teachers rated not only the ten dimensions as those in students' questionnaire but also the two different teaching sequences on a seven-point differential scale (see Appendix M, p. 167). The purpose for the teachers to evaluate the teaching methods is to obtain a better understanding of the teacher's preference in teaching language functions.

Teaching Materials and Instruments

The experimental classes were conducted in a regular classroom with a projector, so that PowerPoint could be used. In the class, the teacher used PowerPoint to show

the teaching contents and gave handouts and worksheets to facilitate the comprehension check for each unit. The PowerPoint was used to show the main teaching content, and led the procedures of the instruction; the worksheets included the worksheets for in-class practice and assignments which were collected in the next class.

Linguistic Variables

In this study, due to the shortage of time and administrational support from the high schools, it is impossible to examine all of the thirteen strategies as given in Table 2 in Chapter Two (on page 19). More importantly, since this study is focused on investigating the four strategies rather than those minute skills of each of the strategies, all of the four strategies are tested to build up a frame of hierarchical ordering of the strategies. Next, only two of the skills of each strategy are chosen in this study due to time limitation. Therefore, sentences with performative verb (Direct-performative strategy, hereafter) and imperative sentences (Direct-imperative strategy, hereafter) are chosen as Direct Invitation (Direct strategy, hereafter). Moreover, Modality sentences with "desire" and "Wish" (Modality-desire strategy and Modality-wish strategy, hereafter) in Conventionally Indirect Invitation (Speaker-based conditions), and Modality sentences with "willingness" and "ability" (Modality-willingness strategy and Modality-ability strategy, hereafter) in Conventionally Indirect Invitation (Hearer-based conditions) are merged as Indirect Invitation by Modality (hereafter, Modality strategy). In addition, hinting sentences in affirmative structure (Hinting-affirmative strategy, hereafter) and hinting sentences in interrogative structure (Hinting-interrogative strategy, hereafter) are included in Indirect Invitation by Hint (hereafter, Hinting strategy). Table 4, adapted from Table 2 (on page 19), presents the sub-types of each strategy and their correspondent examples.

Table 4 *English invitation strategies used in this Study*

	Strategy	Example
I	**Direct Invitation**	
	1. Imperative	Come to my party tonight.
	2. Performative	I invite you to come to my party tonight.
II	**Indirect Invitation by Modality**	
	3. Desire/Needs	I want you to come to my party tonight.
	4. Wishes	I would like you to come to my party tonight.
	5. Willingness	Would you come to my party tonight?
	6. Ability	Could you come to my party tonight?
III	**Indirect Invitation by Hint**	
	7. Hint (affirmative)	I am having a party tonight.
	8. Hint (interrogative)	Do you know I am having a party tonight?

Due to the subjects' English proficiency level and the limitation of teaching time, sentences with subordinate clauses and those with presequences are excluded.

In this study, the main reason to consider imperatives as a "Direct" strategy is that the sentence structure of imperative is more conventionalized as a reference to invitation than those with modality or by hints. Also, merging imperative sentence and sentence with a performative verb into the category of Direct strategy would simplify the categorization of linguistic variables to facilitate teachers' instruction and students' comprehension.

Functional Variables

In this study, indirectness and politeness are two functional variables to be examined for their influences on appropriate linguistic choices.

The Test for the American Norm

The test served to identify the correspondence of the linguistic devices to strengths of indirectness and politeness. The purpose of this test was to evaluate the effectiveness and feasibility of teaching language functions in EFL classrooms in regular senior high schools. The test results were statistically analyzed to establish the American norm of indirectness and politeness, based on which the lesson plan was designed before the pilot test was conducted. Paired-sample t-test was applied in data analysis.

It was presumed that linguistic structures which are more indirect are more polite.

However, this presumption is not fully verified in this test. Table 5 presents the means of indirectness and politeness of the eight target sentences. In Table 5, the eight sentences are arrayed in the order from low indirectness to high indirectness.

Table 5 *The means of indirectness and politeness of the eight sentences*

NO. of sentence	Sentence patterns	Means of **Indirectness**	Means of **Politeness**
S1	Come to my party tonight.	1.25	3.80
S3	I want you to come to my party tonight.	1.30	4.60
S2	I invite you to come to my party tonight.	1.35	5.25
S4	I would like you to come to my party tonight.	1.60	5.60
S6	Could you come to my party tonight?	1.70	5.55
S5	Would you come to my party tonight?	2.55	5.35
S7	I am having a party tonight.	4.50	4.65
S8	Do you know I am having a party tonight?	4.70	4.15

The results presented in Table 5 reveal that the order of strength of indirectness does not conform to that offered by Bulm-Kulka et al. (1989). According to Bulm-Kulka et al., the order of these eight sentences by their strength of indirectness should be S1>S2>S3>S4>S5>S6>S7>S8, and it is known that the strength of politeness is negatively correlated with the strength of indirectness. That is, the more indirect the sentence is, the more polite it is (Celce-Murcia and Larsen-Freeman, 1999; Leech, 1983). However, the results of this test show the order of S1>S3>S2>S4>S6>S5>S7>S8. Presumably, based on Bulm-Kulka et al.'s ordering of the eight linguistic forms, sentences of Direct-performative strategy are less indirect than those of Modality strategy, and sentences of Modality-ability strategy should be more indirect than those of Modality-willingness strategy. Moreover, the ordering of the means of politeness does not resemble that of indirectness. To be more specific, the two factors are statistically tested to be different in the ordering, and the results indicate that the ordering of the means of politeness does not parallel to that of indirectness. The same concept that hints are considered to be less polite than Conventionally Indirect Strategy is found in Walters (1979) and Blum-Kulka's (1987) studies. Moreover, according to Chan (2008), indirectness and politeness, instead of being in positive or negative correlation, may intersect with each other, and her proposal is confirmed in this study. Figure 1, as adapted from Chan (2008), displays the distribution of the eight sentences with the concept of interaction between politeness and indirectness. In this figure, the eight target invitation forms fall into

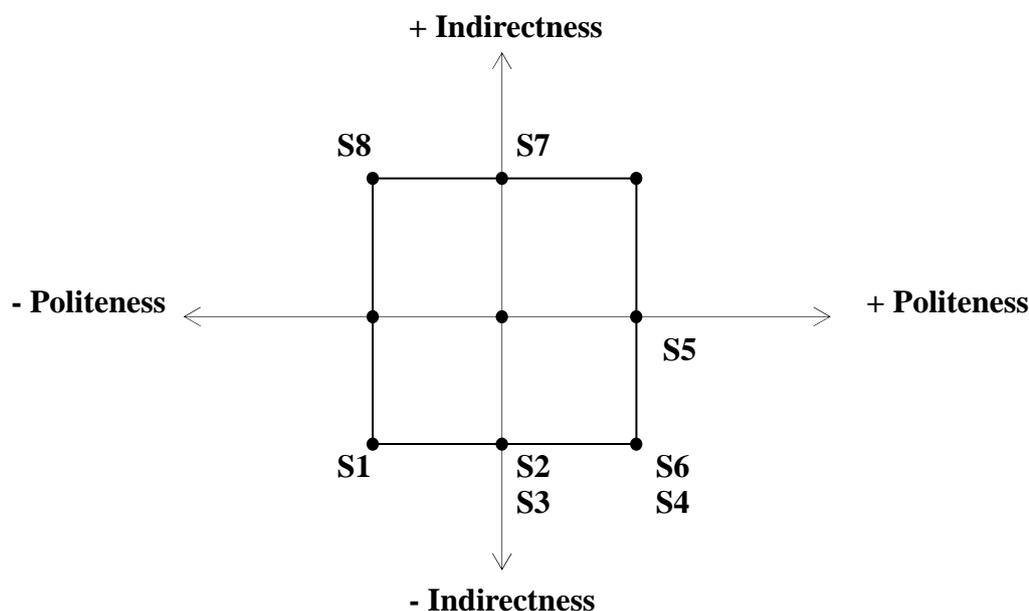different quadrants constructed by the two axes of politeness and indirectness.

Figure 1 Distribution of eight sentences by indirectness and politeness

Several findings are derived from Figure 1. First, along the axis of politeness, S1 (Direct-imperative strategy) and S8 (Hinting-interrogative strategy) fall into the zone of low politeness, in which S1, in low indirectness zone, as expected, is less polite; however, S8, at high indirectness, is considered less polite by the American subjects. Next, in medium politeness, S7 (Hinting-affirmative strategy) as expected, correspond to medium politeness. In addition, S5 (Modality-willingness strategy), falling at medium indirectness, is considered to be more polite. What is surprising is that S2 (Direct-performative strategy) and S3 (Modality-desire strategy) of low indirectness are considered to be moderately polite. As to S6 (Modality-ability strategy) and S4 (Modality-wish strategy), although they are low in indirectness, they are considered the most polite forms. In conclusion, indirectness does not correlate with politeness in a simple, systematic way; instead, they interact with each other in a more complicated way.

The above findings were taken as manifestations of the American norm, which, in turn, was used to design the pre-test to investigate the Chinese students' competence of language use. Then, based on the results of the pre-test, the lesson plans and the teaching materials were designed and prepared for the researcher's instruction of language functions to the Chinese subjects.

The Pilot Test

On the basis of the results of the pre-test and the post-test, the Chinese students' ratings of the strength of indirectness by the eight sentences for invitation were improved in terms of ordering, and grouping, after receiving sociopragmatic instructions. It verified that teaching language functions is necessary, and language functions are teachable, and learnable.

However, the results did not show the effectiveness of teaching politeness in terms of ordering and grouping of the eight testing sentences. Moreover, the Chinese students tended to hypercorrect the strength of indirectness and politeness by overemphasizing the cross-category differences, and widening the range of strengths of indirectness and politeness. These phenomena implied some reasons for ineffectiveness, which should be avoided in the official implementation of the teaching program.

First, politeness is a concept more complex than indirectness, therefore, the teacher should spend more time in presenting and explaining this functional concept and in giving more examples for illustration. Second, it was hard for the students to learn the two concepts in such a short period of time, so that the teacher should add some hours in the program. In actual implementation of this teaching program, the teaching hour was lengthened from three hours to four. Third, the return rate of assignments was very low, and the in-class practice was insufficient. It implies that the Chinese students had few chances to practice in class and after school. Therefore, the teacher should increase the chances for students to practice actual implementation of this program. Fourth, it is important to examine whether teaching method will influence the effectiveness of the instruction. In the pilot test, only structure-based method was used to teach language function. Because the eight sentences for invitation were instructed in three different days, and due to time pressure, students were not given an overview of the politeness strengths of the eight strategies. It was very likely that students failed to associate the content of one lesson with that of another because the eight sentences were taught separately. To remedy such problems, both structure-based method (i.e., teaching sequenced by three categories of strategy), and function-based method (i.e., teaching sequenced by two functions) were implemented separately to students of different classes in the real test. The function-based method was expected to supplement the shortage of structure-based

method by providing a view of the eight sentences as a whole.

As mentioned above, the results of the pilot test has offered some implications for the current study. Because the research design of pilot test was modified and used as the tool for the actual implementation of this teaching program, the test results collected from these 36 Chinese subjects in the pilot test were not included, in order to avoid the bias derived from differences between the two research designs.

The Procedures

Testing Procedures

The informants were first required to receive a pre-test to measure their functional competence on invitation before receiving the four-unit program from this researcher. Next, they attended the whole four-unit program of teaching language functions. Afterwards, they were given a post-test to measure the effectiveness of this teaching program, and filled out a questionnaire to evaluate this teaching program.

Teaching Procedures

After completing the pre-test, the students were offered the four-unit program. Based on two different teaching sequences, there were two different procedures of the four-unit program for comparison.

Procedure One—Function-based method. For function-based method, in the first unit, the students were given a general picture of the relationship between function and form, with examples to facilitate the subjects' comprehension. In the second unit, the students were given an introduction of indirectness of the eight sentences for invitation, including Direct-imperative strategy, and Direct-performative strategy; Modality-desire strategy, Modality-wish strategy, Modality-willingness strategy, and Modality-ability strategy; and Hinting-affirmative strategy and Hinting-interrogative strategy. In the third unit, politeness strengths of these eight sentences for invitation were introduced. In the fourth unit, the interaction of indirectness and politeness of the eight invitation sentences was given to the students. At the end of the program, a conclusion was made for reviewing and comparing the concepts of the relationship between function and form, and the eight sentence patterns. Also, after the instructions, the subjects were required to take a post-test.

Class A and Class C attended the four-unit program sequenced by the two pragmatic functions. The procedures were briefly listed as follows.

In the first unit of the program, the teaching contents include:

(1) introducing language functions and forms, and

(2) introducing the speech act of invitation (See Appendix C, p. 123).

In the second unit of the program, the teaching contents include:

(1) presenting the eight linguistic sentences for invitation by strength of indirectness,

(2) practicing to identify the eight sentences for invitation by strength of indirectness,

(3) doing exercise for review, and

(4) giving assignment (See Appendix D, p 128).

In the third unit of the program, the teaching contents include:

(1) reviewing the previous contents,

(2) presenting the eight linguistic sentences for invitation by strength of politeness,

(3) practicing to identify the eight sentences for invitation by strength of politeness,

(4) doing exercise for review, and

(5) giving assignment (See Appendix E, p. 134).

In the fourth unit of the program, the teaching contents include:

(1) reviewing the previous contents,

(2) presenting the interaction of strength of indirectness and politeness,

(3) practicing to identify the eight sentences for invitation by strength of indirectness and politeness,

(4) doing exercise for review (See Appendix F, p. 139). Assignment was not given at the end of the teaching program.

Appendix C to Appendix F (pp.123~141) present the details of Procedure One.

Procedure Two—Structure-based method. For structure-based method, a general review of relationship between form and function was given in the first unit. In the second unite the focus was the introduction of the two least indirect invitation sentences (namely, Direct-imperative strategy and Direct-performative strategy) which are presumed to be the easiest to learn. In the third unit, the researcher reviewed the concept given in the previous class, and then he focused on teaching Modality-desire strategy, Modality-wish strategy, Modality-willingness strategy, and Modality-ability strategy. To take students' comprehension into consideration, the two sentences of Hinting strategy, which is deviated from referential focus and needs

more inference than the other six linguistic forms, was arranged in the fourth unit. In this last unit, he researchers taught the two sentence patterns of Hinting strategy, the most indirect invitation sentences, including Hinting-affirmative strategy and Hinting-interrogative strategy. Similarly, after a conclusion was offered, the students were asked to take a post-test.

Class B and Class D attended the four-unit program sequenced by linguistic structures. The procedures were briefly listed as follows.

In the first unit of the program, the teaching contents include:

(1) introducing language functions and forms, and

(2) introducing the speech act of invitation (See Appendix G, p. 143).

In the second unit of the program, the teaching contents include:

(1) presenting the two linguistic forms in Direct Invitation by Imperative and Direct Invitation by Performative,

(2) practicing to identify the two linguistic forms for practice,

(3) doing exercise for review, and

(4) giving assignment (See Appendix H, p. 148).

In the third unit of the program, the teaching contents include:

(1) reviewing the previous contents,

(2) presenting the four linguistic forms in Indirect Invitation by Modality,

(3) practicing to identify the four linguistic forms for practice,

(4) doing exercise for review, and

(5) giving assignment (See Appendix I, p. 151).

In the fourth unit of the program, the teaching contents include:

(1) reviewing the previous contents,

(2) presenting two linguistic forms in Indirect Invitation by Hint,

(3) practicing to identify the eight linguistic forms for practice and review,

(4) doing exercise for reviewing the eight sentences, and

(5) giving a conclusion of the whole program (See Appendix J, p. 157). Assignment was not given at the end of the teaching program.

Appendix F to Appendix H (pp. 143~160) present details of Procedure Two.

It's controversial whether language teachers should use students' native language for instruction. In this study, since the students' English proficiency level was still low, it is hardly possible for them to understand the instruction solely in English. Therefore, the students' native language, Mandarin Chinese, mingled with English, was used as

the language for instruction.

Methods of Data Analysis

Based on the American norm, the results of the pre-test and those of the post-test were compared to explore the effectiveness of teaching language functions (in this study, indirectness and politeness). In other words, the gap between the pre-test and the American norm was compared to that between the post-test and the American norm in order to determine whether the Chinese subjects made progress or not. For both indirectness and politeness, first, a holistic analysis and discussion were given; second, the influences of different methods on the teaching effectiveness were examined; third, the learning results of the two schools were investigated.

The effectiveness of teaching language functions were measured in terms of four criteria: ordering, grouping, and ranging of the eight testing sentences, and the degree of approximation of the students' performances in the post-test to the American norm. First, in aspect of ordering, the eight testing sentences for invitation were arranged from the strongest force to the weakest force of indirectness and politeness in both the pre-test and the post-test, and the orderings were compared with those in the American norm. Next, as to grouping, sentences of statistically insignificant differences were merged into a group, and the students' groupings in the pre-test and the post-test were compared with those offered by the American norm. Then, ranging refers to the distance between the sentence of the strongest force to that of the weakest force, and the students' rangings of the testing sentences in the pre-test and the post-test are compared with those of the American norm. In addition, the means of the eight sentences in the pre-test and those in the post-test were compared with those given by the American subjects to obtain the degree of approximation to the American norm. In each criterion, when the distance between the post-test and the American norm become shorter than the distance between the pre-test and the American norm, it is taken as a sign of improvement.

In this study, all of the tests and evaluations were analyzed according to their means, and the data of these tests and evaluations were statistically analyzed by mainly by employing paired-sample t-test with a probability at .05.