PROCEDURE AND DATA GATHERING

Preparation of the Study

The author prepared the study as follows:

1. Examine the characteristics of a cloze test and how to construct it from Thai and English books and relevent articles, especially from "Cloze Procedure: A New Tool for Measuring Readability,"[1] "Recent Developments in the Use of Cloze Procedure,"[2] which were written by the cloze pioneer, Wilson L. Taylor, and "Comparable Cloze and Multiple-choice Comprehension Test Scores,"[3] by Bormuth.

2. Examine the characteristics of multiple-choice structure test and how to construct it, from Language Testing,[4] and Testing English as a Second Language.[5]

3. Examine the English Syllabus for the Certification of Education Level for grammatical points required for the teacher-students in the first two years of study. Then English Grammar for Thai Students,[6]

---

[1] Taylor, "Cloze Procedure:....," op.cit.

[2] Taylor, "Recent Developments ...," op.cit.

[3] Bormuth, "Comparable Coze ...," op.cit.

[4] Lado, op.cit.

[5] Harris, op.cit.

[6] A. Palakornkul and Ma. Berg, English Grammar for Thai Students. (Bangkok: Kuruspa Publisher Co., 1970).

the required textbook, was studied throroughly and approximately 200 grammatical points were randomly selected chapter by chapter.

Subjects

The subjects for the main study were Thai second-year teacher-students in Nakornsawan Teachers' College, Nakornsawan. One hundred and twenty boys and eithty girls, a total of two hundred students, comprised the sample. The student population of this college represented a wide range of achievement in learning, socio-economic status, and age, and subjects for this study were drawn by random sampling from alphabetical names lists. The subjects were divided into two groups, 100 subjects each.

Table I

Number of Subjects in the Main Study

Groups	Number of Subjects		Total
	Boys	Girls	
I	66	34	100
II	54	46	100
Total	120	80	200

Three classes with a total of 100 students, 65 boys and 35 girls, from Nakornpathom Teachers' College, where the same textbook is

used, were subjects in the pilot study for pretesting the multiple-choice structure test.

Instruments Employed in the Study

The instruments utilized in the study consisted of a 75-item multiple-choice structure test, and a 75-item cloze test.

I. The Multiple-choice Structure Test.

The multiple-choice structure test was constructed to measure the subjects' proficiency in the English structures taught in English Grammar for Thai Students. The test construction was based upon techniques detailed Language Testing and Testing English as a Second Language.

In the pilot study, there were two 80-item multiple-choice structure tests, Form A and Form B for pretesting. The grammatical points in English Grammar for Thai Students were randomized chapter by chapter by simple randomization method, and made up a total of 160 points. All test items were written by the author and edited by Miss Alison Bunning, an ex-CUSO Volunteer who had four years' experience in teaching English in Nakornsawan Teachers' College, and were re-edited by Dr. Lyle F. Bachman, a psycholinguist and the author's supervisor. The grammatical points were divided into two parallel 80-item tests, Form A and Form B, Both tests were administered to 100 second-year students in Nakornpathom Teachers' College, Nakornpathom on October 6, 1973, in reversed order. This means that every other student (50 students) took Form A first, and Form B second, while the rest (50

students) took the two tests in reversed order. This arrangement was an effort to prevent biased results as a result of ordering. The interval between the tests was five hours, and each administration ranged from approximately 50 minutes to an hour and 15 minutes.

Both tests were scored and item analysis was completed by computer utilizing 27 percent technique in order to determine

(a) the level of difficulty of each item,

(b) the power of discrimination (based on biserial correlation) of each item,

(c) the distribution of the scores of each test, and

(d) the reliabilities of each test when computed by split-half and Kuder-Richardson formulas.20 and 21. On the basis of this analysis, 75 good items from both tests were selected (levels of difficulty ranged from .30 to .75, and power of discriminatiom ranged from .28 to .75). All poor items were eleminated. Test Form A had reliabilities of .74 (split-half) .71 and .66 (Kuder-Richardson 20, 21) and test Form B, .67, .69 and .62. Both tests had approximately normal distributions.

Table II

Level of Difficulty of the Multiple - choice Tests

in the Pilot Study

Level of Difficulty	Number		Total
	Form A	Form B	
Very easy (above .75)	3	5	8
Criterion (.30 - .75)	52	42	94
Very difficult (below .30)	25	33	58
Total	80	80	160

(See Appendix A)

Table III

Level of Discrimination Power(Biserial Correlation) of

the Multiple - choice Tests in the Pilot Study

Power of Discrimination	Number		Total
	Form A	Form B	
No power	-	-	-
Negative power	14	17	31
Low power (.00 - .20)	24	15	39
Median power (.20 - .40)	29	26	55
High power (above .40)	13	22	35
Total	80	80	160

(See Appendix A)

In the main study, the multiple-choice test consisted of 75
good items selected from the ttwo tests in the pilot study. All items
were re-arranged according to their level of difficulty (from the
easiest item to the most difficult one). The timing for the multiple-
choice tests was only one hour.

GRAPH I

Level of Difficulty and Power of Discrimination of
the Multiple - choice Items in the Main Study
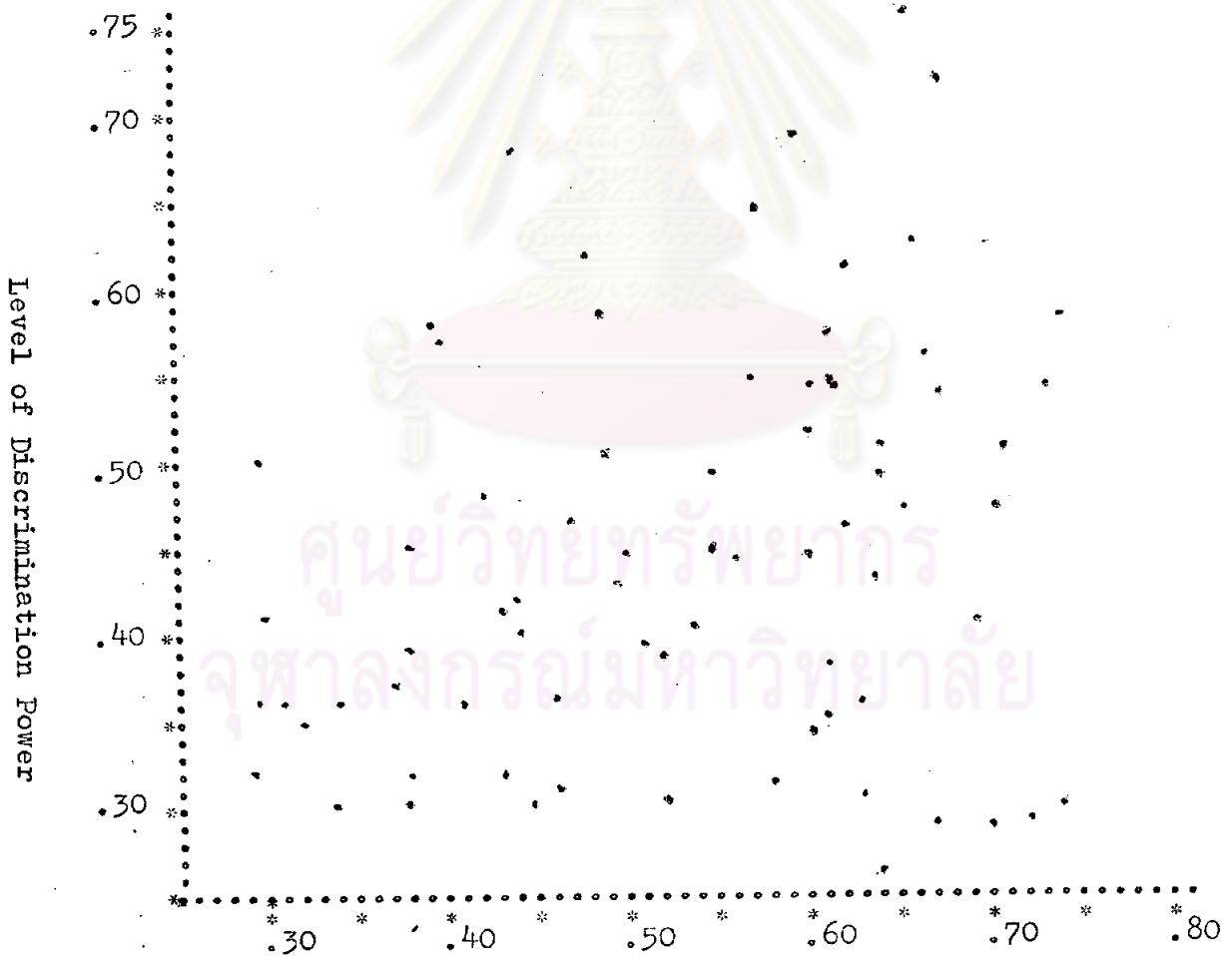
Level of Difficulty

(See Appendix A)

Table IV

Number of Items According to Level of Difficulty

Level of Difficulty	Number
.30 - .34	8
.35 - .44	14
.45 - .54	13
.55 - .64	24
.65 - .75	16
Total	75

(See Appendix A)

II. The Cloze Test

The cloze test utilized in this study was a passage written by the author to cover all 75 grammatical points in the multiple-choice structure test. This passage, entitled "Going to the Market", consisted of 690 words. Only those 75 grammatical points intended to be tested were deleted and replaced with underlined blanks ten spaces in length each. The number of deletions per word ranged from 2 to 20. In other words, the cloze test was constructed by a ten percent deletion method. Detailed instructions were printed in Thai and an example was given at the beginning of the test. The timing for the cloze test was one and a half hours.

Administration of the Instructions

As mentioned, the subjects were divided into 2 groups, Group I and Group II. Each group consisted of 100 students. The multiple-choice test and cloze test were administered in reversed order. Group I took the multiple-choice test first, and the cloze test second. Group II took the cloze test first and the multiple-choice test second. The interval between the two administrations was one week. The first administration was on January 12, 1974 and the second one was on January 19, 1974. In a previous study, Bormuth[7] had found no order effects arising from a similar procedure with cloze test.

Data Gathering Procedure

Both tests were scored by hand. The multiple-choice test was scored by giving one credit for only the correct alternative in each item. The cloze test, however, was scored by giving one credit for either the exact word that had been deleted, or the "grammatically and contextually acceptable response." For example, "Will you _____ me 5 dollars, Mary?," and "Bob _____ low grades every term," the exact words that had been deleted were "lend" and "gets", but "give" and "has" or "receives" were credited. There were only six deletions that could be filled with alternative words. However, if the exact word was filled ungrammatically, no credit was given. If the examinee, for

---

[7]Bormuth, "Comparable...," op.cit. p.296.

instance, filled "get" instead of "gets" in "Bob _____ low grades every term," no credit was granted. Oller,[8] and Oller et al.[9] have shown that for non-native speakers, allowing credit for any contextually acceptable response was superior in terms of item discrimination and significantly superior for correlation with external validating criteria and this was therefore considered the most reliable and economical scoring method.

[8]Oller, "Scoring Methods...," op.cit., p.157.

[9]Oller et al., "Cloze Tests in English...," op.cit.,p.4.