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English: the roadblock to a higher education.

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ENGLISH: THE ROADBLOCK TO A
HIGHER EDUCATION

A Dissertation Presented

By

IDALIA MORALES

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1982

Education

ENGLISH: THE ROADBLOCK TO A
HIGHER EDUCATION

A Dissertation Presented

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IDALIA MORALES

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1982

c

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Dedication:

To my son,

Raymond Morales

and

B.G.P.

ACKNOWLEDGEMENTS

Writing a dissertation requires the intellectual stimulation, cooperation, and loving support of many persons. Although it is impossible to mention all their names, I feel deeply indebted to each and every one of them.

I would like to mention by name certain individuals who were crucial to the achievement of my goal. These persons are: my committee members--Dr. Gloria de Guevara, Dr. Juan C. Zamora, and Dr. Thomas E. Hutchinson. Also the ESL director, Dr. Clodomiro Cabanas, and my typist, Deborah Leonard.

My son merits a special mention for not making me feel guilty whenever I said, "Not now, I have to finish this."

ABSTRACT

ENGLISH: THE ROADBLOCK TO A
HIGHER EDUCATION
(September 1982)

Idalia Morales

B.A., Oswego State College

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During the Fall semester of 1981, the English as a Second Language Program at the University of Massachusetts at Amherst was evaluated to determine its effectiveness in teaching limited English speakers English language skills. All of the 157 students in the ESL Program were involved in the evaluation in one way or another. The Fortune/Hutchinson Evaluation Methodology was used in conducting the evaluation since it has a step-by-step procedure to be followed, is easy to replicate, directly involves the decision-makers of the program, and provides data that can be used to improve or strengthen the program. This data is provided continuously during the evaluation rather than only at the end. This methodology provides for a high degree of accuracy in

the evaluation process.

By implementing the various steps of the Fortune/Hutchinson Evaluation Methodology, an agreement was signed, the goals to be evaluated identified and matched to the parts, these goals expressed in behavioral objectives, instruments for data collecting decided upon, instruments implemented, and data collected, analyzed and reported to the director. A process of revision was in effect throughout the evaluation.

As a whole, the ESL Program is being rather effective in teaching writing and oral English language skills to limited-English speakers. The ESL Program should concentrate on those objectives in which the students regressed or had only a slight improvement. The University of Massachusetts should provide funds for setting up a Conversation Course and for reinstating Courses 105A and 105B to service non-English speaking students.

Further research is needed in the areas of listening and reading comprehension. Refining and establishing validity and reliability of the Data Sheet indices would contribute to the field of language teaching.

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C H A P T E R I
THE EFFECTIVENESS OF ENGLISH AS A SECOND
LANGUAGE PROGRAMS IN HIGHER EDUCATION

The Problem

Massachusetts is the site of twenty-one public and eighty-five private institutions of higher education.¹ Therefore, individuals interested in continuing their education have available many colleges and universities to choose from, depending on their particular interests and career plans. Yet, many students are unable to gain admission into these institutions even though they might be intellectually endowed.

Some of the reasons why students are not accepted are: 1) poor grades, 2) low SAT, 3) not competitive compared with class rank of other students, 4) United States citizens and foreign students who do not possess sufficient mastery of the English language to do well in regular courses.

United States citizens and foreign students with a limited command of English are prevented from entering many colleges and universities because of this lack of English language skills. Their mastery of the English language is inadequate to pursue college level courses. Some of the reasons for this lack of English mastery in

United States citizens are: 1) the student is foreign born and came to the United States after high school, 2) the student came into school system late, 3) student was educated in school system, but because past English as a Second Language (ESL) programs had no set teaching methodology and materials and school policies discriminated against language minorities, students were not adequately prepared in English skills to handle college level courses.

Many of these students have the intellectual capacity to do well in college if given the opportunity to acquire the English language skills that they need. This opportunity should be provided so that students are not penalized for not entering the United States as small children, or for the failure of school systems to provide them with English language skills.

A similar pattern can be found in other states. Nationwide, it is found that among the Hispanics and Asians, the two largest groups of recent immigrants, the percentage of those that have completed college is less than one might expect from their percentages within the United States population. Only 6.7% of Hispanics have completed four or more years of college.² The percentage of Asians who have done so is only 5.3.³ The percentage of White Americans who have done so is 17.2.⁴ This discrepancy is too great to be attributed to mere chance, but must be attributed to a general policy of excluding language minority students

from institutions of higher education.

Because of pressure from admitted minority students, affirmative action regulations, and socially concerned personnel, some colleges and universities have tried to increase the number of minority students in their student body within the past ten years. The colleges and universities have been recruiting in minority communities and offering financial aid. Counselling and academic tutoring are also being given. Hiring minority personnel to provide these services has also been done. For those minority students who tend not to speak English at home, English as a Second Language programs have been instituted. The programs generally follow the standard pattern used to teach foreigners English. Most of the programs are fourteen to fifteen weeks long and are structured in the following way:

Intensive English language programs are offered which give students from abroad training in listening, speaking, reading and writing English. Such training is offered together with supplementary activities such as language laboratory, reading and writing workshops and activities clearly designed to supply orientation to U.S. academic, social and cultural life as well as extracurricular activities which provide the students the opportunity to use their newly acquired skills in the English language. These intensive programs offer a minimum of 15 hours of academic instruction weekly and are equivalent to full-time academic study.⁵

There are also semi-intensive English language programs which offer fewer than 15 hours of classroom instruction weekly and simple courses of English language refinement. Such semi-intensive programs and courses are generally taken in conjunction with regular academic work.⁶

Most of the institutions providing English as a Second Language divide their course offerings into three levels:

- | | |
|---------------|--|
| Beginning | Student cannot function in English beyond basics and frequently uses bilingual dictionary |
| Intermediate: | Student functions effectively but not completely in English academic and social situations |
| Advanced: | Student ⁷ functions as a near-native speaker |

At the present time the state of Massachusetts had the following institutions which offer intensive English language instruction (fifteen hours or more a week):

American Language Academy	Newman Preparatory School
Atlantic Union College	Northeastern University
Boston College	Pine Manor Junior College
Boston University	Shaw Prep School
Bristol College	Springfield Technical CC
Harvard University	University of Massachusetts

It also has twenty-four institutions which offer semi-intensive instruction (less than fifteen hours).⁸

Some institutions, notably Hostos Community College in New York City, are attempting to deal with the lack of English language command by setting up bilingual programs as well as ESL programs for United States citizens who are non-English or limited English speaking.⁹ This program, initiated in 1970, has several components. It consists of Intensive English as a Second Language, Spanish as a Second Language, use of Spanish in content areas, and courses in

biculturalism.

The program services a student population which is 65.5% Spanish origin. Admitted students take courses in Spanish while they acquire or improve their English language skills (as already stated, many language minority students do not possess a mastery of the English language although they have been in the school system since kindergarten). Once the students acquire competence in the English language, they become mainstreamed into their particular course of study.

At a keynote speech given by Hostos' president, Candido de Leon, for the New York State Conference on Bilingual Education in Colleges and Universities, he stated that, "No one has to apologize for teaching in the students' native language, while students are learning the predominant language of that country which will enable them to enter into that society."¹⁰

The University of Massachusetts at Amherst also has a bilingual program. The Bilingual Collegiate Program (BCP), established in 1974, serves the Hispanic student population and other language minority students. It offers the Hispanic student population courses in Spanish, and provides counseling and guidance to all its students. The students admitted to the BCP take their ESL courses in the Rhetoric Department's Intensive English as a Second Language Program, instituted in 1973 to help limited English speaking students acquire

mastery of the English language. Besides the BCP, several departments at the University also offer courses in Spanish. These departments are History, Political Science, Geography, Math, and Spanish and Portuguese.

There are about 640 institutions of higher education in the United States that have ESL programs for non-English and limited English students.¹¹ Yet there is very little literature concerning the effectiveness of these programs in teaching the English language. The author of "The Theses and Dissertations in Graduate ESL Programs," Stephen Cooper, looked at a listing of over 200 graduate theses and dissertations in ESL completed since 1975. He found that "unquestionably, teaching methods, techniques, and materials account for close to half of the theses reported."¹² Another area covered by graduate students "involves studies classified under psycholinguistics and under second language learning, accounting for about fifteen percent of the theses and dissertations reported."¹³ About ten percent of the studies deal with culture and sociolinguistics. Most of the rest are in comparison and contrast of English to other languages, and in adult education in ESL.

Only a few graduate students, chiefly at the doctoral level, seem to be engaged in basic research. Consequently, only about five to ten percent of the students apparently used an experimental design and some of these were theses using questionnaires.¹⁴

It is evident from this article and the scarcity of literature on the subject of ESL evaluation in higher

education that this type of research is needed. Non-English and limited English speaking students depend on these programs to provide them with the English language skills necessary to do well in their college level courses. Therefore, determining a program's effectiveness and the areas where it can be improved will enhance the educational opportunities of the non-English and limited English speaking student.

Purposes of the Study

This research intends to achieve several things. The first is to provide data that the English as a Second Language component of the Rhetoric Program can use in improving the teaching of English language skills. The second is to provide information on the needs of the non-English speaking students and ways that the University can alleviate these needs. The third is to provide information that the University of Massachusetts can use when making decisions during budget cuts.

Assumptions of the Study

There are two assumptions that can be made concerning this study. The first is that the director of the ESL program is in need of data regarding the program, since he asked for the evaluation. The second is that the data generated can lead to the development of other services to

help non-English and limited English speaking students.

Limitations of the Study

This evaluation was limited by available time and resources. Because of this it was not possible to carry out a complete operationalization of goals. Only the first fifteen goals from the Prioritization process were operationalized. These fifteen goals are not necessarily the most important, but are essential to the teaching of ESL.

Since only the ESL component of the Rhetoric Program at the University of Massachusetts at Amherst was evaluated, no generalizations can be made about any other ESL programs.

Significance of the Study

According to Larry G. Benedict,

The utility of evaluation should be in knowing what parts or components or elements of the enterprise are working well and which are not working very well . . .¹⁵

Despite the limitations mentioned, this study provides useful data concerning the achievement of stated goals by the ESL component. These data may be used in decision-making by the ESL Program director, the Rhetoric Department, and the University of Massachusetts. The study not only describes the ESL Program, but tells how it is working.

As mentioned in the discussion of the problem, there is little information concerning the effectiveness of ESL programs in higher education. This study helps to fill this

vacuum and could provide a basis for future evaluations of ESL programs in higher education.

Site of the Study

The University of Massachusetts

The University of Massachusetts, Amherst campus was established in 1863 as a land grant college. Since then it has grown to service a student population of 20,000 on campus and 8,000 off campus. The University is composed of Colleges of Arts and Sciences and the College of Food and Natural Resources. There are schools of Business Administration, Education, Engineering, Public Health, and Physical Education. There is also a graduate school. The University grants bachelor's, masters and doctoral degrees.

History of ESL Program at the University of Massachusetts

In September of 1973 the Rhetoric Department of the University of Massachusetts started to offer courses in English as a Second Language (ESL). These courses were set up to meet the language needs of Hispanic students and other non-English or limited English speakers in the Western Massachusetts area. Two ESL courses were offered: ESL 106 and ESL 107 (two sections of each). There were two teaching assistants (T.A.) and several tutors involved in the program. ESL 106 and ESL 107 became Rhetoric 105C and Rhetoric 100L, described on pages 10 and 11.

In the Spring semester of 1974 two sections of ESL 106, one section of ESL 107, and a section of ESL 110B were offered. The latter was offered for the benefit of those students who were prepared for more advanced courses in English as a Second Language.

In the Summer session of the same year, ESL 106 was offered. An in-service training for tutors, T.A.'s and staff of the English as a Second Language Component was also held.

In the Fall semester of 1974-75, two sections each of ESL 106 and 197 were given. In addition to these courses, two laboratory sessions were held.

From 1975 to the present, the ESL program has been offering the following courses:

Rhetoric 105C - Advanced Intensive English

This course is offered to non-native speakers of English who have reached the advanced intensive level. The conventions of basic grammar will be reviewed and the conventions of more complex structures introduced and discussed in detail. The course will emphasize writing skills through in-class and out-of-class practice and drill, thus forming a bridge between controlled composition and free writing, while introducing methods of organization. In addition, reading selections will provide models of various types of organization as well as serving as a basis for class discussions and vocabulary expansion.

Rhetoric 105F - Advanced Composition

105F is an advanced pre-rhetoric level course offered to non-native speakers of English. It is designed to give students who have a background in complex grammar as well as a basic knowledge of pre-writing and writing skills the maximum opportunity to develop control of their writing. The pre-writing and writing skills will be reviewed and expanded on through both in-class and out of class assignments, most of which will accompany

the readings in the text required for this course. Various methods of organization, both old and new, will be worked with as the formal writing assignments are planned then written. In addition, throughout the semester, rules of grammar, punctuation, usage, and spelling will be reviewed and appropriate exercises will be assigned. The reading selections, which have already been mentioned, will serve not only as a basis for writing assignments but also as a basis for vocabulary development and class discussion.

Rhetoric 100L - Language and Writing

The first half of a two-semester sequence (100L followed by 110B). Provides active practice in reading and formal essay writing. Selected reading materials serve as the basis for class discussions and writing assignments. Students learn to write coherent, unified paragraphs and progress to essay writing. Attention is given to the meaningful selection of purpose, organization, central ideas and supporting material, tone and attitude. The conventions of writing (grammar, punctuation, spelling, etc.) are reviewed. Students write a paragraph for each class period during the first part of the semester. After having mastered the techniques of paragraph writing, students then write one paper each week for the remainder of the semester. In addition to frequent writing assignments, there are a mid-term and a final examination as well as two required student-teacher conferences on an individual basis during the semester.

Rhetoric 110B - Language and Speaking

Aims to improve the student's abilities to communicate in both speech and writing. Geared toward the non-native English speaker; provides active practice of communication skills in the areas of writing, speaking and listening. There are three formal speaking assignments and seven written assignments of varying lengths.

In order to accomodate students who took courses during the 1980 Intensive Summer Program, Rhetoric 105B was added for the Fall 1980 school year. This course is not being offered during the 1981-82 school year.

Rhetoric 105B - High Intermediate Intensive

Continuation of low intermediate intensive course for students who have a basic knowledge of the English

structure and vocabulary and who have developed effective aural skills and fluency of expression. Covers more complex structures and forms of English and refines the student's accuracy and clarity of oral and written expression. Language laboratory required. Six hours per day.

Rationale of the ESL Program

According to the director of the ESL Program, the rationale and objectives of the program are as follows:

Students whose dominant language is not English are at a disadvantage when they attend English-speaking colleges or universities. The academic performance of students with little or no command of English is impaired by their low proficiency in the language.

If preparatory, intermediate and advanced courses in English as a Second Language are provided, non-native speakers of English will have the opportunity to acquire and develop communication skills in English, thereby enabling them to function adequately in English and helping them achieve their academic goals.

Therefore, it is imperative that the Rhetoric Program of the University of Massachusetts should encourage improvement, enrichment, and expansion of the English as a Second Language component of the Rhetoric Program.

General Objectives of the ESL Program

The director of the English as a Second Language program stated the general objectives of the program as follows:

To provide the Spanish-speaking students and other linguistically different students studying at the University with the tools of communication in English which they so urgently need in order to:*

1. Acquire adequate proficiency in English that will allow them to function successfully in the University classroom.
2. Promote the habit of using English as a vehicle of communication in and outside the classroom.
3. Help the student develop the ability to read in English both as a means of information and recreation and as a means of building vocabulary.
4. Help the students develop the ability to express their ideas orally and in writing.
5. Acquire understanding of cultural expressions and attitudes as manifested through the medium of the English language.
6. Develop appreciation for aesthetic values in representative literary works in English.
7. Develop habits of independent critical thinking.
8. Enable such students to compete successfully for jobs after graduation.

*Although all of these goals were used in the Goal Process and Prioritization Process, only the goals ranked 1-15 were evaluated in this study.

ESL Population

Profile of Student Population

There were 157 students being serviced by the English as a Second Language (ESL) Program during the 1981 Fall Semester. These students represent 38 different countries and 21 languages. Spanish-speaking students comprise the largest group in the program. There are 85 Spanish-speaking students, more than half of them Puerto Ricans. The next largest group is comprised of Chinese-speaking students. There are 17 of them in the program. The Spanish-speaking students represent 54% of the ESL population and the Chinese-speaking students 11%.

Table indicates the number of students in each course and the countries and languages that they represent.

Placement of Student Population in ESL Program

Spanish-speaking students and other linguistically different students are screened by the English as a Second Language staff in order to determine their level of proficiency in English, and are placed accordingly. The following steps are followed in the screening process:

1. Personal data is collected from the students (country of origin, years in the United States, courses in English).
2. Diagnostic tests are administered to the students

TABLE 1
STUDENTS BY COUNTRY AND LANGUAGE
IN EACH COURSE FOR FALL 1980

No. of Students	Country	Language
105C Advanced Grammar - Section 1		
29 Students	7 Vietnam	13 Spanish
	5 Puerto Rico	7 Vietnamese
	3 Hong Kong*	4 Chinese
	2 Colombia	2 Japanese
	2 Dominican Republic	1 English*
	2 Japan	1 French
	2 Venezuela	1 Korean
	1 Ecuador	1 Thai
	1 France	
	1 Korea	
	1 Mexico	
	1 Taiwan	
	1 Thailand	
105F Advanced Composition		
16 Students	5 Puerto Rico	12 Spanish
	3 Dominican Republic	3 Portuguese
	3 Portugal	1 Korean
	2 Ecuador	
	1 Colombia	
	1 Korea	
	1 Venezuela	
100L Language and Writing		
79 Students (4 Sections)	29 Puerto Rico	42 Spanish
	6 Hong Kong	9 Portuguese
	6 Portugal	7 Chinese
	4 Iran	4 Farsi
	4 United States	3 Arabic
	2 Argentina	3 French
	2 Colombia	2 Dutch
	2 Lebanon	1 Greek
	2 Spain	1 Hebrew
	1 Angola	1 Ibo
	1 Cape Verde	1 Korean
	1 Chile	1 Norwegian

*One of the students from Hong Kong indicated both Chinese and English as his first languages.

TABLE 1 (Continued)

No. of Students	Country	Language
100L Language and Writing (Continued)		
	1 Dominican Republic	1 Thai
	1 Ethiopia	1 Tigryna
	1 Greece	1 Vietnamese
	1 Holland	
	1 Honduras	
	1 Israel	
	1 Korea	
	1 Nigeria	
	1 Norway	
	1 Syria	
	1 Taiwan	
	1 Thailand	
	1 Venezuela	
	1 Vietnam	
	1 West Africa	
110B Language and Speaking		
33 Students (2 Sections)	10 Puerto Rico	18 Spanish*
	3 Taiwan	6 Chinese
	2 China	2 Farsi
	2 Colombia	1 English*
	2 Dominican Republic	1 Greek
	2 Iran	1 Italian
	2 Spain*	1 Korean
	2 Thailand	1 Malay
	1 Greece	1 Russian
	1 Hong Kong	1 Thai
	1 Italy	1 Vietnamese
	1 Korea	
	1 Russia	
	1 United States*	

*One of the students from Spain indicated dual citizenship and Spanish and English as his first languages.

(Michigan Test of English Language Proficiency, or Test of English as a Foreign Language, or English as a Second Language Achievement Test).

3. Interviews with the students (in English, whenever possible) are held.

At the completion of the screening process, each student is placed into one of the following categories:

1. Students who do not understand, speak, read or write English.
2. Students who understand spoken English but do not speak it.
3. Students who understand spoken English but speak it limitedly.
4. Students who understand and speak English but cannot understand specialized language concepts.
5. Students who understand and speak English fluently but are unable to read and write English.
6. Students who understand and speak English limitedly but are also unable to read and write English.

Criteria for Placement of Student Population into ESL Course Levels

Students are placed in the ESL program based on the Michigan Test of English Language Proficiency, or the Test of English as a Foreign Language (TOEFL), or the English as a Second Language Achievement Test (ESLAT)

Michigan Test of English
Language Proficiency

Those whose scores fall below an equated 80 and/or raw scores below 30 in vocabulary (40 possible), and 10 in reading comprehension (20 possible), or who cannot write an acceptable in-class English essay are enrolled full time in the English as a Second Language program until their English proficiency reaches a level which indicates possible success in regular English-speaking college classes.*

Proficiency Recommendations**

GROUP I. Undergraduates in liberal arts and education

Equated
Score

- 96-100 Can compete with native speakers of English on equal or nearly equal terms. No restrictions need be placed on electives.
- 90-95 Proficient enough in English to carry a full time academic program. Some allowances have to be made for written work and for heavy reading assignments.
- 85-89 May take up to 3/4 the normal academic load plus a special course (4 hours per week) in English as a foreign language.

*As suggested by the Michigan Test of English Language Proficiency Manual, 1962.

**Ibid.

80-84 May take up to 1/2 the normal academic load plus a special course (4 hours per week) in English as a Foreign Language.

.

70-79 May take from 1/4 to 1/3 the normal academic load plus a special intensive course (10 hours per week, non-credit) in English as a Foreign Language.

69 and below Not proficient enough in English to take any academic work.

GROUP II. Graduates and undergraduates in engineering, mathematics, and scientific fields that depend heavily on laboratory work.

Equated
Score

96-100 Can compete with native speakers of English on equal or nearly equal terms. No restrictions need be placed on electives.

85-95 Proficient enough in English to carry a full time academic program. Some allowance will have to be made for written work and for heavy reading assignments.

80-84 May take up to 3/4 the normal load plus a special course (4 hours per week) in English as a Foreign

Note: The dotted line marks the minimum score of acceptance by most schools at the University of Michigan (as stated in the Manual of the Michigan Test of English Language Proficiency).

Language.

-
- 65-79 May take up to 1/2 the normal academic load plus a special intensive course (10 hours per week, non-credit) in English as a Foreign Language.
- 64 and below Not proficient enough in English to take any academic work.

GROUP III. Graduate humanities and social sciences (English and American literature, law, political science, philosophy, etcetera).

Equated
Score

- 92-100 Can compete with native speakers of English on equal or nearly equal terms. No restrictions need be placed on electives. For students in the extreme lower end of this bracket, some allowance may have to be made for written work and heavy reading assignments.
- 85-91 May take up to 3/4 the normal academic load plus a special course (4 hours per week) in English as a Foreign Language.
- 80-84 May take up to 1/2 the normal academic load plus a special course (4 hours per week) in English as a Foreign Language.
-
- 79 and below Not proficient enough in English and not allowed to take any academic work in these fields of study.

Test of English as a
Foreign Language (TOEFL)

Interpretation of scores:*

- 0-350 Do not admit under any circumstances to any program.
- 351-450 Admit only to certain academic programs in conjunction with some additional training at the advanced level in any language program.
- 601-800 Admit freely to any program for which the candidate is academically qualified.

English as a Second Language
Achievement Test (ESLAT)

Scores and recommended courses:**

- 200-579 English 1-2 (105C or 105F at the University of Massachusetts in Amherst)
- 500-690 English 3-4 (Intermediate; 100L or 110B at the University of Massachusetts in Amherst)
- 691-800 English 5-6 (Honors; regular Rhetoric courses)

Methodology: An Abstract of the Fortune/
Hutchinson Evaluation Methodology

This study should provide useful information for improving the teaching of English language skills by the Rhetoric Program at the University of Massachusetts in

*As stated in Guidelines: English Language Proficiency, published by the National Association for Foreign Student Affairs.

**Informe de Reevaluacion de la Facultad de Estudios Generales, pp. 224-227.

Amherst. It uses the Fortune/Hutchinson Methodology, Version I, Draft I, September 1973. This particular methodology was chosen since it has a step-by-step procedure to be followed, is easy to replicate, directly involves the decision-makers of the program, and provides data that can be used to improve or strengthen the program. Another reason was that information for decision-making is provided continuously rather than only at the end of the evaluation--since each step in the methodology provides data that can be used by the program. It also provides for a high degree of accuracy in the evaluation process.

The various steps in the Fortune/Hutchinson Evaluation Methodology were followed during this research (except where modifications clearly could be expected to provide better results). A brief description of the steps in the methodology follows. The first step is to negotiate an agreement for the evaluation to be done. In doing so the evaluator tries to get "a fairly explicit description of the enterprise."¹⁶ The evaluator needs to know what is being evaluated and why it is being evaluated. Then s/he determines what resources are available in order to do the evaluation. "Resources are defined as: staff time, secretarial and clerical support, duplication costs, decision maker time, and money."¹⁷ Finally, s/he tries to "identify for whom the evaluation is to be done."¹⁸ In

other words, who is going to receive the data collected during the evaluation? When these matters have been discussed to the satisfaction of both the decision-maker and the evaluator, the results are put into contract form and signed by both parties.

The second step is to do a "systematic, reliable goals identification and prioritization process."¹⁹ The goals are the intents of the decision-maker regarding the enterprise. They encompass both the specific verbalized objectives and the more general, vague notions of the role of the enterprise. Since there could be countless goals, it is necessary to put them into order so that the evaluator can proceed. This order is determined by the decision-maker.

The third step is to do a "parts" process. What this means is that instead of looking at the enterprise as a whole, the components or parts of it are taken into account. This way, each part can be evaluated as it contributes to the goals of the enterprise. "The purpose of a parts process is to identify the parts of the enterprise from the point of view of the decision maker for whom data are to be collected."²⁰ Input, interface, and output components are considered. Input refers to those things occurring before the enterprise begins. Interface are those things which are not directly part of the enterprise but

which influence it. Output are the results at the end of a given time period.

The fourth step is to relate the goals and parts to each other. "This is done because of the purpose of doing a parts analysis in the first place: to increase the efficiency and usefulness of the data which is to be provided for decision making."²¹

The fifth step is to operationalize the goals that have been prioritized by the decision-maker. This means that vague, general statements (fuzzy concepts) will be expressed in behavioral objectives. This seven-step process is of utmost importance, since it forms the basis for developing measurement techniques.

The sixth step is to decide how to collect data. There are many varieties of measurement instruments that can be used to collect data. At this point it is not possible to specify the instruments that will be used since this is done in conjunction with the decision-maker after goals have been obtained and defined. Whatever instruments are used, they should be direct, unobtrusive, and natural. The instruments should also be valid and reliable. In other words, the instruments should actually measure the defined goal components that they purport to measure, and do so consistently from one time to the next. It is almost impossible for a measurement instrument to meet all these

criteria, but it should come as close to doing so as possible.

The seventh step is to start collecting data by implementing the measurement instruments agreed upon with the population selected.

The eighth step is to analyze the data collected from the point of view of the goals being examined and to report this information to the decision-maker. The format of the report should be understandable. This reporting is carried out as needed by the evaluator.

The ninth step is a process for revision of the evaluation. The revision process can occur at any time during an evaluation. There should be enough flexibility in the design to permit changes as they become necessary. For instance, if the decision-maker changes, this would usually require a change in goals and procedures. The evaluator must be able to take this into account.

(A copy of the Fortune/Hutchinson Evaluation Methodology is included in Appendix 37.)

Organization of the Study

This work is divided into five chapters. Chapter I presents the problem of non-English and limited-English speaking students in gaining admission into institutions of higher education. It also describes the study and the methodology used in order to assess how well the English as

a Second Language component of the Rhetoric Program at the University of Massachusetts at Amherst was achieving its stated goals.

Chapter II presents the literature pertaining to the problem of non-English and limited-English speaking students.

Chapter III presents the implementation of the Fortune/Hutchinson Evaluation Methodology. It details the steps taken during the evaluation and the outcomes of these steps.

Chapter IV discusses these outcomes in order to determine the effectiveness of the ESL Program in teaching English language skills to limited-English speakers.

Chapter V presents the conclusions and recommendations for servicing non-English and limited-English speaking students.

Definition of Terms Used

1. First language, native language, home language, mother tongue: Refer to the language that a student acquires at home during early years.
2. SSL - Spanish as a Second Language: For students whose first language is not Spanish.
2. Bilingual/bicultural education (BBE): The use of two languages for instructional purposes. The learning about the cultures where the two languages are used.

5. Monolingual: A person who speaks one language.
6. Mainstreamed: A student is moved from the BBE program to the regular program for English speaking students.

Chapter One: Footnotes

1. Council of Economic Advisors, Economic Indicators, September 1979 (Washington, D.C.: United States Government Printing Office, 1979), p. 135.
2. Bureau of the Census, Statistical Abstract of the United States, 1980: National Data Book and Guide to Sources (Washington, D.C.: United States Government Printing Office, 1979), p. 149, Table No. 238.
3. Bureau of the Census, 1970 Census of Population: Japanese, Chinese, and Filipinos in the United States (Washington, D.C.: United States Government Printing Office, July 1973), pp. 9, 69, 127. Percentage calculated based on data given on these pages.
4. Council of Economic Advisors, Economic Indicators, September 1979, p. 145, Table No. 231.
5. Nina Davis, Joan Kertis, and James O'Driscoll, English Language and Orientation Programs in the United States (New York: Institute of International Education, 1976), p. i.
6. Ibid.
7. Ibid., p. iii.
8. Ibid.
9. Candido de Leon, "Bilingual Education at Hostos Community College," keynote address at the New York State Conference on Bilingual Education in Colleges and Universities, Albany, New York, 1976.
10. Ibid.
11. David, Kertis, and O'Driscoll, English Language and Dissertation Programs.
12. Stephen Cooper, "The Thesis and Dissertation in Graduate ESL Programs," TESOL Quarterly, Volume 12, No. 2, June 1978, p. 113.
13. Ibid.
14. Ibid.

15. Larry G. Benedict, "The Fortune/Hutchinson Evaluation Methodology: A Decision Oriented Approach." A paper presented at "Methodologies Under Development," a symposium of the American Educational Research Association, New Orleans, February 1973, p. 23.
16. Ibid., p. 11.
17. Ibid.
18. Ibid., p. 12.
19. Ibid., p. 17.
20. Ibid., p. 24.
21. Ibid., p. 33.

C H A P T E R I I

REVIEW OF THE RELATED LITERATURE

Historical Development of English as a Second Language

English as a Second Language (ESL) is used extensively to teach English to non-English speakers. Since English as a Second Language is often confused with English as a Foreign Language, it is important to define what these terms mean. According to Christina Bratt Paulston,

A second language is the official, non-home language of a citizen in a country where he needs the official language for full participation in the social, political, and economic life of that nation, as French in Morocco or Spanish in Mexico.¹

E. Glyn Lewis adds,

It is not at all clear sometimes how a second language distinguishes itself at one end of the scale from the first language or mother tongue, and at the other extreme from a foreign language.

Ordinarily the clearest distinction between the second and a foreign language is based on the context of their acquisition. The former is normally acquired under the stress of close social or environmental requirements.²

In other words, the second language is acquired in a situation of language contact where the need for knowing the second language is essential for engaging in everyday activities such as school, business, government, etcetera.

Foreign language acquisition is not the result of

language contact and is not essential for performing everyday activities. It is seen as an enriching experience. The same language can be a second or foreign language, depending on the circumstance under which it is learned. For Mexicans living in the United States, English is a second language. For Mexicans living in Mexico, English is a foreign language.

Besides the differences in the circumstances surrounding acquisition of a second language and a foreign language, the effects of doing so are different. E. Glyn Lewis states that,

A second language, especially if it is acquired early and involves some of the considerations affecting the acquisition of the first language, is more deeply embedded than a foreign language in the fundamental psychological development of the child. In teaching the second language, therefore, there is a need to ensure that what is known of the relationship between the mother tongue and emotional and cognitive development, and what is known of the function of the mother tongue in the control of important aspects of behavior, are taken into account. It is often the case that the second language is learned when the basic conceptualizing processes are being formed. The foreign language on the other hand, is usually introduced when such processes are nearly completed, and learning in this sense is a cognitive enrichment rather than fulfillment.³

Another difference between the two is the way a person feels and behaves toward learning a second language as opposed to a foreign language. Spolsky finds that having:

A favorable attitude and positive motivation facilitate the acquisition of both, but in learning the second language attitude is the more important since it usually derives from the kind of relation one has with the ethnic group whose language is involved and whose immediate presence supplies the necessary motivation.⁴

The person who has had positive contacts with the dominant language group will react in a favorable way to learning its language. The person who has had negative contacts will react in a negative way. Considering the attitudes that the language contact situation has brought about is essential when teaching ESL since it influences the approaches, methods and techniques which will be used in the classroom.

ESL approaches, methods, and techniques developed from foreign language teaching. An historical overview of this development indicates that the learning of second languages has gone on for centuries:

Trilingual vocabularies used for the education of scribes have been found at Ugarit, and at least two examples of vocabulary in four languages--Sumerian, Akkadian, Jurrian, and Ugaritic--testify to the recognition of the need for instruction in those languages.⁵

Besides these vocabularies, which date from about 1220 B.C., there were found a series of texts which show that these scribes were taught using what is called a translation method. The students started out by copying personal names and proceeded to write phrases, first in Sumerian and then in Akkadean:

The instruction proceeded through long continuous passages in which the Sumerian version was translated into Akkadean line by line. Scholarly accuracy was not inculcated; the main purpose was to render the sense well enough for practical purposes. The study of other Semitic dialects did not require the same prolonged discipline, and for these, bilingual lexicons seemed to have sufficed. (Cambridge Ancient History, III, 1962, p. 103)⁶

In the West, from the first century to the fifth century, bilingual Greek-Latin education prevailed. The Romans used Greek slaves to teach their children Greek:

Though it was the Roman child's second language, Greek was not taught as a foreign language, as we conceive it, rather it was the foundation and core of the educated child's curriculum. It was taught before the child was introduced to any formal instruction in his mother tongue . . .⁷

The Romans were using what is today called the submersion method. This method was used since:

This early instruction in Greek was assumed to be at least as good a foundation of the child's development as his mother tongue would be. It had the advantage of ensuring the easy and firm acquisition of a necessary second language, and it was regarded as a highly satisfying means of improving a child's control of his mother tongue. Every Roman child picked up Latin in the ordinary course of events, so that when he reached the age for attending school he was thoroughly bilingual and could profit from formal instruction in both languages, though it was with Greek that such formal instruction began. (Diel, 1754:742)⁸

In spite of its success in teaching the Romans Greek,

Augustine criticised the un-naturalness of a system of bilingual education which imposed the exclusive use of the second language as the medium of instruction for the young, for this led to boredom and drudgery. (Augustine: 13)⁹

There were other reasons why this method became unpopular, so that by the decline of the Roman Empire in the fifth century, it was no longer used. According to its critics,

1. If, in order to help the child consolidate his Greek, formal instruction in the mother tongue were too long delayed, he might speak his native tongue with a foreign accent.

2. . . . as a result of very early instruction in and use of Greek, educated Romans tended to introduce some features of the Greek tonic system into their Latin speech.
3. . . . many felt that the acquisition of two languages simultaneously was an intellectual burden.
4. Even from the teacher's standpoint, it was thought quite impossible to keep instruction going satisfactorily in the two languages at the same time.
5. For many pupils it was even more difficult and frustrating.¹⁰

These are some of the same complaints heard today about bilingual/bicultural education!

Until the end of the nineteenth century, languages were taught through grammar and translation. First, there was the "grammar method," which was assumed to discipline the mind, develop the memory, and train in logical thinking. Then there was the "interlinear translation method" devised by an Englishman named James Hamilton. It contained a complete story divided into sections, each with an interlinear and then an idiomatic translation. Around 1852, a text was prepared to be used with this method. Questions and answers accompanied each lesson along with lists of cognates. This method was further developed by attempting self-pronunciation exercises in the foreign languages. A limited vocabulary of two or three hundred words, introduced in skillfully constructed sentences and repeated constantly to ensure retention, was also used.

The "natural method," which appeared in the private

language schools around 1866, stressed the spoken language, eliminated technical grammar at the beginning of the course, and used the foreign tongue to explain the meaning of new vocabulary and even grammatical principles which would not be taught in a functional way. No English was used by the instructor and the student was drilled in reading the foreign language aloud and was taught meaning of the text by inference or by explanations given in the language by the instructor.

The academies and universities continued to use the interlinear translation method and there was constant friction between proponents of the two methods. When ten prominent teachers of languages met in Washington in 1892, they decided that the translation method was the most effective way to teach languages. This method prepared students to translate at sight and ultimately to read foreign languages directly. Some practice in pronunciation, conversation, and composition were incorporated to broaden the translation method.

Later developments led to the "psychological method." A series of statements dealing with one subject, but developing the actions by the use of a different verb in each statement, were used in this method. The subjects were commonplace, daily routines, and contained all the vocabulary related to that activity. The emphasis was to train the students to develop listening skills. The teaching

of pronunciation was standardized and became an integral part of the lesson. Dr. Wilhelm Victor, professor of philology at the University of Marburg, was the first one to champion the scientific use of phonetics as an aid in teaching the pronunciation of a foreign tongue. This method emphasized developing listening and speaking skills and later became known as the "direct method."

From these different methods the "eclectic or complete method" was developed. Students were to acquire skills in speaking, writing, comprehension, and reading instead of concentrating in one or the other as in the previous methods. The four areas were incorporated into the day's lesson.

In 1924 the Modern Foreign Language Study began an investigation of the whole field of modern language learning and teaching in the United States. In 1929 Professor Algernon Coleman published The Teaching of Modern Foreign Languages in the United States. The conclusions reached in this volume affected the teaching of modern languages fundamentally until the outbreak of World War II. The emphasis was on reading based on experiments and statistical evidence in the vernacular which indicated that the amount of reading that pupils did was directly related to achievement both in rate of silent reading and in comprehension. Also, more emphasis was placed in the "fuller understanding of foreign people and their civilizations."¹¹ This investi-

gation led to the development of the direct reading method and cognate method.

Along with the educational establishment, the members of the Linguistic Society of America, in their research on the languages of the American Indians, devised learning techniques in the 1920's which were to play a leading part in revitalizing language teaching after 1939. The new techniques were based on the beliefs of Professor Franz Boas, Edward Sapir, Leonard Bloomfield, and others that written language is seldom a representation of actual speech; and that the only way to learn a language as it is spoken is to imitate as accurately as possible the conversation or speech of natives talking naturally and freely.

The method is based upon the principle that a language is made up not of detached words but of phrases, or groups of words. The emphasis therefore is not on the memorization of separate words but on the retention of expressions.¹²

The members of the Linguistic Society of America used the "scientific approach" developed by such scholars as Block, Hill, Trager, Jakobson, Smith, Walker, Twadell, and Cowen.¹³ This method uses descriptive linguistics to point out differences between the two languages and native speakers to develop proper pronunciation and intonation. It also employs the unit approach where the subject matter of each lesson is organized so that it centers around a sphere of interest that is essentially practical.

One of the contributions of linguistics in the field

of language teaching has been a change in emphasis from reading to speech. Also, the need to teach cultural aspects of the language--dance, art, music, etcetera. Yet these ideas were relegated for a long time by the educational establishment for the reading and direct methods. But the American Council of Learned Societies realized their value. Their members developed some interesting innovations in teaching which were applied to language learning by the Army and Navy during World War II. In the Intensive Language Program set up by the Army and Navy, the following innovations developed by the Linguistics Society of America were stressed:

1. Insistence that students spend most of their time in small drill sessions, imitating a native speaker or informant;
2. Extension of the language course to 15 or 20 hours per week;
3. Reduction of the study of grammar to what is essential for the imitation of a native speaker; and
4. Less emphasis on the study of reading or writing which might interfere with learning the 'spoken language.'¹⁴

Professor Mario A. Pei of Columbia University and Professor Frederick Bodner of the University of Cape Town made these same theories plausible and comprehensible to teachers and laymen alike through their books, Languages for War and Peace and The Loom of Language. Both books, which appeared in 1943 and 1944 respectively, stressed the

teaching of several languages at once.

After World War II, the "aural-oral" or "audio-visual" approach became popular. Methods using this approach started being applied directly to the teaching of ESL. The audio-lingual method was developed from this approach and it was dominant for over twenty years. It is based on Bloom's structural linguistics and Skinner's behavioral psychology. The structural linguist studies languages as they are spoken: language is viewed as a structure consisting of many units which can be classified according to their function in the entire language structure. The behavioral psychologist studies the relationship of stimulus/response in behavior. Therefore, students are presented with the language structure in units consisting of grammatical groups presented in dialogues revolving around everyday occurrences. In this method there is plenty of imitation, repetition and conversation to ensure retention and proper use of given units of the language structure. The stress is on developing listening comprehension and speaking before reading and writing. The method calls for concentrated doses of classroom instruction in which pictures, realia, and mechanical aids are liberally used. The use of lab equipment to supplement classroom instruction is essential. With her book, Teaching English as a Second Language: Theory and Practice, Mary Finocchiaro made this approach readily accessible to the classroom

teacher.

By the end of the 1960s many scholars, teachers, and students had become dissatisfied with the audio-lingual approach. According to Edmond A. Meras,

Language learning must be made adaptable to all students and it must reach, by using a multiple approach, every student in any given class whatever his individual aptitudes may be.¹⁵

The consensus seemed to be that the audio-lingual method was not achieving this goal. This was probably a result of the revolution taking place in linguistics and psychology.

The advent of generative linguistics brought with it a new way of looking at language, and at the same time cognitive psychology similarly turned the attention of those studying human behavior away from programs of mechanistic conditioning.¹⁶

As such, a multitude of innovations were implemented in language teaching. But language teachers found that the theories of Noam Chomsky, Robert Krohn, and Bernard Spolsky in linguistics; and David Ausubel, Frank Smith and Carl Rogers in psychology, did not translate into applicable teaching methods and techniques for language teaching. The 1970s saw an unprecedented number of ideas which are essential that language teachers possess, but no panacea to the complex process of language teaching and learning.

During this time the "cognitive-code-learning approach," which leads the student to make an analysis of the language he is learning and to develop competence in its use, developed. The method employs contrastive

analysis of the second and native language. Modified versions of the Grammar Translation Method and Direct Method were also being used.

So the third quarter of the twentieth century was a period when language teaching methodology went from a well accepted method strongly rooted in linguistic and psychological theory to a time of uncertainty and searching.¹⁷

During this quarter of the century, methods based on the substantial and growing body of research that provide comprehensive insights into the process of second language acquisition and take the affective domain into account have developed. In "Community Language Learning," students and teachers struggle with the forms of the language inductively but always with the security of acceptance of each other. "The Silent Way" capitalizes on the motivation of students to communicate with each other with little prodding or direction from the teacher. "Suggestopedia is used for teaching many different skills besides language, relies on the significance of the subconscious cognition of human beings and promotes learning through relaxation and indirect acquisition of forms."¹⁸ It is impossible to mention the other methods which have been developed as scholars, teachers, and students continue to search for the most effective method to teach languages. This rather brief overview shows that the field of language teaching as a foreign or second language has undergone substantial changes that have led to better and more efficient ways of teaching

it. Yet, Edmond A. Meras is correct in writing that,

. . . A long range, impersonal historical view will show only a steady improvement in techniques and increased efficiency in presentation of subject matter.

But greater emphasis on motivation is necessary, and greater social pressure and interest must be created to help combat the general public apathy and even open antagonism to language learning. Only when such interest has been aroused will the many improved and progressive techniques of language teaching really become effective.¹⁹

Historical Developments of Bilingual/Bicultural Education

Although ESL has been in extensive use in higher education since the 1960s, bilingual/bicultural education (BBE) in higher education is a more recent development in the United States. Yet bilingual education was prevalent in elementary and secondary schools prior to World War I. When the Bilingual Education Act was signed by President Lyndon B. Johnson on January 2, 1968 the United States returned to what had been considered normal. This Act is also known as Title VII of the Elementary and Secondary Education Act of 1965 as amended in 1967, or Public Law 90-247. It came about as a result of arduous work by the Hispanic Community and involved many hours of litigation in the courts. The forerunners of this law were Brown (1954) and the Civil Rights Act of 1964. It has been strengthened by the 1970 OCR Memo, the 1974 Supreme Court decision Lau vs. Nichols, and the 1976 Lau Remedies.

Section 702 of the Bilingual Education Act states:

In recognition of the special educational needs of the large numbers of children of limited English-speaking ability in the United States, Congress hereby declares it to be the policy of the United States to provide financial assistance to local educational agencies to develop and carry out new and imaginative elementary and secondary school programs designed to meet these special education needs. For the purpose of this title, 'children of limited English-speaking ability' means children who come from environments where the dominant language is other than English.²⁰

The "new and imaginative" program set up was bilingual education in which the student's mother tongue is used as a medium of instruction while the student is acquiring English as a Second Language. The program is also designed to impart to students a knowledge of the history and culture associated with the respective languages.

When the Spanish-speaking community started pressing for bilingual education during the 1960s, many Americans started complaining that other immigrant groups had not been given this opportunity. But according to Joshua Fishman, this is not true:

More American grandparents received bilingual education at public expense than most of us realize. There was considerable public bilingual education in the U.S.A. in the latter part of the nineteenth and in the early part of the twentieth century (Fishman, 1966) and only the xenophobia of World War I days has erased that fact from our historical consciousness. As many as one million children attended bilingual programs in public schools during the nineteenth century and much earlier in sectarian schools.²¹

There were, for example, German/English public bilingual schools in Indiana, Illinois, Ohio, Wisconsin, Minnesota,

Michigan, Iowa, and Missouri; French/English programs in Louisiana; and Spanish/English programs in New Mexico prior to the Civil War. The school laws and administrative policies were silently permissive as to the language of instruction. Some states actually had laws authorizing the use of a vernacular other than English. In Pennsylvania in 1837 and Ohio in 1839 the law permitted German/English public schools; the California and New Mexico constitutions were drafted so that there was equality between English and Spanish. Cincinnati had bilingual programs until 1917.²²

Taking a closer look at the German/English bilingual programs, Harold H. Leibowitz points out in "Language Policies in the United States," that prior to the last half of the nineteenth century, German was used in the sectarian schools throughout Pennsylvania, Maryland, Virginia, and the Carolinas, often to the exclusion of English.²³ During the period of 1817-35, the number of German immigrants increased greatly, most of them concentrating in Indiana, Illinois, Ohio, Wisconsin, Minnesota, Michigan, Iowa, and Missouri. The public schools set up during this time made no mention of the language to be employed in the schools. If the language question came up, the Germans put pressure on the legislature to ensure the use of German in public schools. In Ohio they managed to have a law passed allowing the use of German in the public schools in 1836; by 1840 the law was revised to set up German/English schools. In

Pennsylvania in 1837 the law permitted German schools to be founded on an equal basis with English ones. This situation persisted until the 1900s, when the teaching of German in the public schools came under severe attack and the use of German was discontinued in St. Louis, Louisville, St. Paul and San Francisco. There had been a large immigration during this time and the Germans posed a threat to the political balance of many states. As such, many moved against them by attacking their language and their church. The Germans developed private and parochial schools to counteract the effect of the new legislation. But these also came under fire, and laws prohibiting the use of German were passed as anti-German feelings increased during World War I and the United States became extremely nationalistic. Although these laws were found to be unconstitutional and could not prevent the teaching of German in private and parochial schools, the practical effect of World War I and the accompanying state legislation resulted in the German language effectively being dropped from the public high school curriculum. The situation was made worse by the advent of World War II.

The political and social barriers imposed on German were also extended to other languages and immigrant groups. It became a "crime" to teach in any language but English, and this "prohibition" lasted until 1968 when the Bilingual Education Act was signed into law.

Since then, many states (Massachusetts was the first state to do so) have passed bilingual education laws to ensure that students who are non-English speaking or limited-English speaking receive an equal education. The programs set up under these laws have been under a continuous barrage of criticism from educators, politicians and the general public.

The criticism leveled at bilingual/bicultural programs falls into three main headings: cognitive aspects, cost and divisiveness. The literature dealing with BBE demonstrates that there is a positive cognitive aspect to bilingualism. The authors of The Bilingual Brain state:

Mastery of a second language affects perceptual strategies and capacities. In the bilingual there is a loosening of perceptual constraints, a new openness and flexibility. Consistent with findings in the section on linguistic studies, we found strong evidence to suggest that bilinguals are better able than monolinguals to deal with abstract aspects of language, that there is greater cognitive flexibility on the part of bilinguals. Nonverbal skills are not impaired in young bilinguals, while verbal skills mature earlier. Bilinguals have greater linguistic sensitivity than monolinguals. Experience in study of foreign language expands the individual's sensitivities to universals of phonetic symbolism.²⁴

In a country that has become increasingly cost conscious BBE seems to many as an unnecessary frill. Yet according to Joshua Fishman, "Bilingual and bicultural education is not a favor for the poor, it is an obligation and opportunity for us all - particularly for the high and mighty - if we are to survive."²⁵ He further states that

When all is said and done bilingual education 'gives' much more than it 'takes away.' The unmarked language child has at least acquired entree into a language culture that would otherwise have been for him a closed book.²⁶

The United States has institutionalized the process of assimilation as the only way to achieve success within the American society. Any deviation from this norm is instantly branded as being divisive and leading to the disintegration of the fifty states. But the desire of a group to maintain its language and culture should be viewed as a means of diversifying rather than dividing the United States. As stated by the authors of The Problem of Language Revival:

Critics claim that languages are barriers, but barriers need not be purely negative things; they can be surprisingly creative. Barriers to reproduction between originally interbreeding sections of plant and animal species have been the means of enabling these to develop, diversify and enrich their own inherited cultures instead of having their individuality diluted and finally washed out in a common flat uniformity.²⁷

Taking these things into account, there is a need in the United States for bilingual/bicultural education programs, not just English as a second language programs. BBE programs should permeate the whole educational system from elementary schools to universities in order to meet the educational needs of citizens who are non-English speaking. The ESL component can also service the large numbers of foreign students who come to study in the United States. BBE programs should provide an alternative education to majority children desiring to be part of it.

Chapter Two: Footnotes

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23. Ibid.
24. Martin L. Albert and Loraine K. Ablor, The Bilingual Brain (New York: Academic Press, 1978), pp. 245-46.
25. Fishman, Bilingual Education, p. 10.
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C H A P T E R I I I
IMPLEMENTATION OF THE FORTUNE/HUTCHINSON
EVALUATION METHODOLOGY

Chapter Overview

This chapter presents the implementation of the Fortune/Hutchinson Evaluation Methodology. The steps carried out during the evaluation, and the outcomes of these steps are described in detail. The major steps in the methodology are used as subtitles.

Negotiation of the Contract

In November of 1980, this evaluator met with the director of the ESL component of the Rhetoric Department at the University of Massachusetts in Amherst, to explain the Fortune/Hutchinson Evaluation Methodology, and to determine if it satisfied his need for an evaluation of the ESL component. After discussing the purpose of evaluation, "to provide information for decision-making," and the methodology, both parties were ready to negotiate an agreement for the evaluation to be done.

In order to draw up the contract, it was necessary to identify the enterprise to be evaluated. The director named the English as a Second Language component of the

Rhetoric Program at the University of Massachusetts at Amherst as the entity to be evaluated. He also provided a written description of the enterprise which appears in Table 3. It was also necessary to identify the resources for the evaluation, and the person who would receive the results of the evaluation. Table 4 lists the resources available to the enterprise and those available for the evaluation. The director was named as the person who would receive the results of the evaluation. There were other possible decision-makers, such as the director of the Rhetoric Program; but since resources were limited, the scope of the study was narrowed in order to do as thorough a job as possible. All this information was put into contract form and signed by both the evaluator and the director. The contract appears in Table 2.

Goals Process

Once an agreement had been reached concerning the entity to be evaluated, the resources available for the evaluation, and who would receive the results of the evaluation, the evaluator started the Goals Process. The director was asked to mention his intent for the ESL program. In response to the question, "What do you really want the ESL component to accomplish for yourself and for others?" the director replied, "To meet the goals of the Rhetoric Program, as established by the Academic Matters and Faculty

TABLE 2

CONTRACT
(Step 1.0)

I agree, as Director of the English as a Second Language (ESL) component of the Rhetoric Program at the University of Massachusetts at Amherst, to provide access to program records, release time for personnel involved in the evaluation (teachers, students, secretary), and five hours a week of my time, without compensation, to the Evaluator, a doctoral candidate in the School of Education's Bilingual-Bicultural Professions Program, who will be evaluating the ESL component of the Rhetoric Program. The Evaluator must evaluate the four levels of the ESL component.

Also, the Evaluator agrees to give progress reports of findings as they become available. The final report of the evaluation should be submitted to me as soon as the evaluation is completed, but the Evaluator will have access to program data until such moment.

Also, the Evaluator agrees to use the information compiled only for the purpose of a doctoral dissertation and agrees that the names of individual students will not be used. Any other use of this information requires written permission from me.

Director

Evaluator

TABLE 3
ENTERPRISE IDENTIFICATION
(Step 2.2)

The Rhetoric Program of the University of Massachusetts at Amherst has an English as a Second Language (ESL) component. This component offers four levels in English instruction to students who are limited English speakers. During the 1981-82 school year, these four levels (Rhetoric 105C, Rhetoric 105F, Rhetoric 100L, and Rhetoric 110B) will be the focus of the evaluation. The evaluation will include all the participants in these four levels.

TABLE 4
 IDENTIFICATION OF RESOURCES
 FOR THE EVALUATION
 (Step 4.1)

The director listed the following resources as being available to the enterprise:

Director	Classrooms
Teachers	Language lab
Secretary	Study room
Office and office equipment	Instructional material--books, tapes, etc.

The following are available for the evaluator:

Director's time	Secretary's time
Teachers' time	Students' records

Senate, and which appear in the program brochure."

The brochure for the Rhetoric Program listed twelve objectives as being "essential to the student's improvement in reading, writing, speaking, and listening." The director indicated the following as being the focus of the ESL program:

To develop a thesis and distinguish between controlling and supporting ideas.

To develop ideas by using a variety of supports (e.g., definition, example, illustration, statistics, comparison and content, analogy).

To develop responsibility for acting as credible sources of complete and accurate information.

To demonstrate knowledge of conventions in writing and speaking (e.g., spelling, punctuation, grammar, oral delivery).

To identify, analyze and evaluate definitions, inferences, assumptions, and patterns of reasoning, and to apply that analysis in spoken and written discourse.

To improve reading and listening skills.

The director also gave the following personal goals as being intents of the ESL program.

To help students acquire an adequate proficiency in English that will allow them to function successfully at the University.

To promote the habit of using English as a vehicle of communication in and outside the classroom.

To acquire understanding of cultural expressions and attitudes as manifested through the medium of the English language.

Develop appreciation for aesthetic values in representative literary works in English.

To become involved in bilingual campus life.

To enable such students to compete successfully for jobs after graduation.

To develop self-discipline and work-study skills.

After the list of goals was generated, the evaluator broke down the multiple goal statements into single goal statements. Multiple goals statements are goal statements expressing more than one purpose (connected by "and," "but," "or," etcetera). Single goal statements are goals with only one purpose. This breakdown of goals appears in Table 5. The director went through the list and felt that the following goals should be added:

To organize ideas in a coherent pattern in writing and speaking.

To express ideas coherently in writing and speaking.

He also felt that the goal stating, "To improve listening skills" should be changed to read:

To improve listening comprehension skills.

The new goals were broken up into single goal statements and added on to the goal list.

In order to determine the completeness of the goals list, the Activities Test of Completeness for Goals was performed. The director made a list of activities that he performs during the course of the ongoing enterprise. Then he stated why these activities are performed, and matched each reason to a goal or goal statements on the list. Table shows the result of this match. It can be seen that the list is pretty complete and that the Prioritization

TABLE 5

PRIORITIZATION PROCESS
(Step 8.0)

Goals	Criteria for Evaluation				
	Importance for success of ESL	Chrono-logical*	Cost (low)	Total	Rank Order
1. To develop a thesis	36	15	2	53	14
2. To distinguish the central idea	37	16	2	55	15
3. To distinguish the supporting ideas	38	17	2	57	16
4. To develop ideas	39	13	2	59	19
5. To develop ideas by definition	40	19	2	61	21
6. To develop ideas by example	41	20	2	63	24
7. To develop ideas by illustration	42	21	2	65	26
8. To develop ideas by statistics	43	22	2	67	28
9. To develop ideas by comparison	44	23	2	69	30
10. To develop ideas by contrast	45	24	2	71	32
11. To develop ideas by analogy	46	25	2	73	35
12. To develop responsibility	47	26	2	75	37

*Refers to goals that have to be achieved first, before others can be implemented.

TABLE 5 (Continued)

Goals	Criteria for Evaluation				
	Importance for success of ESL	Chrono-logical	Cost (low)	Total	Rank Order
13. To develop responsibility for acting as credible sources of complete information	38	27	2	77	39
14. To develop responsibility for acting as credible sources of accurate information	49	28	2	79	40
15. To develop responsibility for acting as complete sources of information	50	29	2	81	42
16. To develop responsibility for acting as accurate sources of information	51	30	2	83	44
17. To develop responsibility for acting as complete sources of credible information	52	31	2	85	46
18. To develop responsibility for acting as accurate sources of credible information	53	32	2	87	48
19. Demonstrate a knowledge of conventions in writing	23	2	4	29	2
20. Demonstrate a knowledge of conventions in speaking	29	8	4	41	8

TABLE 5 (Continued)

Goals	Criteria for Evaluation					Rank Order
	Importance for success of ESL	Chronological	Cost (low)	Total		
21. Demonstrate a knowledge of conventions in spelling	26	5	4	35	5	
22. Demonstrate a knowledge of conventions in punctuation	27	6	4	37	6	
23. Demonstrate a knowledge of conventions in grammar	22	1	4	27	1	
24. Demonstrate a knowledge of conventions in oral delivery	18	7	4	39	7	
25. To identify definitions	54	33	2	89	50	
26. To analyze definitions	55	34	2	91	52	
27. To evaluate definitions	56	35	2	93	54	
28. To identify inferences	57	36	2	95	55	
29. To analyze inferences	58	27	2	97	57	
30. To evaluate inferences	59	38	2	99	59	
31. To identify assumptions	60	39	2	101	60	
32. To analyze assumptions	61	40	2	103	61	
33. To evaluate assumptions	62	41	2	105	62	
34. To identify patterns of reasoning	63	42	2	107	63	
35. To analyze patterns of reasoning	64	43	2	109	64	

TABLE 5 (Continued)

Goals	Criteria for Evaluation				
	Importance for success of ESL	Chrono-logical	Cost (low)	Total	Rank Order
36. To evaluate patterns of reasoning	65	44	2	111	65
37. To apply analysis of definitions in spoken discourse	66	45	2	112	66
38. To apply analysis of definitions in written discourse	67	46	1	114	67
39. To apply analysis of inferences in spoken discourse	68	47	2	117	68
40. To apply analysis of inferences in written discourse	69	48	1	118	69
41. To apply analysis of assumptions in spoken discourse	70	49	2	121	70
42. To apply analysis of assumptions in written discourse	71	50	1	122	71
43. To apply analysis of patterns of reasoning in spoken discourse	72	51	2	125	72
44. To apply analysis of patterns of reasoning in written discourse	73	52	2	127	73
45. To improve reading skills	24	3	3	30	3
46. To improve listening comprehension skills	25	5	1	30	4

TABLE 5 (Continued)

Goals	Criteria for Evaluation				
	Importance for success of ESL	Chronological	Cost (low)	Total	Rank Order
47. Help students acquire adequate proficiency in English	5	57	2	64	25
48. Help students function successfully at the University	6	67	2	66	27
49. Help students acquire the needed adequate proficiency in English to perform successfully at the University	7	59	2	68	29
50. Promote the habit of using English	13	65	2	80	41
51. Promote the habit of using English as a vehicle of communication	14	66	2	82	43
52. Promote the habit of using English as a vehicle of communication in the classroom	8	60	2	70	31
53. Promote the habit of using English as a vehicle of communication outside the classroom	9	61	2	72	33
54. To acquire understanding of cultural expressions in the United States	15	67	2	84	45

TABLE 5 (Continued)

Goals	Criteria for Evaluation					Rank Order
	Importance for success of ESL	Chronological	Cost (low)	Total		
55. To acquire understanding of cultural attitudes in the United States	16	68	2	86	47	
56. To acquire understanding of cultural attitudes as manifested through the medium of the English language in the United States	17	69	2	90	49	
57. To acquire understanding of cultural expressions as manifested through the medium of the English language in the United States	18	70	2	90	51	
58. To acquire understanding of the medium of the English language in the United States	19	71	2	92	53	
59. To develop appreciation	74	74	2	148	74	
60. To develop appreciation for aesthetic values	75	75	2	150	75	
61. To develop appreciation for aesthetic values in representative literary works in English	76	76	2	152	76	

TABLE 5 (Continued)

Goals	Criteria for Evaluation					Rank Order
	Importance for success of ESL	Chrono-logical	Cost (low)	Total		
62. To develop appreciation for representative literary works in English	77	77	2	154	77	
63. To become involved	10	62	0	72	34	
64. To become involved in bilingual campus life	11	63	0	74	36	
65. To become involved in campus life	12	64	0	76	38	
66. To enable such students to compete	1	53	3	57	17	
67. To enable such students to compete successfully	2	54	3	59	8	
68. To enable such students to compete after graduation	3	55	3	61	22	
69. To enable such students to compete for jobs after graduation	4	56	3	63	23	
70. To develop self-discipline	20	72	4	96	56	

TABLE 5 (Continued)

Goals	Criteria for Evaluation					Rank Order
	Importance for success of ESL	Chrono-logical	Cost (low)	Total		
71. To develop work-study skills	21	73	4	98	58	
72. To organize ideas	30	9	2	41	9	
73. To organize ideas in a coherent pattern in writing	31	10	3	44	10	
74. To organize ideas in a coherent pattern in speaking	32	11	1	44	11	
75. To express ideas	33	12	2	47	9	
76. To express ideas coherently in writing	34	12	2	48	9	
77. To express ideas coherently in speaking	35	14	1	50	13	

TABLE 6

TEST OF COMPLETENESS
(Step 6.0)

Activity	Reason	Goals*
1. Evaluation of students with Michigan Test	For placement purposes in ESL program and recommendation for admission to UMass.	40
2. Placement of students	To meet individual language needs, To place in proper course level.	47-49
3. Workshops, course planning, material evaluation and selection, teacher-prepared materials	Professional development. Person can function appropriately and effectively in program.	1-72
4. Orientation of new staff concerning total ESL program	Professional development. Person can function appropriately and effectively in program.	1-72
5. Working with other agencies at UMass (BCPP, Foreign Student Office, Minority Engineering, and CEESB)	To meet students' individual needs.	1-62
6. Course design and planning	To maintain and improve quality of courses offered.	1-62

*See Table for statement of goals.

TABLE 6 (Continued)

Activity	Reason	Goals
7. Mode of testing and evaluation of students in each course	To assess student achievement in each course.	1-58
8. Evaluation of books and materials used in classroom	To maintain and improve quality of courses offered.	1-62
9. Selection of materials to be used in classroom	To maintain and improve quality of courses offered.	1-62
10. Scheduling of courses each semester	To help students plan their program of study/course load.	1-72
11. Interviewing and hiring teachers and other staff.	To maintain function and quality of program.	1-72
12. Developing ESL budget for the year	To assure maximum efficiency in running the program.	1-72
13. Attending professional activities: conferences, workshops, etc.	To acquire information in order to update ESL program.	1-72
14. Making recommendations to admissions office	To provide an opportunity for these students to enter UMass that they would not otherwise have.	66-70

TABLE 6 (Continued)

Activity	Reason	Goals
15. Supervision of teachers	To assure quality and improvement of program.	1-62
16. Evaluation of teachers	To assure quality and improvement of program.	1-72
17. Evaluation of teachers' lesson plans for one semester	To insure quality and control of program.	1-72
18. Doing research testing	To improve placement and proficiency testing of students.	46, 1-46
19. Designing of recordkeeping forms	To acquire data for program evaluation and improvement.	1-72

Process could begin.

During the first part of the Goals Process, seventy-seven single goal statements were generated. These goals had to be prioritized. After discussing possible criteria for prioritizing them, it was determined that there was enough time to do a prioritization of goals using three criteria: importance to ESL component, chronology (which skill must be learned first), and cost to ESL component and students.

The director ranked each goal using each of the criteria decided upon. Then prioritization was done on the basis of adding together ranking on the different criteria. The director used the criterium of importance to success of the ESL program to break any ties resulting from this step. The final prioritized list was presented to the director for approval. Table 5 shows the results of this process. He was satisfied with the order of the goals.

It was decided at this point that only the first fifteen goals would be used for the next step because of the limited resources and time constraints. Although the first fifteen goals are not all the most important, they are those that are basic to the Rhetoric Program. The director received the report shown on Table 7 based on the agreements reached during the Prioritization Process.

TABLE 7
PRIORITIZATION REPORT

FROM: Evaluator
TO: Director
SUBJECT: Results of Prioritization Process
DATE: March 30, 1981

These are the goals that ranked 1 to 15 in the prioritization part of the Goal Process, using the criteria of importance to the success of the ESL component, chronology, and low monetary cost to ESL component and students. They will be the focus of the evaluation for the Integration of Goals and Parts.

1. To demonstrate a knowledge of conventions in grammar.
 2. To demonstrate a knowledge of conventions in writing
 3. To improve reading skills.
 4. To improve listening comprehension skills.
 5. To demonstrate a knowledge of conventions in spelling.
 6. To demonstrate a knowledge of conventions in punctuation.
 7. To demonstrate a knowledge of conventions in oral delivery.
 8. To demonstrate a knowledge of conventions in speaking.
 9. To organize ideas.
 10. To organize ideas in a coherent pattern in writing.
 11. To organize ideas in a coherent pattern in speaking.
 12. To express ideas.
 13. To express ideas coherently in writing.
 14. To express ideas coherently in speaking.
 15. To develop a thesis.
-

Parts Process

The director was asked to respond to the following question: "What are the conceptual components that you see as the major parts of the ESL component of the Rhetoric Program?" Then he was asked to identify the major parts elicited as input, interfaces, or output. Table 8 shows what the major parts of the ESL component are and whether the part is an input (prerequisite), interface (not a part but impinges and influences), or output (results).

These major parts of the ESL component were assigned to the appropriate activity on the activities list generated during the Goals Process. It was found that parts 8-11 (the courses offered by the ESL program) were not assigned to at least one activity. This discrepancy was pointed out to the director and as a result, activity 20, which reads, "Achieving ESL goals at different levels," was added to the activity list since parts 8-11 are essential to the enterprise. Table 9 shows this match between activities and parts. It also gives the ranking of each activity and part. The information gathered during this process was then reported to the director. (See Table 10)

TABLE 8

PARTS PROCESS
(Step 3.0)

Parts	Input	Inter- face	Output
1. Course 105C	Students with scores of 61-80 in the Michigan Proficiency Test and 75-100 in the Michigan Placement Test.	X	Students with scores of 80-up in Michigan Placement Test.
2. Course 105F	Scores of 81-up in Michigan Placement Test. Students who completed 105C but not ready for 100L because of writing skills. New students who have scores of 70-up in Michigan Placement Test but need composition skills.	X	Students of scores of 80-up and can write a composition at appropriate level.
3. Course 100L	Scores of 81-up in Michigan Placement Test. Can write a composition at appropriate level.	X	Scores of 80-up. Can write a composition at appropriate level.
4. Course 110B	Recommendation of teacher. Score 81-up. Composition at appropriate level.	X	Students ready for Core B in ESL or Rhetoric Program.

TABLE 8 (Continued)

Parts	Input	Inter- face	Output
5. Director	X		
6. Secretary	X		
7. Classroom Facilities	X		
8. Library Facilities	X		
9. Budget	X		
10. Instructor	X		
11. Lecturer	X		
12. Teaching Associate	X		
13. Foreign Student English Admission Requirements		X	

TABLE 8 (Continued)

Parts	Input	Inter- face	Output
14. Out-Of-State Student English Admission Requirements		X	
15. In-State Student English Admission Requirements		X	
16. Rhetoric Program		X	
17. Rhetoric Board		X	
18. Academic Matters		X	

TABLE 9 (Continued)

Parts Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
5. Working with other agencies at UMass (BCPP, Foreign Student Office, Minority Engineering, and CEEBS)	X	X																
6. Course design, planning and approval	X			X	X	X										X	X	X
7. Mode of testing and evaluating student in each course	X	X		X	X	X												
8. Evaluation of books & materials used in classroom	X			X	X	X												
9. Selection of materials to be used in classroom	X			X	X	X												

TABLE 9 (Continued)

Parts Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Director	Secretary	Budget	Instructor	Lecturer	Teaching Associate	Course 105C	Course 105F	Course 100F	Course 110B	Foreign Student Admission Requirements	Out-of-State Admission Requirements	In-State Admission Requirements	Classroom Facilities	Library Facilities	Rhetoric Program	Rhetoric Board	Academic Matters
10. Scheduling of courses each semester	X	X																
11. Interviewing and hiring and teachers and other staff	X	X																
12. Developing ESL budget for year	X																	
13. Attending professional activities: conferences, workshops, etcetera	X			X	X	X												
14. Making recommendations to Admissions Office	X																	

TABLE 9 (Continued)

Parts Activities	Director		Secretary	Budget	Instructor	Lecturer	Teaching Associate	Course 105C	Course 105F	Course 100F	Course 110B	Foreign Student Admission Requirements	Out-of-State Admission Requirements	In-State Admission Requirements	Classroom Facilities	Library Facilities	Rhetoric Program	Rhetoric Board	Academic Matters
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
15. Supervision of teachers	X																		
16. Evaluation of teachers	X																		
17. Evaluation of teachers' lesson plans	X																		
18. Doing research in testing	X	X		X	X	X													
19. Designing of recordkeeping forms	X	X																	
20. Achieving ESL goals at different levels			X	X	X	X	X	X	X	X	X				X	X			

TABLE 10
PARTS PROCESS REPORT

FROM: Evaluator
TO: Director
SUBJECT: Parts Process
DATE: May 14, 1981

These are the parts that have been identified as being major elements of the ESL component of the Rhetoric Program. They appear in the rank order that you provided, based on their importance to the Program. They will be the focus of the evaluation for the Integration of Goals and Parts. Tables and are the results of Steps 1.0 - 3.3.2 of the Parts Process.

- | | |
|-----------------------|---|
| 1. Director | 11. Foreign student English admission requirements |
| 2. Secretary | 12. Out-of-state student English admission requirements |
| 3. Budget | 13. In-state student English admission requirements |
| 4. Instructor | 14. Classroom facilities |
| 5. Lecturer | 15. Library facilities |
| 6. Teaching Associate | 16. Rhetoric Program |
| 7. Course 105C | 17. Rhetoric Board |
| 8. Course 105F | 18. Academic Matters |
| 9. Course 100L | |
| 10. Course 110B | |
-

Integration of Goals and Parts Process

The goals list and parts list previously generated were presented to the director. He was asked to assign each of the parts to those goals on the goals list that each of the parts related to. All goals were related to at least one part. Then he had to assign each of the goals to those parts on the parts list that each of the goals related to. There were parts for which no goal was related. After some consideration, the director decided to remove these parts, since they were not directly involved in the achievement of the goals. It must be noted that all the goals are teaching goals; therefore, only the parts dealing with courses and instructors remained.

A new list of goals, parts and combined goals/parts was made up with the revisions determined above. Table 11 shows the match between goals and parts. A new list of activities, parts, and combined activities/parts was also made. Table 12 shows the match between activities and parts.

The information gathered during this process was shown to the director for his approval. (See Table 13)

TABLE 11
 INTEGRATION OF PARTS AND GOALS
 (Step 1.0)

Parts and Their Priorities	Goals and Their Priorities														
	Demonstrate a knowledge of conventions in grammar	Demonstrate a knowledge of conventions in writing	To improve reading skills	To improve listening comprehension skills	Demonstrate a knowledge of conventions in spelling	Demonstrate a knowledge of conventions in punctuation	Demonstrate a knowledge of conventions in oral delivery	Demonstrate a knowledge of conventions in speaking	To organize ideas	To organize ideas in a coherent pattern in writing	To organize ideas in a coherent pattern in speaking	To express ideas	To express ideas coherently in writing	To express ideas coherently in speaking	To develop a thesis
Full Time Lecturer	X	X	X	X	X	X			X			X			
Teaching Associate (T.O.)	X	X	X	X	X	X			X			X	X	X	X
Course 105C	X	X	X	X	X	X			X			X			X

TABLE 11 (Continued)

Parts and Their Priorities	Goals and Their Priorities													
	Demonstrate a knowledge of conventions in grammar	Demonstrate a knowledge of conventions in writing	To improve reading skills	To improve listening comprehension skills	Demonstrate a knowledge of conventions in spelling	Demonstrate a knowledge of conventions in punctuation	Demonstrate a knowledge of conventions in oral delivery	Demonstrate a knowledge of conventions in speaking	To organize ideas in a coherent pattern in writing	To organize ideas in a coherent pattern in speaking	To express ideas	To express ideas coherently in writing	To express ideas coherently in speaking	To develop a thesis
Course 105F	X	X	X	X	X	X			X		X		X	
Course 100L	X	X	X	X	X	X			X	X	X	X	X	X
Course 110B					X				X	X	X	X	X	X
Classroom Facilities	X	X	X	X	X	X			X	X	X	X	X	X

TABLE 12
 REVISED INTEGRATION OF PARTS AND ACTIVITIES
 (Step 3.3)

Parts	Activities*																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Full Time Lecturer	X	X	X	X		X	X	X	X				X					X			X
Teaching Associate (T.O.)	X	X	X	X		X	X	X	X				X					X			X
Course 105C																					X
Course 105F																					X
Course 100L																					X
Course 110B																					X
Classroom Facilities																					X

*See Table 6, pages 65-67, for list of activities

TABLE 13
INTEGRATION OF GOALS AND
PARTS REPORT

FROM: Evaluator
TO: Director
SUBJECT: Integration of Goals and Parts
DATE: May 14, 1981

Tables and are the results of the Integration of Goals and Parts, using the prioritized goal list and parts list as revised during the process. They will be the focus of the evaluation for the Operationalization of the Goals and Data Collection.

Operationalization of Goals

With the goals prioritized, and the decision to limit the evaluation to the goals ranked one to fifteen having been made, the evaluator began the Operationalization of Goals. During this process the evaluator got the director to define or clarify his goals. This step was shortened by asking the director to state how an outside observer would know if the goal was being achieved instead of presenting a hypothetical situation. (By this time the evaluator was convinced that the director was fully knowledgeable of the goals analysis process.) The director wrote down all the things that he thought indicated that the particular goal was being accomplished. The evaluator asked the director to go over the list and add, modify, or eliminate items on the list.

The evaluator then made a list of the director's responses, breaking down multiple responses (joined by "and," "or," "but," etcetera) so that there was only one item per line. Exact duplicates were eliminated. The evaluator asked the director to review the list, make any desired changes, and approve it. The director then had to prioritize the items in terms of the importance of having evaluation data about them. The most important item is assigned a "1," next most important a "2," etcetera. Table 14 shows the result of this process.

TABLE 14
OPERATIONALIZATION OF GOALS
(Steps 2.0-8.0)

Goal 1: To demonstrate a knowledge of convention in grammar.

1. Student has no errors in subject-verb agreement.
 2. Student has less than three errors in tense.
 3. Student has no error in use of pronouns.
 4. Student has less than four errors in use of prepositions.
 5. Student has no errors in use of articles.
 6. Student uses a variety of sentence structures:
 - a. simple sentences
 - b. complex sentences
 - c. compound sentences
-

Goal 2: To demonstrate a knowledge of convention in writing.

In a written sample of about 500 words, the student has:

1. No errors in subject-verb agreement.
 2. Less than three errors in tense.
 3. No errors in use of pronouns.
 4. Less than four errors in use of prepositions.
 5. No errors in use of articles.
 6. A variety of sentence structures:
 - a. simple sentences
 - b. complex sentences
 - c. compound sentences
 7. Less than four errors in spelling.
 8. No errors in word order.
 9. Less than three words used incorrectly.
 10. No words omitted.
 11. No errors in paragraphing.
 12. No errors in use of periods.
 13. Less than three errors in use of commas.
 14. No errors in use of question marks.
 15. No errors in use of capital letters.
 16. No errors in use of small letters.
 17. No errors in use of apostrophe.
 18. Less than two errors in use of exclamation points.
 19. Less than two errors in use of semicolon.
 20. Less than two errors in use of colon.
-

TABLE 14 (Continued)

Goal 3: To improve reading skills

Given a reading passage, student will be able to choose the correct answer to questions based on it.

Goal 4: To improve listening comprehension skills.

Student will be able to choose the appropriate written response to a spoken statement/question.

Goal 5: To demonstrate a knowledge of conventions in spelling.

Less than four errors in spelling.

Goal 6: To demonstrate a knowledge of conventions in punctuation.

1. No errors in use of periods.
 2. Less than three errors in use of commas.
 3. No errors in use of question marks.
 4. No errors in use of apostrophe.
 5. Less than two errors in use of exclamation points.
 6. Less than two errors in use of semi-colon.
 7. Less than two errors in use of colon.
-

Goal 7: To demonstrate a knowledge of conventions in oral delivery.

In a three-minute in-class oral presentation, the student will:

1. Make himself/herself understood.
2. Have no errors in subject-verb agreement.
3. Have less than two errors in tenses.
4. Have less than three errors in prepositions.
5. Have no errors in use of articles.

TABLE 14 (Continued)

-
-
6. Use a variety of sentence structures.
 - a. simple sentences
 - b. complex sentences
 - c. compound sentences
 7. Use chronological order.
 8. Use definitions.
 9. Use examples.
 10. Use comparisons.
 11. Use contrasts.
 12. Use deduction.
 13. Use induction.
 14. Use order of importance of events.
 15. Use analysis.
 16. Use cause and effect.
-

Goal 8: To demonstrate a knowledge of conventions in speaking.

1. Student can make himself understood during a conversation.
 2. Have less than two errors in subject-verb agreement.
 3. Have less than three errors in tenses.
 4. Have less than four errors in use of prepositions.
 5. Have less than two errors in use of articles.
-

Goal 9: To organize ideas.

Student organizes ideas by:

1. Using chronological order.
 2. Using definitions.
 3. Using examples.
 4. Using comparisons.
 5. Using contrasts.
 6. Using deduction.
 7. Using induction.
 8. Using order of importance of events.
 9. Using analysis.
 10. Using cause and effect.
-

TABLE 14 (Continued)

Goal 10: To organize ideas in a coherent pattern in writing.

In a 500-word written sample, the student will organize ideas in the following ways:

1. By using a topic sentence to present the subject matter.
 2. By using chronological order.
 3. By using definitions.
 4. By using examples.
 5. By using contrasts.
 6. By using deduction.
 7. By using induction.
 8. By using order of importance of events.
 9. By using analysis.
 10. By using cause and effect.
-

Goal 11: To organize ideas in a coherent pattern in speaking.

See Goal 8.

Goal 12: To express ideas.

See Goal 9.

Goal 13: To express ideas in writing

See Goal 10.

Goal 14: To express ideas in speaking.

See Goal 8.

Goal 15: To develop a thesis.

See Goal 10.

Once the director had prioritized the list, he stated whether each item was a directly observable behavior or state. He check-marked each item which he believed was a directly observable behavior or state. Then the evaluator examined the check-marked items to ensure that they were observable. The director had not check-marked Goal 8, which read, "To demonstrate a knowledge of conventions in speaking," (see Table 14) because this goal was not directly observable in the classroom since the students seldom engaged in in-class conversations. Goal 7, "To demonstrate a knowledge of convention in oral delivery," (see Table 14) was more indicative of class activities. It was decided at this point to develop observational techniques just for the directly observable items since there was not enough time for the others.

Development of Observational Techniques

Along with clarifying the goals during the Operationalization of Goals, the evaluator and the director also discussed possible observational techniques for measuring them. By the time all the goals had been operationalized, measurement devices had already been agreed upon. In order to measure goals dealing with written grammar, ideas and organization (Goals 1,2,5,6,10,13,15), writing samples totalling about 500 words were collected at the beginning

and end of the semester. For the goals dealing with oral grammar, ideas and organization (Goals 7,11,14), three-minute oral deliveries were made in 110B, the course where this goal is stressed. For the goals dealing with reading (Goal 3) and listening comprehension (Goal 4), the Reading Comprehension and Listening Comprehension parts of the Michigan Proficiency Test were used.

During the discussion about observational techniques, the evaluator felt that the Michigan Proficiency Test should be used, since the ESL component uses it for placement purposes. This meant that there already were scores which could be used for comparisons if the test were given again. The director felt that the Michigan Proficiency Test was not appropriate, since it was not an achievement test and this is what was needed. The director suggested that the evaluator develop a test, but this was beyond the scope of the study. Using another test also meant having to administer it at the beginning and end of the semester. The evaluator discussed the issue with the chairperson of the dissertation committee, who felt that using the Michigan Proficiency Test would be appropriate. The evaluator met with the director again, who reluctantly agreed to the use of the Michigan Proficiency Test.

The planned measurements were then tested for reasonable cost--time of raters, coders, cost of equipment, and supplies. Since it was determined that the cost was

reasonable, and that the measurements could be implemented, the collection of data was begun. All the information gathered during this process was reported to the director. Table 15 shows the report submitted for his approval.

Implementation of Measurement

As soon as the 1981 Fall semester began, the evaluator met with the director to begin the implementation of measurement. The evaluator also met or phoned the teachers in the ESL programs to explain the instruments that were being used to evaluate the goals of the ESL component. The teachers were told that in order to measure those goals dealing with grammar and writing it would be necessary to get two or three writing samples totalling about 500 words from each student in the program, both at the beginning and end of the semester. The teachers felt comfortable with this observational technique even though they felt 500 words were a lot, especially for the beginning students.

To measure those goals dealing with oral delivery, tapings of three-minute oral deliveries would be necessary from the students in 110B. The tapings would be done at the beginning and end of the semester. The teacher of this course felt comfortable with this observational technique.

The third observational technique was the Michigan Proficiency Test. Listening Comprehension and Reading

TABLE 15
INSTRUMENTATION REPORT

FROM: Evaluator
TO: Director
SUBJECT: Instrumentation Process
DATE: September 24, 1981

These are the instruments that we have agreed to use in order to measure the objectives of the ESL program:

1. Writing samples of at least 500 words from each student in the program.
2. Tapes from the courses that concentrate on oral delivery.
3. Michigan Proficiency Test.

It is necessary that I get two or three writing samples totaling about 500 words from each student in the program, both at the beginning and end of this semester. The taped presentations should be about three minutes long. A tape from the beginning of the semester and the end of the semester is needed. All students will take the Listening Comprehension and Reading Comprehension parts of the Michigan Proficiency Test again, but only the Listening Comprehension and Reading Comprehension will be evaluated.

I would like to meet with the teachers in the program to explain the importance of this part of the evaluation, and how they can help to make it successful.

Comprehension were to be measured using this observational technique. When the evaluator met with the teachers in October to discuss this particular observational technique they expressed concern since they felt that listening comprehension and reading comprehension were only being developed as an incidental outcome of teaching grammar and writing. They felt that grammar and writing were the primary focus of their classes, and that students should not be evaluated for listening comprehension and reading comprehension. They did not want their class time used for the administration of the test at the end of the semester. This was reported back to the director and the evaluator indicated that there might be a need to redesign this part of the evaluation. (See Table 16) After a lengthy discussion, it was decided to take a random sampling of forty students to measure the listening comprehension and reading comprehension with the Michigan Proficiency Test instead of administering the test to all the students as originally planned. The test would be done outside of class time. The director felt that these two goals were important, were being achieved in the program, and should be evaluated. Table 17 shows the agreement reached at this time.

During this time the evaluator was also developing devices to record the observations collected from the implementation. A checklist was developed from the opera-

TABLE 16
IMPLEMENTATION PROCESS REPORT

FROM: Evaluator
TO: Director
SUBJECT: Meeting with ESL Teachers
DATE: October 8, 1981

I have met with the teachers in the program to explain the observational techniques to be used for this evaluation. When I mentioned that the Michigan Proficiency Test would be used to measure listening and reading comprehension, they expressed concern, since they felt that the focus of their classes is grammar and writing. They felt that listening comprehension and reading comprehension were incidental to their teaching grammar and writing; and therefore, students should not be evaluated in these two areas.

I would like to discuss this further with you, since there might be a need for redesigning the observational techniques to be used in this part of the evaluation.

TABLE 17

REDESIGN OF INSTRUMENTATION REPORT

FROM: Evaluator
TO: Director
SUBJECT: Redesign of Instrumentation
DATE: October 13, 1981

Because of my discussion with the ESL teachers, we have agreed to modify the observational techniques as follows: a random sampling of forty students from the program will be tested with the Michigan Proficiency Test instead of all the students in the program. The testing will be done outside of class time.

The other observational techniques remain the same:

1. Writing samples of at least 500 words from each student in the program.
 2. Three-minute oral presentations from students in 110B.
-

tionalized goals for the writing and oral delivery goals. Then the recording device for the writing samples was field tested using compositions from former ESL students. It was found that the checklist as developed from the operationalized goals was not sufficient to cover errors present in compositions. After consulting with the director, the evaluator added the following items to the checklist:

1. Number of words written
2. No run-on sentences
3. No incomplete sentences
4. Less than three words used incorrectly
5. Uses topic sentence to present subject matter
6. Uses transition within and between paragraphs
7. Uses description

The item "subject-verb agreement" was changed to just "agreement," to include errors in number agreement. It was felt that these changes would reflect more precisely the quality of the written composition. The number of words would be used to calculate the number of words per error. The revised checklist was field tested again and found satisfactory. Table 18 shows the recording device as it was used to collect data about the writing goals.

Table 19 shows the recording device used to collect data about the goals dealing with oral delivery. This recording device was not field tested, since there were no

TABLE 18
 WRITING SAMPLE DATA SHEET

Course: _____

Operationalized Goals	Student Number of Words				
No errors in agreement					
Less than 3 errors in tenses					
No errors in use of pronouns					
Less than 4 errors in prepositions					
No errors in use of articles					
A variety of sentence structures:					
a) simple sentences					
b) complex sentences					
c) compound sentences					
No incomplete sentences					
No run-on sentences					
Less than 4 errors in spelling					
No errors in word order					
Less than 3 words used incorrectly					
No words omitted					
No errors in paragraphing					
No errors in use of quotation marks					
No errors in use of periods					
Less than 3 errors in use of commas					
No errors in use of question marks					
No errors in use of small letters					
No errors in use of apostrophes					
Less than 2 errors in use of exclamation points					
Less than 2 errors in use of semicolon					
Less than 2 errors in use of colon					
Uses chronological order					
Uses definition					
Uses description					
Uses example					
Uses comparison					
Uses contrast					
Uses deduction					
Uses induction					
Uses order of importance of events					
Uses analysis					
Uses cause and effect					
Uses topic sentence to present subject matter					
Uses transitions within and between paragraphs					

available tapes for doing so.

Table 20 shows the recording device used to collect data about listening comprehension, and Table 21 about reading comprehension.

Since it was necessary to redesign the format of data collection for the reading comprehension and listening comprehension, a sampling plan was developed. This was necessary to accommodate the feelings of some of the ESL instructors that these two goals were not the focus of their classes and should not be tested for. It was decided that the Michigan Proficiency Test would be administered to a random sample of students from all levels, outside of class time. By using a formula for calculating the smallest possible number of observations that could be carried out without much loss of data quality, it was determined that forty students had to take the Michigan Proficiency Test. At this point, students were notified of the evaluation and the observational techniques which would be used. Table 22 shows the letter sent out to all the students in the ESL program.

A plan for getting the names of the forty students who would re-take the Michigan Proficiency Test was developed. This plan consisted of assigning a three-digit random number to each student in the ESL program, using the class lists provided by the director. The random numbers

TABLE 22
NOTIFICATION TO STUDENTS

November 12, 1981

Dear Student:

I am conducting an evaluation of the ESL program here for my doctoral dissertation. I would like to ask you to help me in this evaluation by allowing me to study samples of your writing.

If you wish to participate in my study, I will the the following:

1. writing samples from you
2. oral presentations from students in 110B
3. students to take the Michigan Proficiency Test again

Your teachers will be asking you for writing samples at the beginning and end of the semester.

In December, a random selection of forty students will be chosen to take the Michigan Proficiency Test again. If you are one of the students chosen, I would appreciate your cooperation in attending the sesion that will be set up to administer the test. Those students selected will be contacted personally as to the date and time of the test.

I will be happy to provide a copy of the evaluation when it is finished to any student who asks for it. There will also be a wine and cheese after the test.

Sincerely yours,

were taken from Table I: Random Digits, found on page 547 of Statistical Reasoning in Psychology and Education, by Edward N. Minium, 2nd edition (New York: John Wiley & Sons, 1977). The students were assigned the random digits, starting with 105C and finishing with 110B. It was estimated that the loss of data quality would be minimal since random quality sampling procedures were followed.

The sampling plan was shown to the director. He felt that the loss of data quality was negligible and that the cost of observation was acceptable. As such, the administration of the test was set for December 2, 1981 at 1:00 p.m., and the students randomly chosen were notified about taking the Michigan Proficiency Test. Table 23 shows the letter sent out to the students to inform them about taking the test.

The first phase of the evaluation ran rather smoothly. By the middle of October, the evaluator had compositions from all the courses in the program and the three-minute oral deliveries from 110B. The only difficulty was getting the compositions reproduced and back to the teachers within a day or two.

The second phase of the evaluation did not go as well. Since the Michigan Proficiency Test was administered outside of class time, it was difficult to find a day and time that were convenient to all the students involved.

TABLE 23
NOTIFICATION OF TESTING SESSION

Dear _____,

You have been randomly selected to take the Michigan Proficiency Test again. Will you please come to Room 301 in Herter Hall at 2:30 p.m. on Wednesday, December, 2, 1981 in order to do so.

As you know, this is part of my dissertation and I would appreciate your help in getting the information that I need.

There will be wine and cheese after the test. Thank you for your cooperation.

Sincerely yours,

Wednesday, December 2, 1981 had been chosen for administering the Michigan Proficiency Test. Since it was two weeks before the end of the semester, it was felt that the students would not be too pressured by other finals that they might have to take, and yet still close enough to the end of the semester to be valid. There was difficulty in getting a room in which to administer the test and the time had to be changed from 1:00 to 2:30 p.m. The students received the notification extremely late, and only two students showed up to take the test. Because of this, the evaluator made arrangements to administer the test again on Saturday, December 5, 1981. The director was notified of this setback. Table 24 shows the memorandum that the evaluator sent the director informing him of the problem. The students who had been randomly selected were personally notified by the evaluator about the new date by phone. Many said they would not be able to do so that day but could at another day. Others said that they could not take the test at all since they had other tests to worry about. Sixteen students said that they would show up to take the test. One came in and took it on Friday. Since the students were so reluctant to take the test, the evaluator decided to give only the listening comprehension and the reading comprehension parts of the Michigan Proficiency Test, since the length of the test was a factor in this reluctance. The director was not in favor of this

TABLE 24

ADMINISTRATION OF MICHIGAN
PROFICIENCY TEST

FROM: Evaluator
TO: Director
SUBJECT: Michigan Proficiency Test
DATE: December 3, 1981

Because of the late notification to students, only two showed up to take the Michigan Proficiency Test on Wednesday, December 2, 1981. I have made arrangements to administer it again on Saturday, December 5, 1981.

change, since the different parts of the Michigan Proficiency Test are not timed. The student has seventy-five minutes to complete the whole test. Yet he could understand why the change was necessary. Only two actually showed up to take the test. The Director of the Bilingual Collegiate Program (BCP) had also been contacted during this time and had urged the students in the BCP to take the test, and two testing sessions at the BCP were set up for Tuesday, December 8th and Thursday, December 10th. The director and the teachers of the ESL component were also asked to urge the students to take the test on these dates. Table 25 shows the memorandum sent to the director concerning this problem. The evaluator also spoke to the director about the possibility of administering the test during class time since only the listening comprehension part and reading comprehension part would be given, but he did not agree to do so.

Two of the instructors in the ESL program allowed the evaluator to give the test during part of their class time on December 8th. In all, the test was administered six times and only sixteen students took the test. The director was informed of the problem and the evaluator's decision to do no more testing. (See Table 26)

Problems were also encountered during the last phase of the evaluation. On November 18, 1981, teachers were reminded about the end-term writing samples. The

TABLE 25

RESCHEDULING OF MICHIGAN
PROFICIENCY TEST

FROM: Evaluator
TO: Director
SUBJECT: Michigan Proficiency Test
DATE: December 7, 1981

Only two students showed up to take the test on Saturday. The Director of the Bilingual Collegiate Program has contacted BCP students in the ESL program to urge them to take the Michigan Proficiency Test on Tuesday or Thursday (December 8 and 10) at 7:00 p.m. at Wilder Hall. I have spoken to the teachers about urging the students to take the test. I would appreciate it if you would do the same.

TABLE 26

TERMINATION OF TESTING REPORT

FROM: Evaluator
TO: Director
SUBJECT: Implementation Process: Michigan
Proficiency Test
DATE: December 11, 1981

The Michigan Proficiency Test was given on six different occasions. I was only able to test sixteen students from the random sample of forty, but have decided to do no more testing since there is little chance for success.

evaluator sent each instructor notification of the deadline for the writing samples and tapes. The deadline was December 14, 1981. Table 27 shows the memorandum sent to each instructor. On December 7, 1981 the evaluator found out that the students in 110B did not meet during the last two weeks of the semester, so that they could work on their term papers due at the end of the semester. The students would be meeting with the teacher on an individual basis during this time. This meant that no end-term writing samples would be available for this course. The evaluator did not receive end-term papers from 105F either, since the instructor felt that reviewing for the final was essential, and time could not be spared for the composition. Tables 28 and 29 show the reports sent to the director on the last week of data collecting. The evaluator also indicated the beginning of the analysis of the data collected.

Data Analysis

Once all the observations had been recorded, the evaluator began the process of analyzing the data. The first observations analyzed were those pertaining to the writing objectives. Only writing samples for which both pre and post information were available were analyzed. The evaluator and two paid consultants read the compositions,

TABLE 27

END-TERM DATA COLLECTION REQUEST

FROM: Evaluator
TO: All Teachers
SUBJECT: End-term Writing Samples and Oral Presentations
from 110B
DATE: November 18, 1981

The end of the semester is fast approaching. In order to finish the evaluation of the ESL program for my dissertation, I need to get the end-term writing samples from all students in each class, and the oral presentations from 110B.

I need a writing sample of about 500 words from each student, and this should be stressed to them when they are asked to do the writing sample. It will probably be necessary to get two or three compositions in order to get the 500 words. The topics assigned should be the same or similar to those given for the writing sample at the beginning of the semester.

I would appreciate it if you got these samples during the first two weeks in December. I should have all the samples by December 14, 1981. If you have any concerns or questions, I will be in the ESL office every Tuesday and Thursday from 1:00 p.m. to 3:00 p.m. You can also call me at home.

TABLE 28
DATA COLLECTION PROGRESS REPORT

FROM: Evaluator
TO: Director
SUBJECT: Implementation Process
DATE: December 18, 1981

I have received the end-term oral presentations from 110B. The data for this part of the evaluation is complete.

I have received end-term compositions from 105C (both sections) and 100L, sections 1 and 2. I have not received them from 100L, sections 3 and 4, 110B (both sections), or 105F.

TABLE 29
COMPLETION OF DATA COLLECTION
REPORT

FROM: Evaluator
TO: Director
SUBJECT: Implementation Process
DATE: December 23, 1981

I have received end-term compositions from six of the sections, but not from 105F or the two sections of 110B. I will analyze the data obtained so far, and give you a final report as soon as the analysis is finished.

recording the findings in the Data Sheet prepared for this purpose. The evaluator asked each consultant to read the compositions, indicating the number of words written; the number of errors in agreement, tenses, pronouns, prepositions, articles, spelling, word order, words used incorrectly, words omitted, and paragraphing; the number of simple, complex, and compound sentences written, and to indicate the extent of variety by using Poor, Fair, Good, and Excellent; to indicate if the punctuation was used correctly, incorrectly (how many errors), or was not needed; to indicate with Yes (for used) or No (for not used) whether there was chronological order, definition, description, example, comparison, contrast, deduction, induction, order of importance of events, analysis, cause and effect, and a topic sentence; and to indicate the extent of transition by using Poor, Fair, Good and Excellent.

When the consultants returned the compositions and the Data Sheets, the evaluator calculated the degree of agreement between the three raters. Since there were items that were not directly observable, the percentage of agreement is not expected to be as high as when all the items are directly observable. The average percentage of agreement between the evaluator and the first consultant in the pre sample is 63.6 and in the post sample is 65.7.

The average percentage of agreement between the evaluator and the second consultant in the pre sample is 62.3 and in the post sample is 63.3. The agreement between consultants on one and two in the pre sample is 54.5 and in the post sample is 55.1. These calculations were done by looking at the ratings for each item. When the difference in rating was one, the rating given by the evaluator was used. If the difference was two or more, the composition was checked, and the evaluator's Data Sheet revised when necessary. For the items rated Yes or No, the evaluator's rating was used. For those items rated Poor, Fair, Good, and Excellent, the evaluator's rating was used if the difference was one, but revised to the next category if the difference was more than one. Once this had been done for all the pre and post test items in the six courses, the number of students who met the objective in each course was calculated for both the pre and post test. Then the difference between the pre and post test writing sample was calculated. These calculations were made for individual students (see Appendixes 31 through 66, pages 119-154), and for the group (see Tables 31 through 66, pages 119-154).

The Michigan Proficiency Test was used to evaluate the skills of listening and reading comprehension and reading comprehension. Only 16 out of the 40 students randomly selected took the test, and only 11 of these

students had both pre and post test scores. Nine of the students were Hispanic and two were Chinese. The differences between the pre and post equated scores were calculated (see Appendixes 35 and 36). Because the sample was too small and was not representative of the total population, no further analyses were performed with the data.

The observations pertaining to oral delivery were analyzed next. The Evaluator asked consultant number one to listen to the tapes and to indicate the extent to which the student had made himself/herself understood, by using Poor, Fair, Good, and Excellent. Then the consultant transcribed the tapes and rated the transcriptions using the Data Sheet prepared for this purpose. The consultant indicated the number of errors in the items dealing with grammar, and used Yes or No for those items dealing with organization. Because of poor equipment, three samples were lost from Course 110B, Section 1 and two from Section 2. These deliveries were too faint to be understood whenever the student moved away from the recorder to demonstrate something. When this had been done by the consultant, the evaluator also listened to the tapes, indicated the extent to which the student made himself/herself understood, and corrected the transcriptions and evaluated them. The evaluator then calculated the degree of agreement between the two raters. The percentage of

agreement between the evaluator and the consultant was 79.5 in the pre test and 78.5 for the post test. This was done by using the same procedure that was used for the writing sample. Once this agreement had been calculated, the difference between the pre and post test oral delivery sample was calculated for individual students (see Appendixes 31 through 66, pages 119-154), and for the group (see Tables 31 through 66, pages 119-154).

Reporting Procedures

The evaluator presented to the director a final report of the findings of the evaluation of the four courses of the Rhetoric Department's ESL Program in May 1982. This report included a cover letter explaining the materials enclosed (see Table 30). It also included Appendixes 1 through 34 which show the results of data analysis for individual students (see pages 180-369). Also included were Tables 31 through 66 which show the results for all six courses (see pages 119-154). Appendixes 35 and 36, which show the results of the listening and reading comprehension observational technique were also included in this final report (see pages 370-373).

After the director had read the report, the evaluator answered the questions and clarified the concerns that the director had.

TABLE 30
FINAL EVALUATION REPORT

FROM: Evaluator
TO: Director
SUBJECT: Final Evaluation Report
DATE: April 23, 1982

This is the final report for the evaluation of the ESL Program. Enclosed you will find Tables 31 through 66, which show the names of the observational techniques, the priority of the components and operationalized goals evaluated using these observational techniques, the number of students involved and the results of the data analysis. Appendices 1 through 34 show the results for individual students.

As you know, there was great difficulty in getting the randomly selected students to take the Michigan Proficiency Test again, even though several attempts were made. Therefore, the sample for the listening and reading comprehension areas is too small, and not representative of the total population (mostly Hispanics). For this reason, no analysis has been performed, but I am including Appendices 35 and 36 which show the data collected in these two areas.

I will be available to answer any questions or clarify any concerns you may have after reading the report.

TABLE 31

AVERAGE NUMBER OF WORDS WRITTEN BY
 COURSE WHEN ASSIGNED A 500-WORD
 IN-CLASS WRITING SAMPLE

Course (Section)	Number of Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
105C (1)	12	206	218	+ 12
105C (2)	6	104	159	+ 55
105C Total	18	155	189	+ 34
100L (1)	16	163	352	+ 189
100L (2)	19	202	404	+ 202
100L (3)	18	264	336	+ 72
100L (4)	13	209	288	+ 79
100L Total	66	210	345	+ 135
TOTAL	84	182	267	+ 85

TABLE 32

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
 BY COURSE WHEN ASSIGNED A 500-WORD
 IN-CLASS WRITING SAMPLE

Course (Section)	Number of Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
105C (1)	12	7.5	15.6	+ 8.1
105C (2)	6	2.4	6.7	+ 4.3
105C Total	18	5.0	11.2	+ 6.2
100L (1)	16	8.2	14.3	+ 6.1
100L (2)	19	7.4	21.5	+ 14.1
100L (3)	18	11.5	14.7	+ 3.2
100L (4)	13	16.1	27.7	+ 11.6
100L Total	66	10.8	19.6	+ 8.8
TOTAL	84	7.9	15.4	+ 7.5

TABLE 33

USE OF TRANSITIONS BY COURSE WHEN ASSIGNED
A 500-WORD IN-CLASS WRITING SAMPLE

Course (Section)	Number Of Students	Pre Test				Post Test			
		Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
105C (1)	12	0	5	6	1	1	5	6	0
105C (1)	6	0	0	1	5	0	2	2	2
105C Total	18	0	5	7	6	1	7	8	2
100L (1)	16	0	7	9	0	0	8	5	3
100L (2)	19	1	4	8	6	1	9	5	4
100L (3)	18	1	6	9	2	1	6	7	4
100L (4)	13	1	4	5	3	1	6	5	1
100L Total	66	3	21	31	11	3	29	22	12
TOTAL	84	3	26	38	17	4	36	30	14

TABLE 34

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN AGREEMENT*

Course (Section)	Number of Students	Pre Test		Post Test		
		Met Objective	Met Objective	Failed to Meet Objective		
				Improved	Did Not Improve	Regressed
105C (1)	12	3	8	3	1	0
105C (2)	6	2	3	0	1	2
105C Total	18	5	11	3	2	2
100L (1)	16	4	2	5	3	6
100L (2)	19	9	8	2	1	8
100L (3)	18	5	3	2	1	12
100L (4)	13	10	6	0	0	7
100L Total	66	28	19	9	5	33
TOTAL	84	33	30	12	7	35

*Includes subject/verb agreement and number agreement.

TABLE 35

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN THREE ERRORS IN TENSES

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	6	11	0	1	0	
105C (2)	6	4	4	1	0	1	
105C Total	18	10	15	1	1	1	
100L (1)	16	10	14	1	0	1	
100L (2)	19	16	16	0	0	3	
100L (3)	18	11	17	0	0	1	
100L (4)	13	12	13	0	0	0	
100L Total	66	49	60	1	0	5	
TOTAL	84	59	75	2	1	6	

TABLE 36

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN PRONOUNS

Course (Section)	Number of Students	Pre Test		Post Test		
		Met Objective	Met Objective	Failed to Meet Objective		
				Improved	Did Not Improve	Regressed
105C (1)	12	7	8	1	0	3
105C (2)	6	3	3	0	1	2
105C Total	18	10	11	1	1	5
100L (1)	19	11	13	0	1	3
100L (2)	16	12	13	0	1	5
100L (3)	18	15	15	1	0	4
100L (4)	13	9	10	0	1	2
100L Total	66	47	49	1	2	14
TOTAL	84	57	60	2	3	19

TABLE 37

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN FOUR ERRORS IN PREPOSITIONS

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	2	5	0	3	4	
105C (2)	6	2	5	0	0	1	
105C Total	18	4	10	0	3	5	
100L (1)	19	14	14	0	0	2	
100L (2)	16	17	16	0	2	1	
100L (3)	18	15	16	0	2	1	
100L (4)	13	13	13	0	0	0	
100L Total	66	59	59	0	3	4	
TOTAL	84	63	69	0	6	9	

TABLE 38

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN THREE WORDS USED INCORRECTLY

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	7	8	1	0	3	
105C (2)	5	1	1	3	0	2	
105C Total	18	8	9	4	0	5	
100L (1)	19	8	8	3	1	4	
100L (2)	16	10	11	1	0	7	
100L (3)	18	5	4	2	3	9	
100L (4)	13	10	12	1	0	0	
100L Total	66	33	35	7	4	20	
TOTAL	84	41	44	11	4	25	

TABLE 39

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO WORDS OMITTED

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	1	4	6	2	0	
105C (2)	6	0	1	3	1	1	
105C Total	18	1	5	9	3	1	
100L (1)	19	2	2	7	0	7	
100L (2)	16	4	3	7	3	6	
100L (3)	18	3	3	6	1	8	
100L (4)	13	4	5	1	1	6	
100L Total	66	13	13	21	5	27	
TOTAL	84	14	18	30	8	28	

TABLE 40

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN ARTICLES

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	4	7	2	0	3	
105C (2)	6	2	4	1	0	1	
105C Total	18	6	9	2	0	5	
100L (1)	19	6	9	2	0	5	
100L (2)	16	13	11	1	0	7	
100L (3)	18	11	9	2	1	6	
100L (4)	13	7	12	0	1	0	
100L Total	66	37	41	5	2	18	
TOTAL	84	43	50	7	2	23	

TABLE 41
 ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
 VARIETY IN SENTENCE STRUCTURE

Course (Section)	Number of Students	Pre Test				Post Test			
		Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
105C (1)	12	1	1	4	6	2	1	4	5
105C (2)	6	0	0	4	2	0	1	1	4
105C Total	18	1	1	8	8	2	2	5	9
100L (1)	16	5	3	8	0	0	2	7	7
100L (2)	19	5	2	6	6	1	3	11	4
100L (3)	18	4	3	4	7	1	6	4	7
100L (4)	13	0	5	4	4	2	0	3	8
100L Total	66	14	13	25	26	4	11	25	26
TOTAL	84	15	14	30	25	6	13	30	35

TABLE 42

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO INCOMPLETE SENTENCES

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	5	12	0	0	0	0
105C (2)	6	3	4	0	0	2	2
105C Total	18	8	16	0	0	2	2
100L (1)	19	10	14	0	0	1	1
100L (2)	16	14	11	0	1	7	7
100L (3)	18	14	11	0	3	4	4
100L (4)	13	7	11	0	1	1	1
100L Total	66	45	47	0	6	13	13
TOTAL	84	53	63	0	6	15	15

TABLE 43

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO RUN-ON SENTENCES

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	8	8	1	1	2	
105C (2)	6	1	3	2	0	1	
105C Total	18	9	11	3	1	3	
100L (1)	19	8	12	2	2	0	
100L (2)	16	10	12	2	1	4	
100L (3)	18	11	10	0	2	6	
100L (4)	13	10	8	1	1	3	
100L Total	66	39	42	5	5	13	
TOTAL	84	48	53	8	7	16	

TABLE 44

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN FOUR ERRORS IN SPELLING

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective			
				Improved	Did Not Improve	Regressed	
105C (1)	12	9	12	0	0	0	
105C (2)	6	4	5	1	0	0	
105C Total	18	13	17	1	0	0	
100L (1)	19	12	15	1	0	0	
100L (2)	16	11	16	0	0	3	
100L (3)	18	16	13	2	0	3	
100L (4)	13	12	13	0	0	0	
100L Total	66	57	57	3	0	6	
TOTAL	84	70	74	4	0	6	

TABLE 45

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN WORD ORDER

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective			
				Improved	Did Not Improve	Regressed	
105C (1)	12	6	11	0	0	1	
105C (2)	6	0	4	1	1	0	
105C Total	18	6	15	1	1	1	
100L (1)	19	11	8	1	4	3	
100L (2)	16	13	9	3	1	6	
100L (3)	18	13	14	1	1	2	
100L (4)	13	11	11	0	0	2	
100L Total	66	48	42	5	6	13	
TOTAL	84	54	57	6	7	14	

TABLE 46

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN PARAGRAPHING

Course (Section)	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
105C (1)	12	7	7	1	1	3	
105C (2)	6	2	4	0	1	1	
105C Total	18	9	11	1	2	4	
100L (1)	19	16	16	0	0	0	
100L (2)	16	11	16	0	0	3	
100L (3)	18	11	15	1	0	2	
100L (4)	13	10	12	0	0	1	
100L Total	66	48	59	1	0	6	
TOTAL	84	57	70	2	2	10	

TABLE 47

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF QUOTATION MARKS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	0	0	12	3	0	9
105C (2)	6	0	1	17	1	0	5
105C Total	18	0	1	17	4	0	14
100L (1)	16	1	0	15	0	0	16
100L (2)	19	5	0	14	1	2	16
100L (3)	18	2	0	16	4	0	14
100L (4)	13	4	0	9	1	0	12
100L Total	66	12	0	54	6	2	58
TOTAL	84	12	1	71	10	2	72

TABLE 48

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF PERIODS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	5	7	0	11	1	0
105C (2)	6	3	3	0	6	0	0
105C Total	18	8	10	0	17	1	0
100L (1)	16	10	6	0	15	1	0
100L (2)	19	14	5	0	12	7	0
100L (3)	18	14	4	0	12	6	0
100L (4)	13	6	7	0	10	3	0
100L Total	66	44	22	0	49	17	0
TOTAL	84	52	32	0	66	18	0

TABLE 49

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN THREE ERRORS IN USE OF COMMAS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	5	7	0	3	9	0
105C (2)	6	0	6	0	2	4	0
105C Total	18	5	13	0	5	13	0
100L (1)	16	3	13	0	4	12	0
100L (2)	19	2	17	0	3	16	0
100L (3)	18	0	18	0	5	13	0
100L (4)	13	5	8	0	5	8	0
100L Total	66	10	56	0	19	49	0
TOTAL	84	15	69	0	24	62	0

TABLE 50

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF QUESTION MARKS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	0	0	12	0	0	12
105C (2)	6	1	0	5	0	0	6
105C Total	18	1	0	17	0	0	18
100L (1)	16	0	2	14	0	1	15
100L (2)	19	3	2	14	5	0	14
100L (3)	18	2	1	15	4	1	13
100L (4)	13	2	1	10	3	0	10
100L Total	66	7	6	53	12	2	52
TOTAL	84	8	6	70	12	2	70

TABLE 51

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF CAPITAL LETTERS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	6	6	0	9	3	0
105C (2)	6	6	0	0	6	0	0
105C Total	18	12	6	0	15	3	0
100L (1)	16	13	3	0	14	2	0
100L (2)	19	17	2	0	12	7	0
100L (3)	18	12	6	0	11	7	0
100L (4)	13	9	4	0	10	3	0
100L Total	66	51	15	0	47	19	0
TOTAL	84	63	21	0	62	22	0

TABLE 52

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF SMALL LETTERS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	8	4	0	9	3	0
105C (2)	6	1	6	0	3	3	0
105C Total	18	9	9	0	12	6	0
100L (1)	16	8	8	0	12	4	0
100L (2)	19	15	4	0	6	13	0
100L (3)	18	17	1	0	17	1	0
100L (4)	13	13	0	0	13	0	0
100L Total	66	56	13	0	48	18	0
TOTAL	84	65	22	0	60	24	0

TABLE 53

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF APOSTROPHES

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	4	3	5	2	3	7
105C (2)	6	2	1	3	0	0	6
105C Total	18	6	4	8	2	3	13
100L (1)	16	1	6	9	2	1	13
100L (2)	19	5	2	12	4	2	13
100L (3)	18	0	2	16	4	3	11
100L (4)	13	6	1	6	3	2	8
100L Total	66	12	11	43	13	8	45
TOTAL	84	18	15	51	15	11	58

TABLE 54

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
NO ERRORS IN USE OF EXCLAMATION POINTS

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	1	0	11	0	0	12
105C (2)	6	0	0	6	0	0	6
105C Total	18	1	0	17	0	0	18
100L (1)	16	1	0	15	0	0	15
100L (2)	19	0	0	16	4	2	13
100L (3)	18	2	0	16	3	1	14
100L (4)	13	0	1	12	1	0	12
100L Total	66	3	1	59	8	3	54
TOTAL	84	4	1	76	8	3	72

TABLE 55

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN TWO ERRORS IN USE OF SEMICOLON

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	0	2	10	1	2	9
105C (2)	6	0	0	6	0	0	6
105C Total	18	0	2	16	1	2	15
100L (1)	16	4	2	10	3	2	11
100L (2)	19	2	1	16	1	6	12
100L (3)	18	2	3	13	1	7	10
100L (4)	13	1	1	11	0	3	10
100L Total	66	9	7	50	5	18	43
TOTAL	84	9	9	66	6	20	58

TABLE 56

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
LESS THAN TWO ERRORS IN USE OF COLON

Course (Section)	Number of Students	Pre Test			Post Test		
		Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed	Used When Needed	Not Used and Not Needed	Used When Not Needed or Not Used When Needed
105C (1)	12	1	0	11	0	0	12
105C (2)	6	0	0	6	0	0	6
105C Total	18	1	0	17	0	0	18
100L (1)	16	1	0	16	2	0	16
100L (2)	19	3	1	15	5	2	12
100L (3)	18	3	1	14	5	0	13
100L (4)	13	0	1	12	0	0	13
100L Total	66	7	3	56	12	2	54
TOTAL	84	8	3	73	12	2	72

TABLE 57

ACHIEVEMENT IN WRITING SAMPLE BY COURSE:
USE OF ORGANIZATION

Course (Section)	Number of Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
105C (1)	12	7	6	- 1
105C (2)	6	2	4	+ 2
105C Total	18	4	5	+ 1
100L (1)	16	9	9	=
100L (2)	19	8	9	+ 1
100L (3)	18	7	8	+ 1
100L (4)	13	8	9	+ 1
100L Total	66	8	9	+ 1
TOTAL	84	6	7	+ 1

TABLE 58

AVERAGE NUMBER OF WORDS SPOKEN IN THREE
MINUTES IN COURSE 110B

Course 110B	Number of Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
Section 1	10	303	264	- 39
Section 2	11	282	323	+ 41
Total	21	292.5	293.5	+ 1

TABLE 59
AVERAGE NUMBER OF WORDS SPOKEN PER
GRAMMAR ERROR IN COURSE 110B

Course 110B	Number of Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
Section 1	10	116.5	122.0	+ 5.5
Section 2	11	72.0	70.0	- 2.0
Total	21	94.0	96.0	+ 2.0

TABLE 60
 ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
 MAKES HIMSELF/HERSELF UNDERSTOOD

Course 110B	Number of Students	Pre Test				Post Test			
		Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
Section 1	10	0	6	2	2	1	6	3	0
Section 2	11	1	1	8	1	0	4	5	2
Total	21	1	7	10	3	1	10	8	2

TABLE 61
 ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
 NO ERRORS IN AGREEMENT*

Course 110B	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective		Regressed	
				Improved	Did Not Improve		
Section 1	10	7	7	0	2	1	
Section 2	11	8	6	0	1	4	
Total	21	15	13	0	3	5	

*Includes subject-verb agreement and number agreement.

TABLE 62
 ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B
 LESS THAN TWO ERRORS IN TENSES

Course 110B	Number of Students	Pre Test		Post Test		
		Met Objective	Met Objective	Failed to Meet Objective		
				Improved	Did Not Improve	Regressed
Section 1	10	9	10	0	0	0
Section 2	11	9	9	0	0	2
Total	21	18	19	0	0	2

TABLE 63

ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
LESS THAN THREE ERRORS IN PREPOSITIONS

Course 110B	Number of Students	Pre Test		Post Test			
		Met Objective	Met Objective	Failed to Meet Objective			
				Improved	Did Not Improve	Regressed	
Section 1	10	10	9	0	0	1	
Section 2	11	9	7	1	0	3	
Total	21	19	16	1	0	4	

TABLE 64

ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
NO ERRORS IN USE OF ARTICLES

Course 110B	Number of Students	Pre Test		Post Test		
		Met Objective	Met Objective	Failed to Meet Objective		
				Improved	Did Not Improve	Regressed
Section 1	10	6	8	1	0	1
Section 2	11	7	5	0	2	4
Total	21	13	13	1	2	5

TABLE 65

ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
 VARIETY IN SENTENCE STRUCTURE

Course 110B	Number of Students	Pre Test				Post Test			
		Excellent	Good	Fair	Poor	Excellent	Good	Fair	Poor
Section 1	10	2	1	3	4	1	3	3	3
Section 2	11	2	3	3	3	4	1	6	0
Total	21	4	4	6	7	5	4	9	3

TABLE 66

ACHIEVEMENT IN ORAL DELIVERY IN COURSE 110B:
USE OF ORGANIZATION

Course 110B	Students	Pre Test \bar{x}_1	Post Test \bar{x}_2	Difference
Section 1	10	2.6	3.4	+ 0.8
Section 2	11	3.0	4.0	+ 1.0
TOTAL	21	2.8	3.7	+ 0.9

C H A P T E R I V
THE EFFECTIVENESS OF THE ENGLISH AS A
SECOND LANGUAGE PROGRAM

Chapter III presented the results of implementing the Fortune/Hutchinson Evaluation Methodology. The number of students who achieved the goals in their operationalized form in the pre test and post test writing samples was given. The percentage of agreement between raters was also given. The same was done for the oral delivery pre test and post test sample.

Chapter IV will analyze these findings in order to answer the question presented at the beginning of the study: How effective is the English as a Second Language Program at the University of Massachusetts, Amherst in teaching limited-English speakers English language skills?

Discussion of Findings: Writing

Before presenting the findings it is necessary to indicate that the presentation will be performed by course, and then for the group. This approach is necessary since Course 105C is structured to "review basic grammar" and to "introduce more complex structures," as well as "methods of organization." (See course description, page 10) Therefore, it is expected that the students in this course will have

low pre test scores and higher post test scores, which is what the data show. Course 100L is structured to teach students who already possess a firm grammar base how "to write coherent, unified paragraphs and progress to essay writing." (See course description, page 11) Therefore, it is expected that the students in this course will have higher pre test scores than those in 105C. Also it is expected that the difference between the pre test and post test will not be as high as those in 105C. But it is expected that the students in 100L will write more, use more ways of organizing ideas, and more transitions within and between paragraphs. This is generally what the data show.

Results for 105C*

The results for the items not dealing with punctuation and organization will be presented first. Those results pertaining to punctuation will be next, and those related to organization will be last. The eighteen students in Course 105C show a mean gain of 34 words in the average number of words written when assigned a 500-word in-class writing sample. Since the purpose of this course is to teach grammar, this result is not unexpected. In the average number of words per error in grammar and punctuation, these

*See pages 119 through 145 for data tables.

students had mean gain of 6.2 words. This shows an improvement, since instead of making a mistake in grammar or punctuation every 5 words, they did so every 11.2 words. They also show an improvement in the use of transitions. The studented rated Good/Excellent increased from 28 percent to 44 percent, and those rated Poor declined from 33 percent to 11 percent. In agreement, there was also improvement. Twenty-five percent of the students met the objective in the pre test and 61 percent did so in the post test. In the use of tenses they improved from 50 percent in the pre test to 83 percent in the post test. There was a slight improvement between the pre test and post test scores in the use of pronouns. It increased from 56 percent to 61 percent. In the use of prepositions, they improved from 22 percent to 56 percent. They also show improvement in the use of articles. The number of students who met the objective increased from 33 percent to 50 percent. The results for sentence structure variety indicate a slight improvement. Eleven percent met the objective in the pre test and 22 percent in the post test in the Good/Excellent categories. A marked improvement was shown in the absence of incomplete sentences. There were 44 percent who met the objective in the pre test and 89 percent who did so in the post test. They also show some improvement in the absence of run-on sentences by increasing from 50 percent to 61 percent. In

the area of spelling the students show improvement by going from 72 percent to 94 percent. A marked improvement was shown in word order. They improved from 33 percent to 83 percent. A slight improvement was shown in the number of words used incorrectly. The students increased from 44 percent to 50 percent. They improved from 6 percent to 28 percent in the objective of words omitted. In paragraphing the students show some improvement by going from 50 percent to 61 percent.

The results for the items dealing with punctuation will be presented next. The students in Course 105C show some improvement in the use of the quotation mark. They went from 0 percent to 22 percent who used it when needed. The percentage of students who did not use quotation marks declined markedly from 94 percent to 78 percent. In the use of the period, they show great improvement. They increased from 44 percent to 94 percent who used it when needed. The use of the comma did not change. In both the pre and post tests, 28 percent used it when needed. In the case of the question mark, the percentage of students increased from 94 percent to 100 percent who did not use it. The students show an improvement in the use of capital letters. They improved from 67 percent to 83 percent who used capital letters when needed. They also show an improvement in the use of small letters. The percentage of students

who used small letters when needed increased from 50 percent to 67 percent. The students show a decline in the use of the apostrophe. They regressed from 33 percent to 11 percent who used the apostrophe when needed, and 72 percent did not use it at all. They increased from 94 percent to 100 percent in non-use of exclamation points. There was a very slight improvement in the use of the semicolon. The students improved by going from 0 percent to 6 percent who used it when needed, and from 89 percent to 83 percent in non-use. But they went from 94 percent to 100 percent in the non-use of the colon.

The results of the items dealing with organization show that the students in Course 105C had a mean gain of one in the use of chronological order, description, definition, example, comparison, contrast, deduction, induction, order of importance of events, analysis, cause and effect, and topic sentence. They started out using a mean of four organizers and used a mean of five at the end.

So, overall the students in Course 105C wrote a little bit more, had less errors in grammar and punctuation, had an improvement in the use of transitions, and a slight gain in the area of organization. They had a high incidence of non-use of punctuation, except for the comma and period, and actually regressed in the use of the apostrophe.

Results for Course 100L*

The presentation of the results for Course 100L will follow the same format used to report the results for Course 105C. First the results of items not pertaining to punctuation and organization will be given, and then those for punctuation and organization. The 66 students in Course 100L show a mean gain of 135 words, showing the effectiveness of the course in the particular objective. In all the sections there were one or more students who outperformed the rest of the group in the number of words written in the post writing sample. Their particular gains are noteworthy. (See Appendices 1-A through 1-F, pages 180-186). In the number of words per error, the students had a mean gain of 8.8 words. This shows an improvement since they had an error in grammar or punctuation every 19.6 words instead of every 10.8 words. They also show an improvement in the use of transition. The percentage of students rated Excellent remained the same at 4.5 percent, but those rated Good increased from 32 percent to 44 percent. There was a slight increase in those rated Poor: 17 percent to 18 percent. The students show a marked regression in the objective of agreement. Only 29 percent met the objective, and 50 percent actually regressed. They improved in the objective of tense by going from 74 percent to 91 percent. There was a slight

*See pages 119 through 145 for data tables.

improvement in the objective of pronouns. The number of students who met the objective increased from 71 percent to 74 percent. They show no change in the use of prepositions. In both the pre and post test, 89 percent of the students met the objective, which was rather high to begin with. They show a slight improvement in the use of articles by going from 56 percent to 62 percent. The students regressed in sentence structure variety. The percentage who were rated Good/Excellent declined from 41 percent to 23 percent. There was also an increase from 26 percent to 29 percent in those rated Poor. The raters found that in general the students in Course 100L tended to use complex sentences in disproportion to simple and compound sentences. Some used simple sentences in disproportion to complex and compound sentences, and a few only used two types of sentences in their writing sample. There was a slight improvement in the absence of incomplete sentences. The percentage of students meeting the objective changed from 68 percent to 71 percent. They also show a slight improvement in the absence of run-on sentences by changing from 59 percent to 64 percent. There is no change between the pre and post test in spelling. In both cases 86 percent met the objective, which was very high to begin with. The students show regression in word order. They regressed from 73 percent to 64 percent who met the objective. They show a slight improvement in words used

incorrectly. The percentage of those meeting the objective increased from 50 percent to 53 percent. There was no change in words omitted: 20 percent met the objective in both the pre and post test. They show some improvement in paragraphing. They improved from 73 percent to 89 percent.

The results pertaining to the items dealing with punctuation will be presented next. The percentage of students in Course 100L using quotation marks when needed declined from 18 percent to 9 percent, and the percentage of those not using them increased from 82 percent to 88 percent. They show a slight improvement in the use of the period. The percentage of students doing so increased from 67 percent to 74 percent. In the use of the comma, they show some improvement. They improved from 15 percent to 29 percent who used it when needed. It was interesting to note that the pre test score for the students in Course 105C was higher than for those in Course 100L and that the gain was in Course 100L instead of 105C, since the reverse was expected. There was a slight improvement in the use of the question mark. Eleven percent used it when needed in the pre test and 18 percent used it when needed in the post test. The students show a slight regression in the use of capital letters. They regressed from 77 percent to 71 percent who used them when needed. They also show some regression in the use of small letters by going from 85 percent to 73

percent. They had a very slight improvement in the use of the apostrophe. The change was from 18 percent to 20 percent who used it when needed. The students declined in the use of the semicolon when needed: from 14 percent to 8 percent. They also regressed in the use of it by going from 11 percent to 27 percent who used it when not needed. They show an improvement in the use of the colon. They increased from 11 percent to 18 percent who used it when needed.

When it comes to the use of punctuation, the students in both Course 105C and Course 100L have a high percentage of non-use except for the period and the comma. The students in Course 100L show a slightly higher percentage of usage, though.

The results of the items related to organization show that the students in Course 100L had a mean gain of one in the use of chronological order, description, definition, example, comparison, contrast, deduction, induction, order of importance of events, analysis, cause and effect, and topic sentence. They started out using a mean of eight organizers and used a mean of nine at the end.

So, the students in Course 100L wrote a lot more, had fewer errors in grammar and punctuation, and improved slightly in transition and organization. They do show some regression in agreement, sentence structure variety, word order, capital letters, and small letters.

Group Results*

As a group, the students in the ESL Program show a marked improvement in the average number of words written, tenses, paragraphing and use of periods. They show some improvement in prepositions, articles, incomplete sentences, run-on sentences, use of commas, and use of transitions. They show a slight improvement in pronouns, spelling, word order, words used incorrectly, words omitted, use of the question mark, exclamation point and colon, and organization. They show regression in agreement, sentence structure, variety, use of quotation marks, capital letters, small letters, apostrophes, and semicolons. Overall, the students had a net gain, as shown by the average number of words per error. They wrote more and the frequency of errors in grammar and punctuation declined.

Discussion of Findings: Oral Delivery

Course 110B is the only course in the ESL Program which "aims to improve the student's abilities to communicate in both speech and writing." (See course description, page 10) The students in the two sections prepared three-minute oral presentations, both at the beginning and end of the semester. The results of the achievement in the operationalized goals will now be presented.

*See pages 119 through 145 for data tables.

Results for Section 1*

The students in Section 1 started out speaking more than the students in Section 2. But they regressed by twenty-five words in the average number of words spoken in three minutes. In the pre test they spoke an average of 303 words and in the post test an average of 264 words. They improved in the number of words per grammar error. They had an error in grammar every 122 words instead of every 116.5 words. The students show an improvement in making themselves understood. The percentage of students rated Good/Excellent increased from 60 to 70 percent, while those rated Poor declined from 20 percent to 0 percent. There was no change in the number of students who met the objective of no errors in agreement. The percentage who did so was 70 percent in both the pre and post tests. The students did markedly well in the objective of tenses in both the pre and post tests. They increased from 90 percent to 100 percent who met the objective. The students regressed in the use of prepositions by going from 100 percent to 90 percent. They improved in the use of articles. Those who met the objective increased from 60 percent to 80 percent. The students improved in sentence structure variety. The percentage of students rated Good/Excellent increased from 30 percent to 40 percent, and those rated Poor declined from

*See pages 146 through 154 for data tables.

20 percent to 0 percent. They had a mean gain of eight-tenths (0.8) in the use of chronological order, definition, example, comparison, contrast, deduction, induction, order of importance of events, and cause and effect. They started out using an average of 2.6 in the pre test and used 3.4 in the post test.

The students in Section 1 have shown an improvement in making themselves understood, in tenses, articles, and in sentence structure variety. They also had a very slight improvement in organization. They had no change in agreement and regressed in prepositions. In the number of words spoken in three minutes they regressed, but had an improvement in the number of words per grammar error.

Results for Section 2*

The students in Section 2 started out speaking less than the students in Section 1. They they improved by 41 words in the average number of words spoken in three minutes. In the pre test they spoke an average of 282 words and in the post test an average of 323 words. They regressed in the number of words per grammar error. They had an error in grammar every 70 words instead of very 72 words. The students show an improvement in making themselves understood. The percentage of those rated Good increased from 9 percent to 36 percent, while those rated Fair declined from 73

*See pages 146 through 154 for data tables.

percent to 45 percent. The students did markedly well in the objective of tenses. In both the pre and post test 82 percent met the objective. There was a regression shown in the objective of no errors in agreement. The students declined from 73 percent who met the objective in the pre test to 55 percent who did so in the post test. The students also regressed in the use of prepositions by going from 82 percent to 64 percent who met the objective. Regression was also shown in the use of articles by going from 64 percent to 45 percent. The students improved in sentence structure variety. The percentage of students rated Excellent increased from 18 percent to 36 percent, and those rated Poor declined from 27 percent to 0 percent, changing those rated Fair from 27 percent to 55 percent. They had a mean gain of one (1.0) in the use of chronological order, definition, example, comparison, contrast, deduction, induction, order of importance of events, and cause and effect. They started out using a mean average of three in the pre test and used four in the post test.

The students in Section 2 show an improvement in making themselves understood and in sentence structure variety. They had a slight improvement in organization. In the number of words spoken in three minutes, they improved, but regressed in the number of words per grammar error. They had no change in tenses, and regressed in

agreement, prepositions and articles.

Group Results*

As a group, the students in Course 110B show improvement in making themselves understood, in tenses and sentence structure variety. They also show a slight improvement in organization. They show no change in articles, and regressed in agreement and prepositions. There was a slight improvement in the number of words spoken in three minutes, and in the number of words per grammar error.

The results from the oral delivery pre and post samples show that overall the students in Course 110B had a very slight net gain, as shown by the number of words spoken and the number of words per error. They spoke a little more and the frequency of errors declined slightly.

*See pages 146 through 154 for data tables.

C H A P T E R V

CONCLUSIONS AND RECOMMENDATIONS

In Chapter IV the results of the writing and oral delivery samples were discussed. In Chapter V the findings will be summarized and conclusions made. Recommendations for improving 105C, 100L and 110B will be offered, as well as recommendations to the English as a Second Language Program and the University of Massachusetts. Recommendations and suggestions for further research will also be included in this chapter.

Summary of Findings

In the objectives related to writing, it was found that the students in 105C and 100L in the English as a Second Language Program show a marked improvement in the average number of words written, tenses, paragraphing and use of periods. They show some improvement in prepositions, articles, absence of incomplete sentences, absence of run-on sentences, use of commas, and use of transitions. They show a slight improvement in pronouns, spelling, word order, words used incorrectly, words omitted, use of the question mark, exclamation point and colon, and organization. They show regression in agreement, sentence structure variety,

use of quotation marks, capital letters, small letters, apostrophes, and semicolons. Overall, the students had a net gain, as shown by the average number of words per error. They wrote more and the frequency of errors in grammar and punctuation declined.

In the objectives pertaining to oral delivery the students in Course 110B as a group show improvement in making themselves understood, in tenses, and sentence structure variety. They also show a slight improvement in organization. They show no change in articles, and regressed in agreement and prepositions. There was a slight improvement in the number of words spoken in three minutes, and in the number of words per grammar error.

Recommendations for 105C

Course 105C fulfilled its main purpose of teaching grammar quite well, since the students improved in all of the items dealing with grammar. Yet, the high incidence of non-use of punctuation except for the comma and period indicates a need to concentrate on teaching their use. Materials specifically developed to teach and give practice in the use of punctuation should be incorporated into the course. More emphasis should also be given to the area of organization, since the students are only using an average of four organizers out of twelve.

Recommendations for 100L

Even though the students in Course 100L wrote much more in the post test, and had fewer errors in grammar and punctuation, they do show regression in agreement, sentence structure variety, word order, capital letters, and small letters. This indicates a need for reviewing during the semester, since skills in a second language tend to deteriorate quickly when not reinforced. The students also had a high incidence of non-use of punctuation, but this area would probably just need reinforcing in 100L if the use of punctuation were taught in Course 105C.

Recommendations for 110B

Course 110B was effective in helping students to make themselves understood. Their pronunciation, intonation, and pacing improved. Yet, they only had a slight improvement in the number of words spoken in three minutes. This indicates a need to concentrate in getting students to say more, which requires providing more time to speak. This might not be possible the way Course 110B is presently structured. (See Recommendations to ESL Program) In the number of words per grammar error, the improvement is also slight. This indicates a need for reviewing to reinforce a skill which tends to deteriorate the quickest of all.

Recommendations for ESL Program

The very slight net gain shown by the students in 110B in oral delivery indicates a need to place more emphasis in this skill. The ESL Program should offer a three-hour course in Conversation instead of having it as part of Course 110B. There does not seem to be enough time in this course to develop both writing and speaking skills. The Conversation Course set up would concentrate on pronunciation, intonation, pacing, vocabulary development, grammar and organization. It would meet for an hour three times a week instead of for three hours once a week. The course should have several levels to accommodate the oral skills of the students. Language teachers know that the oral skills in a second language tend to deteriorate much quicker than the listening, reading and writing skills when not used regularly, so that they must be constantly reinforced.

Although as a group the 105C and 100L students had a net gain in writing skills, there are several areas where the ESL Program should concentrate, since the students experienced regression in them. These areas are: 1) agreement (number agreement more so than subject-verb agreement), 2) sentence structure variety, 3) quotation marks, 4) capital letters, 5) small letters, 6) apostrophes, and 7) semicolons. It should also reinforce the following areas since there was

only slight improvement: 1) pronouns, 2) spelling, 3) word order, 4) words used incorrectly, 5) words omitted, 6) use of question marks, 7) exclamation points, 8) colon, and 9) organization. This might entail restructuring of courses, and changing or supplementing materials.

Recommendations for the University
of Massachusetts at Amherst

As a whole, the ESL Program is being rather effective in teaching writing and oral English language skills to limited-English speakers. To expect greater gains would be unrealistic since the students in 100L and 110B only meet for three hours a week, and those of 105C for ten. Mastering a language requires many hours of practice and dedication. Even though it is effective, the ESL Program does not have any course specifically structured to meet the needs of non-English speakers. The ESL Program has stopped offering Courses 105A and 105B which were meant to service this particular student population. The University of Massachusetts should provide the funds to reinstate these two courses in order to expand the educational opportunities of students who come to the United States after high school and who have the academic requirements to do college level courses. Having these courses would allow them to enter the University instead of getting discouraged and deciding to forego a college education.

There are people who feel that an ESL Program at the college level is a waste of time and money. They do not realize that an ESL Program promotes growth in the English language by structuring courses that meet the student's particular needs. It also fosters a sense of security by placing students in an environment where all the students have the same problem: lack of English language skills. To place students in regular rhetoric classes would frustrate them to such an extent that many would fail or drop out. This would only perpetuate the lack of educational opportunities open to limited- and non-English speakers.

This evaluator hopes that these recommendations will be put into effect in order to make the ESL Program an excellent vehicle for teaching limited- and non-English speakers the language skills that they need to succeed at the University of Massachusetts and later on in life. The number of students who have done so in the past is enough proof that the ESL Program should be continued and reinforced.

Recommendations for Further Research

There are two areas that still need to be addressed concerning the ESL Program. This evaluation was unable to determine its effectiveness in developing listening comprehension and reading comprehension skills. Further research

needs to be done in these two areas.

The Data Sheet developed from the operationalized goals was very useful in collecting the writing skills data for this evaluation. Further refining of this Data Sheet and establishing its validity and reliability indices would certainly be a great contribution to the field of language teaching.

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APPENDICES

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APPENDIX 1
NUMBER OF WORDS WRITTEN
BY STUDENTS IN EACH COURSE

APPENDIX 1-A

NUMBER OF WORDS WRITTEN BY STUDENTS
IN COURSE 105C (SECTION 1)

Students	Pre Test	Post Test	Difference
1	230	200	- 30
2	300	300	=
3	294	224	- 70
4	252	138	- 114
5	128	180	+ 52
6	240	240	=
7	115	170	+ 55
8	189	283	+ 94
9	140	165	+ 25
10	220	316	+ 96
11	265	160	- 106
12	99	240*	+ 141

*Showed great gain in number of words written in post test.

APPENDIX 1-B
 NUMBER OF WORDS WRITTEN BY STUDENTS
 IN COURSE 105C (Section 2)

Students	Pre Test	Post Test	Difference
1	90*	344**	+ 254
2	34*	62	+ 28
3	152	155	+ 3
4	133*	142	+ 9
5	99*	91	- 8
6	118*	160	+ 42

*Student write more than one composition.
 The average number of words written per composition
 is given.

**Showed great gain in number of words
 written in post test.

APPENDIX 1-C

NUMBER OF WORDS WRITTEN BY STUDENTS
IN COURSE 100L (SECTION 1)

Students	Pre Test	Post Test	Difference
1	100*	300**	+ 200
2	125*	189	+ 64
3	118*	324	+ 20
4	173*	240	+ 67
5	200*	290	+ 90
6	150*	378**	+ 278
7	160*	360**	+ 200
8	150*	352**	+ 202
9	208*	425**	+ 217
10	285*	365	+ 80
11	158*	224	+ 66
12	325*	555**	+ 230
13	178*	360	+ 177
14	173*	408**	+ 307
15	110*	100	- 10
16	175	690**	+ 515

*Student wrote more than one composition.
The average number of words written per composition
is given.

**Showed great improvement in number of words
written in post test.

APPENDIX 1-D

NUMBER OF WORDS WRITTEN BY STUDENTS
IN COURSE 100L (SECTION 2)

Students	Pre Test	Post Test	Difference
1	245	415	+ 170
2	306	440	+ 134
3	176	252	+ 76
4	153	205	+ 52
5	228	511*	+ 282
6	140	250	+ 110
7	280	320	+ 40
8	215	255	+ 40
9	133	312	+ 179
10	80	170	+ 90
11	196	630*	+ 434
12	155	315	+ 160
13	138	320	+ 182
14	120	440*	+ 320
15	210	380	+ 170
16	275	310	+ 35
17	156	290	+ 134
18	208	380	+ 172
19	425	510	+ 85

*Showed great gain in number of words written in post test.

APPENDIX 1-E

NUMBER OF WORDS WRITTEN BY STUDENTS
IN COURSE 100L (SECTION 3)

Students	Pre Test	Post Test	Difference
1	205	230	+ 25
2	280	285	+ 5
3	224	295	+ 71
4	255	295	+ 40
5	277	336	+ 59
6	266	262	- 14
7	258	284	+ 27
8	306	390	+ 84
9	136	120	- 16
10	200	240	+ 40
11	210	293	+ 83
12	335	870*	+ 534
13	304	285	+ 81
14	400	260	- 40
15	495	310	- 185
16	240	434	+ 194
17	252	445	+ 193
18	208	320	+ 112

*Showed great gain in number of words written in post test.

APPENDIX 1-F

NUMBER OF WORDS WRITTEN BY STUDENTS
IN COURSE 100L (SECTION 4)

Students	Pre Test	Post Test	Difference
1	255	294	+ 39
2	135	160	+ 25
3	245	405**	+ 160
4	355	378	+ 23
5	140	192	+ 52
6	220	250	+ 30
7	140*	275**	+ 135
8	144*	203	+ 59
9	140*		
10	160*	312	+ 152
11	98*	98	=
12	414	430	+ 15
13	270	440**	+ 170

*Student wrote more than one composition. The average number of words written per composition is given.

**Showed great gain in number of words written in post test.

APPENDIX 2

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN EACH COURSE

APPENDIX 2-A

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 105C (SECTION 1)

Students	Pre Test	Post Test	Difference
1	5.3	11.1	+ 5.8
2	8.3	8.8	+ 0.5
3	6.1	28.0	+ 21.9
4	9.7	15.3	+ 5.6
5	2.8	11.3	+ 8.5
6	12.0	10.9	- 1.1
7	23.0	85.0	+ 62.0
8	5.3	11.3	+ 6.0
9	8.8	33.0	+ 24.2
10	18.3	21.0	+ 2.7
11	8.8	32.0	+ 23.2
12	9.9	24.0	+ 14.1

APPENDIX 2-B

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 105C (SECTION2)

Students	Pre Test	Post Test	Difference
1	5.9	5.5	- 0.4
2	2.4	3.0	+ 0.6
3	3.7	6.2	+ 2.5
4	5.9	10.1	+ 4.2
5	5.9	No Errors	
6	9.3	7.6	- 1.7

APPENDIX 2-C

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 100L (SECTION 1)

Students	Pre Test	Post Test	Difference
1	6.9	30.0	+ 23.1
2	12.5	27.0	+ 14.5
3	9.8	40.5	+ 30.7
4	15.0	34.3	+ 19.3
5	14.3	20.7	+ 6.4
6	23.0	25.2	+ 2.2
7	11.4	17.1	+ 5.7
8	15.0	44.0	+ 29.0
9	6.0	12.1	+ 6.1
10	8.5	21.5	+ 13.0
11	11.7	11.8	+ 0.1
12	50.0	24.1	- 25.9
13	11.5	12.0	+ 0.5
14	31.4	18.5	- 12.9
15	14.7	4.5	- 10.2
16	11.7	16.8	+ 5.1

APPENDIX 2-D

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 100L (SECTION 2)

Students	Pre Test	Post Test	Difference
1	14.4	7.5	- 6.9
2	43.7	18.3	- 25.4
3	6.3	9.2	+ 2.9
4	9.5	11.4	+ 1.9
5	12.0	18.3	+ 6.3
6	17.5	31.3	+ 13.8
7	8.9	16.0	+ 7.1
8	7.7	15.9	+ 8.2
9	11.0	17.3	+ 6.3
10	20.0	21.3	+ 1.3
11	8.9	13.7	+ 4.8
12	44.3	13.1	- 31.2
13	10.6	12.3	+ 1.7
14	8.6	13.8	+ 5.2
15	8.8	31.7	+ 29.9
16	8.6	28.2	+ 19.6
17	44.6	No Errors	
18	26.0	25.3	- 0.7
19	21.3	10.4	- 10.9

APPENDIX 2-E

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 100L (SECTION 3)

Students	Pre Test	Post Test	Difference
1	7.6	38.3	+ 30.7
2	8.5	11.9	+ 3.4
3	9.0	10.9	+ 1.9
4	10.6	10.9	+ 0.3
5	13.9	16.8	+ 2.9
6	6.8	13.3	+ 6.5
7	6.3	5.2	- 1.1
8	7.3	7.6	+ 0.3
9	9.7	15.0	+ 5.3
10	11.1	15.0	+ 3.9
11	11.7	41.9	+ 30.2
12	18.6	26.4	+ 7.8
13	15.7	25.9	+ 10.2
14	25.0	60.0	+ 35.0
15	41.3	44.3	+ 3.0
16	24.0	12.4	- 11.6
17	14.0	12.7	- 1.3
18	17.3	12.3	- 5.0

APPENDIX 2-F

AVERAGE NUMBER OF WORDS WRITTEN PER ERROR
BY STUDENTS IN COURSE 100L (SECTION 4)

Students	Pre Test	Post Test	Difference
1	19.6	14.0	- 5.6
2	12.3	22.9	+ 10.6
3	17.5	45.0	+ 27.5
4	25.4	126.0	+ 100.6
5	10.0	19.2	+ 9.2
6	16.9	20.8	+ 3.9
7	46.5	19.6	- 26.9
8	14.4	15.6	+ 1.2
9	18.7	13.3	- 5.5
10	18.8	156.0	+ 137.2
11	10.8	32.7	+ 21.9
12	37.7	23.9	- 13.8
13	90.0	220.0	+ 130.0

APPENDIX 3

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION

ERRORS MADE IN WRITING SAMPLE

BY STUDENTS IN EACH COURSE

APPENDIX 3-A

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 105C (SECTION 1)

Students	Pre Test	Post Test	Difference
1	43	18	+ 25
2	36	34	+ 2
3	48	8	+ 40
4	26	9	+ 17
5	46	16	+ 30
6	20	22	- 2
7	5	2	+ 3
8	36	25	+ 11
9	16	5	+ 11
10	12	15	- 3
11	30	5	+ 25
12	10	10	=

APPENDIX 3-B

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 105C (SECTION 2)

Students	Pre Test	Post Test	Difference
1	46	62	- 16
2	42	21	+ 21
3	41	25	+ 16
4	45	14	+ 31
5	60	0	+ 50
6	38	21	+ 17

APPENDIX 3-C

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 1)

Students	Pre Test	Post Test	Difference
1	29	10	+ 19
2	20	7	+ 13
3	24	8	+ 16
4	23	7	+ 16
5	28	14	+ 14
6	13	15	- 2
7	28	21	+ 7
8	20	6	+ 14
9	69	35	+ 34
10	67	17	+ 50
11	27	19	+ 8
12	13	23	- 10
13	31	30	+ 1
14	11	26	- 15
15	21	22	- 1
16	15	41	- 26

APPENDIX 3-D

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 2)

Students	Pre Test	Post Test	Difference
1	34	55	- 21
2	7	24	- 17
3	28	48	- 20
4	18	18	=
5	19	38	- 19
6	8	8	=
7	63	20	+ 43
8	38	16	+ 12
9	24	18	+ 6
10	4	8	- 4
11	22	46	- 24
12	7	24	- 17
13	13	26	- 13
14	14	32	- 18
15	24	12	+ 12
16	32	11	+ 21
17	7	0	+ 7
18	8	15	- 7
19	20	49	- 29

APPENDIX 3-E

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 3)

Students	Pre Test	Post Test	Difference
1	27	6	+ 21
2	33	24	+ 9
3	25	27	- 2
4	24	27	- 3
5	20	20	=
6	39	19	+ 20
7	41	55	- 14
8	42	51	- 9
9	14	8	- 6
10	18	16	+ 2
11	18	7	+ 11
12	18	33	- 15
13	26	11	+ 15
14	16	6	+ 10
15	12	7	+ 5
16	10	35	- 25
17	18	35	- 17
18	12	26	- 14

APPENDIX 3-F

TOTAL NUMBER OF GRAMMAR AND PUNCTUATION ERRORS
MADE IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 4)

Students	Pre Test	Post Test	Difference
1	13	21	- 8
2	11	7	+ 4
3	14	9	+ 5
4	14	3	+ 11
5	14	10	+ 4
6	13	10	+ 3
7	6	14	- 8
8	20	13	+ 7
9	15	23	- 8
10	17	2	+ 15
11	18	3	+ 15
12	11	18	- 7
13	3	2	+ 1

APPENDIX 4

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: USE OF TRANSITION

APPENDIX 4-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
 IN COURSE 105C (SECTION 1):
 USE OF TRANSITION

Students	Pre Test	Post Test	Difference
1	F	G	+
2	G	F	-
3	P	F	+
4	F	G	+
5	F	G	+
6	G	F	-
7	G	F	-
8	F	G	+
9	F	G	+
10	G	E	+
11	G	F	-
12	F	F	=

Key:

E = Excellent

G = Good

F = Fair

P = Poor

+ = Improved

- = Regressed

= = No Change

APPENDIX 4-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
 IN COURSE 105C (SECTION 2):
 USE OF TRANSITION

Students	Pre Test	Post Test	Difference
.1	P	P	=
2	P	F	+
3	P	F	+
4	P	G	+
5	F	G	+
6	P	P	=

Key: E = Excellent + = Improved
 G = Good - = Regressed
 F = Fair = = No Change
 P = Poor

APPENDIX 4-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 1):
USE OF TRANSITION

Students	Pre Test	Post Test	Difference
1	F	G	+
2	F	F	=
3	F	G	+
4	G	G	=
5	F	G	+
6	G	G	=
7	F	F	=
8	G	G	=
9	F	P	-
10	F	F	=
11	F	F	=
12	G	G	=
13	G	F	-
14	F	P	-
15	G	P	-
16	G	G	=

Key:

E = Excellent
G = Good
F = Fair
P = Poor

+ = Improved
- = Regressed
= = No Change

APPENDIX 4-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 2):
USE OF TRANSITION

Students	Pre Test	Post Test	Difference
1	G	G	=
2	F	G	+
3	F	P	-
4	P	P	=
5	F	G	+
6	G	F	-
7	P	G	++
8	P	F	+
9	F	F	=
10	G	F	-
11	P	P	=
12	E	G	-
13	F	P	-
14	F	G	=
15	P	G	++
16	P	G	++
17	F	E	++
18	G	G	=
19	F	F	=

Key: E = Excellent + = Improved
 G = Good - = Regressed
 F = Fair = = No Change
 P = Poor

APPENDIX 4-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN COURSE 100L (SECTION 3):
USE OF TRANSITION

Students	Pre Test	Post Test	Difference
1	F	G	+
2	F	F	=
3	F	P	-
4	G	F	-
5	G	F	-
6	F	G	+
7	P	P	=
8	F	F	=
9	F	P	-
10	G	F	-
11	F	G	+
12	G	G	=
13	P	G	+
14	E	G	-
15	G	E	+
16	G	P	-
17	F	F	=
18	F	F	=

Key:

E = Excellent
G = Good
F = Fair
P = Poor

+ = Improved
- = Regressed
= = No Change

APPENDIX 4-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
 IN COURSE 100L (SECTION 4):
 USE OF TRANSITION

Students	Pre Test	Post Test	Difference
1	G	G	=
2	P	F	+
3	P	G	++
4	G	G	=
5	F	F	=
6	P	P	=
7	E	G	-
8	G	F	-
9	F	G	+
10	G	E	+
11	F	F	=
12	F	G	+
13	F	F	=

Key

E = Excellent
 G = Good
 F = Fair
 P = Poor

+ = Improved
 - = Regressed
 = = No Change

APPENDIX 5

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: NO INCOMPLETE SENTENCES
AND NO RUN-ON SENTENCES

APPENDIX 5-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 105C (SECTION 1): NO INCOMPLETE
SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	0	+ 1	3	2	+ 1
2	1	0	+ 1	0	0	=
3	4	0	+ 4	0	1	- 1
4	1	0	+ 1	0	0	=
5	1	0	+ 1	0	0	=
6	0	0	=	1	1	=
7	0	0	=	0	0	=
8	0	0	=	3	0	+ 3
9	2	0	+ 2	0	0	=
10	0	0	=	0	0	=
11	0	0	=	0	0	=
12	1	0	+ 1	0	2	- 2

Note: Numbers indicate how many errors made.

APPENDIX 5-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO INCOMPLETE
 SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	7	0	+ 7	0	2	- 2
2	0	0	=	4	1	+ 3
3	1	2	- 1	2	0	+ 2
4	0	0	=	1	0	+ 1
5	0	0	=	2	0	+ 2
6	1	2	- 1	2	1	+ 1

Note: Numbers indicate how many errors made.

APPENDIX 5-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 1): NO INCOMPLETE
SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	0	0	=
2	0	0	=	1	0	- 1
3	0	0	=	0	0	=
4	0	0	=	1	0	+ 1
5	1	0	+ 1	0	0	=
6	0	0	=	0	0	=
7	0	0	=	2	2	=
8	1	0	+ 1	2	0	+ 2
9	5	0	+ 5	5	2	+ 3
10	0	0	=	3	0	+ 3
11	2	0	+ 2	0	0	=
12	0	0	=	1	1	=
13	0	0	=	3	2	+ 1
14	1	1	=	0	0	=
15	1	0	+ 1	0	0	=
16	0	1	- 1	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 5-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO INCOMPLETE
 SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	1	+ 1	0	0	=
2	1	0	+ 1	0	1	- 1
3	0	0	=	1	2	- 1
4	0	0	=	0	0	=
5	0	2	- 2	0	0	=
6	0	0	=	0	1	- 1
7	1	0	+ 1	1	0	+ 1
8	2	0	+ 2	2	0	+ 2
9	1	0	+ 1	0	0	=
10	0	1	- 1	0	0	=
11	0	1	- 1	2	1	+ 1
12	0	2	- 2	1	1	=
13	0	0	=	3	2	+ 1
14	0	2	- 2	0	0	=
15	0	0	=	2	0	+ 2
16	0	0	=	2	0	+ 2
17	0	0	=	0	0	=
18	0	1	- 1	2	0	+ 2
19	0	1	- 1	0	2	- 2

Note: Numbers indicate how many errors made.

APPENDIX 5-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 3): NO INCOMPLETE
SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	0	0	=
2	0	0	=	0	1	- 1
3	0	0	=	2	0	+ 2
4	1	1	=	0	0	=
5	0	1	- 1	0	0	=
6	1	1	=	1	1	=
7	0	3	- 3	2	7	- 5
8	1	0	+ 1	1	1	=
9	0	0	=	0	0	=
10	0	0	=	1	2	- 1
11	0	0	=	1	0	+ 1
12	1	1	=	0	1	- 1
13	0	1	- 1	0	2	- 2
14	0	0	=	1	0	+ 1
15	0	0	=	0	0	=
16	0	0	=	0	0	=
17	0	0	=	0	3	- 3
18	0	1	- 1	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 5-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 4): NO INCOMPLETE
SENTENCES AND NO RUN-ON SENTENCES

Students	No Incomplete Sentences			No Run-on Sentences		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	0	0	=
2	0	0	=	0	0	=
3	1	0	+ 1	0	0	=
4	0	0	=	0	0	=
5	0	0	=	0	1	- 1
6	0	1	- 1	2	1	+ 1
7	1	0	+ 1	0	0	=
8	1	1	=	1	1	=
9	0	0	=	0	1	- 1
10	1	0	+ 1	1	0	+ 1
11	1	0	+ 1	0	0	=
12	0	0	=	0	0	=
13	1	0	+ 1	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 6

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: VARIETY IN

SENTENCE STRUCTURE

APPENDIX 6-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 105C
(SECTION 1): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test			Post Test				
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	0	9	3	P	7	7	1	P
2	11	5	3	G	9	4	2	F
3	14	10	2	F	6	7	2	F
4	10	5	0	P	6	7	0	P
5	2	5	0	P	5	2	2	F
6	4	5	5	E	9	1	3	P
7	4	4	1	F	7	2	0	P
8	4	4	1	F	8	4	3	G
9	4	3	1	F	3	3	2	E
10	16	2	0	P	10	7	2	F
11	16	3	0	P	2	3	2	E
12	6	2	1	P	7	1	6	P

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 6-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 105C
(SECTION 2): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test			Post Test				
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	19	3	4	P	18	9	3	G
2	12	3	3	F	7	1	0	P
3	9	2	3	F	9	1	2	P
4	26	1	2	P	7	3	1	F
5	20	6	3	F	7	1	0	P
6	21	3	5	F	9	2	1	P

P = Poor

F = Fair

G = Good

E = Excellent

Key:

Numbers indicate how many sentences written.

APPENDIX 6-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 100L
(SECTION 1): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test			Post Test				
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	7	6	3	G	17	4	1	P
2	2	7	2	F	1	4	2	F
3	3	6	3	F	8	6	2	F
4	8	6	7	E	11	2	1	P
5	8	7	5	E	16	2	2	P
6	3	7	2	F	12	3	2	P
7	6	5	3	E	6	4	4	G
8	7	3	3	F	5	5	2	F
9	12	9	8	E	17	6	4	F
10	5	18	2	F	8	5	1	P
11	8	4	3	G	6	4	1	P
12	17	8	12	G	8	12	4	F
13	10	4	6	F	9	5	3	F
14	6	6	3	F	13	2	1	P
15	5	6	4	E	3	2	1	G
16	2	5	2	F	18	4	9	F

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 6-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 100L
(SECTION 2): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test				Post Test			
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	7	5	7	E	18	7	5	F
2	20	2	1	P	27	5	2	P
3	4	3	2	E	8	7	2	F
4	1	5	2	P	4	5	1	P
5	7	2	3	F	10	12	4	F
6	2	4	2	G	3	7	4	F
7	9	7	8	E	3	6	3	F
8	6	3	3	F	6	4	7	G
9	3	5	4	E	4	8	3	G
10	5	0	3	P	5	3	0	P
11	6	1	2	F	13	4	12	F
12	7	5	8	G	14	4	3	F
13	5	1	3	P	9	2	6	F
14	3	3	1	P	19	7	1	P
15	11	0	2	P	7	9	2	F
16	7	4	4	F	6	9	3	F
17	4	5	2	F	3	7	2	F
18	4	5	4	E	13	8	7	G
19	6	2	6	F	10	11	8	E

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 6-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 100L
(SECTION 3): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test				Post Test			
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	5	5	3	E	5	7	0	P
2	0	7	1	P	3	7	2	F
3	4	5	2	G	18	7	2	P
4	3	6	3	F	11	2	3	P
5	18	6	1	P	14	6	1	P
6	8	4	2	F	11	6	1	P
7	5	5	1	P	13	7	4	F
8	4	6	5	E	14	5	5	G
9	3	5	0	P	4	2	0	P
10	5	3	5	E	9	4	7	G
11	6	3	5	G	16	2	2	P
12	22	2	2	P	27	10	16	G
13	4	6	1	P	14	4	3	F
14	5	10	4	F	9	7	3	G
15	4	10	8	F	10	5	4	G
16	4	3	3	E	13	7	11	G
17	2	3	5	G	4	3	4	E
18	1	1	0	P	13	4	4	F

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 6-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN COURSE 100L
(SECTION 4): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test			Post Test				
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	5	6	2	G	5	9	1	P
2	6	4	1	F	7	3	3	F
3	13	0	2	P	8	13	1	P
4	8	8	4	G	5	13	3	P
5	8	0	1	P	6	3	2	F
6	2	5	6	G	1	6	1	P
7	11	1	4	P	12	3	0	P
8	3	5	6	G	4	2	3	E
9	8	6	2	F	4	5	4	E
10	13	5	3	F	10	5	0	P
11	6	3	2	F	3	2	0	P
12	8	5	8	G	10	5	4	F
13	16	2	2	P	8	15	3	P

Key:

E = Excellent

G = Good

F = Fair

P = Poor

Numbers indicate how many sentences written.

APPENDIX 7

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: NO ERRORS IN WORD ORDER
AND NO ERRORS IN PARAGRAPHING

APPENDIX 7-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	0	0	=
2	2	0	+ 2	0	2	- 2
3	3	0	+ 3	3	2	+ 1
4	3	0	+ 3	3	0	+ 3
5	6	0	+ 6	0	0	=
6	1	3	- 2	1	0	+ 1
7	0	0	=	0	0	=
8	0	0	=	2	2	=
9	0	0	=	0	0	=
10	0	0	=	0	2	- 2
11	3	0	+ 3	2	0	+ 2
12	0	0	=	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 7-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	9	3	+ 6	2	2	=
2	4	0	+ 4	1	0	+ 1
3	1	1	=	0	1	- 1
4	2	0	+ 2	1	0	+ 1
5	12	0	+12	1	0	+ 1
6	1	0	+ 1	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 7-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	1	=	0	0	=
2	0	0	=	0	0	=
3	0	0	=	0	0	=
4	0	0	=	0	0	=
5	1	1	=	0	0	=
6	0	1	- 1	0	0	=
7	1	1	=	0	0	=
8	0	0	=	0	0	=
9	1	0	+ 1	0	0	=
10	0	0	=	0	0	=
11	0	0	=	0	0	=
12	1	1	=	0	0	=
13	0	1	- 1	0	0	=
14	0	0	=	0	0	=
15	0	12	-12	0	0	=
16	0	10	-10	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 7-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	2	- 2	0	0	=
2	0	3	- 3	0	1	- 1
3	0	0	=	1	0	+ 1
4	3	1	+ 2	1	0	+ 1
5	2	1	+ 1	1	0	+ 1
6	0	0	=	0	1	- 1
7	4	1	+ 3	1	0	+ 1
8	7	0	+ 7	0	0	=
9	1	1	=	0	0	=
10	0	0	=	0	0	=
11	0	1	- 1	2	0	+ 2
12	0	3	- 3	0	0	=
13	0	0	=	0	1	- 1
14	0	0	=	0	0	=
15	0	0	=	2	0	+ 2
16	1	0	+ 1	2	0	+ 2
17	0	0	=	0	0	=
18	0	1	- 1	0	0	=
19	0	4	- 4	2	0	+ 2

Note: Numbers indicate how many errors made.

APPENDIX 7-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	11	0	+ 11
2	5	0	+ 5	1	0	+ 1
3	0	0	=	1	0	+ 1
4	3	1	+ 2	1	0	+ 1
5	1	1	=	2	1	+ 1
6	0	0	=	2	0	+ 2
7	1	0	+ 1	1	2	- 1
8	0	0	=	0	0	=
9	3	0	+ 3	0	0	=
10	0	0	=	0	0	=
11	0	0	=	0	0	=
12	0	0	=	0	0	=
13	0	0	=	0	0	=
14	0	0	=	0	0	=
15	0	0	=	0	0	=
16	0	2	- 2	0	2	- 2
17	0	0	=	0	0	=
18	0	1	- 1	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 7-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 WORD ORDER AND NO ERRORS
 IN PARAGRAPHING

Students	No Errors in Word Order			No Errors in Paragraphing		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	0	0	=
2	0	0	=	0	0	=
3	0	0	=	0	0	=
4	0	0	=	0	0	=
5	0	0	=	3	0	+ 3
6	1	0	+ 1	0	0	=
7	0	0	=	0	0	=
8	0	1	- 1	0	0	=
9	0	0	=	0	0	=
10	1	0	+ 1	0	0	=
11	0	0	=	3	0	+ 3
12	0	2	- 2	2	5	- 3
13	0	0	=	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 8

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: NO ERRORS IN AGREEMENT
AND LESS THAN THREE ERRORS IN TENSES

APPENDIX 8-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 AGREEMENT AND LESS THAN THREE
 ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	7	2	+ 5	3	3	=
2	2	1	+ 1	4	2	+ 2
3	0	0	=	17	0	+ 17
4	3	2	+ 1	3	0	+ 3
5	2	2	=	3	0	+ 3
6	0	0	=	3	0	+ 3
7	1	0	+ 1	0	0	=
8	4	0	+ 4	5	0	+ 5
9	0	0	=	0	0	=
10	2	0	+ 2	0	1	- 1
11	2	0	+ 2	0	0	=
12	1	0	+ 1	2	0	+ 2

Note: Numbers indicate how many errors made.

*Includes subject-verb and number agreement.

APPENDIX 8-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 AGREEMENT AND LESS THAN THREE
 ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	3	- 2	1	6	- 5
2	1	0	+ 1	2	0	+ 2
3	3	3	=	3	2	+ 1
4	0	0	=	5	4	+ 1
5	1	0	+ 1	1	0	+ 1
6	0	2	- 2	0	0	=

Note: Numbers indicate how many errors made.

*Includes subject-verb and number agreement.

APPENDIX 8-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 AGREEMENT AND LESS THAN THREE
 ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	3	+ 3	1	1	=
2	0	0	=	3	0	+ 3
3	1	1	=	0	0	=
4	0	1	- 1	0	0	=
5	5	4	+ 1	6	2	+ 4
6	1	2	- 1	0	2	- 2
7	1	3	- 2	7	2	+ 5
8	2	0	+ 2	0	0	=
9	10	1	+ 9	9	8	+ 1
10	2	4	- 2	3	2	+ 1
11	0	5	- 5	5	1	+ 4
12	1	1	=	2	2	=
13	4	1	+ 3	1	0	+ 1
14	2	3	- 1	0	4	- 4
15	2	2	=	0	0	=
16	4	1	+ 3	1	2	- 1

Note: Numbers indicate how many errors made.

*Includes subject-verb agreement and number agreement.

APPENDIX 8-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 2): NO ERRORS IN
AGREEMENT AND LESS THAN THREE
ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	3	8	- 5	4	2	+ 2
2	0	2	- 2	0	0	=
3	4	1	+ 3	2	3	- 1
4	1	5	- 4	1	3	- 2
5	4	6	- 2	1	1	=
6	0	0	=	0	0	=
7	3	0	+ 3	9	2	+ 7
8	2	0	+ 2	2	2	=
9	2	2	=	1	0	+ 1
10	0	0	=	0	0	=
11	0	6	- 6	5	1	+ 4
12	0	0	=	0	2	- 2
13	0	1	- 1	1	1	=
14	3	4	- 1	0	8	- 8
15	5	2	+ 3	0	1	- 1
16	0	0	=	0	1	- 1
17	0	0	=	0	0	=
18	0	0	=	0	1	- 1
19	1	2	- 1	2	2	=

Note: Numbers indicate how many errors made.

*Includes subject-verb agreement and number agreement.

APPENDIX 8-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 AGREEMENT AND LESS THAN THREE
 ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	3	0	+ 3	2	0	+ 2
2	3	5	- 2	5	1	+ 4
3	4	6	- 2	0	1	- 1
4	4	1	+ 3	3	1	+ 2
5	1	2	- 1	1	1	=
6	1	1	=	4	1	+ 3
7	1	3	- 2	4	1	+ 3
8	2	3	- 1	2	3	- 1
9	0	2	- 2	2	2	=
10	2	3	- 1	1	1	=
11	0	6	- 6	12	1	+11
12	2	6	- 4	0	0	=
13	2	6	- 4	4	2	+ 2
14	0	1	- 1	2	0	+ 2
15	0	0	=	2	0	+ 2
16	0	0	=	1	0	+ 1
17	1	2	- 1	3	2	+ 1
18	4	3	+ 1	0	1	- 1

Note: Numbers indicate how many errors made.

*Includes subject-verb agreement and number agreement.

APPENDIX 8-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 AGREEMENT AND LESS THAN THREE
 ERRORS IN TENSES

Students	No Errors in Agreement*			Less Than Three Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	3	- 1	2	2	=
2	2	3	- 1	1	0	+ 1
3	0	0	=	0	1	- 1
4	0	1	- 1	0	0	=
5	6	0	+ 6	1	0	+ 1
6	0	0	=	0	0	=
7	0	2	- 2	0	0	=
8	0	0	=	4	1	+ 3
9	0	4	- 4	2	2	=
10	0	0	=	0	0	=
11	0	2	- 2	0	0	=
12	0	1	- 1	0	0	=
13	0	0	=	0	0	=

Note: Numbers indicate how many errors made.

*Includes subject-verb agreement and number agreement.

APPENDIX 9

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: NO ERRORS IN USE OF
PREPOSITIONS AND NO ERRORS IN USE
OF ARTICLES

APPENDIX 9-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	2	=	0	0	=
2	1	3	- 2	2	4	- 2
3	1	0	+ 1	2	1	+ 1
4	1	1	=	0	1	- 1
5	2	3	- 1	4	0	+ 4
6	0	2	- 2	3	0	+ 3
7	2	0	+ 2	0	0	=
8	1	2	- 1	2	1	+ 1
9	1	0	+ 1	3	0	+ 3
10	1	1	=	1	0	+ 1
11	4	0	+ 4	2	0	+ 2
12	0	0	=	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 9-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	6	- 5	3	0	+ 3
2	5	1	+ 4	2	1	+ 1
3	5	3	+ 2	2	3	- 1
4	6	2	+ 4	3	0	+ 3
5	0	0	=	0	0	=
6	6	1	+ 5	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 9-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	1	+ 1	2	0	+ 2
2	0	1	- 1	0	2	- 2
3	1	0	+ 1	1	0	+ 1
4	2	3	- 1	1	0	+ 1
5	4	0	+ 4	2	0	+ 2
6	0	1	- 1	0	0	=
7	0	2	- 2	3	4	- 1
8	0	1	- 1	0	0	=
9	3	4	- 1	6	4	+ 2
10	10	0	+10	5	4	+ 1
11	1	0	+ 1	0	1	- 1
12	0	1	- 1	0	0	=
13	1	3	- 2	1	0	+ 1
14	0	1	- 1	1	3	- 2
15	0	1	- 1	3	0	+ 3
16	1	9	- 8	0	2	- 2

Note: Numbers indicate how many errors made.

APPENDIX 9-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	4	4	=	1	2	- 1
2	2	2	=	0	3	- 3
3	1	2	- 1	1	0	+ 1
4	1	0	+ 1	0	2	- 2
5	1	2	- 2	1	0	+ 1
6	0	0	=	0	0	=
7	6	6	=	5	2	+ 3
8	2	1	+ 1	0	0	=
9	2	0	+ 2	0	0	=
10	0	0	=	0	1	- 1
11	0	4	- 4	1	0	+ 1
12	0	1	- 1	0	0	=
13	0	2	- 2	0	1	- 1
14	1	1	=	0	0	=
15	3	2	+ 1	0	0	=
16	0	0	=	2	0	+ 2
17	0	0	=	0	0	=
18	0	0	=	0	3	- 3
19	3	0	+ 3	0	8	- 8

Note: Numbers indicate how many errors made.

APPENDIX 9-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	1	- 1	0	0	=
2	1	0	+ 1	1	0	+ 1
3	1	1	=	1	1	=
4	0	1	- 1	0	1	- 1
5	0	1	- 1	0	0	=
6	2	1	+ 1	1	0	+ 1
7	4	1	+ 3	1	0	+ 1
8	5	5	=	3	6	- 3
9	2	0	+ 2	0	0	=
10	4	0	+ 4	1	1	=
11	1	0	+ 1	0	0	=
12	0	2	- 2	0	1	- 1
13	1	2	- 1	4	3	+ 1
14	0	1	- 1	0	0	=
15	0	1	- 1	0	0	=
16	0	2	- 2	0	2	- 2
17	1	5	- 4	0	1	- 1
18	0	2	- 2	1	2	- 1

Note: Numbers indicate how many errors made.

APPENDIX 9-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 USE OF PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	No Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	2	=	0	0	=
2	0	1	- 1	3	0	+ 3
3	0	0	=	1	0	- 1
4	0	0	=	0	0	=
5	1	0	+ 1	0	0	=
6	0	0	=	1	0	+ 1
7	0	1	- 1	2	0	+ 2
8	2	2	=	0	0	=
9	0	3	- 3	0	0	=
10	1	1	=	1	0	+ 1
11	1	1	=	0	0	=
12	0	2	- 2	1	1	=
13	0	0	=	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 10

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: NO ERRORS IN USE OF

PRONOUNS AND LESS THAN FOUR

ERRORS IN SPELLING

APPENDIX 10-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	1	- 1	0	0	=
2	6	4	+ 2	0	2	- 2
3	0	0	=	3	2	+ 1
4	0	0	=	3	0	+ 3
5	3	0	+ 3	0	0	=
6	0	0	=	1	0	+ 1
7	0	0	=	0	0	=
8	0	1	- 1	2	2	=
9	0	1	- 1	0	0	=
10	1	0	+ 1	0	2	- 2
11	2	0	+ 2	2	0	+ 2
12	1	0	+ 1	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 10-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	5	- 5	8	4	+ 4
2	0	0	=	3	1	+ 2
3	2	2	=	3	2	+ 1
4	2	0	+ 2	0	0	=
5	1	0	+ 1	3	0	+ 3
6	0	1	- 1	4	3	+ 1

Note: Numbers indicate how many errors made.

APPENDIX 10-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	3	0	+ 3
2	0	0	=	0	0	=
3	0	0	=	12	3	+ 9
4	0	0	=	1	2	- 1
5	2	0	+ 2	1	0	+ 1
6	0	0	=	2	2	=
7	1	2	- 1	4	1	+ 3
8	1	0	+ 1	0	0	=
9	4	0	+ 4	2	1	+ 1
10	1	2	- 1	6	0	+ 6
11	0	0	=	3	0	+ 3
12	0	0	=	0	1	- 1
13	0	0	=	6	5	+ 1
14	0	0	=	0	1	+ 1
15	0	0	=	3	1	+12
16	0	4	- 4	1	2	- 1

Note: Numbers indicate how many errors made.

APPENDIX 10-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	2	- 2	3	8	- 5
2	0	0	=	0	3	- 3
3	0	0	=	3	6	- 3
4	2	0	+ 2	1	1	=
5	1	0	+ 1	0	1	- 1
6	0	0	=	0	1	- 1
7	2	2	=	5	0	+ 5
8	0	0	=	2	0	+ 2
9	1	0	+ 1	2	0	+ 2
10	1	-	+ 1	1	2	- 1
11	0	2	- 2	2	3	- 1
12	0	3	- 3	0	0	=
13	0	1	- 1	0	2	- 2
14	0	1	- 1	0	7	- 7
15	1	0	+ 1	3	0	+ 3
16	0	0	=	4	1	+ 3
17	1	0	+ 1	0	0	=
18	0	0	=	0	0	=
19	0	0	=	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 10-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	2	1	+ 1
2	1	0	+ 1	3	3	=
3	1	0	+ 1	2	1	+ 1
4	2	1	+ 1	1	1	=
5	0	0	=	3	2	+ 1
6	0	0	=	3	1	+ 1
7	0	0	=	7	4	+ 3
8	0	1	- 1	1	4	- 3
9	0	0	=	1	0	+ 1
10	0	1	- 1	2	1	+ 1
11	0	0	=	0	0	=
12	0	0	=	1	5	- 4
13	0	0	=	3	0	+ 3
14	0	0	=	1	1	=
15	0	0	=	0	3	- 3
16	0	1	- 1	2	4	- 2
17	0	1	- 1	5	4	+ 1
18	0	0	=	1	3	- 2

Note: Numbers indicate how many errors made.

APPENDIX 10-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 USE OF PRONOUNS AND LESS THAN FOUR
 ERRORS IN SPELLING

Students	No Errors in Use of Pronouns			Less Than Four Errors in Spelling		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	0	=	1	1	=
2	2	0	+ 2	2	0	+ 2
3	1	0	+ 1	2	3	- 1
4	0	0	=	3	0	+ 3
5	0	0	=	3	1	+ 2
6	0	1	- 1	0	0	=
7	0	1	- 1	0	2	- 2
8	0	0	=	0	1	- 1
9	1	1	=	5	2	+ 3
10	1	0	+ 1	1	1	=
11	0	0	=	3	0	+ 3
12	0	0	=	2	3	- 1
13	0	0	=	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 11

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: LESS THAN THREE WORDS
USED INCORRECTLY AND NO WORDS OMITTED

APPENDIX 11-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	6	1	+ 5	0	0	=
2	1	6	- 5	6	6	=
3	2	0	+ 2	8	2	+ 6
4	4	1	+ 3	4	0	+ 4
5	3	1	+ 2	6	1	+ 5
6	2	7	- 5	8	6	+ 2
7	1	0	+ 1	1	1	=
8	6	4	+ 2	1	0	+ 1
9	4	2	+ 2	1	0	+ 1
10	2	6	- 4	4	2	+ 2
11	1	0	+ 1	3	1	+ 2
12	0	0	=	4	1	+ 3

Note: Numbers indicate how many errors made.

APPENDIX 11-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	14	-12	3	14	-11
2	8	10	- 2	5	4	+ 1
3	9	4	+ 5	5	2	+ 3
4	5	3	+ 3	9	5	+ 4
5	8	0	+ 8	5	0	+ 5
6	6	3	+ 3	7	7	=

Note: Numbers indicate how many errors made.

APPENDIX 11-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	5	1	+ 4	7	3	+ 4
2	0	3	- 3	4	1	+ 3
3	5	1	+ 4	0	1	- 1
4	0	1	- 1	3	0	+ 3
5	2	4	- 2	0	0	=
6	7	5	+ 2	2	1	+ 1
7	11	4	+ 7	2	3	- 1
8	1	1	=	2	1	+ 1
9	11	7	+ 4	4	1	+ 3
10	15	2	+13	9	1	+ 8
11	5	1	+ 4	5	6	- 1
12	2	7	- 5	6	8	- 2
13	6	6	=	3	6	- 3
14	2	7	- 5	3	4	- 1
15	2	2	=	1	3	- 2
16	2	2	=	5	4	+ 1

Note: Numbers indicate how many errors made.

APPENDIX 11-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre	Post	Difference	Pre	Post	Difference
1	3	15	-12	8	2	+ 6
2	1	2	- 1	1	3	- 2
3	2	7	- 5	7	11	- 4
4	3	1	+ 2	3	2	+ 1
5	2	6	- 4	5	1	+ 4
6	3	1	+ 2	1	1	=
7	11	2	+ 9	5	1	+ 4
8	6	2	+ 4	3	5	- 2
9	8	2	+ 6	3	3	=
10	0	2	- 2	0	0	=
11	5	10	- 5	3	5	- 2
12	0	5	- 5	3	2	+ 1
13	2	5	- 3	0	3	- 3
14	6	1	+ 5	0	5	- 5
15	4	3	+ 1	1	0	+ 1
16	2	0	+ 2	6	2	+ 4
17	2	0	+ 2	0	0	=
18	0	0	=	1	1	=
19	4	11	- 7	4	5	+ 1

Note: Numbers indicate how many errors made.

APPENDIX 11-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	5	2	+ 3	2	1	+ 1
2	3	5	- 2	7	5	+ 2
3	8	9	- 1	1	4	- 3
4	5	7	- 2	2	4	- 2
5	6	5	+ 1	4	1	+ 3
6	5	3	+ 2	9	4	+ 5
7	5	5	=	5	9	- 4
8	7	16	- 9	10	9	+ 1
9	1	4	- 3	3	0	+ 3
10	3	3	=	1	2	- 1
11	2	0	+ 2	0	0	=
12	4	7	- 3	4	2	+ 2
13	3	3	=	3	3	=
14	2	2	=	0	1	- 1
15	1	1	=	1	0	+ 1
16	0	7	- 7	0	7	- 7
17	4	7	- 3	2	5	- 3
18	4	7	- 3	1	2	- 1

Note: Numbers indicate how many errors made.

APPENDIX 11-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): LESS THAN THREE
 WORDS USED INCORRECTLY AND NO WORDS
 OMITTED

Students	Less Than Three Words Used Incorrectly			No Words Omitted		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	2	2	=	1	0	+ 1
2	0	0	=	1	2	- 1
3	4	0	+ 4	0	1	- 1
4	2	0	+ 2	1	0	+ 1
5	0	1	- 1	0	0	=
6	6	3	+ 3	0	2	- 2
7	0	1	- 1	1	3	- 2
8	2	1	+ 1	2	1	+ 1
9	5	2	+ 3	2	2	=
10	2	0	+ 2	1	0	+ 1
11	1	0	+ 1	1	0	+ 1
12	1	2	- 1	1	2	- 1
13	0	0	=	0	1	- 1

Note: Numbers indicate how many errors made.

APPENDIX 12

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: NO ERRORS IN USE OF

PERIODS AND LESS THAN THREE ERRORS

IN USE OF COMMAS

APPENDIX 12-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	2	1	3	4
2	1	0	3	1
3	3	0	0	2
4	1	0	0	0
5	2	0	7	4
6	0	0	2	1
7	0	0	0	0
8	1	0	8	0
9	1	0	1	1
10	0	0	0	2
11	0	0	1	4
12	0	0	0	3

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 12-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less Than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	1	0	4	2
2	2	0	4	2
3	0	0	5	2
4	0	0	6	0
5	0	0	14	0
6	2	0	9	2

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 12-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less Than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	1	0
2	0	0	9	0
3	0	0	3	2
4	0	0	12	0
5	1	0	1	2
6	0	0	0	1
7	0	0	7	3
8	0	0	8	2
9	1	1	7	2
10	1	0	4	2
11	2	0	1	1
12	0	0	0	1
13	0	0	6	6
14	1	0	1	2
15	1	0	1	0
16	0	0	0	2

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 12-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less Than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	1	0	3	8
2	1	0	1	3
3	0	0	1	6
4	0	0	0	2
5	0	2	1	4
6	0	0	4	3
7	0	0	10	2
8	0	0	5	0
9	1	0	2	3
10	0	1	0	1
11	1	1	1	10
12	0	2	2	1
13	0	0	4	6
14	0	1	1	0
15	0	0	2	2
16	4	1	5	4
17	0	0	4	0
18	0	0	5	5
19	0	1	4	9

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 12-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less Than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	2	0
2	0	0	2	3
3	0	0	4	3
4	1	1	1	4
5	0	1	2	3
6	1	1	8	4
7	0	2	8	8
8	1	0	3	3
9	0	0	2	0
10	0	0	3	0
11	0	0	1	0
12	1	1	3	5
13	0	0	5	3
14	0	0	9	2
15	0	0	6	0
16	0	0	7	7
17	0	0	1	3
18	0	1	1	2

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 12-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 USE OF PERIODS AND LESS THAN THREE
 ERRORS IN USE OF COMMAS

Students	No Errors in Use of Periods		Less Than Three Errors in Use of Commas	
	Pre Test	Post Test	Pre Test	Post Test
1	1	0	2	8
2	0	0	0	0
3	1	0	1	4
4	1	0	8	2
5	0	1	0	4
6	0	1	2	3
7	1	0	0	1
8	1	1	6	2
9	0	0	0	5
10	1	0	4	0
11	1	0	6	0
12	0	0	0	0
13	1	0	1	0

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: NO ERRORS IN USE OF

QUESTION MARKS AND NO ERRORS

IN USE OF EXCLAMATION POINTS

APPENDIX 13-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	0	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	0	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	1	X	0	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	1	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	X	X
13	X	X	X	X
14	X	X	X	X
15	X	X	X	X
16	X	1	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	0	X	X	X
2	X	X	X	0
3	1	X	X	0
4	X	X	X	X
5	X	X	X	0
6	X	X	X	0
7	0	0	X	1
8	X	X	X	X
9	0	0	X	1
10	X	X	X	X
11	X	X	X	X
12	X	0	X	X
13	X	X	X	X
14	1	X	X	X
15	X	X	X	X
16	X	0	X	X
17	X	X	X	X
18	X	0	X	X
19	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	X	0
2	0	0	X	0
3	X	0	X	X
4	X	1	X	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	X	X
13	X	X	X	X
14	X	X	X	X
15	X	X	X	X
16	X	X	X	X
17	1	X	X	X
18	X	0	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 13-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN USE
 OF QUESTION MARKS AND NO ERRORS IN USE
 OF EXCLAMATION POINTS

Students	No Errors in Use of Question Marks		No Errors in Use of Exclamation Points	
	Pre Test	Post Test	Pre Test	Post Test
1	X	0	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	0	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	0	0	X	0
11	X	X	X	X
12	2	0	2	X
13	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: NO ERRORS IN USE OF

QUOTATION MARKS AND NO ERRORS IN

USE OF APOSTROPHES

APPENDIX 14-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	X	0	X	X
2	X	X	0	0
3	X	X	1	X
4	X	X	1	X
5	X	X	1	1
6	X	X	0	X
7	X	0	X	1
8	X	0	0	1
9	X	X	X	0
10	X	X	0	X
11	X	X	X	X
12	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	X	0	1	X
2	X	X	0	X
3	1	X	X	X
4	X	X	X	X
5	X	X	0	X
6	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	0	X	0	X
5	X	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	X	X
13	X	X	X	X
14	X	X	X	X
15	X	X	X	X
16	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	0
3	0	X	0	0
4	X	X	1	X
5	X	0	0	0
6	X	X	X	0
7	X	X	0	1
8	X	X	X	X
9	X	X	X	1
10	X	X	X	X
11	X	X	X	X
12	X	X	1	X
13	1	X	X	X
14	X	X	0	X
15	X	X	X	X
16	X	X	X	X
17	0	X	X	X
18	0	X	0	X
19	0	1	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	X	0
2	0	0	X	0
3	X	0	X	1
4	X	X	X	X
5	X	X	X	X
6	X	X	X	0
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	1	X
13	X	X	X	2
14	X	X	X	1
15	X	0	2	X
16	X	X	X	X
17	X	X	X	X
18	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 14-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN
 USE OF QUOTATION MARKS AND NO ERRORS
 IN USE OF APOSTROPHES

Students	No Errors in Use of Quotation Marks		No Errors in Use of Apostrophes	
	Pre Test	Post Test	Pre Test	Post Test
1	0	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	0	X	X	X
6	X	X	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	0	X	X	0
11	X	X	X	X
12	0	0	2	X
13	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: NO ERRORS IN USE OF

CAPITAL LETTERS AND NO ERRORS IN

USE OF SMALL LETTERS

APPENDIX 15-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	2	0	1	1
2	2	2	1	1
3	4	0	0	0
4	1	0	0	0
5	0	1	2	1
6	0	0	0	0
7	0	0	0	0
8	0	0	3	0
9	3	0	0	0
10	0	0	0	0
11	0	0	0	0
12	1	1	0	0

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	10	1
2	0	0	1	1
3	0	0	0	0
4	0	0	4	0
5	0	0	2	0
6	0	0	1	1

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	5	0	2	X
2	3	0	X	X
3	1	0	X	X
4	1	0	1	X
5	0	1	2	X
6	0	0	0	0
7	3	0	X	1
8	3	0	X	X
9	0	4	X	X
10	2	0	1	X
11	0	0	1	X
12	0	0	X	X
13	0	0	X	X
14	0	0	X	0
15	4	1	X	X
16	0	1	1	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	0	0
2	0	0	0	1
3	3	9	1	0
4	0	0	1	1
5	0	2	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	1	2	0
11	0	0	0	1
12	0	2	0	1
13	0	0	0	0
14	2	2	0	0
15	0	0	0	2
16	0	0	4	2
17	0	0	0	0
18	0	1	0	0
19	1	0	0	0

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	0	0	0	0
2	1	0	0	0
3	0	0	0	0
4	0	1	0	0
5	0	1	0	0
6	1	1	0	0
7	1	2	1	8
8	1	0	0	0
9	0	0	0	0
10	0	0	0	0
11	0	0	0	0
12	1	1	0	0
13	1	0	0	0
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	0	1	0	0
18	0	1	0	0
19	0	0	0	0

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 15-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): NO ERRORS IN USE
 OF CAPITAL LETTERS AND NO ERRORS IN
 USE OF SMALL LETTERS

Students	No Errors in Use of Capital Letters		No Errors in Use of Small Letters	
	Pre Test	Post Test	Pre Test	Post Test
1	0	3	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	1	0	0	0
8	1	1	0	0
9	0	1	0	0
10	1	0	0	0
11	1	0	0	0
12	1	1	0	0
13	1	0	0	0

APPENDIX 16

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: LESS THAN TWO ERRORS
IN USE OF SEMICOLON AND LESS THAN
TWO ERRORS IN USE OF COLON

APPENDIX 16-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERRORS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	1	X	0	X
2	X	2	X	X
3	X	X	X	X
4	X	X	X	X
5	1	X	X	1
6	X	1	X	X
7	X	X	X	X
8	X	X	X	X
9	X	0	X	X
10	X	X	X	X
11	X	X	X	X
12	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 16-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERRORS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	X	X	X

Key:

0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 16-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERRORS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	X	X	X
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	1	X	X	X
7	0	2	0	X
8	X	0	X	X
9	0	X	X	X
10	4	X	X	0
11	X	3	X	X
12	0	X	X	X
13	0	0	X	X
14	X	0	X	X
15	X	X	X	X
16	X	X	X	0

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 16-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERROS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	2	1	X	0
2	X	X	X	X
3	X	X	0	1
4	X	0	X	X
5	X	X	X	X
6	X	X	X	0
7	X	X	X	X
8	X	1	X	X
9	X	5	0	0
10	X	2	X	X
11	X	X	X	X
12	0	X	X	1
13	X	X	X	X
14	X	X	X	0
15	X	X	1	X
16	X	X	X	X
17	X	X	X	X
18	X	2	X	0
19	0	1	0	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 16-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERRORS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	X	1	X	0
2	X	1	X	0
3	X	X	X	X
4	X	X	X	X
5	X	X	X	X
6	X	0	X	X
7	X	X	X	X
8	2	X	3	X
9	X	X	X	X
10	X	2	X	X
11	1	X	0	X
12	X	1	0	X
13	X	X	X	X
14	1	X	X	X
15	0	2	0	0
16	0	1	X	X
17	X	1	X	X
18	X	X	X	X

Key: 0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 16-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): LESS THAN TWO
 ERRORS IN USE OF SEMICOLON AND LESS
 THAN TWO ERRORS IN USE OF COLON

Students	Less Than Two Errors in Use of Semicolon		Less Than Two Errors in Use of Colon	
	Pre Test	Post Test	Pre Test	Post Test
1	X	X	X	X
2	X	1	X	X
3	X	X	X	X
4	0	X	X	X
5	X	1	X	X
6	1	1	X	X
7	X	X	X	X
8	X	X	X	X
9	X	X	X	X
10	X	X	1	X
11	X	X	X	X
12	X	X	X	X
13	X	X	X	X

Key:

0 = No Errors (punctuation needed and used)
 X = Punctuation not used and not needed
 Numbers indicate how many errors made.

APPENDIX 17

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: USE OF CHRONOLOGICAL

ORDER AND DESCRIPTION

APPENDIX 17-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	N	N	N
3	N	Y	N	Y
4	N	N	N	N
5	N	Y	N	N
6	N	N	N	Y
7	N	Y	N	N
8	N	Y	N	Y
9	N	Y	N	Y
10	N	Y	N	Y
11	Y	N	N	N
12	N	Y	N	Y

Key: N = Not Used Y = Used

APPENDIX 17-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	N	Y	Y
3	N	N	Y	Y
4	N	N	Y	Y
5	N	N	Y	Y
6	N	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 17-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	N	Y	Y
2	Y	N	N	Y
3	Y	Y	Y	Y
4	Y	N	Y	Y
5	Y	N	Y	N
6	Y	N	Y	Y
7	Y	N	Y	Y
8	Y	N	Y	Y
9	Y	Y	Y	Y
10	N	N	N	Y
11	Y	N	Y	Y
12	Y	N	Y	Y
13	Y	Y	Y	Y
14	Y	N	Y	N
15	N	N	Y	Y
16	N	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 17-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	N	Y	Y
2	Y	Y	Y	N
3	N	Y	Y	N
4	N	Y	Y	N
5	N	Y	Y	Y
6	N	Y	N	N
7	Y	Y	N	N
8	N	Y	N	Y
9	N	Y	N	Y
10	Y	Y	Y	N
11	Y	N	N	N
12	N	N	Y	N
13	N	N	Y	N
14	N	Y	N	N
15	N	Y	Y	N
16	Y	N	Y	Y
17	N	N	Y	Y
18	Y	N	N	N
19	Y	N	N	N

Key: N = Not Used Y = Used

APPENDIX 17-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	N	Y	N
2	Y	N	N	N
3	N	N	Y	Y
4	N	N	Y	Y
5	N	N	Y	Y
6	Y	N	Y	Y
7	Y	N	N	Y
8	Y	N	Y	N
9	N	N	N	N
10	N	N	N	N
11	N	Y	N	N
12	N	N	N	Y
13	Y	Y	N	Y
14	Y	N	Y	Y
15	Y	N	Y	Y
16	Y	Y	Y	Y
17	N	N	Y	Y
18	N	N	N	Y

Key: N = Not Used Y = Used

APPENDIX 17-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	N	N	Y
3	N	Y	Y	Y
4	Y	Y	Y	Y
5	N	Y	Y	Y
6	N	Y	N	Y
7	N	N	Y	Y
8	Y	N	Y	Y
9	Y	N	Y	Y
10	N	N	Y	Y
11	N	N	Y	Y
12	N	Y	Y	Y
13	N	Y	Y	Y

Key:

N = Not Used

Y = Used

APPENDIX 18
ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: USE OF DEFINITION
AND EXAMPLE

APPENDIX 18-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 105C (SECTION 1): USE OF
DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	N	Y	Y
3	N	N	Y	Y
4	N	N	Y	Y
5	N	N	Y	N
6	N	N	Y	Y
7	N	N	Y	Y
8	N	N	Y	Y
9	N	N	Y	Y
10	N	N	Y	Y
11	Y	Y	Y	Y
12	N	N	N	N

Key: N = Not Used Y = Used

APPENDIX 18-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): USE OF
 DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	N	N	Y
4	N	N	N	N
5	N	N	N	N
6	N	N	N	N

Key: N = Not Used Y = Used

APPENDIX 18-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): USE OF
 DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	Y
2	N	Y	Y	Y
3	N	Y	Y	Y
4	N	Y	Y	Y
5	N	Y	Y	Y
6	N	Y	Y	Y
7	N	Y	Y	Y
8	N	Y	Y	Y
9	N	Y	Y	Y
10	N	Y	Y	Y
11	N	Y	Y	Y
12	N	Y	Y	Y
13	N	Y	Y	Y
14	N	Y	Y	Y
15	N	Y	Y	N
16	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 18-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 2): USE OF
DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	N	Y	Y	Y
3	N	Y	Y	Y
4	N	N	Y	Y
5	Y	Y	Y	Y
6	Y	Y	Y	Y
7	N	Y	Y	Y
8	Y	N	Y	Y
9	N	Y	Y	Y
10	Y	Y	Y	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13	N	Y	Y	Y
14	N	Y	Y	Y
15	N	Y	Y	Y
16	N	Y	N	Y
17	Y	Y	Y	Y
18	N	Y	Y	Y
19	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 18-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF
 DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	N	Y	Y
3	N	Y	Y	Y
4	N	N	Y	Y
5	N	N	Y	Y
6	N	N	Y	Y
7	N	N	Y	Y
8	N	N	Y	Y
9	N	N	Y	Y
10	N	N	Y	Y
11	N	N	Y	Y
12	N	N	Y	Y
13	N	Y	Y	Y
14	N	Y	Y	Y
15	N	N	Y	Y
16	N	N	Y	Y
17	N	N	Y	Y
18	N	N	Y	Y

Key:

N = Not Used

Y = Used

APPENDIX 18-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 4): USE OF
DEFINITION AND EXAMPLE

Students	Definition		Example	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	Y	N	Y	Y
3	N	N	Y	Y
4	N	N	Y	Y
5	N	N	Y	Y
6	N	N	Y	Y
7	Y	Y	Y	Y
8	N	N	Y	Y
9	N	N	Y	Y
10	Y	Y	Y	Y
11	N	N	Y	Y
12	N	N	Y	Y
13	Y	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 19

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: USE OF COMPARISON

AND CONTRAST

APPENDIX 19-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 105C (SECTION 1): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	Y	N
3	N	N	N	Y
4	N	N	Y	N
5	N	N	N	N
6	N	N	N	N
7	N	N	N	N
8	N	N	Y	N
9	N	N	N	N
10	N	N	Y	N
11	Y	N	Y	Y
12	N	N	Y	N

Key: N = Not Used Y = Used

APPENDIX 19-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 105C (SECTION 2): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	N	N	Y
4	N	Y	N	N
5	N	Y	N	N
6	N	Y	N	N

Key: N = Not Used Y = Used

APPENDIX 19-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): USE OF
 COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	N	Y	N	Y
3	N	N	N	Y
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	N	Y	N
7	Y	Y	Y	Y
8	Y	Y	Y	Y
9	Y	Y	Y	Y
10	N	Y	N	Y
11	N	Y	N	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y
14	N	Y	Y	Y
15	Y	Y	Y	Y
16	N	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 19-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 2): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	N	Y	Y
3	Y	Y	Y	Y
4	Y	Y	Y	Y
5	N	Y	Y	Y
6	Y	Y	Y	Y
7	Y	N	Y	Y
8	Y	N	Y	Y
9	Y	N	Y	N
10	Y	Y	Y	Y
11	N	Y	Y	Y
12	N	Y	N	Y
13	N	Y	N	Y
14	Y	Y	Y	Y
15	N	Y	Y	Y
16	N	Y	N	Y
17	N	Y	Y	N
18	Y	Y	N	Y
19	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 19-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF
 COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	Y
2	N	Y	Y	Y
3	N	Y	N	Y
4	N	Y	Y	Y
5	N	Y	Y	Y
6	N	Y	N	Y
7	Y	Y	Y	Y
8	Y	Y	Y	Y
9	N	N	N	N
10	Y	Y	Y	Y
11	N	Y	N	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y
14	Y	Y	Y	Y
15	Y	Y	Y	Y
16	Y	Y	Y	Y
17	Y	N	Y	N
18	N	Y	N	Y

Key: N = Not Used Y = Used

APPENDIX 19-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 4): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	Y	N	N	N
3	N	N	N	Y
4	N	N	Y	Y
5	Y	Y	Y	N
6	N	N	Y	Y
7	Y	N	Y	N
8	N	N	N	N
9	Y	Y	Y	Y
10	Y	Y	N	Y
11	Y	N	N	N
12	Y	Y	N	Y
13	N	N	Y	N

Key: N = Not Used Y = Used

APPENDIX 20
ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: USE OF DEDUCTION
AND INDUCTION

APPENDIX 20-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): USE OF
 DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	N	Y
2	Y	Y	Y	N
3	Y	Y	N	N
4	Y	Y	N	N
5	Y	Y	N	N
6	Y	Y	N	N
7	N	Y	N	N
8	Y	Y	N	Y
9	Y	Y	N	N
10	Y	Y	Y	Y
11	Y	N	Y	Y
12	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 20-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 105C (SECTION 2): USE OF
DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	N	N	N
4	N	N	N	N
5	N	N	N	N
6	N	N	N	N

Key: N = Not Used Y = Used

APPENDIX 20-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 1): USE OF
DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	N	N
2	N	Y	Y	N
3	Y	Y	N	Y
4	Y	N	N	N
5	Y	Y	N	N
6	Y	Y	N	N
7	Y	Y	N	Y
8	Y	Y	N	N
9	Y	N	N	N
10	N	N	N	Y
11	Y	Y	N	N
12	Y	Y	N	N
13	Y	Y	N	N
14	Y	Y	N	N
15	Y	N	N	N
16	N	N	N	Y

Key: N = Not Used Y = Used

APPENDIX 20-D

ACHIEVEMENT IN WRITING SAMPLY BY STUDENTS IN
COURSE 100L (SECTION 2): USE OF
DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	N	N
2	N	Y	Y	Y
3	Y	Y	N	N
4	Y	Y	N	N
5	Y	Y	N	Y
6	Y	N	N	Y
7	N	Y	Y	N
8	Y	Y	N	N
9	Y	Y	N	N
10	Y	Y	N	N
11	Y	Y	N	N
12	Y	Y	N	Y
13	Y	Y	N	N
14	Y	Y	N	Y
15	Y	Y	N	Y
16	Y	Y	N	N
17	Y	Y	N	N
18	Y	Y	N	Y
19	Y	Y	N	N

Key: N = Not Used Y = Used

APPENDIX 20-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF
 DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	N	Y
2	Y	Y	N	Y
3	N	N	N	N
4	Y	Y	N	N
5	Y	Y	N	N
6	Y	Y	N	Y
7	Y	Y	N	N
8	N	Y	N	N
9	Y	Y	N	N
10	Y	Y	N	Y
11	Y	Y	N	Y
12	Y	Y	Y	Y
13	Y	Y	N	Y
14	Y	Y	Y	Y
15	Y	Y	N	Y
16	Y	Y	Y	N
17	Y	Y	Y	N
18	Y	Y	N	N

Key: N = Not Used Y = Used

APPENDIX 20-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
COURSE 100L (SECTION 4): USE OF
DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	N	Y
3	Y	Y	N	Y
4	Y	Y	Y	N
5	Y	Y	N	N
6	Y	Y	N	N
7	Y	Y	Y	Y
8	Y	N	Y	N
9	Y	Y	Y	Y
10	Y	Y	Y	N
11	Y	Y	Y	N
12	Y	Y	N	N
13	Y	Y	N	Y

Key: N = Not Used Y = Used

APPENDIX 21

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN EACH COURSE: USE OF ORDER OF

IMPORTANCE OF EVENTS

AND ANALYSIS

APPENDIX 21-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	N
2	Y	Y	Y	N
3	N	Y	Y	N
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	Y	Y	N
7	Y	Y	Y	N
8	Y	Y	Y	N
9	Y	Y	Y	N
10	Y	Y	Y	N
11	Y	N	Y	N
12	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 21-B

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 2): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	Y	N	N
4	N	Y	N	N
5	N	Y	N	N
6	N	Y	N	N

Key: N = Not Used Y = Used

APPENDIX 21-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	N	Y
3	Y	Y	Y	Y
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	Y	Y	Y
7	Y	Y	Y	Y
8	Y	Y	Y	Y
9	Y	N	Y	Y
10	N	Y	Y	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y
14	Y	N	Y	Y
15	Y	Y	N	Y
16	Y	Y	Y	Y

Key:

N = Not Used

Y = Used

APPENDIX 21-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	Y	Y
3	Y	Y	Y	Y
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	Y	Y	Y
7	Y	Y	Y	Y
8	N	Y	Y	Y
9	Y	N	Y	Y
10	Y	N	Y	Y
11	Y	N	Y	Y
12	Y	Y	Y	Y
13	Y	N	Y	N
14	Y	Y	Y	Y
15	Y	Y	Y	Y
16	Y	Y	Y	Y
17	Y	Y	Y	Y
18	Y	Y	Y	Y
19	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 21-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	Y	Y
3	N	N	Y	Y
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	Y	Y	Y
7	Y	Y	Y	Y
8	N	N	Y	Y
9	N	N	N	N
10	N	N	Y	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y
14	Y	Y	Y	Y
15	Y	Y	Y	Y
16	N	N	Y	Y
17	Y	Y	Y	Y
18	N	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 21-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	Y	Y
3	Y	Y	Y	Y
4	Y	Y	Y	Y
5	Y	Y	Y	Y
6	Y	Y	N	Y
7	Y	Y	Y	Y
8	Y	Y	Y	Y
9	Y	Y	Y	Y
10	Y	Y	Y	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y

Key:

N = Not Used

Y = Used

APPENDIX 22

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN EACH COURSE: USE OF CAUSE AND EFFECT,
AND TOPIC SENTENCE TO PRESENT
SUBJECT MATTER

APPENDIX 22-A

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 105C (SECTION 1): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Students	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	Y
2	Y	Y	Y	Y
3	N	N	Y	N
4	N	N	Y	Y
5	Y	N	Y	Y
6	Y	N	Y	Y
7	Y	N	Y	Y
8	Y	Y	Y	Y
9	Y	N	Y	Y
10	Y	Y	Y	Y
11	Y	N	Y	Y
12	N	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 22-B

ACHIEVEMENT IN WRITING SAMPLES BY STUDENTS IN
 COURSE 105C (SECTION 2): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Students	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	Y
2	N	N	Y	Y
3	N	N	Y	Y
4	N	Y	Y	Y
5	N	N	Y	Y
6	N	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 22-C

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 1): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Subject	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	Y
2	Y	Y	Y	Y
3	N	Y	Y	Y
4	N	N	Y	Y
5	Y	N	Y	Y
6	Y	Y	Y	Y
7	Y	Y	Y	Y
8	Y	N	Y	Y
9	N	N	Y	Y
10	N	N	Y	Y
11	Y	N	Y	Y
12	Y	Y	Y	Y
13	Y	Y	Y	Y
14	Y	N	Y	Y
15	N	N	Y	N
16	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 22-D

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 2): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Students	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	Y	Y
3	N	Y	Y	Y
4	Y	Y	N	Y
5	N	Y	Y	Y
6	N	Y	Y	Y
7	N	Y	Y	Y
8	N	N	Y	Y
9	N	N	Y	Y
10	N	N	Y	Y
11	N	Y	Y	Y
12	Y	Y	Y	Y
13	Y	N	Y	N
14	N	Y	Y	Y
15	N	Y	Y	Y
16	Y	Y	Y	Y
17	N	N	Y	Y
18	N	Y	Y	Y
19	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 22-E

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 3): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Subject	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	Y	Y	Y
2	Y	Y	Y	Y
3	N	N	Y	Y
4	Y	N	Y	Y
5	Y	N	Y	Y
6	Y	Y	Y	Y
7	N	N	Y	Y
8	Y	Y	Y	Y
9	N	N	Y	Y
10	N	Y	Y	Y
11	N	Y	Y	Y
12	Y	Y	Y	Y
13	N	N	Y	Y
14	Y	N	Y	Y
15	Y	N	Y	Y
16	Y	N	Y	Y
17	Y	Y	Y	Y
18	Y	Y	Y	Y

Key: N = Not Used Y = Used

APPENDIX 22-F

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS IN
 COURSE 100L (SECTION 4): USE OF CAUSE
 AND EFFECT, AND TOPIC SENTENCE
 TO PRESENT SUBJECT MATTER

Students	Cause and Effect		Topic Sentence to Present Subject Matter	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	N	Y	Y	Y
3	N	Y	Y	Y
4	Y	Y	Y	Y
5	N	Y	Y	Y
6	N	Y	Y	Y
7	Y	Y	Y	Y
8	Y	Y	Y	Y
9	Y	Y	N	Y
10	Y	Y	Y	Y
11	N	N	Y	Y
12	Y	Y	Y	Y
13	N	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 23

NUMBER OF WORDS SPOKEN IN THREE MINUTES

BY STUDENTS IN COURSE 110B

APPENDIX 23-A

NUMBER OF WORDS SPOKEN IN THREE MINUTES
BY STUDENTS IN COURSE 110B (SECTION 1)

Students	Pre Test	Post Test	Difference
1	348	312	- 36
2	185	280	+ 95
3	250	255	+ 5
4	635	370	- 265
5	186	123	- 63
6	325	195	- 130
7	290	200	- 90
8	345	380	+ 65
9	121	290	+ 169
10	345	237	- 108

APPENDIX 23-B

NUMBER OF WORDS SPOKEN IN THREE MINUTES
BY STUDENTS IN COURSE 110B (SECTION 2)

Students	Pre Test	Post Test	Difference
1	200	315	+ 115
2	350	467	+ 117
3	345	450	+ 105
4	235	445	+ 210
5	360	300	- 60
6	150	190	+ 40
7	210	240	+ 30
8	360	215	- 145
9	135	265	+ 130
10	335	320	- 15
11	425	350	- 75

APPENDIX 24

NUMBER OF WORDS SPOKEN PER GRAMMAR ERROR
BY STUDENTS IN COURSE 110B

APPENDIX 24-A

NUMBER OF WORDS SPOKEN PER GRAMMAR ERROR
BY STUDENTS IN COURSE 110B (SECTION 1)

Students	Pre Test	Post Test	Difference
1	43.5	52.0	+ 8.5
2	46.3	35.0	- 11.3
3	125.0	No Errors	
4	211.7	No Errors	
5	46.6	123.0	+ 76.5
6	No Errors	No Errors	
7	290.0	200.0	- 90
8	No Errors	107.5	
9	135.0	No Errors	
10	115.0	118.5	+ 3.5

APPENDIX 24-B

NUMBER OF WORDS SPOKEN PER GRAMMER ERROR
BY STUDENTS IN COURSE 110B (SECTION 2)

Students	Pre Test	Post Test	Difference
1	200.0	31.5	- 168.5
2	17.5	116.8	+ 58.25
3	57.5	150.0	+ 92.5
4	26.1	89.0	+ 62.9
5	52.9	42.9	- 10.0
6	25.0	95.0	+ 70.0
7	105.0	34.3	- 70.7
8	90.0	107.5	+ 17.5
9	No Errors	53.0	
10	167.5	80.0	- 87.5
11	141.7	175.0	+ 33.3

APPENDIX 25
TOTAL ERRORS IN ORAL DELIVERY
BY STUDENTS IN COURSE 110B

APPENDIX 25-A

TOTAL ERRORS IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B (SECTION 1)

Students	Pre Test	Post Test	Difference
1	8	6	+ 2
2	4	8	- 4
3	2	0	+ 2
4	3	0	+ 3
5	4	1	+ 3
6	0	0	=
7	1	1	=
8	0	2	- 2
9	1	0	+ 1
10	3	2	+ 1

APPENDIX 25-B

TOTAL ERRORS IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B (SECTION 2)

Students	Pre Test	Post Test	Difference
1	1	10	- 9
2	2	4	- 2
3	6	3	+ 3
4	9	5	+ 4
5	8	7	+ 1
6	6	2	+ 4
7	2	7	- 5
8	4	2	+ 2
9	0	5	- 5
10	2	4	- 2
11	3	2	+ 1

APPENDIX 26

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B: MAKES HIMSELF/HERSELF
UNDERSTOOD

APPENDIX 26-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
COURSE 110B (SECTION 1): MAKES HIMSELF/
HERSELF UNDERSTOOD

Students	Pre Test	Post Test	Difference
1	G	G	=
2	G	G	=
3	P	F	+
4	F	F	=
5	F	G	+
6	G	E	+
7	P	F	+
8	G	G	=
9	G	G	=
10	G	G	=

Key: E = Excellent
G = Good
F = Fair
P = Poor

+ = Improved
= = No Change
- = Regressed

APPENDIX 26-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 2): MAKES HIMSELF/
 HERSELF UNDERSTOOD

Students	Pre Test	Post Test	Difference
1	F	G	+
2	F	F	=
3	G	G	=
4	F	F	=
5	F	F	=
6	F	F	=
7	F	F	=
8	F	P	-
9	P	P	=
10	F	G	+
11	E	G	-

Key:

E = Excellent
 G = Good
 F = Fair
 P = Poor

+ = Improved
 = = No Change
 - = Regressed

APPENDIX 27

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B: LESS THAN THREE
ERRORS IN USE OF PREPOSITIONS
AND NO ERRORS IN USE OF
ARTICLES

APPENDIX 27-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 1): LESS THAN THREE
 ERRORS IN PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	Less Than Three Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	0	+ 1	3	2	+ 1
2	1	5	- 4	1	0	+ 1
3	1	0	+ 1	1	0	+ 1
4	1	0	+ 1	0	0	=
5	0	1	- 1	3	0	+ 3
6	0	0	=	0	0	=
7	0	0	=	0	0	=
8	0	0	=	0	1	- 1
9	1	0	+ 1	0	0	=
10	1	0	+ 1	0	0	=

Note: Numbers indicate how many errors made.

APPENDIX 27-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 2): LESS THAN THREE
 ERRORS IN PREPOSITIONS AND NO ERRORS
 IN USE OF ARTICLES

Students	Less Than Three Errors in Use of Prepositions			No Errors in Use of Articles		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	1	5	- 4	0	0	=
2	2	0	+ 2	0	0	=
3	5	3	+ 2	0	0	=
4	2	3	- 1	0	1	- 1
5	4	2	+ 2	1	2	- 1
6	2	1	+ 1	0	0	=
7	1	5	- 4	1	1	=
8	2	1	+ 1	0	1	- 1
9	0	0	=	0	2	- 2
10	0	0	=	2	2	=
11	0	1	- 1	2	0	+ 2

Note: Numbers indicate how many errors made.

APPENDIX 28

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B: NO ERRORS IN AGREEMENT
AND LESS THAN TWO ERRORS
IN USE OF TENSES

APPENDIX 28-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 1): NO ERRORS IN
 AGREEMENT AND LESS THAN TWO ERRORS
 IN TENSES

Students	No Errors in Agreement*			Less Than Two Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	3	3	=	1	1	=
2	0	2	- 2	2	1	+ 1
3	0	0	=	0	0	=
4	2	0	+ 2	0	0	=
5	0	0	=	1	0	+ 1
6	0	0	=	0	0	=
7	0	0	=	1	1	=
8	0	0	=	0	1	- 1
9	0	0	=	0	0	=
10	2	2	=	0	0	=

*Includes subject/verb agreement and number agreement.

Note: Numbers indicate how many errors made.

APPENDIX 28-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 2): NO ERRORS IN
 AGREEMENT AND LESS THAN TWO ERRORS
 IN TENSES

Students	No Errors in Agreement*			Less Than Two Errors in Tenses		
	Pre Test	Post Test	Difference	Pre Test	Post Test	Difference
1	0	2	- 2	0	3	- 3
2	0	3	- 3	0	1	- 1
3	0	0	=	1	0	+ 1
4	5	0	+ 5	2	1	+ 1
5	2	2	=	1	1	=
6	3	0	+ 3	1	1	=
7	0	1	- 1	0	0	=
8	0	0	=	2	0	+ 2
9	0	0	=	0	3	- 3
10	0	1	- 1	0	1	- 1
11	0	0	=	1	1	=

*Includes subject-verb agreement and number agreement.

Note: Numbers indicate how many errors made.

APPENDIX 29

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS

IN COURSE 110B: VARIETY

IN SENTENCE STRUCTURE

APPENDIX 29-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN COURSE 110B
(SECTION 1): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test				Post Test			
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
	1	7	6	6	E	7	7	4
2	5	1	3	F	6	5	2	G
3	5	6	4	E	7	5	4	G
4	9	7	5	G	3	0	6	P
5	10	1	4	P	4	1	3	F
6	9	1	10	P	1	3	6	F
7	9	3	5	F	5	3	4	E
8	12	3	7	F	5	2	6	F
9	10	1	3	P	8	1	4	P
10	19	3	8	P	6	8	1	P

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 29-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN COURSE 110B
(SECTION 2): VARIETY IN SENTENCE STRUCTURE

Students	Pre Test			Post Test				
	Simple	Complex	Compound	Variety	Simple	Complex	Compound	Variety
1	3	4	3	E	4	3	5	E
2	8	3	4	F	2	7	6	F
3	14	3	4	P	12	5	10	F
4	4	4	3	E	6	3	9	F
5	3	6	7	G	4	5	5	E
6	3	0	4	P	7	2	3	F
7	8	3	7	F	6	2	6	F
8	4	4	10	F	7	3	5	G
9	2	2	4	G	4	6	5	E
10	8	4	9	G	6	9	2	F
11	7	2	10	P	5	6	7	E

Key: E = Excellent G = Good F = Fair P = Poor
Numbers indicate how many sentences written.

APPENDIX 30

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B: USE OF CHRONOLOGICAL
ORDER AND DESCRIPTION

APPENDIX 30-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 1): USE OF
 CHRONOLOGICAL ORDER AND
 DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	Y	N	Y	Y
2	N	N	N	N
3	N	N	Y	N
4	N	N	N	Y
5	N	N	Y	N
6	Y	N	N	N
7	N	N	N	N
8	N	N	Y	N
9	N	N	N	N
10	N	N	Y	N

Key: N = Not Used Y = Used

APPENDIX 30-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
COURSE 110B (SECTION 2): USE OF
CHRONOLOGICAL ORDER AND
DESCRIPTION

Students	Chronological Order		Description	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	Y
3	N	N	Y	N
4	N	N	N	N
5	N	N	Y	N
6	N	N	N	Y
7	N	N	Y	Y
8	N	N	N	N
9	N	N	N	N
10	N	N	Y	N
11	Y	N	N	N

Key: N = Not Used Y = Used

APPENDIX 31

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS

IN COURSE 110B: USE OF COMPARISON

AND CONTRAST

APPENDIX 31-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
COURSE 100B (SECTION 1): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	N	Y
2	Y	N	N	Y
3	N	N	Y	Y
4	N	N	N	Y
5	N	Y	N	N
6	N	N	Y	Y
7	Y	N	N	Y
8	N	N	N	N
9	N	N	N	Y
10	N	N	N	Y

Key: N = Not Used Y = Used

APPENDIX 31-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
COURSE 110B (SECTION 2): USE OF
COMPARISON AND CONTRAST

Students	Comparison		Contrast	
	Pre Test	Post Test	Pre Test	Post Test
1	N	Y	Y	N
2	N	N	N	N
3	N	N	N	N
4	N	N	N	Y
5	N	N	N	N
6	N	N	N	N
7	N	N	N	N
8	N	N	N	N
9	N	N	N	N
10	N	N	N	Y
11	N	N	N	N

Key: N = Not Used Y = Used

APPENDIX 32

ACHIEVEMENT IN WRITING SAMPLE BY STUDENTS
IN COURSE 110B: USE OF DEDUCTION
AND INDUCTION

APPENDIX 32-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
COURSE 110B (SECTION 1): USE OF
DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	Y	N	N
4	N	N	N	N
5	N	N	N	N
6	N	Y	N	N
7	N	Y	N	N
8	N	N	N	N
9	N	Y	N	N
10	N	Y	N	N

Key: N = Not Used Y = Used

APPENDIX 32-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 2): USE OF
 DEDUCTION AND INDUCTION

Students	Deduction		Induction	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	N
2	N	N	N	N
3	N	N	N	N
4	N	N	N	N
5	N	N	N	N
6	N	N	N	N
7	N	N	N	N
8	N	N	N	N
9	N	N	N	N
10	Y	N	N	N
11	N	N	N	N

Key: N = Not Used Y = Used

APPENDIX 33

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS

IN COURSE 110B: USE OF ORDER OF

IMPORTANCE OF EVENTS

AND ANALYSIS

APPENDIX 33-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 1): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	N	Y
2	Y	N	N	Y
3	N	N	N	Y
4	Y	N	N	N
5	Y	N	N	Y
6	Y	N	N	N
7	Y	N	N	N
8	Y	N	N	Y
9	Y	N	N	Y
10	Y	N	N	Y

Key: N = Not Used Y = Used

APPENDIX 33-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS IN
 COURSE 110B (SECTION 2): USE OF
 ORDER OF IMPORTANCE OF EVENTS
 AND ANALYSIS

Students	Order of Importance of Events		Analysis	
	Pre Test	Post Test	Pre Test	Post Test
1	N	N	Y	Y
2	Y	Y	N	N
3	Y	Y	N	N
4	N	N	N	Y
5	Y	N	N	Y
6	Y	N	N	N
7	Y	N	N	N
8	Y	N	N	Y
9	Y	Y	N	Y
10	Y	Y	N	Y
11	Y	N	Y	Y

Key: N = Not Used Y = Used

APPENDIX 34

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B: USE OF CAUSE AND EFFECT

APPENDIX 34-A

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B (SECTION 1):
USE OF CAUSE AND EFFECT

Students	Cause and Effect	
	Pre Test	Post Test
1	Y	Y
2	N	Y
3	N	Y
4	Y	N
5	N	Y
6	N	N
7	N	N
8	N	Y
9	N	Y
10	N	Y
11	N	Y

Key: N = Not Used Y = Used

APPENDIX 34-B

ACHIEVEMENT IN ORAL DELIVERY BY STUDENTS
IN COURSE 110B (SECTION 2):
USE OF CAUSE AND EFFECT

Students	Cause and Effect	
	Pre Test	Post Test
1	N	Y
2	N	Y
3	N	Y
4	N	Y
5	N	Y
6	N	Y
7	N	N
8	N	Y
9	N	Y
10	N	Y
11	Y	Y

Key: N = Not Used Y = Used

APPENDIX 35

RESULTS BY COURSE OF MICHIGAN PROFICIENCY TEST
IN READING COMPREHENSION

APPENDIX 35

RESULTS BY COURSE OF MICHIGAN PROFICIENCY TEST
IN READING COMPREHENSION

Course	Student	Number of Items	First Testing		Second Testing		Difference
			Raw Score	Equated Score	Raw Score	Equated Score	
105C	1	20	7	35	6	30	- 5
	2	20	9	45	12	60	+ 15
	3	20	5	25	9	45	+ 20
105F	1	20	10	50	3	15	- 35
	2	20	4	20	7	35	+ 15
100L	1	20	12	60	11	55	- 5
	2	20	13	65	17	85	+ 20
	3	20	11	55	10	50	- 5
	4	20	11	55	10	50	- 5
110B	1	20	16	80	11	55	- 25
	2	20	14	70	6	30	- 40

APPENDIX 36

RESULTS BY COURSE OF MICHIGAN PROFICIENCY TEST
IN LISTENING COMPREHENSION

APPENDIX 36

RESULTS BY COURSE OF MICHIGAN PROFICIENCY TEST
IN LISTENING COMPREHENSION

Course	Student	Number of Items	First Testing		Second Testing		Difference
			Raw Score	Equated Score	Raw Score	Equated Score	
105C	1	90	53	63	57	71	+ 8
	2	90	76	88	72	85	- 3
	3	90	45	50	45	50	=
105F	1	90	66	80	72	85	+ 5
	2	90	71	84	76	88	+ 4
100L	1	90	82	92	79	90	- 2
	2	90	81	92	82	92	=
	3	90	47	53	78	90	+ 38
	4	90	79	90	80	91	+ 1
110B	1	90	57	71	85	95	+ 24
	2	90	73	86	71	84	- 2

APPENDIX 37
THE FORTUNE/HUTCHINSON EVALUATION
METHODOLOGY

The Negotiation of the Contract

- Purpose:** To develop the scope of work for the evaluation with the temporary decision-maker.
- Step 1.0** Explication of the evaluation methodology and determination of whether it satisfies the needs of the temporary decision-maker.
- 1.1 Identify the temporary decision-maker or the person who has control of evaluation resources for the enterprise.
 - 1.2 Give the purpose of evaluation, "to provide information for decision-making."
 - 1.3 Provide the temporary decision-maker with a broad outline of the methodology, especially the definition of terms.
 - 1.4 Ask the temporary decision-maker if the purpose is acceptable. If no, go to 1.3; if yes, go to 1.7.
 - 1.5 If the answer given by the temporary decision-maker is no, ask what concept of evaluation the temporary decision-maker has.
 - 1.6 Determine if there is a real conflict and if the temporary decision-maker's concept cannot still fit into the broad definition of the evaluation purpose. If this is not possible, suggest to the temporary decision-maker that this evaluation methodology would not be suitable.
 - 1.7 If the answer given by the temporary decision-maker is yes--proceed.
- Step 2.0** Identification of the Enterprise
- 2.1 Ask the temporary decision-maker to state the purpose of the enterprise starting by naming it and thereby substituting the name for the word 'enterprise' hereinafter.
 - 2.2 Ask the temporary decision-maker to provide a description of the enterprise in narrative and written form.
 - 2.3 Ask the temporary decision-maker if the total enterprise or only parts of it are to be evaluated in order to determine the extent of the enterprise.
 - 2.31 If parts of the enterprise are to be evaluated, as opposed to the whole, ask the temporary decision-maker to identify which parts. This will establish a new enterprise. Renew as necessary.
- Step 3.0** Elimination of Misunderstanding (Test of Completeness)
- 3.1 Provide the temporary decision-maker with feedback on the information gathered thus far in completing step 1 and 2, in order to insure that a mutual understanding has been maintained and to make revisions if necessary.
- Step 4.0** Identification of Resources For the Evaluation
- 4.1 Ask the temporary decision-maker to list the resources available to the enterprise without making judgments

concerning the reality of the choices. (Ask, what do you have or can get hold of by way of resources for your enterprise?)

- 4.2 Ask the temporary decision-maker to indicate which resources are available from the first list and for evaluation.
- 4.21 Advise the temporary decision-maker of the danger in committing so many resources that the ability of the enterprise to deliver its objectives is jeopardized.
- 4.3 Test of completeness of 4.2.
- 4.31 The temporary decision-maker identifies 'others' who prepare lists of resources.
- 4.32 The evaluator adds the lists prepared by 'others' to the list prepared by the temporary decision-maker, eliminating redundant or overlapping items.
- 4.33 The temporary decision-maker inspects the final list, makes revisions if necessary and indicates if the list is complete with respect to the best estimate.

Step 5.0 Identification of Decision-Makers

- 5.1 Ask the temporary decision-maker to provide a list of all decision-makers associated with the enterprise without making judgements concerning the reality of the choices.
- 5.2 Perform a test of completeness for 5.1.
- 5.21 Ask the temporary decision-maker to identify 'others' who can develop lists of decision-makers.
- 5.22 The temporary decision-maker inspects the total list and revises, eliminating those who do not desire to be included, whose decision-making is extremely remote or indirect or those for whom the temporary decision-maker does not want information gathered.

The Goals Process in the Fortune/Hutchinson Evaluation Methodology

Orientation Element: Process for Deciding which Goals Procedure is Appropriate in Dealing with a Decision Maker

- 0.0 Determine who the first priority decision maker is to be, i.e., the person(s) for whose decision making purposes data is to be collected. If this first priority decision maker has already gone through the goals process, then determine who is the next highest priority decision maker who has not already gone through the goals process and deal with him (them).
- 0.1 If that decision maker is an individual person who individually makes decisions relative to the enterprise, refer to Case I: Goals Process: Where the Decision Maker is an Individual.
- 0.2 If that decision maker is a group of persons, determine if that group of persons is a single decision making body who as a group have the authority and responsibility for making decisions and who make those decisions as a group. If it is a single decision making body, then refer to Case II: Goals Process, Identification Procedures, Where the Decision Maker is a Group of Persons who act as a Single Decision Making Body.
- 0.3 If that decision maker is a group which does not act as a single decision making body then the group is a group of individual decision makers who individually make decisions relative to the enterprise. Refer to Case III: Goals Process, Identification Procedures, Where the Group is a Collection of Individual Decision Makers Making Individual Decisions.

The Goals Process: Case I, Revised

Case I: Where the Decision Maker is an Individual

Purpose: To arrive at as complete an approximation as possible of the decision maker's intents for the enterprise

- 1.0 Ask the decision maker to respond to the following stimulus either by writing or tape recording:
- What do you really want or intend (the enterprise) to be and to accomplish? What do you really want (the enterprise) to accomplish for yourself and for others?
- (NOTE: These are separate questions but a single stimulus, and if the first question does not seem appropriate, then the second, a paraphrase of the first, may be appropriate.)
- The evaluator substitutes the name of the enterprise, e.g., Project Upgrade, for the words "the enterprise," as is appropriate for the given enterprise under consideration.
- 2.0 Perform a goal analysis on the results of 1.0
- 2.1.0 Determine if the evaluator has had supervised field experience in performing a goal analysis.
- 2.1.1 If he has, then he may proceed with the goal analysis process. Go to step 2.2
- 2.1.2 If he has not, then he should proceed to "A Self-Instructional Module in the Goal Analysis Procedures of the Goals Process in the Fortune/Hutchinson Evaluation Methodology" (unless he has completed that module).
- (NOTE: This is necessary to insure that the evaluator can reliably apply the goal analysis procedures. Without supervision or training, the goal analysis procedures can not be reliably applied.)
- 2.2 Break down multiple goal statements into single goal statements, resulting in a list of goals with one goal per line. A multiple goal statement is

one containing more than a single intent, aspiration, goal or purpose.

- 2.3 Eliminate redundant goal statements. A redundant statement is one which contains the exact same words as another statement.
- 2.4 For each goal now listed, identify and write down the implied goal(s) if any. An implied goal is
- (1) one which can be considered as a prerequisite of the stated goal. For example, if a goal is "to implement an affective curriculum," one goal implied by this is "to develop an affective curriculum."

and/or

- (2) one which needs to be or will be a direct result of the stated goal. For example, if the goal is "to develop performance criteria," one goal implied by this is to "implement the performance criteria."

3.0 The evaluator develops an alternative list of goals from selected enterprise documents, identifying in writing, and by labeling, the sources from which they come.

3.1 Determine how many resources - time, money, staff - are available to devote to this activity.. (If there are no resources, this step is eliminated. The evaluator would proceed to step 7.0.)

3.2 Choose the primary written document which would be a major source of enterprise goals. If this is unknown to the evaluator, ask the decision maker which document the enterprise has produced which would be a major source of goals.

3.3 In the document, identify statements which appear to indicate what someone wants (the enterprise) to accomplish for self/or for others.

(NOTE: Goals occur throughout such documents and it should not be thought that 3.3.0 applies to just a section of the document that might be labeled "goals" or "objectives.")

- 3.4.0 Perform a goal analysis (cf 2.0) of this selected published enterprise document.
- 3.5.0 After completing this goal analysis for this primary document, and if (say) this primary document produced more than 10 goals, then determine the amount of resources remaining to devote to continuing this activity.
- 3.5.1 If resources still remain, and if 3.0 produced (say) 10 or more additional goals, then choose another major written source of enterprise goals. This second major document need not be solicited from the decision maker but might be chosen by the evaluator or by other enterprise personnel at the discretion of the evaluator. (Cf. 3.4.2 below for an exception.)
- 3.5.2 If going through the primary document (cf. 3.2) produces fewer than (say) 10 additional goals, then this activity is not very useful and the evaluator would not proceed with 3.4.1, namely any other documents.
- 4.0 The evaluator develops alternative lists of goals by repeating the process outlined in 1.0 for other decision makers of the enterprise, that is, he elicits a goals list(s) for other people or groups of people in the enterprise who are decision makers but not the primary or most important ones. (This is not done if the evaluator has this material as the result of a prior step.) The evaluator identifies the sources of the alternative goals list(s) unless the source (other decision maker) wishes not to be publicly identified. If so, his list would be used but the source would be noted as a person in the enterprise rather than by his name, title, rank, etc.
- 4.1 Determine the amount of resources - time, money, staff available to devote to this activity.
- 4.2 Choose this other decision maker(s) in the enterprise who is likely to have goals other than the ones the primary decision maker is likely to put down. The primary decision

- maker may suggest to the evaluator another decision maker whose goals he is interested in seeing or reacting to.
- 4.3 Perform a goal analysis (cf. 2.0) on this other decision maker's goals.
- 4.4.0 After completing this goal analysis for this other decision maker(s), determine the amount of resources remaining to devote to this continuing activity.
- 4.4.1 If resources still remain, and if 4.1-4.3 produced (say) 10 or more additional goals then repeat this process for another decision maker within the enterprise. This second decision maker or group of decision makers need not be solicited from the decision maker but might be chosen by the evaluator.
- (NOTE: An alternative to 4.4.1 would be to develop an alternative goals list from decision makers from a separate but similar enterprise, which enterprise could either be chosen by the decision maker or lacking a desire on his part to do so, by the evaluator.)
- 5.0 Ask the primary decision maker(s) to react/respond to the alternative lists of goals resulting from 3.0, documents, and 4.0, other decision makers, by asking him to consider if the goals are ones he holds for his enterprise. (At least one of the following steps should be done for each goal on the list.)
- 5.1 If the decision maker considers a given goal statement to be one which he holds for the enterprise, and if it has not already been identified the evaluator would now add it to a "list of goals" which he would start at this point.
- 5.2 If the decision maker considers the goal statement to be one which he does not hold for the enterprise, it should not be added to his list but simply be rejected. The evaluator would not add it to the list of goals.

- 5.3 If the particular goal statement stimulates the decision maker to think of additional goal statements, these should now be added by the evaluator to the list of goals.
- 5.4 If one of these steps causes the decision maker to wish to modify one of the goal statements on his list, then the evaluator makes the appropriate changes.
- 6.0 Perform the Activities Test of Completeness for Goals.
- 6.1 Determine the amount of resources - time, money, staff - available to devote to this activity. (If no resources are available, this step should be eliminated.)
- 6.2 The decision maker is asked to make a list of activities, i.e., things that he does, that the enterprise does, during the course of the on-going enterprise.
- 6.3 After making up such a list, for each activity contained on it, the decision maker asks himself the question: why do I (we, the enterprise) do that?
- 6.4 The decision maker then relates each reason resulting from 6.2 above to a goal or goal statement(s) resulting from the first five steps of the Identification process, so it results in a complete cross-check of what goals relate to what activities and what activities relate to what goals on their respective lists.
- 6.4.1 For each and every reason that does not relate to at least one goal, the evaluator points out the discrepancy to the decision maker. The evaluator then might do two things: (a) ask the decision maker whether in fact he does have a goal for the activity and if he does, the evaluator would add it to the list; or,
- (b) ask the decision maker if that activity is still an activity he wishes to pursue.
- 6.4.2 For each and every goal on the goals list for which no activities are related, the

evaluator points out this discrepancy to the decision maker. The evaluator again does two things: (a) asks the decision maker if he does indeed have activities he (the enterprise) is doing and if so, adds these to the activities list, or (b) if he does not have any activities, asks if this is a goal he really holds and if it is not, removes it from the goals list.

- 7.0 The decision maker, one last time, goes through the entire goals list which has resulted from steps 1.0 through 5.0 and as amended or modified by the test of completeness, 6.0. For each and every goal statement on that list, the decision maker seriously reconsiders it and commits himself before proceeding to the next step in the evaluation.
- 7.1 If the decision maker still holds the goal in the form in which it is written, nothing more is done to it at this point.
- 7.2 If the decision maker no longer holds a given goal for the enterprise, the evaluator removes the item from the list of goals.
- 7.3 If the decision maker still holds a goal for the enterprise but feels the wording or intent should be modified, then the evaluator makes those modifications the decision maker feels are appropriate.
- 7.4 If the decision maker thinks of any goals that are not included on the list, the evaluator adds them to the list.
- 8.0 The decision maker now prioritizes his list of goals resulting from steps 1.0 through 7.0, the goals identification and test of completeness procedures. He does this by choosing kinds of prioritization criteria which have been suggested to him by the evaluator (cf. criteria below) or ways of prioritizing that he suggests as alternatives to those presented by the evaluator.
- The evaluator should explain to the decision maker the options available in this reacting process. He should also point out that they do not have to simply choose from the list but can at any time during this step make changes.
- 8.1 Determine the resources available to devote to this activity. If very few resources are available, this

process should be shortened, e.g., only one criteria, possibly with a time limit imposed.

- 8.2 Prioritization on the basis of a Preference/Importance Criteria. If the decision maker chooses this criteria, then:

The decision maker rank orders the goals in terms of the goals most important to him, assigning a rank of 1 to the goal most important to him, a rank of 2 to the second most important goal to him and so on.

- 8.3 Prioritization on the basis of a Chronological Criteria. If the decision maker chooses this criteria, then:

The decision maker rank orders the goals in terms of their order of occurrence in time, assigning a rank of 1 to the goal which will occur first in time, a rank of 2 to the goal occurring next in time after 1 and so on.

- 8.4 Prioritization on the basis of a Cost/Risk Criteria. If the decision maker chooses this Criteria, then:

The decision maker rank orders the goals in order of their probability of failing, assigning a rank of 1 to the goal with the highest probability of failing, a rank of 2 to the goal with the next highest probability of failing and so on.

- 8.5 If the decision maker has chosen only one of these criteria of prioritizing or another of his own suggestion, the prioritization is complete. The evaluator would then proceed with the next step in the evaluation process. If, however, he has chosen more than one set of Criteria, then there must be a way of arriving at a final prioritization list. That is, the criteria, if more than one has been used, need to be combined.

- 8.5.1 The decision maker prioritizes the criteria he has used (if he has used more than one) and then he simply chooses the goal ranked 1

on this most important criteria. The second goal would simply be the first ranked goal on the next most important criteria and so on.

8.5.2

Prioritization is done on the basis of adding together rankings on the different criteria.

The decision maker orders the goals lists as in 8.1, 8.2, 8.3 or any other order he may have used. Each goal will have received more than one rank if more than one ranking criteria was used. These ranks are then added together and the one receiving the lowest total is assigned a rank of 1, the goal with the next lowest total receives a rank of 2 and so on.

In the event of tied ranks, i.e., if more than one goal receives the same rank number after combining ranks, the decision maker is asked to decide which of the ranking criteria used he considers to be the most important. The tie is broken then on the basis of the tied goal with the highest rank on the most important criteria being chosen.

8.5

The decision maker is asked to examine the final prioritized list arrived at through this prioritization process, 8.0 through 8.4 and to decide if this list represents a reasonable order in which to proceed with the next step in the evaluation process. If he responds positively, the evaluator proceeds with the next process. If he responds negatively, the prioritization procedure is repeated. That is, the decision maker is allowed at this point to recycle if he feels the result of 8.0 is unsatisfactory. However, minor changes may be made but if the decision maker expresses general dissatisfaction, then 8.0 should be recycled.

Fortuna/Hutchinson Evaluation Methodology

PARTS PROCESS (Draft II - Jim Thomann) 3/2/72

- 0.0 For each decision-maker (d.m.) for whom the parts process is to be done, the case used in the goals process is the case used in this Process, as was determined by the following criteria.
- 0.1 Determine who the first priority decision maker is to be, i.e. the person(s) for whose decision making purposes data is to be collected. If this first priority decision maker has already gone through the parts process, then determine who is the next highest priority decision maker who has not already gone through the goals process and deal with him (them).
- 0.1.1 If that decision maker is an individual person who individually makes decisions relative to the enterprise, refer to Case I: Parts Process, Identification Procedures, Where the Decision Maker is an Individual.
- 0.1.2 If that decision maker is a group of persons, determine if that group of persons is a single decision making body who as a group have the authority and responsibility for making decisions and who make these decisions as a group. If it is a single decision making body, then refer to Case II: Parts Process, Identification Procedures, Where the Decision Maker is a Group of Persons who act as a Single Decision Making Body.
- 0.1.3 If that decision maker is a group which does not act as a single decision making body then the group is a group of individual decision makers who individually make decisions relative to the enterprise. Refer to Case III: Parts Process, Identification Procedures, Where the Group is a Collection of Individual Decision Makers Making Individual Decisions.

Case I: Decision-maker is an Individual

1.0 Determine the amount of resources -- time, money, staff, etc. -- which are available to devote to this activity for this d.m.

2.0 Ask the d.m. to respond to the following stimulus either by writing or recording:

What are the conceptual components that you see as the major parts of the (enterprise)?

(* - The Evaluator substitutes name of the enterprise

2.1 If difficulty arises provide d.m. with a couple of examples of different enterprises.

Caution: Refrain from giving d.m. you input as to the parts of his enterprise or giving d.m. too many examples for you could easily end up with yours or someone else's parts.

3.0 Tests of Completeness of Parts List

3.1 Ask d.m. to identify the parts he elicited that are Inputs, Interfaces, Outputs and others where Input, Interface and Output are defined as:

Input - those things occurring before the enterprise begins, or those prerequisites for the program -- e.g. in a school situation these might be budget, a physical plant etc.

Interfaces - those things which are not directly part but which impinge on it and thus influence it -- e.g. in a school situation these might be School Board, P.T.A., etc.

Output - that which results from the project or program, that occurs after a program is ended. In a school, the output might be the student after the program or at the end of the year.

3.1.1 If none of the parts are any of the above, have d.m. consider and add to his list, parts he sees that he left out of the above.

3.1.2 Have the d.m. consider each of the major divisions (Input, Interfaces, etc.) as to whether they are complete or not. If not add the necessary parts.

3.2 Have other d.m.s elicit their parts of the (enterprise) and present those to the d.m. as stimulus to see if they are parts from his perspective, if yes and not already on the list add them; or see if they make d.m. think of any parts not on the list, if yes add them.

3.3 Take activities list generated in Goals process:

3.3.1 Ask the d.m. to assign each of the activities to a part on the parts list and each part to the appropriate activities on the activities list.

3.3.2 Evaluator points out any activity that is not related to at least one part and asks the d.m. whether in fact a part exists that carries out that activity and if it does and it is not already on his list add it, or if no part exists ask d.m. whether he wants the (enterprise) to pursue that activity or not.

3.3.3 For each (first)* level part of the (enterprise) for which a (second)* level breakdown was done take the goals assigned to that part and have the d.m. assign them to the subparts and each subpart to the goals, then:

3.3.3.1 Evaluator points out goals not related to any subpart and asks d.m. if subpart exists which carries it out, if one does add it to the lists.

3.3.3.2 Evaluator points out parts for which there are no goals and asks d.m. if there are any goals which this part accomplishes, if yes add it to the lists, if no the d.m. is asked to consider if this is a legitimate subpart.

3.3.4 Ask d.m. to reconsider each of the subparts elicited and make final commitment to the list.

3.4 Prioritize subparts of each part done in the same way as original prioritization was done.

3.5 Get final commitment from d.m. to this list.

3.6 Go back to 5.1 and do it again.

40 A final list of parts is made up of the evaluator which shows not only all the parts and subparts generated, but 1) their priorities, 2) the activities assigned to each part and 3) the goals assigned to each part. This list is then taken to the d.m. for final approval.

Integration of Goals and Parts

- 0.0** For each d.m. for whom the both the Parts Process and Goals Process have been done, then this integration of Goals and Parts is done. You use the same Case of this Process as you used for the d.m. in the Goals Process and the Parts Process. If you are not sure of the Case use the following criteria to choose the appropriate Case:
- 0.1** If the d.m. is an individual person who individually makes decisions relative to the enterprise refer to Case I: Integration of Goals and Parts, where the decision maker is an individual.
 - 0.2** If that d.m. is a group of persons, determine if that group of persons is a single decision making body who as a group have the authority and responsibility for making decisions and who make these decisions as a group. If it is a single decision making body then refer to Case II: Integration of Goals and Parts, where the decision maker is a group of persons who act as a single decision making body.
 - 0.3** If that decision is a group which does not act as a single decision making body then the group is a group of individual decision makers who individually make decisions relative to the enterprise. Refer to Case III: Integration of Goals and Parts where the Group is a collection of individual decision makers making individual decisions.

Case I: Decision Maker is an Individual

- 1.0** Take the Goals List and Parts List previously generated for this decision maker.
- 1.1** Ask the d.m. to assign each of the goals to those first five parts on the Parts List that each of the goals relates to.
 - 1.2** Ask the d.m. to assign each of the first level parts to those goals on the Goals List that each of the first level parts relates to.
 - 1.3** Evaluator points out any goal that is not related to at least one part and asks d.m. whether a first level part exists that carries out that goal, if 'yes' the part is added to the lists, if 'no' then the d.m. is asked to consider if it is a goal or not - if not then remove the goal from the lists.
 - 1.4** Evaluator points out any first level part for which no goal has been related. He then asks the d.m. if there is any goal which this part accomplishes, if 'yes' then he adds to the lists, if 'no' he asks d.m. to consider whether it is a first level part of the enterprise or not; if not then the first level part is removed from the lists.
- 2.0** The Evaluator now takes the above lists and makes up new lists with the revisions determined above.
- 2.1** Three lists are made up. A new Goals List, a new Parts List and a combined Goals-Parts List based on the d.m.'s work in 1.0

- 2.2 Wherever a discrepancy occurs on the Parts-Goals List just put together, the d.m. is asked to reconsider the part or parts and goal or goals involved as to whether it was a mistake or the goal or part should be changed, left out or what.
- 2.3 After the above problems are worked out a new Parts-Goals List is generated.
- 2.4 These three lists are taken back to the d.m. and his approval is gotten for each of the lists.
- 3.0 For any Part that is broken down more than one level, the following procedure is used until all levels of breakdown are dealt with by the d.m.
- 3.1 For each (first)^a level part of the (enterprise) for which a (second)^a level breakdown was done take the goals assigned to that part and have the d.m. assign them to the sub-parts and each sub-part to at least one of the goals.
- [Change word to second if it is first, third if second, etc., depending on what cycle you are starting through the step.]
- 3.1.1 Evaluator points out goals not related to any sub-part and asks d.m. if any sub-part exists which carries it out, if one does, add it to lists.
- 3.1.2 Evaluator points out parts for which there are no goals assigned and asks d.m. if there are any goals which this part accomplishes, if 'yes' the goal is added to the lists, if 'no' the d.m. is asked to consider whether this is a legitimate sub-part, if not it is crossed off the list.
- 3.2 After this is done for all (first)^a level parts for which a (second) level was done then the d.m. is asked to give approval to the revised lists.
- 3.3 The Evaluator then checks the original Parts List to see if any of the (second)^a level breakdowns were broken to a (third)^a level. If any exist then recycle to 3.1 for these sub-parts, if none are taken down to the next level then go to step 4.0.
- 4.0 A final list is made up by the Evaluator. This list shows each part, its sub-parts, the priorities of each, the goals as they are related to each part, the goals priorities. This list is then taken to the d.m. for his approval. If any revisions are found to be necessary, make them and again go back to the d.m. for his approval. Carry this out until the d.m. makes no more changes.

Operationalization of Goals

Case I

Individual Decision Maker Operationalizes His (Her) First (or next) Goal Statement

- 1.0 Evaluator develops an initial operationalization stimulus.
- 1.1 Evaluator develops a hypothetical situation that is appropriate to his or her purpose of obtaining the decision maker's specific meaning for the goal in the context of the particular goal-part interface.
- 1.2 Evaluator describes the hypothetical situation in such a way that it contains the goal being accomplished within it.
- 1.3 Evaluator writes a stimulus which combines the elements from 1.1 and 1.2
- (Note: Here is an example of a stimulus for a graduate student where the evaluator is the student's major advisor and where one of the student's goals is "to clarify my own ideas about future plans".
- Imagine the advisory process as you really want it to be and in that process "clarifying your own ideas about future plans" is taking place. It is happening as fully as you really want. Observe that situation carefully and write down everything you see that tells you that "clarifying your own ideas about future plans" is fully happening.)
- 1.4 Evaluator shows the stimulus to the decision maker, explaining the nature and purpose of an operationalization stimulus.
- 1.5 Evaluator writes a stimulus in which the goal is absent.
- (Note: Here is an example of a second stimulus:
- Now, imagine the advisory process again except, in this process, there is no "clarifying of your own ideas about future plans" occurring at all. It's not happening. Observe this situation carefully and write down everything you see that tells you that "clarifying your own ideas about future plans" is not happening at all.)
- 2.0 Evaluator asks the decision maker to write down all the things (s)he sees going on in the first hypothetical situation which indicate that the particular goal is being accomplished.
- 3.0 Evaluator asks the decision maker to write down all the things (s)he sees going on in the second hypothetical situation which indicate that the particular goal is not being accomplished at all.

- 4.0 Evaluator tests the completeness of the decision maker's responses.
- 4.1 Evaluator provides the decision maker with at least one other person's responses to the two stimuli, asking the decision maker to examine them and to make any changes in his own responses that the other person's responses may suggest to him/her. (Note: The decision maker may add to his or her original list; modify items already on the list or eliminate items on the list. It should be stressed however, that the evaluator is after what the decision maker means by the fuzzy concept, rather than what others mean by it.)
- 4.2 Evaluator asks the decision maker to re-examine in his mind his original two hypothetical situations and to seriously reconsider the things (s)he observed but didn't write down before. If any of those things are part of what (s)he means by the goal or by its absence, (s)he should add them to what (s)he has written.
- 4.3 Evaluator asks the decision maker to think of things that have nothing to do with his/her goal and to seriously consider whether or not they do. If (s)he thinks of anything that is, in fact, part of what (s)he means by the goal, (s)he should write down those things too.
- 5.0 Evaluator asks the decision maker to write the positive ends of those items which the decision maker wrote down in response to the second hypothetical situation (i.e. those negative items).
- 6.0 Evaluator makes a list of the decision maker's responses, breaking down multiple responses (joined by "and", "or", "but", etc.) so that there is only one item per line. Exact duplicates are eliminated.
- 7.0 Evaluator asks the decision maker to review the list, make any desired changes, and approve it.
- 8.0 Evaluator asks the decision maker to prioritize the items in terms of the importance of having evaluation data about them. The most important item for which data is needed is assigned the number 1, the next most important item the number 2, and so on.
- 9.0 Evaluator tests for observability.
- 9.1 For each item on the list, evaluator asks the decision maker, "Is this item a directly observable behavior or state?" (Note: If the decision maker asks for an explanation of the question, the evaluator gives the decision maker an alternative question:

If you sent someone else somewhere to see whether this item was actually happening, do you think the person would come back with exactly the same information that you would if you went yourself?)

- 9.2 Evaluator asks the decision maker to place a check mark beside each item that he believes is a directly observable behavior or state.
 - 9.3 Evaluator examines the check-marked items to insure that they are observable. (Directly observable items will then be set aside and while the operationalization process continues, the evaluator would begin developing observational techniques, c.f. Measurement Process.)
 - 9.4 Evaluator asks the decision maker to prioritize the non-operational items on the basis of importance of having evaluation data about them.
- 10.0 For the most important (next most important) item that is not a directly observable behavior or state, evaluator goes to step 1.1 (and following) substituting the term "nonoperationalized component" for the term "goal-part interface", the term "item" for the term "goal", and the term "sub-item" for the term "item".
 - 11.0 If no components remain to be operationalized or if resources available for operationalizing the goal have been exhausted, evaluator goes to step 0.1.4.
 - 12.0 If no goals remain to be operationalized for which there are resources available for these activities, evaluator goes to the Measurement Process.

The Development of Observational Techniques
in the Fortuni/Hutchinson Methodology

Step

- 1.0 Determine how many resources - time, money, staff are available to devote to this activity.
- 2.0 Determine whether a measurement consultant is necessary.
 - 2.1 The evaluator reads this entire section.
 - 2.2 If there are any of the steps that he does not fully understand, then a measurement consultant is necessary.
- 3.0 Choose the next operationalized component for measurement development.
 - 3.1 Choose the highest priority operationalized component available of the highest priority goal of the highest priority D.M. that does not already have a measurement device developed through this process.
 - 3.2 Determine how many resources are available to develop an observational technique for this component.
- 4.0 Design the ideal observational technique for the chosen operationalized component.
 - 4.1 Plan how to directly observe the actual number of occurrences of the operationalized component. If this cannot be planned, then the chosen component is not fully operationalized and should be returned for further operationalization.
 - 4.2 Plan how to directly observe the operationalized component under natural conditions, e.e., no conditions are imposed by the measurement technique to elicit the kind of behavior to be observed. The only stimuli present are those normally present in the enterprise being evaluated.
 - 4.3 Plan how to directly observe the operationalized component under natural conditions and unobtrusively.
 - 4.3.1 In the case of behavior observed in such a way that the persons being observed are not aware that they are being observed and can never become aware that the observation has or is being made.
 - 4.3.2 In the case of observation of things unobtrusive observation is one which does not in any way alter the state of thing being observed.
 - 4.4 Determine if there is an existing observational technique that meets the requirements of the plan. If so, go to step 5.0.
 - 4.5 Design an observational technique that meets the requirements of the plan.
- 5.0 Test the planned measurement for reasonable cost - time of observers, raters, coders; cost of equipment, supplies; etc.
 - 5.1 Determine the actual cost of carrying out the planned measurement.
 - 5.2 Determine the amount of resources available for measurement for the decision maker.
 - 5.3 Present the results of 5.1 and 5.2 to the D.M. and ask him if the actual cost of the planned measurement is a reasonable cost pointing out both the consequences of spending that much and the possible consequences of not carrying out the planned measurement.
 - 5.4 If the cost is reasonable go to 10.0.

- 6.0 Determine which element of the planned measurement costs too much. See if the cost may be made reasonable through sampling; if so, go to 10.0.
- 6.1 Ask the D.M. if the cost of the degree of unobtrusiveness is too much, if no, go to step 7.0.
- 6.2 Ask the D.M. if the cost of the degree of naturalness is too much, if so, go to step 8.0.
- 6.3 Ask the D.M. if the cost of the degree of directness of observation costs too much, if so, go to step 9.0.
- 6.4 Ask the D.M. what aspect of the proposed measurement technique costs too much.
- 6.4.1 If he names an attribute, redesign the observational technique and go to step 5.0.
- 6.4.2 If he fails to name an attribute, ask again if the technique costs too much.
- 6.4.2.1 If not go to step 10.0.
- 6.4.2.2 If so, design and go to step 5.0.
- 7.0 Alter the degree of obtrusiveness.
- 7.1 If D.M.'s have difference desired directions for the same operationalized component, go to step 7.3.
- 7.2 Plan a degree of obtrusiveness that the evaluator believes will have a long term positive effect on the actual accomplishment of the D.M.'s operationalized component. Document the planned effect and go to step 4.4 unless no plan can be developed.
- 7.3 Plan a degree of obtrusiveness that will have a short term minimum effect on the operationalized component. Plan a procedure for attempting to cause the obtrusiveness to become smaller over repeated observations. Document the planned effects and go to step 4.4 unless no plan can be developed.
- 7.4 Plan a degree of obtrusiveness that will have a long term negative effect on the D.M.'s operationalized component. Document the planned effect and ask the D.M. if he would rather decided to not measure that component. If so, go to step 3.0, otherwise, go to step 4.4 unless no plan can be developed.
- 7.5 Go to step 2.0.
- 8.0 Alter the degree of naturalness by planning a stimulus situation maximally consistent with the D.M.'s goals for the enterprise and as nearly natural as possible. Document the new stimulus situation and go to step 4.4.
- 9.0 Alter the degree of directness by planning an indirect measurement that is as close as possible to the direct measurement. Document the difference and to to step 4.4.
- 10.0 Test the proposed observational technique for completeness.
- 10.1 Determine how many resources - time, money staff are available for this activity.
- 10.2 Field Test
- 10.2.1 Try out the observational technique on a group similar (but not the same) to the actual group to be measured.
- 10.2.2 Compute the reliability of the observational technique.

- 10.2.3 Document all problems encountered and if there are problems, redesign and go to step 4.4.
- 10.3 Validity test, to be done only if there is a difference between the actual observational technique and the ideal observational technique.
- 10.3.1 Determine how many resources - time, money, staff are available for this activity.
- 10.3.2 See if the resources are sufficient to permit carrying out the ideal measurement on a short term basis. If not, go to 10.4.
- 10.3.3 Carry out the actual observational technique and the ideal measurement simultaneously measuring the same things.
- 10.3.4 Document all differences between the two sets of observations including any statistical adjustment that can be made to the actual observation such that the data is more consistent with the data that would be produced by the ideal measurement. Go to step 11.0.
- 10.4 Validity test where it is not possible to test against the ideal measurement.
- 10.4.1 See if the resources are sufficient to permit carrying out a measurement technique more nearly ideal than the actual observational technique for a short period of time. If not, go to 11.0.
- 10.4.2 Carry out the actual observational technique and the more nearly ideal measurement simultaneously measuring the same things.
- 10.4.3 Document all differences between the two sets of observations including any statistical adjustments that can be made to the actual observations such that the data is more consistent with the data that would be produced by the more nearly ideal measurement.
- 11.0 Document the proposed observational technique as contrasted with the ideal observational technique pointing out all threats to validity and documenting all tests made. Present this to the D.M. and ask him if the data produced would really be used by him in his decision making process.
- 11.1 If so, go to step 3.0.
- 11.2 If not, ask him if he would prefer not to measure the component and if so, go to step 3.0.
- 11.3 If not, redesign.
- 11.3.1 Ask the D.M. what aspect of the observational technique is not acceptable to him.
- 11.3.2 Re-design and go to step 4.4.

The Implementation of Measurement in the Fortuna/Hutchinson
Methodology

Step

- 1.0 Determine how many resources - time, money, staff - are available to devote to this activity.
- 2.0 Determine whether a sampling consultant is necessary.
 - 2.1 The evaluator reads this entire procedure.
 - 2.2 If there is any step that the evaluator does not know how to perform completely then a sampling consultant is necessary.
- 3.0 Choose the next observational technique to be implemented.
 - 3.1 Choose the unimplemented observational technique that has been developed for the highest priority operationalized component of the highest priority goal of the highest priority D.M.
 - 3.2 Determine how many resources - time, money, staff - are available for this D.M.
- 4.0 Develop a recording device.
 - 4.1 The recording device should have some information precordded.
 - 4.1.1 The name of the D.M.(s).
 - 4.1.2 The name of the goal(s).
 - 4.1.3 The name of the operationalized component.
 - 4.2 The recording device should have set places for recording other standard information.
 - 4.2.1 The part of the enterprise being observed.
 - 4.2.2 The time of observation - year, month, day, day of week, time.
 - 4.2.3 The names of the subjects being observed or some other way of recording the essential information regarding subjects.
 - 4.2.4 For each subject the actual observations made.
- 5.0 Field test the recording device.
 - 5.1 Determine how many resources - time, money, staff - are available to devote to this activity.
 - 5.2 Carry out the observational technique on a sample other than those to be observed in implementation.
 - 5.3 Document all problems in using the recording device. If there are any problems redesign and go to step 5.0.
- 6.0 Develop a sampling plan.
 - 6.1 Determine in which part of the enterprise the observation is to be carried out.
 - 6.2 Determine whether sampling is required to reduce the cost of observation.
 - 6.2.1 If no, go to 6.4.

- 6.3 Determine whether resources can be conserved by sampling with little loss of data quality.
 - 6.3.1 If not, go to 8.0.
 - 6.4 Determine the smallest number of observations that can be carried out and still have only a little loss of data quality.
 - 6.5 Develop a complete plan for sampling from the population of observations.
 - 6.6 Document the plan, the estimated loss of data quality, and the actual savings in resources.
- 7.0 Test of completeness.
 - 7.1 Show sampling plan to D.M.
 - 7.2 Ask him if the cost in data quality is acceptable.
 - 7.2.1 If not, go to 6.5.
 - 7.3 Ask him if the cost of observation is acceptable.
 - 7.3.1 If not, go to Observational Techniques, step 6.0.
 - 7.4 Implement the sampling plan and choose the actual sample of observations to be made.
 - 8.0 Carry out the actual observations.
 - 8.1 Record all observations.
 - 8.2 Document any deviations from the specified observational technique that occurs.
 - 8.3 Document any deviations from the sampling plan that occur.
 - 8.4 Document any other problems that occur.
 - 9.0 Report the results to the D.M.(s) using the Reporting Procedures of the Fortune/Hutalinson methodology.
 - 10.0 Plan when to repeat the observation.
 - 10.1 Ask the D.M. if the results will be used in his decision making process.
 - 10.2 If not, redesign and go to Observational Techniques.
 - 10.3 Ask the D.M. if the results cause him to be concerned that the goal may not be achieved.
 - 10.4 If so, wait a short time (a short time depends upon the amount of time in the evaluation contract, if one month then two days is a short time, if one year then two weeks is a short time, etc.) and go to step 7.4.
 - 10.5 Wait a long time (a long time depends upon the amount of time in the evaluation contract, if one month then two weeks is a long time, if one year then two months is a long time, etc.) and go to step 7.4.

Draft 1 Tom Hutchinson 28 June 72 Reporting

Reporting Data to the Decision Maker in the Fortune/Hutchinson
Evaluation Methodology

Step

- 0.0 Determine how many resources - time, money, staff - are available to devote to this activity. If none, go to the Evaluation of Evaluation process.
- 1.0 From the list of D.M.s who are to receive the data choose the D.M. with the highest priority who has not already had the data reported to him.
 - 1.1 If that D.M. is an individual who as an individual makes decision relative to the enterprise, refer to Case I: Reporting to Individual Decision Makers.
 - 1.2 If that D.M. is a group of persons that form a single decision making body, who as a group have the authority and responsibility for making decisions and who make those decisions as a group; then refer to Case II: Reporting to Group Decision Makers.
 - 1.3 If that D.M. is a group which does not act as a single decision making body then the group is a group of individual decision makers. Refer to Case III: Reporting to a Group of Individual Decision Makers

Case I: Reporting to Individual Decision Makers

Step

- 2.0 Determine how many resources - time, money, staff - are available to devote to this activity.
 - 2.1 If the resources are small then the material prescribed in the steps below that are placed within brackets should be presented orally.
 - 2.2 If the resources are large then all the material should be presented in writing.
- 3.0 Write the body of the report.
 - 3.1 The title should be as follows: Report to (insert name of D.M.) on (insert name of operational component) in (insert name of the part of the enterprise).
 - 3.2 Date of report.
 - 3.3 Name of D.M.'s goal and its priority among goals, e.g. this operational component is a part of your goal (insert goal) which is the (insert priority) in importance for you to receive data about among (insert total number of goals) goals.
 - 3.4 Priority of the component e.g. (insert name of component) is the (insert priority) in importance among the (insert total number of operational components of (insert name of goal) that were identified.
 - 3.5 [Report on the degree of completeness of operationalization of the goal.]
 - 3.6 Name of the part of the enterprise and its priority e.g. observations were made on the (insert name of part) part of (insert name of next higher system) which is (insert priority) in importance for you to receive data about among (insert total number of parts) parts.
 - 3.7 Report on all higher systems in the same sequence and their relative priorities.
 - 3.8 Name of observational technique and dates of observation e.g. (insert name of observational technique) was used to observe (insert name of operational component) from (insert beginning date) to (insert ending date).

- 3.9 Present the data
 - 3.9.1 Numerically in a Table.
 - 3.9.2 [Graphically, if appropriate]
 - 3.9.3 [Verbally, i.e. say in words what is in the table and graph.]
- 3.10 [Report all difficulties in interpreting the results.]
 - 3.10.1 Difficulties due to the observational technique e.g. intrusiveness.
 - 3.10.2 Difficulties due to the sampling plan, e.g. non random sampling of time.
 - 3.10.3 Other difficulties, e.g. nonresponding, coincidence of observation with an unusual event.
- 3.11 If this is a report on the first time this operational component has been observed in this part go to step 4.0, otherwise present the current data with the old data so that trends may be inspected.
 - 3.11.1 Numerically in a table by time.
 - 3.11.2 [Graphically, if appropriate].
 - 3.11.3 [Verbally, i.e. say in words what is in the table and graph.]
- 4.0 Assemble appendices.
 - 4.1 Documentation of the operationalization of the goal.
 - 4.2 Documentation of the observational technique.
 - 4.3 Documentation of the sampling plan.
- 5.0 Present the report to the D.M.
 - 5.1 Ask him to read the report.
 - 5.2 Present orally all items (if any) that have not been written due to resource limitations.
 - 5.3 Point out the consequence of the difficulties in interpretation of the results.
 - 5.3.1 Difficulties due to the observational technique.
 - 5.3.2 Difficulties due to the sampling plan.
 - 5.3.3 Other difficulties.
 - 5.4 Ask the D.M. if he has any questions that the evaluator can help to answer.

- 5.0 Ask the D.M. if he would like to review all the previous reports on the same goal on the same part.
 - 6.1 If no, go to step 1.0.
 - 6.2 If yes, assemble in one set all previous reports of operational components of the same goal observed in the same part.
 - 6.3 Present the reports to the D.M.
 - 6.4 Point out the consequences to interpretation of the degree of operationalization that was performed.
 - 6.5 Ask the D.M. if he has any questions that the evaluator can help to answer.
- 7.0 Ask the D.M. if he would like to review all the previous reports on the same part.
 - 7.1 If no, go to step 8.0.
 - 7.2 If yes, assemble in one set all previous reports of other goals in the same part.
 - 7.3 Give the D.M. the assembled reports.
 - 7.4 Ask the D.M. if he has any questions that the evaluator can help to answer.
- 8.0 Ask the D.M. if he would like to review all the previous reports on the same goal.
 - 8.1 If no, go to step 1.0.
 - 8.2 Assemble in one set all previous reports of the same goal in other parts.
 - 8.3 Give the D.M. the assembled reports.
 - 8.4 Ask the D.M. if he has any questions that the evaluator can help to answer.
- 9.0 Go to step 1.0.

Redesign of Evaluation in the Fortune/Hutchinson Evaluation Methodology
Step

- 0.0 Determine which case of the this procedure is appropriate
 - 0.1 If the redesign is initiated at the request of a D.M. then use Case W: Redesign at the Request of a Decision Maker.
 - 0.2 If the redesign is initiated by the evaluator for one or more decision makers then use Case X: Redesign Initiated by the Evaluator for One or More Decision Makers.
 - 0.3 If the redesign is initiated at the request of the temporary decision maker then use Case Y: Redesign at the Request of the Temporary Decision Maker.
 - 0.4 If the redesign is initiated by the evaluator as a regular part of a long term (two years or more) evaluator's at the end of a year interval then use Case 2: Regular Redesign in a Long Term Evaluation.
- 1.0 The evaluator should decide if redesign is really necessary. If so, see which step above (0.1, 0.2, 0.3, or 0.4) best describes the situation and follow that sequence.

Case W: Redesign at the Request of a Decision Maker

Step

- 2.0 Determine how many resources - time, money, staff - are available to devote to this activity.
 - 2.1 If none, then determine how many resources are available for this decision maker.
 - 2.2 If none, then redesign is not necessary.
 - 2.3 Reallocate the resources available for this D.M. so that redesign can proceed through step 3.7.
- 3.0 Test to see if a redesign for a D.M. is necessary.
 - 3.1 Assemble a report on all evaluation activities performed to date for this D.M.
 - 3.2 Present this report to the D.M.
 - 3.3 Point out possible benefits of redesigning the evaluation.
 - 3.4 Point out possible costs of redesigning the evaluation.
 - 3.5 Ask the D.M. if he still wishes to have the evaluation redesigned.
 - 3.6 If no, proceed with the existing evaluation design and procedures.
 - 3.7 If yes, reallocate the resources available for that D.M. among the parts of evaluation methodology.
- 4.0 Go through all the design procedures that are being redone using the original output of the D.M. as the only test of completeness.
- 5.0 Continue to implement the evaluation design and procedures.

