

ED 023 313

EM 006 924

By -Glassner, Leonard E.

Television Linguistics Program. 1967 Report.

Pittsburgh Public Schools, Pa.

Pub Date 67

Note -72p.

EDRS Price MF -\$0.50 HC -\$3.70

Descriptors -Broadcast Television, Content Analysis, \*Course Evaluation, \*Descriptive Linguistics, \*English Instruction, Grade 8, Grade 9, Grade 10, \*Instructional Television, Structural Analysis, Structural Grammar, Teacher Attitudes, Transformation Generative Grammar

Identifiers -Elementary and Secondary Education Act, ESEA Title 1

The program teaches contemporary English grammar through principles of linguistic science to 12000 students in Pittsburgh. Structural grammar is presented to eighth and ninth grade students, and transformational grammar to tenth graders. In 1966-67, the effectiveness of the program was evaluated by data processing of final examination results. Since effectiveness may be related to teacher attitudes toward the program, questionnaires were designed and included in a survey of teacher attitude toward the program. Students of structural grammar were tested on form classes of words, basic sentence patterns, sentence formulas, function words, sentence types, and expansions; students of transformational grammar on sentence trees, kernel sentences, transformations, phonology, morphology, syntax, and deep and surface structure. Most of the concepts measured by the final examinations were understood by a majority of both groups of students. Teachers registered a generally positive response to teaching linguistics and to the television medium, and indicated that the average student derives most benefit from the program. Appendices include group interview schedule, teacher questionnaire, and final examinations. (TI)

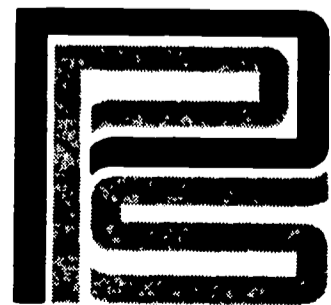


**ESPA**

**TITLE I PROJECTS**

**TELEVISION LINGUISTICS  
1967 REPORT**

**PITTSBURGH PUBLIC SCHOOLS  
SIDNEY P. MARLAND, JR., SUPERINTENDENT**



U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

TELEVISION LINGUISTICS PROGRAM  
1967 REPORT

Leonard E. Glassner  
Program Evaluator

Pittsburgh Public Schools  
Sidney P. Marland, Jr., Superintendent

EM 006 924

ED023313

## 9. TELEVISION LINGUISTICS PROGRAM

### Introduction

#### History of the Program

During its first year of operation, the 1965-1966 school year, the Television Linguistics Program in structural grammar was offered to all regular ninth-grade English classes and all eighth-grade Scholars' English classes. Approximately 5,000 students participated. During the 1966-1967 school year, the same program was repeated for a similar population.

Each new concept in structural grammar was initially presented in a weekly 25-minute television lesson. This lesson was taught by an English teacher in the Pittsburgh Public Schools who was on leave from his regular assignment and was chosen for the television presentation because of his competence in the course content. The television lessons were taped and presented on a repeating schedule arranged to coincide with the beginning of every class period throughout the school day. Classroom teachers were furnished lesson plans in advance of the television presentation to guide them in their preparation and follow-up teaching activities.

In the 1966-1967 school year, a course in transformational grammar was added to the Television Linguistics Program and offered to all tenth-grade students in the Pittsburgh Public Schools. This course

was taught by the same television teacher who had previously taught the ninth-grade course in structural grammar. The organization and procedures for presentation and follow-up were identical for both courses.

### Description of the Program

A definition meeting for the Television Linguistics Program was held at the Administration Building on March 28, 1967. Each of the two discussion groups was composed of 12 participants, seven of whom were classroom teachers, while the remaining five included a principal and supervisory-administrative personnel from the instructional and television education staffs. Each group had both experienced and beginning teachers representing ninth and tenth grades and Scholars' and regular classes. Trained discussion leaders from the Office of Research directed the participants' attention to a series of questions relating to various aspects of the program (see Appendix A for Group Interview Schedule). The information gained at this meeting was used by the program evaluator to compile the program definition which follows.

## Television Linguistics Program Definition

### GENERAL

#### I. Overall Statement of Objectives and Rationale for the Program

The purpose of the program is to present the concepts of contemporary grammar through the principles of linguistics science, stressing the patterning and structure of the English language rather than traditional Latin-oriented grammar.

#### II. Scope

##### A. Number of Pupils and Schools Involved

Approximately 12,000 students in all secondary schools and in eighth-grade Scholars' classes in secondary and elementary schools participate.

##### B. The Grades or Ages of Participants

1. Transformational grammar is presented to all tenth-grade students in the Pittsburgh Public Schools.
2. Structural grammar is presented to all ninth-grade students in the Pittsburgh Public Schools (except those in Scholars' classes) and to all eighth-grade students in the Scholars' Program.

##### C. General Description of Staff

1. Instructional staff
  - a. Television teacher
  - b. All teachers of tenth-grade English, all teachers of ninth-grade English (except teachers of Scholars' classes) and all teachers of eighth-grade Scholars' English classes
2. Supervisory staff
  - a. Associate Director of Instruction for English
  - b. Supervisor of English
  - c. Television Education supervisors

## OUTCOMES

I. Major Objectives--changes that are expected to take place in program participants as a result of their experiences in the program. There are two types of major objectives,

A. Terminal Objectives--behaviors that the pupil is expected to demonstrate at the end of the program to indicate successful completion of the program

1. The ability to recognize the basic structure of the English language
2. The ability to speak and write English with greater skill than has been achieved through the study of traditional grammar courses
3. A heightened understanding of the importance of structure in framing sentences in speech and written compositions
4. The ability to apply elementary scientific techniques to the study of grammar
5. The ability to explain the functions of words in English sentences
6. The ability to use versatile language in speech and writing
7. Insight into and a feeling for good English

B. Ultimate Objectives--behaviors that the student is expected to exhibit at the end of the program which will affect his general school performance and his life outside the school

1. An elimination of language prejudices by an understanding of the appropriateness of different kinds of speech in different circumstances
2. An interest in using effective English
3. Alertness to the power of language as used in the mass media in today's world

4. Strengthened reading and listening skills
5. A developed skill in taking brief and comprehensive notes
6. A transfer of the enthusiasm and increased interest of slow learners, brought about by a better understanding of English grammar through linguistics, to other subjects in the curriculum
7. A broadening of experience, especially for children from deprived environments, through exposure to new techniques, concepts, and vocabularies presented in linguistics
8. An improvement in employment opportunities made possible by the ability to control standard English

**II. Enabling Objectives--the skills and information the pupil must acquire during the program to make the attainment of the major objectives feasible**

- A. An understanding of the importance of the simple sentence and its use in constructing other kinds of sentences
- B. The ability to analyze sentence parts and relationships
- C. Knowledge of the principles of sentence construction and the ability to construct sentences
- D. An enlarged vocabulary
- E. Improved listening skills
- F. The ability to do critical thinking
- G. The ability to relate abstractions to specifics

**III. Other Benefits--certain by-product benefits expected to accrue to parents, teachers, the school, and the community as a result of students' participation in the program**

- A. Parents' awareness of the school system's concern for finding better ways to teach children



- B. An increase in teacher competency through a continuing in-service training program in linguistic principles and appropriate methods of presenting them in the classroom
- C. An opportunity for adults to improve their knowledge of language through their informal participation in the Television Linguistics courses
- D. A general community appreciation of the value of educational television

## ANTECEDENTS

### I. Students

- A. Selection Criteria--the criteria that are used to determine who shall participate in the program

All students in ninth- and tenth-grade English classes, with the exception of ninth-grade students in the Scholars' Program, automatically participate in the Television Linguistics Program. In addition, the program is incorporated into the curriculum of the eighth-grade Scholars' students.

- B. Entering Behaviors--characteristics of participants (other than selection criteria) which are related to performance in the program

Because the total city-wide enrollment in the program approximates 12,000 students, it is evident that no meaningful distinguishing group characteristics can be determined. There are, however, significant differences between the students in the Scholars' Program and those in regular classes in the ninth and tenth grades. Since Scholars and non-Scholars generally meet in separate classes, this distinction presents a valid basis for comparison.

- 1. Characteristics of Scholars' Program students in Television Linguistics classes

The typical student in the Scholars' Program is a rapid learner--alert, inquisitive, willing to work, wanting to learn, and able to accept a difficult assignment as a challenge rather than as an obstacle impossible to overcome. In addition, he is usually receptive to new ideas

as evidenced by his readiness to experiment with new ways of doing things. This quality is a positive asset in the study of linguistics through the relatively new educational medium of television.

## 2. Characteristics of non-Scholars in Television Linguistics classes

Many of these students exhibit the following characteristics that must be considered in planning program activities:

- a. They are often ill-prepared in language skills, having an inadequate understanding of traditional grammar, low reading and writing ability, and poor speech habits.
- b. They customarily lack skill in making generalizations and have little propensity for abstract reasoning.
- c. They have little motivation for learning academic subjects and little interest in exploring new fields or new ways of doing things. Specifically, they have some commitment to the concepts of traditional grammar, but they are generally not interested in gaining insight into new approaches to the subject.
- d. They speak better than they write.

## 3. There are also certain student characteristics which, when present, seem related to a successful performance in the Television Linguistics Program.

- a. Some knowledge of traditional grammar
- b. Skill in making generalizations
- c. The ability to read at grade level
- d. Some skill in dealing with abstractions
- e. The ability to take good notes
- f. The ability to outline

## II. Staff

Staff requirements reflect the dual nature of the Television Linguistics Program with respect to course content and medium of instruction. Staff qualifications with respect to specific positions are reported for both categories of personnel in the tables below.

### School Staff

| Staff Member                                  | Professional Qualifications   | Personal Qualifications   |
|---|---|---|
| Television Teacher                            | <ol style="list-style-type: none"> <li>1. Expert knowledge of subject</li> <li>2. Certified teacher</li> <li>3. Master teacher</li> </ol>                           | <ol style="list-style-type: none"> <li>1. Pleasing TV personality</li> <li>2. Good voice</li> <li>3. Photogenic</li> <li>4. Able to project to student audience</li> <li>5. Creative</li> <li>6. Adaptable</li> </ol>   |
| Classroom Teacher                             | <ol style="list-style-type: none"> <li>1. Degree in English</li> <li>2. Knowledge of linguistics</li> <li>3. Experience in teaching of subject desirable</li> </ol> | <ol style="list-style-type: none"> <li>1. Positive, professional attitude</li> <li>2. Willingness to share class time with TV teacher</li> <li>3. Adaptable</li> <li>4. Manifest interest in TV program</li> <li>5. Ability to anticipate students' problems</li> </ol> |
| Associate Director of Instruction for English |   | <ol style="list-style-type: none"> <li>1. Personal interest in program</li> <li>2. Ability to generate enthusiasm of staff</li> </ol>   |
| Planning Committee                            | <ol style="list-style-type: none"> <li>1. Master classroom teachers</li> <li>2. Superior understanding of linguistics</li> </ol>                                    |   |

| Staff Member   | Professional Qualifications           | Personal Qualifications                          |
|--|---------------------------------------|--|
| Associate Director, TV Education                         | Knowledge of TV and TV utilization    | Some executive ability                           |
| Supervisor, TV Education                                 | Knowledge of TV and TV utilization    | Ability to give help without arousing antagonism |
| TV Repairman   | Knowledge and experience in TV repair | Pleasing, unobtrusive manner                     |
| TV Repairman for non-Compensatory Schools (Contract Job) | Knowledge and experience in TV repair | Pleasing, unobtrusive manner                     |
| Secretary  | Ability to do typing accurately       | Ability to follow directions                     |

#### Television Station Staff

| Staff Member                             | Professional Qualifications   | Personal Qualifications  |
|--|-------------------------------|--|
| Director, School Services                | Knowledge of instructional TV | Executive ability  |
| Assistant to Director of School Services | Knowledge of instructional TV | Executive ability  |
| Producer-Director                        | Knowledge of instructional TV | Ability to handle crew, talent, and other elements efficiently |

### III. Support

- A. Administrative Support--support from administrative personnel who cooperate in carrying out the program

1. Proper scheduling of Television Linguistics classes by the principal
  2. Adequate overall scheduling of the program
  3. Meaningful evaluation
  4. Facilitating the obtaining of supplies
- B. Other Human Resources--auxiliary personnel whose cooperation is necessary for the smooth operation of the program**
1. Technical crew for producing TV programs
  2. Custodial services
  3. Cooperation of school personnel in keeping interruption of Television Linguistics classes to an absolute minimum
- C. Media--necessary materials, equipment, and supplies**
1. Television equipment and related paraphernalia
    - a. Television set in good working order, equipped for UHF
    - b. Lock and key for television set
    - c. Extension cords
  2. Other materials and equipment
    - a. Sufficient and appropriate textbooks, especially for grade 10
    - b. Lesson plans
    - c. Blackboard
    - d. Overhead projector and transparencies
    - e. Tape recorder
    - f. Supplementary reference materials
    - g. Duplicating supplies

- h. **Pattern drills (used in two schools) to present standard structures**

In regard to the purposes of these media, the lesson plans enable the teacher to prepare and motivate the students, and the textbooks make it possible to adapt the television lesson to the appropriate grade level. Purposes of the television set and related equipment are obvious.

#### **D. Facilities**

- 1. **Classrooms in a good location**
- 2. **Proper lighting facilities**
- 3. **Convenient electrical outlets**

### **PROCESS**

#### **I. Student Activities--the day-to-day program activities that lead ultimately to the achievement of objectives**

- A. **Introductory activities conducted by the classroom teacher in preparation for the television lesson**
- B. **Viewing the television lesson**
- C. **Taking notes while the lesson is on the air**
- D. **Participating in such follow-up and reinforcement activities as the following:**
  - a. **Reading related textbook material**
  - b. **Organizing, outlining, and reviewing information**
  - c. **Preparing and discussing homework assignments**
  - d. **Transferring skills and concepts of linguistics to related aspects of the English curriculum (spelling, composition, note taking, literature)**

#### **II. Staff Activities**

##### **A. Functions and Duties of Specific Staff Members**

### School Staff

| Staff Member   | Functions   | Duties   |
|--|---|--|
| <b>Television Teacher</b>                            | <b>Plans and presents each TV lesson</b>  | <ul style="list-style-type: none"> <li>a. Prepares advance lesson plans for teachers</li> <li>b. Interprets basic material</li> <li>c. Observes classes</li> <li>d. Arranges for program guests</li> </ul> |
| <b>Classroom Teacher</b>                             | <ul style="list-style-type: none"> <li>1. Supports and reinforces television instruction</li> <li>2. Provides feedback to TV teacher</li> </ul> | <ul style="list-style-type: none"> <li>a. Motivates and prepares students for TV lesson</li> <li>b. Follows up TV lesson</li> <li>c. Makes objective interpretation of TV lesson</li> </ul>                |
| <b>Associate Director of Instruction for English</b> | <b>Has primary responsibility for all phases of the program except the technical aspects of TV production</b>                                   | <ul style="list-style-type: none"> <li>a. Plans course content</li> <li>b. Arranges for in-service training</li> </ul>   |
| <b>Associate Director, TV Education</b>              | <b>Has primary responsibility for coordination of instructional and television aspects of program</b>   | <ul style="list-style-type: none"> <li>a. Supervises distribution of lesson plans</li> <li>b. Provides budget for program</li> </ul>   |
| <b>Supervisor, TV Education</b>                      | <b>Provides feedback to Associate Director, TV Education</b>  | <ul style="list-style-type: none"> <li>a. Makes field observations</li> <li>b. Makes suggestions about utilization</li> </ul>  |

| Staff Member   | Functions                                 | Duties  |
|--|---|---|
| Planning Committee                                       | General planning of units to be presented | <ul style="list-style-type: none"> <li>a. Identifies major units for course</li> <li>b. Provides general content for certain units</li> </ul> |
| TV Repairman   | Provides best reception possible          | Repairs TV sets   |
| TV Repairman for non-Compensatory Schools (Contract Job) | Provides best reception possible          | Repairs TV sets   |
| Secretary  | Provides secretarial assistance           | <ul style="list-style-type: none"> <li>a. Types scripts</li> <li>b. Types lesson plans</li> <li>c. Mails lesson plans</li> </ul>              |

#### Television Station Staff

| Staff Member                             | Functions  | Duties  |
|--|--|---|
| Director, School Services                | Responsible for coordination and production                                  | Makes arrangements to insure the best production  |
| Assistant to Director of School Services | Assists the Director in his responsibilities for coordination and production | Assists the Director in making arrangements to insure the best production   |
| Producer-Director                        | Makes lesson the best possible from the point of view of TV production       | <ul style="list-style-type: none"> <li>a. Plans lesson with TV teacher</li> <li>b. Produces and directs lesson</li> </ul> |



## **B. Intra-Staff Communications and Coordination**

- 1. Formal discussions about topics such as objectives, teaching techniques, problems, and needs--especially in the large schools**
- 2. Informal communication among teachers to exchange ideas and suggestions about the program in its day-to-day operation**
- 3. Visits to the classrooms by associate directors and supervisors**
- 4. Written communications from the central office staff**
- 5. Linguistics courses for teachers**
- 6. Lesson plans distributed by the Associate Director, TV Education**
- 7. Questionnaires**
- 8. Meetings between the TV teacher and the television committee**
- 9. Telephone contacts between teachers and the Associate Director, TV Education to discuss technical problems that arise**

### Statement of the Problem

Believing that the effectiveness of an innovative instructional program such as Television Linguistics is to an important degree related to the attitude of its teachers, program and administrative staff requested that a survey of teacher opinion be made during the 1966-1967 school year. This request resulted in the gathering of data concerning teachers' attitudes toward many aspects of the program. It was also considered necessary to measure students' understanding of the content of the linguistics courses. The evaluation of the Television Linguistics Program in its second year of operation, therefore, had two major foci: (1) an appraisal of teachers' attitudes toward the courses and the television presentations, and (2) a determination of students' understanding of the concepts of structural or transformational grammar.

### Method

Teachers' attitudes toward various aspects of the program were surveyed through a three-part questionnaire (see Appendix B) designed by the evaluation staff of the Office of Research. This questionnaire requested data needed for evaluation, as well as additional information desired by program staff. It was mailed to all 150 teachers in the program in the spring of 1967. The return rate was 77 percent.

Part I of the questionnaire was concerned with mechanical and organizational aspects of the program. Part II contained 24 attitudinal

items, all but one of which (item 16) had four response alternatives. (Item 16 asked teachers to evaluate their own competency to teach linguistics courses.) Part III consisted of eight open-end questions in which teachers were asked to express their opinions on a wide range of program variables. Evaluation of teacher attitude consisted of a descriptive analysis of the questionnaire.

Since the total population received the Television Linguistics Program and there were, therefore, no control groups available, a direct appraisal of student achievement was impracticable. As an alternative approach, student progress in linguistics courses was evaluated through a content analysis of the final examinations in structural and transformational grammar. These examinations (see Appendix C) were prepared by the television teacher under the guidance of the Office of Research. After the examinations were administered by classroom teachers, the answer sheets containing the raw scores were returned to the Office of Research for data processing and analysis. This analysis was based on 100 percent of the scores for Scholars' classes and a 50 percent random sample of the scores for regular classes and was obtained through the following procedures:

1. A frequency count of correct responses was obtained for each question. (The structural grammar examination had 80 items; the transformational grammar examination had 70 items.)

2. The percentage of correct responses was obtained for each question.
3. The mean percentage of correct responses for all questions and type of class was determined, as was the standard deviation for each distribution. This information is presented in Table 1.

TABLE 1

Mean Percentage and Standard Deviation by Type of Class

| Type of Class                   | Percentage | Standard Deviation |
|---------------------------------|------------|--------------------|
| <u>Structural Grammar</u>       |            |                    |
| Regular classes                 | 63.2       | 15.6               |
| Scholars' classes               | 82.1       | 13.9               |
| <u>Transformational Grammar</u> |            |                    |
| Regular classes                 | 52.7       | 15.9               |
| Scholars' classes               | 73.8       | 15.9               |

4. Those items with percentages of correct responses which were at least one standard deviation above and below the mean were selected for analysis.
5. The procedure discussed above yielded the number of items for analysis for each distribution shown in Table 2:

TABLE 2

Number of Items Selected for Analysis for Each Distribution

| Distribution                    | No. Items<br>Upper End | No. Items<br>Lower End |
|---------------------------------|------------------------|------------------------|
| <u>Structural Grammar</u>       |                        |                        |
| Regular classes                 | 14                     | 12                     |
| Scholars' classes               | 8                      | 12                     |
| <u>Transformational Grammar</u> |                        |                        |
| Regular classes                 | 12                     | 10                     |
| Scholars' classes               | 14                     | 9                      |

For a complete record of percentages of correct responses and deviations from the mean for each of the four distributions, refer to Appendix D.

Results: Questionnaire for Television Linguistics Teachers

There are three possible assignments which linguistics teachers might have had--teaching only structural grammar, teaching only transformational grammar, or teaching both structural and transformational grammar. Of the teachers who returned the questionnaire, 53 taught only structural grammar, 44 taught only transformational grammar, and 18 taught both. Their responses can be interpreted as being more positive than negative concerning all aspects of the linguistics program.

In response to the 18 questions which all the teachers were asked to answer, the three teacher assignment groups were very similar in their answers. The largest number of responses generally were the same for all three groups. Only on questions 5, 6, 10, 13, 14, 15, 22 and 24 did one of the three groups differ in their choice of the most frequent response.

Following is a list of the topics covered in the 18 questions and the response(s) chosen by the largest number of teachers:

| Item | Topic   | Most Often Chosen Response(s)  |
|------|---|--|
| 1.   | Value of the provided lesson plans  | Quite valuable   |
| 2.   | Quality of television reception   | Average  |
| 3.   | How well the teachers feel they could teach linguistics without the use of the television program | Reasonably well  |
| 4.   | Number of television lessons needed each month  | Four   |
| 5.   | Enjoyment of teaching linguistics   | Very much--structural grammar teachers<br>Moderately--other teachers |

| Item | Topic   | Most Often Chosen Response(s)  |
|------|---|--|
| 6.   | Type of student who benefits most from linguistics as now presented | The average student--structural grammar teachers<br>The above-average student--transformational grammar teachers<br>The average student and the above-average student equally--those who teach both types of grammar                                 |
| 7.   | Value of in-service activities                                      | Average  |
| 8.   | Amount of additional preparation needed to teach linguistics        | Little additional preparation  |
| 9.   | Frequency of material preparation for classes                       | Less than once a week  |
| 10.  | Importance of student notebooks in linguistics                      | Average importance--those who teach both types of grammar<br>Great importance--all other teachers  |
| 11.  | Frequency of use of linguistics textbooks                           | Once weekly  |
| 12.  | Time necessary for student motivation before television lessons     | Less than half a period  |
| 13.  | Time needed for follow-up of television lessons                     | Less than half a period--those who teach both types of grammar<br>At least half a period--all other teachers   |
| 14.  | Amount of formal training the teachers have had in linguistics      | Answers divided equally between no formal training and linguistics workshop--structural grammar teachers<br>Answers divided equally between no formal training, one course, two or more courses, and linguistics workshops--transformational grammar |

| Item | Topic   | Most Often Chosen Response(s)  |
|------|---|--|
|      |   | teachers<br>No formal training--those who teach both types of grammar  |
| 15.  | Feelings about time required for linguistics in total English program | Reasonable amount of time required --structural and transformational grammar teachers<br>Too much time required--those who teach both types of grammar |
| 16.  | Evaluation of self-competence   | "80" on a scale of 0-100 with 0 meaning no competence and 100 meaning complete competence  |
| 22.  | Attitude of non-Scholars' classes toward television program           | Favorable--structural grammar teachers<br>Unfavorable--all other teachers  |
| 24.  | Attitude of non-Scholars toward course content                        | Favorable--structural grammar teachers<br>Unfavorable--all other teachers  |

Questions 17, 18, 21, and 23 were applicable for those teachers who taught structural grammar only and possibly for those who taught both structural and transformational grammar. Their responses to these questions were as follows:

|     |   |   |
|-----|---|---|
| 17. | How teachers rate textbook                                  | Adequate  |
| 18. | How students react to textbook                              | Favorably   |
| 21. | Attitude of Scholars' classes toward the television program | Favorable--those who teach only structural grammar<br>Equally divided between favorable and unfavorable--those who teach both structural and transformational grammar |



| Item | Topic   | Most Often Chosen Response(s)  |
|------|---|--|
| 23.  | Attitude of Scholars' classes toward the course content | Favorable--those who teach only structural grammar<br>Equally divided between favorable and very unfavorable--those who teach both structural and transformational grammar |

Questions 19 and 20 were applicable for those who taught transformational grammar only and possibly for those who taught both types of grammar. Their responses to these two questions were as follows:

19. How teachers rate textbook Adequate
20. How students react to textbook Unfavorably

The teachers were also asked to answer eight open-end questions. The eight questions with the responses the teachers made to them are listed below.

Question 1: What major problems are you now facing in the teaching of linguistics?

The two major problem areas were the content of the course and the motivation of students. Examples of problems concerned with course content were: (1) lack of continuity in lessons, (2) abstract thinking and inductive reasoning too difficult for students, (3) lack of continuity between structural grammar and transformational grammar, (4) too many exceptions to the rules, and (5) difficulty of transferring linguistics concepts to learning in other classes. Some of the problems of motivation were: (1) students' need for more immediate reward, (2) justifying the

Television Linguistics Program to the students, (3) eliminating the drag caused by the dullness of the television program, and (4) the non-receptive attitude of students toward linguistics as a replacement of traditional grammar.

The next most serious problem mentioned was the presentation of the television program itself. Some of the specific items mentioned were: (1) television lessons not correlated with the textbook, (2) illustrations which talked down to students, (3) television programs which moved too slowly, and (4) information given on television which was not sufficiently clear.

Some of the teachers indicated that they had a hard time finding enough time to devote to linguistics each week. They also said that requiring a theme per week of the students demands too much teacher time.

Another problem dealt with the materials. Lesson plans were delivered late, there was a need for more books, and textbook illustrations were not suited to the type of student using them.

Some teachers expressed the feeling that they lacked enough personal knowledge of linguistics to do an adequate job of teaching and said there was a need for in-service or summer training courses.

Question 2: What benefits do you feel your students are gaining from the study of linguistics?

The teachers indicated that the greatest benefit was a better

understanding of the structure of English, including the similarities among words, basic grammar, and sentence construction and parts of speech.

Another benefit mentioned was an awareness of different approaches to the study of grammar. In this connection, teachers cited specific benefits such as making comparisons with traditional grammar, a fresh concept of grammar and new concepts of language study.

Increased interest in language, intellectual growth, practice in use of language, and strengthening of study skills were also mentioned by some of the teachers as benefits to the students.

Question 3: What are the disadvantages in the study of linguistics for your students?

The largest number of teachers felt that the linguistics course was generally a poor use of the students' time for the following reasons: (1) the time could be spent better in something else, (2) the students have to watch the television program too much, (3) there is too much theory, (4) the students can see no relationship between linguistics and their lives, and (5) language patterns cannot be changed in this way.

Some of the teachers felt that linguistics caused too much confusion for the students, with its new terminology and new divisions of words. Some also said that no one seemed to know where the lessons were going.

A few of the teachers said they did not think the students were prepared well enough in traditional grammar. Others said linguistics instruction should have started in earlier grades.

Other disadvantages for the students mentioned were the following:

(1) not enough time for proper coverage of the material, (2) the difficulty of relating linguistics to the other parts of the English program, (3) the lack of materials for proper preparation and follow-up, (4) material that is too difficult, and (5) having to take notes.

Question 4: What disadvantages do you see in using television as a medium of instruction in linguistics courses for your students?

The most often mentioned disadvantage of using television was its inflexibility. This includes such things as not being able to interrupt the program to ask questions, to explain confusing points, or to discuss points of interest.

The second greatest disadvantage mentioned was the difficulty of meeting the varying needs of individual students with only one program presented on one level.

Poor reception in some schools hampered understanding and proved to be a disadvantage.

Other disadvantages mentioned were the following: (1) poor pacing of the program (sometimes too fast, sometimes too slow), (2) the fact that students think of television as entertainment and not as education, (3) lack of personal contact, (4) the television set not always being available, (5) the amateur quality of the program, (6) the minimization of the role of the classroom teacher, and (7) the fact that too much follow-up is necessary.

Question 5: What are the advantages of using television in linguistics courses for your students?

Most of the teachers who answered this question felt that the greatest advantage of using television was that the students associated it with pleasure and it, therefore, served as good motivation.

The next greatest advantage of television was felt to be that it gave all students a chance to learn linguistics from a master teacher. Some of the teachers felt that the television teacher was a better teacher than they were. Others commented upon the fact that the television program gave the students information upon which the classroom teachers could build.

Some teachers felt that television provided a systematic organization of content. Their comments were: (1) it keeps all classes together, (2) there is some basis of objectivity, (3) television lessons are usually well organized, and (4) there is uniformity of coverage of the content.

Another advantage mentioned by the teachers was that television was a good medium for teaching--more specifically that it aided student comprehension, it required the students to pay attention, and there was use of visual example.

Question 6: What linguistics concepts have been best presented in the course to date?

In descending order of frequency of mention the concepts were the following: (1) form classes, (2) kernal sentences, (3) function words, (4) sentence tree, (5) scientific approach, the phonological concepts,

and concepts of lexical and structural meaning, (6) concept of morphology, (7) basic pattern sentences and history of language, (8) classification of words, (9) studies of sound, (10) elements of language, phrase-structure rules, and changing language, and (11) different levels and uses of language and basic sentence structure.

Question 7: What concepts do you think need to be re-presented or re-taught?

The most frequent response was "none." The responses after that in descending order of frequency were the following: (1) phonemes and morphemes, (2) overlapping functions of words, (3) how to find intensifiers, (4) derivation and purpose of studying linguistics, (5) phrase-structure rules, (6) subordination and auxiliaries, and (7) modification, expansion, formal versus structural signals, non-kernal sentences, difference between structural and lexical meaning, kernal sentences and sound and meaning.

Question 8: List below any specific suggestions you have for improving the television linguistics program.

Those suggestions made by eight to 10 teachers were: (1) hire someone more qualified than present television teacher (linguistically speaking and as a performer), (2) speed up various areas of the program (have less repeating), (3) make lesson plans and long-range plans and objectives available to classroom teachers ahead of time, and (4) extend structural linguistics through tenth grade.

The suggestions made by four to six teachers were: (1) the humor should be improved (the irrelevant needs to be cut out and the sophisticated, the current, and the more mature stressed), (2) a short review should precede each lesson, (3) more student exercises should be provided during lessons, (4) the program should be begun on a lower level, (5) more examples should be provided, (6) the program should be aimed at only one level of students, and (7) tests should be provided which correlate more closely with what is going on in classes.

Suggestions which three or fewer teachers mentioned were: (1) use more challenging questions, (2) clarify scientists' methods, (3) give students time to digest rules before giving the exceptions, (4) improve the quality of the television reception, (5) provide centrally prepared drill sheets, (6) bring in nationally known experts to present information not otherwise available to classroom teachers, (7) teach program as one unit of study over a two- or three-week period, (8) provide more books, (9) allow more time for students to copy material, (10) maintain a consistency of oral terminology and written symbols, (11) have the television instructor visit the classrooms, (12) provide a live audience for the television instructor, (13) give more attention to advanced composition, (14) change the theme song for the tenth-grade program, (15) use completely objective tests, and (16) have a more advanced program for the Scholars.

## Results: Structural Grammar Examination

### Part I--Recognition

Form Classes. Students in Scholars' classes and those in regular ninth-grade English classes had little difficulty in classifying words as to their form class. Of 15 items relating to this concept, only question 14 appeared at the lower end of both distributions. In responding to this question a majority of both groups of students incorrectly identified lot in the clause "...he had done a lot of night swimming...." as an adjective instead of as a noun. This proved to be the most difficult question on the test for all students. Scholars' students had relative difficulty recognizing dark in the clause "...he would go for a swim after dark...." as a noun, with 38 percent classifying the word in some other form class. Each group placed three items in this section of the examination in the upper end of its distribution, suggesting that the concept of form classes was generally well understood by the total population.

Basic Sentence Patterns. Of the five questions which measured understanding of basic sentence patterns, two (questions 16 and 19) appeared in the lower end of the distributions for Scholars' and regular classes alike, while no question in this section found its way into the upper end of the distributions. In question 16, 39 percent of the Scholars and 63 percent of the students in regular classes failed to



record the correct response. Similarly, in responding to question 19, 32 percent of the Scholars and 55 percent of students in regular classes were incorrect. Despite the appearance of two questions in this five-item section in the low end of the distributions, a majority of Scholars chose the correct responses for all questions and a majority of students in other classes chose the correct response for three of the five. Nevertheless, the mean percentages of correct responses in this section of the test was relatively low for both groups compared to the mean percentages for all items (48 percent versus 63 percent for regular classes and 73 percent versus 82 percent for Scholars' classes).

Complete Formulas. This section (questions 21 through 25) was based on the same sentences as the preceding one. Students in both groups, however, had a higher degree of comprehension of complete formulas than they had of basic sentence patterns. This is reflected by the fact that no question in this section appeared in the lower end of the Scholars' distribution and only one (question 24) appeared in the lower end of the distribution for regular classes.

Sentences from Formulas. Both groups of students proved able to match sentence formulas with sample sentences in their responses to questions 26 through 30. With one exception (regular classes' responses to question 26), the majority of students answered all questions in this section correctly. Moreover, responses to most questions registered percentages considerably above the mean for the entire test.

Function Words. No serious difficulty was experienced with any question that measured understanding of function words, with the single exception of the responses of regular students to question 35. In this case only 44 percent of the students properly identified the underlined words in the sentence "Before you came and while he was talking, Mary circulated among her friends and neighbors." as coordinators and subordinators.

Kinds of Sentences. Judging from responses to test items, most students demonstrated a clear understanding of sentence type. Scholars' students placed two of the five questions in this section at the upper end of their distribution, and those in regular classes placed four of the five in the upper end of their distribution. Furthermore, the mean percentages of correct responses were 8.4 and 13.9 higher than the mean percentages for the entire test for Scholars' and regular classes respectively. Question 41, which dealt with recognition of sentence type through intonation, was relatively difficult, however, for both groups. For regular students this question fell in the lower end of the distribution, and for Scholars' students its percentage of correct responses was 11 percent below the mean.

Expansions. Four items dealing with expansion of a basic pattern comprised the final section of Part I of the examination. This area of the course was well assimilated by both groups of students, with regular students according it the highest upward deviation from the total

mean of any section of the test. Both groups placed two of the four items in the upper end of their distribution.

### Part II--Judgment

Part II of the examination attempted to measure students' attitudes toward linguistics principles. In responding to question 46, Scholars' and regular students alike overwhelmingly rejected the idea that the use of nonstandard English brands a speaker as stupid. About half the students in both kinds of classes failed to accept the statement that nonstandard English is probably a sign of an uneducated speaker and thus answered the question incorrectly. A third of the regular students incorrectly assessed the recognition of form classes as the most desirable result of a study of grammar (question 48). Although they correctly associated the scientific nature of linguistics with observation of language behavior (question 52), many regular students joined Scholars' students in failing to realize that linguistics qualifies as a science because it is descriptive rather than prescriptive (question 53).

### Part III--Completion

Each of the 10 items in Part III of the examination required students to choose one of four responses in order to complete a statement correctly. The statements related mainly to the technical lexicon of structural grammar. The mean percentages for this section were slightly below those obtained for the entire test for both groups of

students, with two questions falling into the lower end of each distribution and no question appearing in the upper end for either group. Although a majority of students in responding to question 56 understood the linguistics principle that sentences are most accurately considered structures which do not need to be part of a larger structure, sufficient numbers in both groups had difficulty with the item to place it in the lower end of their distribution. Most Scholars who answered the question incorrectly reflected a common misapprehension by limiting their definition of a sentence to "a structure that contains a subject and a predicate." They were joined in this answer by over half of the regular students. The latter also had considerable difficulty identifying the role of responses in linguistics.

#### Part IV--Recall

Two of the four matching questions in Part IV concerned the history of English, and two concerned the structure of the language. Some confusion regarding the role of Chaucer in standardizing Middle English was apparent in both groups, while a relatively high proportion of the Scholars (38 percent) failed to associate William the Conqueror with the Norman Conquest. Similar proportions did not recognize Old English as being of Anglo-Saxon origin and were unable to identify close down as a separable verb. The highest percentage of correct responses in this section of the test was registered by both groups in

identifying the expression "You all" as an example of American Southern dialect.

### Results: Transformational Grammar Examination

#### Part I--Sentence Trees

The five items on sentence trees (equivalent to diagramming in traditional grammar) proved relatively difficult both for students in the Scholars Program and for those in regular classes. For the latter group the mean percentage of correct responses for these five items was 12 points below the mean percentage for the entire test, and for Scholars' classes it was 7.4 points below the total mean. Each group had sufficient difficulty with one of the trees (item 3 for Scholars' classes and item 4 for regular classes) to place the item in the lower end of its distribution. Item 3 was a simple sentence having a verb in the present tense followed by a direct object, while item 4 was a sentence containing a predicate adjective. Of the five items in this section, item 2, a simple sentence in the present tense, was best understood by both groups of students.

#### Part II--Judgment

Questions 6 through 15 were true-false items largely concerned with definitions of general terms and principles of transformational grammar. Both groups of students found this section relatively easy, with each group placing one of the questions in the high end of its distribution.

### Part III--Kernels

Using the final examination as a criterion for measuring comprehension, it is clear that students in both types of classes absorbed the concept of kernel sentences better than any other on which they were tested. This is evident in a mean percentage of correct responses in both groups higher than for any section (+6.1 for regular classes and +7.5 for Scholars) and is further borne out by the fact that Scholars placed three of the questions in the high end of their distribution while regular students placed two in the high end of theirs. The single stumbling block in this section was question 24, in which slightly more than one third of the students in regular classes failed to associate "He became lazy." with the appropriate kernel sentence.

### Part IV--Transformations

Responses to the questions devoted to transformations were parallel for both groups of students in several respects. First, the mean percentage of correct responses was the second highest of all sections of the test for each group. Second, the mean percentage for this section exceeded the mean percentage for the entire test by 5.8 points in both groups. Third, each group placed the same four questions (26, 28, 29, and 30) in the upper end of its distribution. Finally, both Scholars' and regular classes had sufficient difficulty with question 31 to place it in the low end of their respective distributions. Most students who answered

this question incorrectly selected the sentence with the present perfect tense rather than the one with the simple present tense to match the formula  $Af + v \rightarrow v + Af$ .

#### Part V--Phonology and Morphology

Part V of the examination sought to measure students' understanding of the sound and structure of English words. The mean percentage of correct responses for this section was virtually the same as the mean for the entire test for both populations. Students in both groups were most successful in identifying "saw," "believed," and "grew" as past morphemes in question 42, which became the only question in this section to rank in the high end of the distributions. On the other hand, Scholars had most difficulty with question 36, with approximately 40 percent unable to define a phoneme as "a family of related units of sound," equating it instead with "a unit of sound." Regular classes were most confused by question 41, with 63 percent incapable of distinguishing among allomorphs, allophones, allophonemes, and allomorphemes.

#### Part VI--Syntax

Scholars' Program students and those in regular classes placed four common items dealing with syntax (49, 50, 51, 55) at the high end of their distributions, with Scholars adding question 54 to this list. Three of these questions (49, 50, and 51) concerned formulas for sentence parts, and the fourth (question 55) measured whether students

could associate the symbol NP (for noun phrase) with "Det(determiner) + N(noun)." More than nine out of 10 Scholars were also able in responding to question 54 to match the symbol with an optional construction. Although both categories of students had significant difficulty with question 48 (recognizing S as the symbol for recursiveness), achievement on the items in this section averaged approximately 5 percent higher than the test as a whole.

#### Part VII--Deep and Surface Structure

Without question, the final section of the examination, which dealt with the linguistic concept of deep and surface structure, proved most difficult for Scholars'and regular students alike. Students in regular classes recorded a mean percentage of correct responses 13 points below that obtained for the entire test; the corresponding figure for Scholars'classes was 19 points.

Each of the 10 questions in this section of the test contained three response alternatives, one of which did not belong with the other two. Students were asked to choose the response that was out of place. Approximately three quarters of the students in regular classes failed to eliminate the inappropriate item in four of the 10 questions, and over half of the Scholars had difficulty with five of the 10. The most difficult question on the entire test for Scholars proved to be question 63, with only 28 percent of these students responding correctly; question 66 had



the lowest recorded percentage (22 percent) of correct responses for students in regular classes. Each distribution contained two items in this section of the test that were answered correctly with a greater frequency than the questions of average difficulty.

### Discussion and Conclusions

The generally positive response of teachers to the attitude questionnaire indicates faculty support for the program. Teachers were in basic agreement about the value of such overall aspects of the program as the issuing of lesson plans and the weekly presentation of the television lesson, while they questioned the efficacy of some in-service activities and identified such mechanical problems as inadequate television reception and the occasional late delivery of lesson plans. Teachers of structural grammar agreed with teachers of transformational grammar on the majority of items on which they were polled. Principal differences between the two groups were registered with respect to the value of student notebooks, students' attitudes toward the course content and the television lessons, time required for classroom follow-up of the television lesson, and the need for teacher preparation.

Most of the concepts measured by both the final examinations were understood by a majority of both groups of students (Scholars' and regular students). As might be expected, Scholars' Program students outperformed those in regular classes by a wide margin. Although the absence of control groups makes it impossible to evaluate the opinion

of teachers that the average student derives the most benefit from the program, the high degree of achievement of the Scholars implies that they derived considerable benefit from the course in terms of understanding its principal concepts.

There is general agreement between teachers' opinions about the concepts best presented on the television program and student achievement on the final examination in the areas of form classes, function words, kernel sentences, phonology, and morphology. The data do not support those teachers who listed the concepts of phonemes and morphemes, phrase-structure rules, and sentence expansion as those most in need of re-teaching. Students taking both courses have a positive attitude toward those linguistics concepts measured by the final examinations.

## APPENDICES

## Appendix A

### GROUP INTERVIEW SCHEDULE TELEVISION LINGUISTICS PROGRAM

#### OBJECTIVES

1. What objectives does the Television Linguistics Program seek to accomplish for the students in your school? (What should students be able to do as a result of participation in the program? )
2. Are there any objectives, not directly related to students' accomplishment in the classroom, which might be realized through Television Linguistics and which will help bring about the major objectives of the program?
3. Do you see any by-product benefits to parents, teachers, the community, or the school that may result from the Television Linguistics Program, even though they may not specifically help bring about the major objectives?

#### STUDENTS

1. What are the principal characteristics and attitudes of Scholars' students participating in the program?
2. What are the principal characteristics and attitudes of student participants who are in regular classes?
3. What are the activities which students typically take part in and which help them to realize the major objectives of the program?
4. Are there any skills or knowledges which are, or should be, prerequisite for success in the Television Linguistics Program?
5. Are there any special skills or knowledge which students may be expected to acquire as they participate in the program and which will help them to realize its objectives?

## STAFF

1. What instructional personnel are necessary in order to meet the objectives of the Television Linguistics Program?
2. What noninstructional personnel (e. g. television staff) are necessary in order to meet the objectives?
3. What is the role of each staff member mentioned above in meeting the program's objectives?
4. In fulfilling their roles, what specific duties are required or expected of the various staff members in the program?
5. What legal, professional, or other nonpersonal qualifications are specified or recommended for each group of the staff?
6. What personal characteristics are necessary for the various staff members if they are to carry out their assignments with the program's objectives in mind?

## MEDIA

1. What are the five most valuable materials, equipment, and supplies (other than television materials and equipment) required to carry out the program?
2. What specific television materials, equipment, and supplies are required? How will these materials, equipment, and supplies contribute to realizing the program's objectives?

## COMMUNICATION

1. How do members of the Television Linguistics staff communicate with one another concerning the operation and development of the program within the school?
2. How are staff members in the school kept informed of developments concerning the city-wide Television Linguistics Program? How do they communicate their needs to those responsible for the program on the central office staff?

## SUPPORT

1. What support is necessary to operate the Television Linguistics Program within a school?
2. What support do you feel is required from the Central Office staff to meet the program's objectives?
3. What steps are, or should be taken to assure this support?

APPENDIX B

QUESTIONNAIRE  
TELEVISION LINGUISTICS TEACHERS

Name of school \_\_\_\_\_

Check the grades in which you teach television linguistics:

Grade 8 \_\_\_\_\_ Grade 9 \_\_\_\_\_ Grade 10 \_\_\_\_\_

Check your years of teaching experience, counting the current school year as one full year:

1 year \_\_\_\_\_ 2 to 5 years \_\_\_\_\_ 5 to 10 years \_\_\_\_\_ more than 10 years \_\_\_\_\_

Indicate the number of years, counting 1966-1967 as a full year, that you have been teaching linguistics: \_\_\_\_\_ years

PART I

By filling in the spaces in the chart below, you will provide valuable data about the physical organizational aspects of the Television Linguistics Program in your school. COMPLETE ONE COLUMN FOR EACH LINGUISTICS CLASS THAT YOU TEACH.

|   | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Grade   |   |   |   |   |   |   |
| Number of students  |   |   |   |   |   |   |
| Write "S" if Scholars' class  |   |   |   |   |   |   |
| Write "N" if non-Scholars' class  |   |   |   |   |   |   |
| Indicate whether linguistics textbook is available by writing "Yes" or "No"           |   |   |   |   |   |   |
| Does this class regularly view the television lesson? ("Yes" or "No")                 |   |   |   |   |   |   |
| Is a television set permanently assigned to your classroom?                           |   |   |   |   |   |   |
| Do any other classes view the lesson at the same time in the same room?               |   |   |   |   |   |   |
| If answer to above question is "Yes," indicate number of additional classes.          |   |   |   |   |   |   |
| If your class does not view the lesson in your classroom, indicate location.*         |   |   |   |   |   |   |
| How much time in minutes do you have for follow-up the same day the lesson is taught? |   |   |   |   |   |   |

\* For example: auditorium, gym, audio-visual room, library, cafeteria, another classroom



## PART II

The questions below concern teachers' opinions about television linguistics. By checking one of the four choices provided with each question, you can register your evaluation of an important aspect of the course. **THERE ARE NO RIGHT OR WRONG ANSWERS.** All replies will be kept confidential.

1. How valuable do you find the lesson plans provided for these courses?

- Of very little value       Quite valuable  
 Of average value       Of very great value

2. How would you characterize the quality of television reception in the room where your students view the program?

- Excellent       Below average  
 Average       Poor

3. How well do you feel you could teach the linguistics course without the use of the television program?

- Not well at all       With little difficulty  
 Reasonably well       Extremely well

4. How many television lessons do you feel should be presented monthly?

- One       Three  
 Two       Four

5. To what extent do you enjoy teaching your linguistics courses?

- Very much       Only slightly  
 Moderately       Not at all

6. In your opinion, what type of student benefits most from the study of linguistics courses as they are now presented?

- The slow learner       The above-average student  
 The average student       The superior student

7. How valuable have you found the in-service activities conducted for teachers of television linguistics?
- Not valuable at all                       Of average value  
 Of slight value                               Very valuable
8. How much additional preparation do you find necessary in order to teach your linguistics classes?
- No additional preparation                       Considerable additional preparation  
 Little additional preparation                       Excessive additional preparation
9. How often do you prepare worksheets or other duplicated materials for your linguistics classes?
- More than once a week                       Less than once a week  
 About once a week                               Not at all
10. What importance do you attach to student notebooks in connection with the linguistics courses?
- No importance                                       Average importance  
 Little importance                                       Great importance
11. How often do you use the linguistics textbook?
- Daily     Once weekly  
 Several times weekly                               Very seldom
12. How much time do you find necessary for proper motivation before students view the television lesson?
- A full period or more                       Less than half a period  
 At least half a period                       None
13. How much time do you need to follow up each television lesson?
- None     At least half a period  
 Less than half a period                       A full period or more

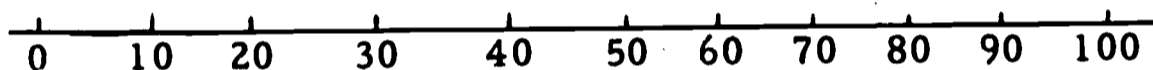
14. How much formal training have you had in the field of linguistics?

- |   |  |
|---|--|
| <input type="checkbox"/> No formal training | <input type="checkbox"/> Two or more courses   |
| <input type="checkbox"/> One course         | <input type="checkbox"/> Linguistics workshops |
|   | (Indicate number ___)                          |

15. In relation to the total English program, how do you feel about the time required for the linguistics lessons?

- |   |   |
|---|---|
| <input type="checkbox"/> Far too much time required | <input type="checkbox"/> Reasonable amount of time required   |
| <input type="checkbox"/> Too much time required     | <input type="checkbox"/> Too little time given to linguistics |

16. On the scale below indicate by encircling the appropriate number where you perceive yourself to be in terms of your competence to teach the concepts of linguistics to classes. ("0" represents no competence; "100" represents complete competence.)



Please respond to those items below which apply to your own teaching assignment. Check "Not applicable" for items which do not apply.

17. How do you rate the linguistics textbook for grade 9 (and grade 8 Scholars)?

- |  |   |
|--|---|
| <input type="checkbox"/> Superior      | <input type="checkbox"/> Unsuitable     |
| <input type="checkbox"/> Adequate      | <input type="checkbox"/> Not applicable |
| <input type="checkbox"/> Below average |   |

18. How do your students react to this textbook?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorably | <input type="checkbox"/> Very unfavorably |
| <input type="checkbox"/> Favorably      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorably    |   |

19. How do you rate the linguistics textbook for grade 10?

- |  |   |
|--|---|
| <input type="checkbox"/> Superior      | <input type="checkbox"/> Unsuitable     |
| <input type="checkbox"/> Adequate      | <input type="checkbox"/> Not applicable |
| <input type="checkbox"/> Below average |   |

20. How do your students react to this textbook?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorably | <input type="checkbox"/> Very unfavorably |
| <input type="checkbox"/> Favorably      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorably    |   |

21. In general, how would you describe the attitude toward the television program of students in your Scholars' classes?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorable | <input type="checkbox"/> Very unfavorable |
| <input type="checkbox"/> Favorable      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorable    |   |

22. In general, how would you describe the attitude toward the television program of students in your regular classes?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorable | <input type="checkbox"/> Very unfavorable |
| <input type="checkbox"/> Favorable      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorable    |   |

23. How would you describe the attitude of Scholars' Program students toward the course content?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorable | <input type="checkbox"/> Very unfavorable |
| <input type="checkbox"/> Favorable      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorable    |   |

24. How would you describe the attitude of regular students toward the course content?

- |   |   |
|---|---|
| <input type="checkbox"/> Very favorable | <input type="checkbox"/> Very unfavorable |
| <input type="checkbox"/> Favorable      | <input type="checkbox"/> Not applicable   |
| <input type="checkbox"/> Unfavorable    |   |

### PART III

Please answer the following questions as briefly and succinctly as possible. Use other side if necessary.

1. What major problems are you now facing in the teaching of linguistics?
2. What benefits do you feel your students are gaining from the study of linguistics?
3. What are the disadvantages in the study of linguistics for your students?
4. What disadvantages do you see in using television as a medium of instruction in linguistics courses for your students?
5. What are the advantages of using television in linguistics courses for your students?
6. What linguistics concepts have been best presented in the course to date?
7. What concepts do you think need to be re-presented or re-taught?
8. List below any specific suggestions you have for improving the Television Linguistics Program.

APPENDIX C

**GRADE 9**  
**FINAL EXAMINATION**  
**LANGUAGE SENSE AND STRUCTURE**

FINAL EXAMINATION - LANGUAGE SENSE AND STRUCTURE (B) Grade 9

There are eighty points in this examination. Each part has been assigned a point value.

PART I - RECOGNITION (45 points)

FORM CLASSES

In this part of the examination you are to indicate the form class of each numbered, underscored word in the paragraph below. Darken the blocks on your answer sheet by this code: 1=noun; 2=verb; 3=adjective; 4=adverb. For example, if you think an underscored word is an adjective, darken the block with the number 3 in it.

(1) (2) (3) (4) (5)  
He thought suddenly of the lake and decided that he would go for a swim  
(6) (7) (8)  
after dark. He would feel the cool water against his hot body and plunge his  
(9) (10) (11) (12)  
face into the mysterious depths holding the stars. That was practically the  
(13) (14) (15)  
only good thing about this summer: he had done a lot of night swimming and  
learned to love it.

BASIC PATTERNS

In this part of the examination you are asked to find the basic sentence pattern in the expanded structures below. Example: The basic pattern in He carelessly threw the ball down the street. is 121. Your answer will be one of the four patterns below:

- (1) 1 2 (4)
- (2) 1 2 1
- (3) 1 2L 3
- (4) 1 2L 1.

On your answer sheet darken the number of the basic pattern contained in each of the sentences.

- 16. Furniture for classrooms is always a big problem for school designers.
- 17. Students are either too big or too small.
- 18. Furniture must function differently in different classes.
- 19. In some classes tables must serve several purposes for instruction in the subject.
- 20. A new adjustable chair fits the shorter students and the taller ones in a class.

COMPLETE FORMULAS

In this part you will need to recognize the complete formulas for the same sentences. On your answer sheet darken the block which has the number to match the number of the best formula for each sentence.

- 21. Furniture for classrooms is always a big problem for school designers.  
(1) 1 p 1 2 4 d 3 1 p 3 1. (2) 1 p 1 2L 4 d 3 1 p 3 1.  
(3) 1 p 1 2 4 d 3 1 p 1. (4) 1 p c p 2L 4 d 3 1 p 3 1.
- 22. Students are either too big or too small.  
(1) 1 2 c v 3 c v 3. (2) 1 2 c v 4 c v 4.  
(3) 1 2L c v 3 c v 3. (4) 1 2L c v 3 c v 4.
- 23. Furniture must function differently in different classes.  
(1) 1 a 2 4 p 3 1. (2) 1 a 2 4 p 4 1.  
(3) 1 a 2L 4 p 3 1. (4) 1 a 2L 4 p 4 1.



FINAL EXAMINATION - LANGUAGE SENSE AND STRUCTURE (B)

24. In some classes tables must serve several purposes for instruction in the subject.

- (1) p d l l a 2 d l p l p d l. (2) p d l l a 2 L d l p l p d l.  
 (3) p d l 2 a 2 d l p l p d l (4) p d l l s 2 d l p l p d l.

25. A new adjustable chair fits the shorter students and the taller ones in a class.

- (1) d 3 3 1 2 L d 3 1 c d 3 1 p d l. (2) d 3 3 1 2 d 3 1 p d l p d l.  
 (3) d 3 3 1 2 d 3 1 c d 3 1 p 3 l. (4) d 3 3 1 2 d 3 1 c d 3 1 p d l.

SENTENCES FROM FORMULAS

In this part you will be expected to recognize the sentence which fits a particular formula. On your answer sheet darken the block which has the number to match the number of the best sentence for each formula. (Phrases are underlined; dependent clauses are in parentheses.)

26. (s 1 2) p d l l 2 L l.

- (1) If you rode in that car, you missed me.  
 (2) When they returned from their trip, they were ready.  
 (3) While they were in that shop, they bought souvenirs.  
 (4) When they returned from their trip, they were experts.

27. 2 L 1 3 ?

- (1) Is Henry thoughtful?  
 (2) Henry is thoughtful?  
 (3) Can Henry work?  
 (4) Who picked Henry?

28. 2 p d l c 2 p d l.

- (1) Go into the kitchen and tell Mother.  
 (2) Arrange in columns or separate into groups.  
 (3) Go down the stairs and look in the closet.  
 (4) Spend your money but earn your pay.

29. d 3 3 1 p l 2 p d l p d l.

- (1) A big round bundle of letters lay on the table for the guests.  
 (2) A big round bundle of letters was there on the table for the guests.  
 (3) A big round bundle waited for guests on the table.  
 (4) A big bundle of letters lay on the table for the guests.

30. 1 2 (s 1 2) p d l.

- (1) When he came into the room, I smiled.  
 (2) I smiled when he came into the room.  
 (3) I smiled when he looked up the address.  
 (4) He came into the room when I smiled.

FUNCTION WORDS

In this part you will need to identify kinds of function words. What kinds of function words are underlined in the following sentences? On your answer sheet darken the block with the number to match the best response for each sentence.

31. That woman gave some candy to the children for their trick-or-treat bags.

- (1) subordinators (2) coordinators (3) determiners (4) intensifiers

32. Either do the work now or do it later and feel rushed.

- (1) subordinators (2) coordinators (3) determiners (4) intensifiers

33. In the past he has won many games for his team.

- (1) prepositions (2) determiners (3) auxiliaries (4) prepositions and determiners

34. He had known the answer before the teacher had asked the question.

- (1) auxiliaries (2) subordinators (3) auxiliaries and subordinators (4) auxiliaries and determiners

FINAL EXAMINATION - LANGUAGE SENSE AND STRUCTURE (B)

35. Before you came and while he was talking, Mary circulated among her friends and neighbors.  
(1) coordinators and subordinators (2) subordinators and auxiliaries  
(3) coordinators and auxiliaries (4) coordinators and prepositions
36. It was too long ago to be very specific about all of the quite numerous details.  
(1) intensifiers and prepositions (2) Prepositions (3) intensifiers  
(4) determiners and prepositions.

KINDS OF SENTENCES

In this part you will need to recognize different kinds of sentences. Darken the blocks on your answer sheet by this code: 1-statement; 2-question; 3-request. For example, if you think a sentence is a statement, darken the block with the number 1 in it. (Punctuation has been omitted in the sentences below on purpose.)

37. Was that fun  
38. He's gone  
39. That girl is the one who sings  
40. Listen  
41. If you were speaking the four sentences above, how many of them could you change from one kind to another by changing your intonation?  
(1) All four (2) Only 37 (3) Only 37 and 40 (4) None

EXPANSIONS

In this part you are expected to know which structures will fit in certain positions to expand a basic pattern. Here is the basic pattern you will consider:

The (1) water dripped (2) (3) (4)

To expand the sentence you will need to fill the blanks with all the structures numbered below. On your answer sheet darken the number of the blank into which you would place each structure.

42. cold  
43. slowly  
44. into the bucket  
45. while we waited

PART II - JUDGMENT (10 points) In this part you are to decide whether a language scientist would agree or disagree with the following statements. If you think he would agree, darken the block on your answer sheet with the number 1 in it; if you think he would disagree, darken the block with the number 2 in it. Although the statements are arranged in pairs, it is not necessarily true that a language scientist would always disagree with one of the pair and agree with the other!

46. Use of English which is not standard is a certain indication that the speaker is stupid.  
47. Use of English which is not standard is probably a sign that the speaker is uneducated.  
48. Recognition of form classes is the most desirable result from a study of grammar.  
49. Knowledge of the structure of our language is the most desirable result from a study of grammar.  
50. Linguistic courtesy involves unprejudiced attitudes toward the language habits of others.  
51. Linguistic courtesy involves the idea that "anything goes" in language usage.

PART II - IDENTIFICATION - LANGUAGE SENSE AND STRUCTURE (B)

52. Linguistics is scientific because it is based upon observation of language behavior.
53. Linguistics is scientific because it is descriptive rather than prescriptive.
54. One can best judge language usage by its correctness or incorrectness.
55. One can best judge language usage by its appropriateness.

PART III - COMPLETION (10 points) In this part you will need to supply the correct word to fill the blank. On your answer sheet darken the block with the number to match the number of the word which best fills the blank in each sentence below.

56. According to linguistics, sentences are most accurately considered structures which \_\_\_\_\_.  
 (1) contain a subject and predicate (2) do not need to be part of a larger structure (3) can be included in other structures (4) contain a form class 1 word and a form class 2 word
57. Dialects are regional differences in speech; \_\_\_\_\_ are individual differences in speech.  
 (1) intellects (2) geolects (3) isolects (4) idiolects
58. "Included sentences" are the same as \_\_\_\_\_.  
 (1) dependent clauses (2) homophones (3) superfixes (4) independent clauses
59. When we add something at the beginning or the end of a word, we are using \_\_\_\_\_.  
 (1) superfixes (2) affixes (3) coordinators (4) prefixes
60. Sometimes a word functions in more than one class without a change in its form; such words are called \_\_\_\_\_.  
 (1) phones (2) allophones (3) megaphones (4) homophones
61. Pitch of voice, pausing in speech, and use of emphasis on certain words are all treated in a part of language study called \_\_\_\_\_.  
 (1) punctuation (2) rhetoric (3) intonation (4) dialectics
62. The first word in a dependent clause is usually one of the group called \_\_\_\_\_.  
 (1) affixes (2) superfixes (3) subordinators (4) coordinators
63. When a subject and predicate agree in form, we say they have \_\_\_\_\_.  
 (1) intonation (2) concord (3) response (4) predication
64. Following the linguistics approach, we can tell the kinds of sentences by \_\_\_\_\_.  
 (1) affixes (2) punctuation (3) responses (4) idiolects
65. If we can not find at least one basic pattern in an expression, it is probably \_\_\_\_\_.  
 (1) an included sentence (2) a superfix (3) a fragment (4) an adjunct

PART IV - RECALL (15 points) In this part you will be expected to recall information by pairing items in two columns. On your answer sheet darken the block which has the number to match the number of the best answer in the right-hand column.

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| 66. -ed                           | (1) usually signals from class 3      |
| 67. -s                            | (2) can signal form classes 3 and 4   |
| 68. -est                          | (3) can signal form classes 1 and 2   |
| 69. -ly                           | (4) usually signals from class 2      |
|                                   | (5) can signal form classes 1 and 4   |
| <hr/>                             |                                       |
| 70. Chaucer                       | (1) symbolizes English history        |
| 71. Westminster Abbey             | (2) standardized Middle English       |
| 72. William the Conqueror.        | (3) led Norman invasion               |
|                                   | (4) led Anglo-Saxons                  |
|                                   | (5) invented English                  |
| <hr/>                             |                                       |
| 73. at the corner                 | (1) example of a head word            |
| 74. because you work              | (2) example of a separable verb       |
| 75. the big stone church          | (3) example of a dependent clause     |
| 76. <u>close down</u> the factory | (4) example of a prepositional phrase |
|                                   | (5) example of a sentence             |

FINAL EXAMINATION- LANGUAGE SENSE AND STRUCTURE (B)

- |                            |                             |
|----------------------------|-----------------------------|
| 77. Old English            | (1) Southern dialect region |
| 78. Pennsylvania "Eutch"   | (2) Romance family          |
| 79. "you all"              | (3) Anglo-Saxon origin      |
| 80. Latin, French, Spanish | (4) Midland dialect region  |
|                            | (5) Norman English          |
-

GRADE 10  
FINAL EXAMINATION  
LANGUAGE PATTERNS IN MOTION

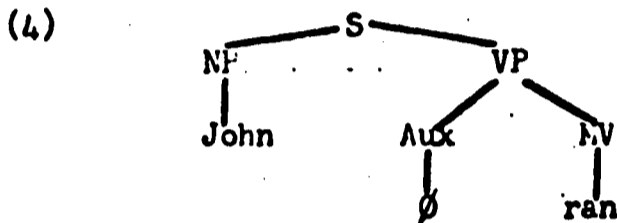
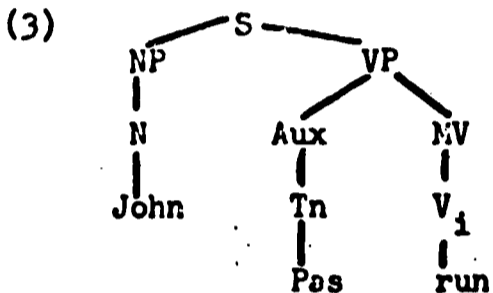
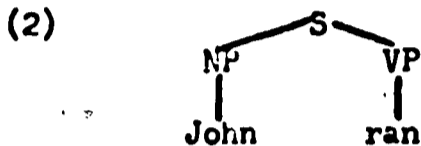
FINAL EXAMINATION

LANGUAGE PATTERNS IN MOTION

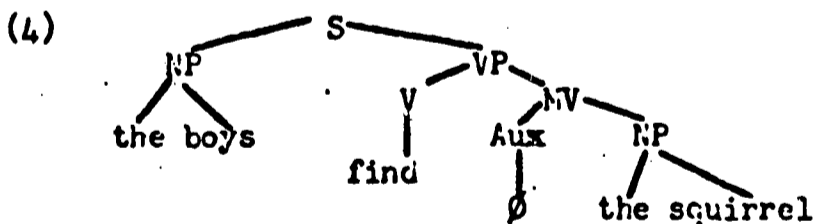
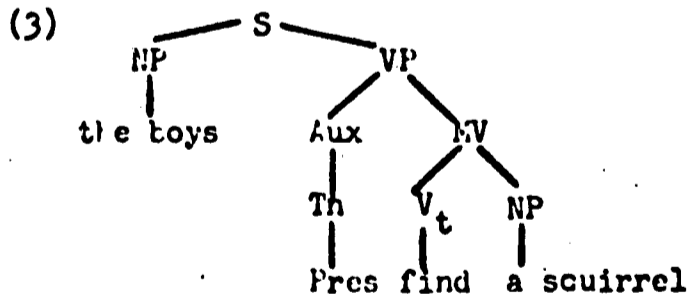
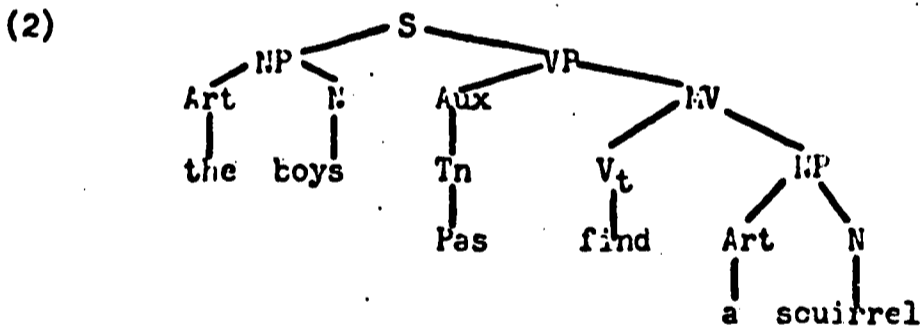
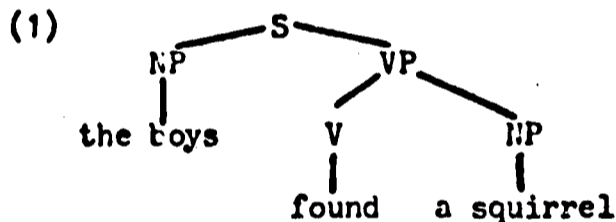
There are seventy points in this examination. Each part has been assigned a point value.

PART I - TREES (5 points) In this section you will work with sentence trees. On your answer sheet darken the space with the number to match the tree which is the most suitable illustration of each sentence below.

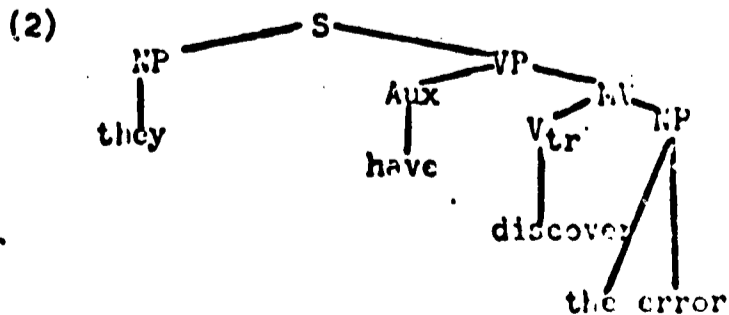
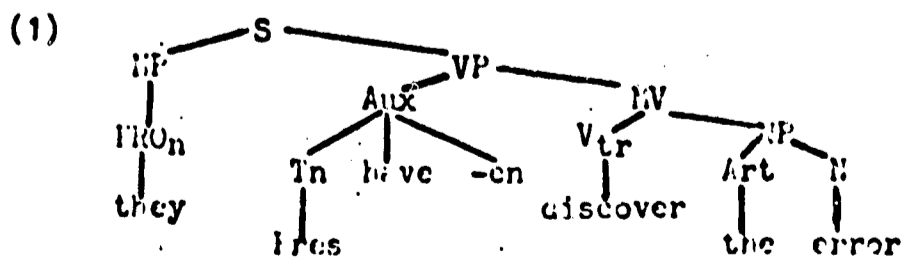
1. John ran.



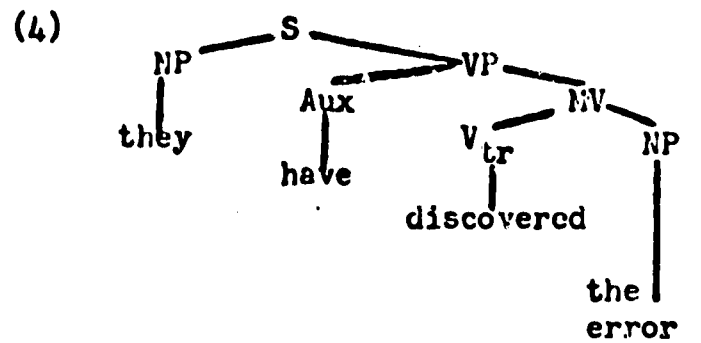
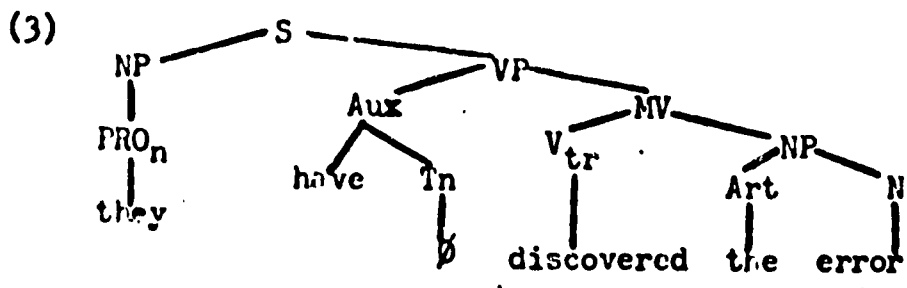
2. The boys found a squirrel.



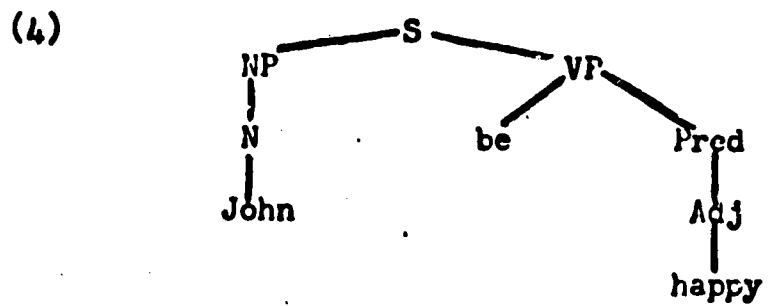
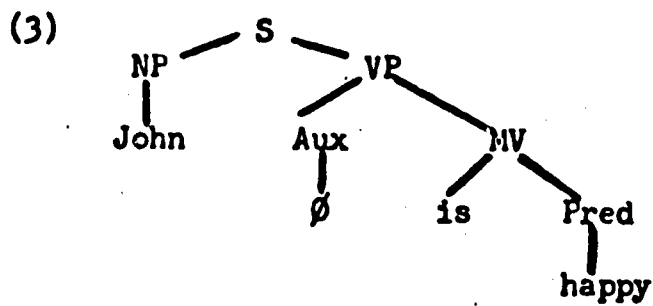
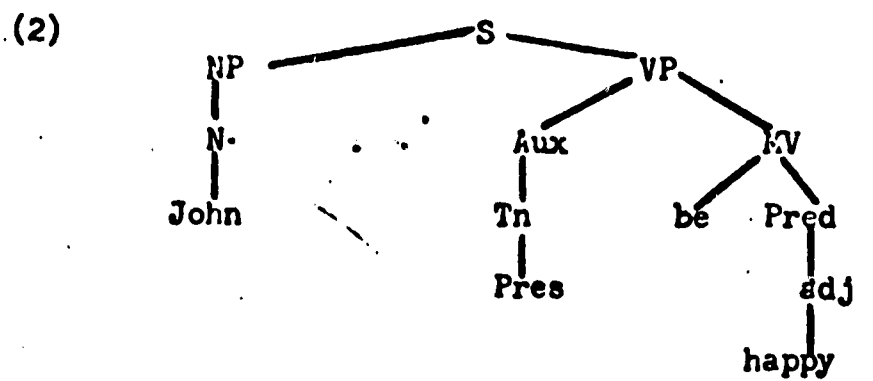
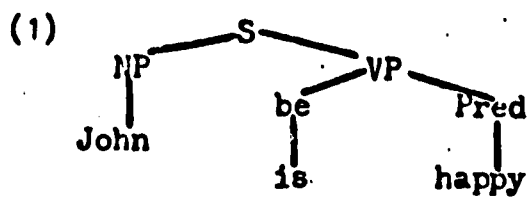
3. They have discovered the error.



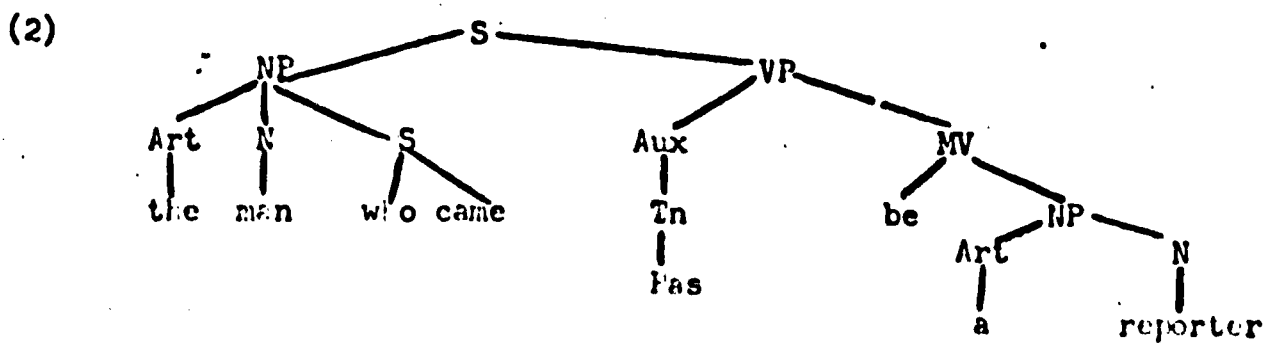
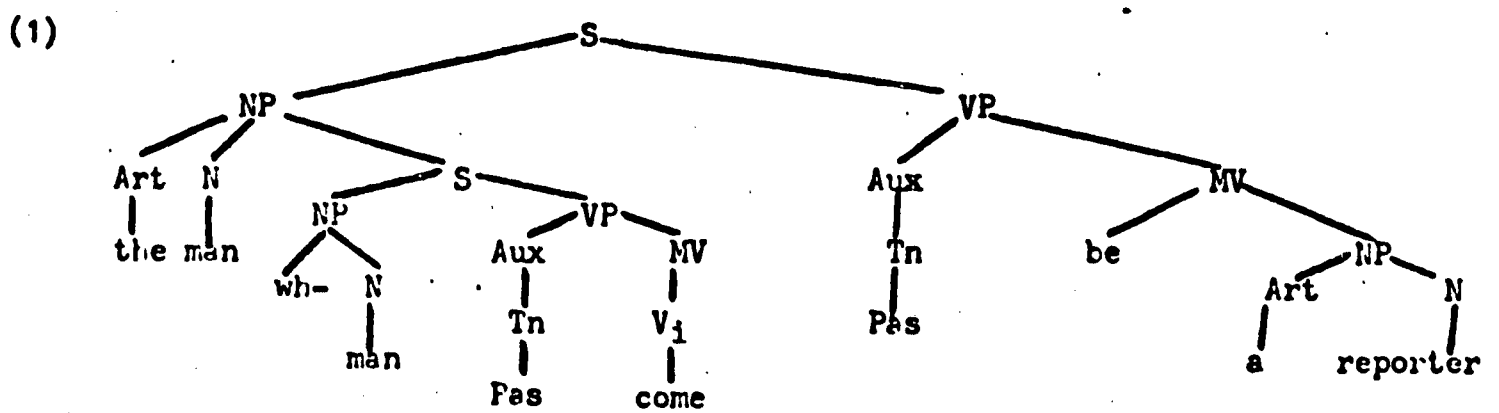
FINAL EXAMINATION LANGUAGE PATTERNS IN MOTION



4. John is happy.

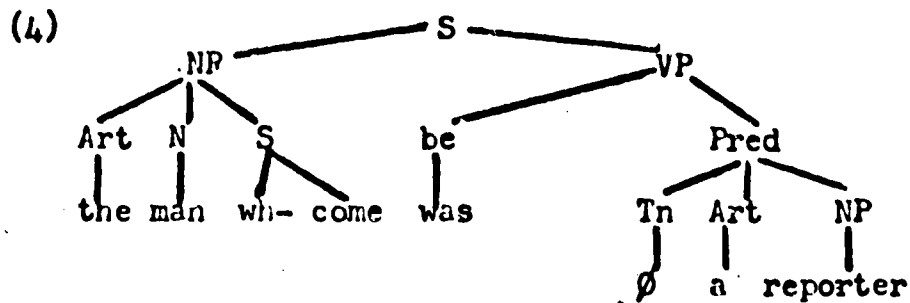
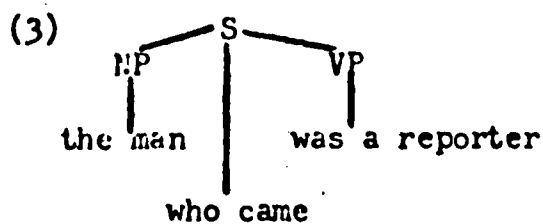


5. The man who came was a reporter.



## FINAL EXAMINATION

## LANGUAGE PATTERNS IN MOTION



**PART II - JUDGMENT (10 points)** In this part you should decide whether a statement shows the point of view of a grammar or not. If you think it does, darken the space next to number 1 on your answer sheet; if you think it does not, darken the block after number 2.

6. A grammar is a set of rules for constructing sentences.
7. An adjective is more accurately termed a form class 3 word.
8. A grammar should show how sentences come into being.
9. A grammar should break up the parts of already completed sentences.
10. Tense is always part of the auxiliary to a verb.
11. There are only two tenses in English.
12. A sentence is a group of words expressing a complete thought.
13. A sentence is extremely difficult to define.
14. Parts of speech or form classes are the most important items in a grammar.
15. The processes by which sentences are made are the most important items in a grammar.

**PART III- KERNELS (10 points)** In this part you will need to identify the four types of kernel sentences. Use the chart. If you think a sentence below is the be type, darken the block number 1; if you think it is type I, darken block number 2, etc:

be = 1  
 I = 2  
 II = 3  
 III = 4.

| Type    | Position |                |      |       |
|---------|----------|----------------|------|-------|
|         | 1        | 2              | 3    | 4     |
| (1) be  | NP       | be             | Pred | (Adv) |
| (2) I   | NP       | V <sub>i</sub> | ∅    | (Adv) |
| (3) II  | NP       | V <sub>t</sub> | NP   | (Adv) |
| (4) III | NP       | V <sub>L</sub> | Comp | (Adv) |

16. Henry passed.
17. The elephants trampled the wheat.
18. Larry is sorry now.
19. Mrs. Smith looks ill.
20. Susan works efficiently.
21. The fans yelled.
22. The trees are beautiful then.
23. The book is on the table.
24. He became lazy.
25. The students finished the test quickly.

**PART IV - TRANSFORMATIONS (10 points)** In this section you will need to identify a sentence as the result of a transformation. On your answer sheet darken the block which matches the number of the sentence you think results from the item given in (). The transformations are simplified here.

26. NP<sub>1</sub> + NP<sub>2</sub> ⇒ NP<sub>2</sub> + NP<sub>1</sub> (Professor Jones answered the question.)



## FINAL EXAMINATION LANGUAGE PATTERNS IN MOTION

- (1) Professor Jones questioned the answer.  
 (2) The answer was questioned by Professor Jones.  
 (3) The question was answered by Professor Jones.  
 (4) Professor Jones was answered by the question.
27. Af + v  $\leftrightarrow$  v + Af (John + Pas + study + today)  
 (1) John studies today.  
 (2) John studied today.  
 (3) John has studies today.  
 (4) John has studied today.
28. Adjective embedding transformation (Alice bought a dress. The dress is blue.)  
 (1) Alice bought a blue dress.  
 (2) Alice's dress is blue.  
 (3) Alice is blue about her dress.  
 (4) The blue dress is Alice's.
29. wh- adjective embedding transformation (The man was a bully. The man came to dinner.)  
 (1) The man was a bully at dinner.  
 (2) The man who came was a bully at dinner.  
 (3) The man was a bully who came to dinner.  
 (4) The man who came to dinner was a bully.
30. wh- adverbial embedding transformation (I came SOMETIME. I was ready.)  
 (1) Sometimes I am ready.  
 (2) I came when I was ready.  
 (3) I was ready and so I came.  
 (4) Ready as I was, I came.
31. Af + v  $\leftrightarrow$  v + Af (I + Pres + study + now)  
 (1) I will study now.  
 (2) I must study now.  
 (3) I study now.  
 (4) I am studying now.
32. (Q) transformation (John is there.)  
 (1) Is John there?  
 (2) There is John.  
 (3) John's there.  
 (4) Where is John?
33. (C) transformation with wh-REASON and PRO-form (You did the work.)  
 (1) Did you do the work?  
 (2) Why did you do the work?  
 (3) Who did the work?  
 (4) Where did you do the work?
34. N + Adj  $\leftrightarrow$  Adj + N (The house, dark and lonely, dominated the corner.)  
 (1) The house dominated the dark and lonely corner.  
 (2) The corner was dominated by the house, dark and lonely.  
 (3) The corner, dark and lonely, dominated the house.  
 (4) The dark and lonely house dominated the corner.
35. Embedding transformation for objective complement (We chose Jim. Jim was captain.)  
 (1) Jim, the captain, chose us.  
 (2) We chose Jim captain.  
 (3) We chose Captain Jim.  
 (4) Jim was chosen captain.

PART V - PHONOLOGY AND MORPHOLOGY (10 points) Here you will be expected to remember terms which are used in the scientific study of sound and meaning in language. On your answer sheet darken the numbered block which matches the number of the best completion of the statement.

36. A phoneme is \_\_\_\_\_.  
 (1) a unit of sound  
 (2) a family of related units of sound  
 (3) an inventory of sounds  
 (4) a unit of the alphabet
37. /daʊn ðs striɪt/ is a \_\_\_\_\_ transcription of down the street.  
 (1) shorthand  
 (2) phonological  
 (3) phonemic  
 (4) morphemic
38. The word disgracefully has \_\_\_\_\_ morphs.  
 (1) 1  
 (2) 2  
 (3) 3  
 (4) 4
39. The underlined portions of the words dogs, cats and causes are, in linguistic terms, variations or allomorphs of the English plural \_\_\_\_\_.  
 (1) form  
 (2) prefix  
 (3) morpheme  
 (4) spelling
40. \_\_\_\_\_ is the study of the sounds of the human voice which are used in language.  
 (1) phonetics  
 (2) phonemics  
 (3) phonography  
 (4) phonics
41. The words pat and tap indicate by their pronunciation differences within a family of sounds; the t's and p's in these two words are called \_\_\_\_\_ of one another.  
 (1) allomorphs  
 (2) allophones  
 (3) allophonemes  
 (4) allomorphemes
42. The verb forms saw, believed and grew have one element in common, linguistically:  
 (1) the past morpheme  
 (2) They are all regular verbs  
 (3) They are all linking verbs  
 (4) the future morph
43. [ ] and / / are symbols used in \_\_\_\_\_.  
 (1) phonology (phonetics and phonemics)  
 (2) morphology (morphs and morphemics)  
 (3) morphemics only  
 (4) phonemics only
44. {-S<sub>2</sub>} represents all the forms which make words show \_\_\_\_\_ in English.  
 (1) ownership  
 (2) plural

## FINAL EXAMINATION : LANGUAGE PATTERNS IN MOTION

- (3) tense  
(4) degree

45. \_\_\_\_\_ is a morph added to the end of a word.

- (1) An affix  
(2) A suffix  
(3) A prefix  
(4) A superfix

PART VI - SYNTAX (15 points) In this section you will need to recall terms and associations which are involved in understanding the arrangement of sentence parts in the construction of sentences. You will match items from two columns. Darken the block on your answer sheet which matches your choice from the right hand column.

- |               |                   |
|---------------|-------------------|
| 46. P-S rules | (1) recursiveness |
| 47. T-rules   | (2) kernels       |
| 48. S         | (3) anaphora      |
|               | (4) non-kernels   |

- |                                   |                           |
|-----------------------------------|---------------------------|
| 49. S $\longrightarrow$ NP + VP   | (1) *helper and verb      |
| 50. VP $\longrightarrow$ Aux + MV | (2) past and present      |
| 51. Aux $\longrightarrow$ Tn      | (3) phrase and clause     |
|                                   | (4) subject and predicate |

- |                |                       |
|----------------|-----------------------|
| 52. $\implies$ | (1) adjectival        |
| 53. $\implies$ | (2) phrase-structural |
| 54. ( )        | (3) optional          |
|                | (4) transformational  |

- |                |         |
|----------------|---------|
| 55. Det + N    | (1) Pas |
| 56. have + -en | (2) NP  |
| 57. verb + -ed | (3) VP  |
|                | (4) Aux |

- |   |                     |
|---|---------------------|
| 58. John cut <u>himself</u> .                       | (1) compounding     |
| 59. Henry <u>cleaned and polished</u><br>his shoes. | (2) complementation |
| 60. The book <u>that I wanted</u><br>was out.       | (3) anaphora        |
|   | (4) subordination   |

PART VII - DEEP AND SURFACE STRUCTURE (10) points In this part what you don't write is perhaps more important than what you do write. Your answer will be a surface structure for your reason in choosing it. Like non-kernel sentences in English, your written answers will not indicate everything you might think. Your teacher will give you the benefit of the doubt and assume that your correct answers are transformations of very, very deep structures of thought. On your answer sheet darken the number of the item which does not belong in the group. Be careful!

FINAL EXAMINATION

LANGUAGE PATTERNS IN MOTION

61. (1) surface structure  
(2) deep structure  
(3) phrase structure
62. (1) resultant sentence  
(2) kernel sentence  
(3) basic sentence
63. (1) Samuel  
(2) Noah  
(3) the Ark
64. (1) dictionary  
(2) encyclopedia  
(3) lexicon
65. (1) (You) Go to the store.  
(2) John is taller than Jim (is tall).  
(3) (Q) John is ready.
66. (1) complements  
(2) appositives  
(3) subordinates
67. (1) The girl who sings came.  
(2) John passed easily.  
(3) The book is on the table.
68. (1) find  
(2) gone  
(3) believe
69. (1) tree  
(2) branch  
(3) root
70. (1) NP  
(2) Loc  
(3) be

APPENDIX D

TABLE D-1

Structural Grammar Test Questions  
Percentage of Correct Responses and Deviation from the Mean

Mean Percentage for Scholars' Classes: 82.1

Mean Percentage for Regular Classes: 63.2

| Question | Scholars' Classes                              |                                    | Regular Classes                                |                                    |
|----------|--|------------------------------------|--|------------------------------------|
|          | <u>Percentage<br/>of Correct<br/>Responses</u> | <u>Deviation<br/>from<br/>Mean</u> | <u>Percentage<br/>of Correct<br/>Responses</u> | <u>Deviation<br/>from<br/>Mean</u> |
| 1        | 95.0   | +12.9                              | 70.8   | + 7.6                              |
| 2        | 94.0   | +11.9                              | 74.6   | +11.4                              |
| 3        | 98.6   | +16.5                              | 89.4   | +26.2                              |
| 4        | 95.8   | +13.7                              | 73.8   | +10.0                              |
| 5        | 95.8   | +13.7                              | 80.4   | +17.2                              |
| 6        | 62.3   | -19.8                              | 42.5   | -20.7                              |
| 7        | 97.4   | +15.3                              | 76.6   | +13.4                              |
| 8        | 97.6   | +15.5                              | 77.2   | +14.0                              |
| 9        | 93.2   | +11.1                              | 88.2   | +25.0                              |
| 10       | 88.2   | + 6.1                              | 73.7   | +10.5                              |
| 11       | 93.2   | +11.1                              | 63.4   | + 0.2                              |
| 12       | 88.2   | + 6.1                              | 73.6   | +10.4                              |
| 13       | 95.0   | +12.9                              | 76.8   | +13.6                              |
| 14       | 27.3   | -54.8                              | 18.4   | -44.8                              |
| 15       | 95.0   | +12.9                              | 85.9   | +22.7                              |
| 16       | 61.3   | -20.8                              | 36.2   | -27.0                              |
| 17       | 84.4   | + 2.3                              | 60.4   | - 2.8                              |
| 18       | 77.0   | - 5.1                              | 51.5   | -11.7                              |
| 19       | 67.9   | -14.2                              | 45.4   | -17.8                              |
| 20       | 78.4   | - 3.7                              | 50.7   | -12.5                              |
| 21       | 77.0   | - 5.1                              | 58.1   | - 5.1                              |
| 22       | 79.4   | - 2.7                              | 58.7   | - 4.5                              |
| 23       | 86.2   | + 4.1                              | 58.8   | - 4.4                              |
| 24       | 73.1   | - 9.0                              | 44.1   | -19.1                              |
| 25       | 73.5   | - 8.6                              | 50.0   | -13.2                              |
| 26       | 73.7   | - 8.4                              | 41.6   | -21.6                              |
| 27       | 90.6   | + 8.5                              | 72.2   | + 9.0                              |
| 28       | 95.0   | +12.9                              | 75.1   | +11.9                              |
| 29       | 89.0   | + 6.9                              | 63.5   | + 0.3                              |
| 30       | 80.6   | - 1.5                              | 61.4   | - 1.8                              |
| 31       | 94.0   | +11.9                              | 72.9   | + 9.7                              |
| 32       | 79.6   | - 2.5                              | 59.6   | - 3.6                              |
| 33       | 86.0   | + 3.9                              | 61.2   | - 2.0                              |
| 34       | 93.0   | +10.9                              | 72.8   | + 9.6                              |
| 35       | 69.3   | -12.8                              | 43.8   | -19.4                              |
| 36       | 91.8   | + 9.7                              | 65.1   | + 1.9                              |
| 37       | 91.8   | + 9.7                              | 81.6   | +18.4                              |
| 38       | 97.2   | +15.1                              | 86.9   | +23.7                              |
| 39       | 97.8   | +15.7                              | 89.4   | +26.2                              |
| 40       | 94.6   | +12.5                              | 83.4   | +20.2                              |

TABLE D-1 (contd.)

Structural Grammar Test Questions  
Percentage of Correct Responses and Deviation from the Mean

Mean Percentage for Scholars' Classes: 82.1

Mean Percentage for Regular Classes: 63.2

| Question | Scholars' Classes               |                     | Regular Classes                 |                     |
|----------|---------------------------------|---------------------|---------------------------------|---------------------|
|          | Percentage of Correct Responses | Deviation from Mean | Percentage of Correct Responses | Deviation from Mean |
| 41       | 70.9                            | -11.2               | 44.5                            | -18.7               |
| 42       | 98.4                            | +16.3               | 89.5                            | +26.3               |
| 43       | 94.6                            | +12.5               | 84.5                            | +21.3               |
| 44       | 97.6                            | +15.5               | 90.8                            | +27.6               |
| 45       | 91.4                            | + 9.3               | 74.8                            | +11.6               |
| 46       | 96.4                            | +14.3               | 84.5                            | +21.3               |
| 47       | 54.5                            | -27.6               | 48.0                            | -15.2               |
| 48       | 72.9                            | - 9.2               | 34.6                            | -28.6               |
| 49       | 84.4                            | + 2.3               | 69.5                            | + 6.3               |
| 50       | 93.4                            | +11.3               | 67.6                            | + 4.4               |
| 51       | 86.4                            | + 4.3               | 72.1                            | + 8.9               |
| 52       | 91.2                            | + 9.1               | 78.8                            | +15.6               |
| 53       | 39.3                            | -42.8               | 37.8                            | -25.4               |
| 54       | 76.2                            | - 5.9               | 49.4                            | -13.8               |
| 55       | 84.0                            | + 1.9               | 59.6                            | - 3.6               |
| 56       | 68.1                            | -14.0               | 37.9                            | -25.3               |
| 57       | 68.7                            | -13.4               | 49.1                            | -14.1               |
| 58       | 60.3                            | -21.8               | 48.3                            | -14.9               |
| 59       | 80.0                            | - 2.1               | 56.7                            | - 6.5               |
| 60       | 79.6                            | - 2.5               | 64.1                            | + 0.9               |
| 61       | 92.2                            | +10.1               | 64.2                            | + 1.0               |
| 62       | 74.5                            | - 7.6               | 62.0                            | - 1.2               |
| 63       | 89.2                            | + 7.1               | 64.3                            | + 1.1               |
| 64       | 78.6                            | - 3.5               | 46.9                            | -16.3               |
| 65       | 92.2                            | +10.1               | 76.0                            | +12.8               |
| 66       | 84.8                            | + 2.7               | 61.5                            | - 1.7               |
| 67       | 79.0                            | - 3.1               | 57.6                            | - 5.6               |
| 68       | 73.5                            | - 8.6               | 54.9                            | - 8.3               |
| 69       | 74.3                            | - 7.8               | 67.7                            | + 4.5               |
| 70       | 64.7                            | -17.4               | 43.3                            | -19.9               |
| 71       | 80.2                            | - 1.9               | 48.5                            | -14.7               |
| 72       | 64.1                            | -18.0               | 48.9                            | -14.3               |
| 73       | 87.6                            | + 5.5               | 63.7                            | + 0.5               |
| 74       | 77.6                            | - 4.5               | 49.5                            | -13.7               |
| 75       | 83.4                            | + 1.3               | 55.5                            | - 7.7               |
| 76       | 64.5                            | -17.6               | 51.7                            | -11.5               |
| 77       | 65.7                            | -16.4               | 63.5                            | + 0.3               |
| 78       | 78.0                            | - 4.1               | 70.7                            | + 7.5               |
| 79       | 95.6                            | +13.5               | 89.9                            | +26.7               |
| 80       | 84.6                            | + 2.5               | 64.3                            | + 1.1               |

TABLE D-2

Transformational Grammar Test Questions  
 Percentage of Correct Responses and Deviation from the Mean

Mean Percentage for Scholars' Classes: 73.8

Mean Percentage for Regular Classes: 52.7

| Question | Scholars' Classes                      |                            | Regular Classes                        |                            |
|----------|--|----------------------------|--|----------------------------|
|          | <u>Percentage of Correct Responses</u> | <u>Deviation from Mean</u> | <u>Percentage of Correct Responses</u> | <u>Deviation from Mean</u> |
| 1        | 72.1                                   | - 1.7                      | 43.0                                   | - 9.7                      |
| 2        | 81.9                                   | + 8.1                      | 57.0                                   | - 1.7                      |
| 3        | 55.7                                   | -18.1                      | 37.6                                   | -15.1                      |
| 4        | 58.1                                   | -15.7                      | 34.7                                   | -18.0                      |
| 5        | 64.0                                   | - 9.8                      | 37.1                                   | -15.6                      |
| 6        | 84.4                                   | +10.6                      | 75.2                                   | +22.5                      |
| 7        | 61.6                                   | -12.2                      | 42.5                                   | -10.2                      |
| 8        | 82.5                                   | + 8.7                      | 57.3                                   | + 4.6                      |
| 9        | 61.8                                   | -12.0                      | 49.6                                   | - 3.1                      |
| 10       | 80.1                                   | + 6.3                      | 67.5                                   | +14.8                      |
| 11       | 76.1                                   | + 2.3                      | 51.6                                   | - 1.1                      |
| 12       | 69.4                                   | - 4.4                      | 44.1                                   | - 8.6                      |
| 13       | 67.5                                   | - 6.3                      | 44.8                                   | - 7.9                      |
| 14       | 84.2                                   | +10.4                      | 46.4                                   | - 6.3                      |
| 15       | 89.9                                   | +16.1                      | 68.5                                   | +15.8                      |
| 16       | 91.6                                   | +17.8                      | 69.9                                   | +17.2                      |
| 17       | 93.6                                   | +19.8                      | 74.4                                   | +21.7                      |
| 18       | 84.5                                   | +10.7                      | 66.0                                   | +13.3                      |
| 19       | 73.8                                   | 0                          | 49.1                                   | - 3.6                      |
| 20       | 75.4                                   | + 1.6                      | 49.1                                   | - 3.6                      |
| 21       | 87.8                                   | +14.0                      | 66.1                                   | +13.4                      |
| 22       | 72.4                                   | - 1.4                      | 52.7                                   | 0                          |
| 23       | 80.3                                   | + 6.5                      | 60.9                                   | + 8.2                      |
| 24       | 64.7                                   | - 9.1                      | 36.7                                   | -16.0                      |
| 25       | 88.6                                   | +14.8                      | 63.1                                   | +10.4                      |
| 26       | 93.9                                   | +20.1                      | 74.4                                   | +21.7                      |
| 27       | 66.3                                   | - 7.5                      | 44.7                                   | - 8.0                      |
| 28       | 99.0                                   | +25.2                      | 87.1                                   | +34.4                      |
| 29       | 93.9                                   | +20.1                      | 78.3                                   | +25.6                      |
| 30       | 94.6                                   | +20.8                      | 76.1                                   | +23.4                      |
| 31       | 48.8                                   | -25.0                      | 20.1                                   | -32.6                      |
| 32       | 69.0                                   | - 4.8                      | 41.6                                   | -11.1                      |
| 33       | 66.4                                   | - 7.4                      | 42.2                                   | -10.5                      |
| 34       | 89.5                                   | +15.7                      | 63.7                                   | +11.0                      |
| 35       | 74.7                                   | + 0.9                      | 56.7                                   | + 4.0                      |



TABLE D-2 (contd.)

Transformational Grammar Test Questions  
Percentage of Correct Responses and Deviation from the Mean

Mean Percentage for Scholars' Classes: 73.8

Mean Percentage for Regular Classes: 52.7

| <u>Question</u> | <u>Scholars' Classes</u>               |                            | <u>Regular Classes</u>                 |                            |
|-----------------|--|----------------------------|--|----------------------------|
|                 | <u>Percentage of Correct Responses</u> | <u>Deviation from Mean</u> | <u>Percentage of Correct Responses</u> | <u>Deviation from Mean</u> |
| 36              | 57.0                                   | -16.8                      | 37.4                                   | -15.3                      |
| 37              | 66.3                                   | - 7.5                      | 51.6                                   | - 1.1                      |
| 38              | 76.5                                   | + 2.7                      | 65.5                                   | +12.8                      |
| 39              | 73.7                                   | - 0.1                      | 43.5                                   | - 9.2                      |
| 40              | 61.3                                   | -12.5                      | 44.5                                   | - 8.2                      |
| 41              | 75.2                                   | + 1.4                      | 35.9                                   | -16.8                      |
| 42              | 93.9                                   | +20.1                      | 70.6                                   | +17.9                      |
| 43              | 72.6                                   | - 1.2                      | 48.6                                   | - 4.1                      |
| 44              | 75.4                                   | + 1.6                      | 60.6                                   | + 7.9                      |
| 45              | 84.1                                   | +10.3                      | 68.1                                   | +15.4                      |
| 46              | 76.4                                   | + 2.6                      | 53.3                                   | + 0.6                      |
| 47              | 75.6                                   | + 1.8                      | 49.4                                   | - 3.3                      |
| 48              | 38.6                                   | -35.2                      | 21.0                                   | -31.7                      |
| 49              | 97.3                                   | +23.5                      | 80.3                                   | +27.6                      |
| 50              | 91.2                                   | +17.4                      | 69.6                                   | +16.9                      |
| 51              | 89.2                                   | +15.4                      | 71.3                                   | +18.6                      |
| 52              | 78.2                                   | + 4.4                      | 54.8                                   | + 2.1                      |
| 53              | 79.4                                   | + 5.6                      | 57.6                                   | + 4.9                      |
| 54              | 93.2                                   | +19.4                      | 66.9                                   | +14.2                      |
| 55              | 93.8                                   | +20.0                      | 73.5                                   | +20.8                      |
| 56              | 69.8                                   | - 4.0                      | 42.1                                   | -10.6                      |
| 57              | 79.7                                   | + 5.9                      | 51.4                                   | - 1.3                      |
| 58              | 69.6                                   | - 4.2                      | 40.0                                   | -12.7                      |
| 59              | 84.6                                   | +10.8                      | 66.4                                   | +13.7                      |
| 60              | 70.2                                   | - 3.6                      | 54.3                                   | + 1.6                      |
| 61              | 70.4                                   | - 3.4                      | 68.3                                   | +15.6                      |
| 62              | 63.2                                   | -10.6                      | 46.1                                   | - 6.6                      |
| 63              | 27.9                                   | -45.9                      | 25.4                                   | -27.3                      |
| 64              | 71.5                                   | - 2.3                      | 47.2                                   | - 5.5                      |
| 65              | 75.9                                   | + 2.1                      | 45.6                                   | - 7.1                      |
| 66              | 40.5                                   | -33.3                      | 22.2                                   | -30.5                      |
| 67              | 47.6                                   | -26.2                      | 26.8                                   | -25.9                      |
| 68              | 79.9                                   | + 6.1                      | 46.2                                   | - 6.5                      |
| 69              | 32.4                                   | -41.4                      | 38.0                                   | -14.7                      |
| 70              | 38.5                                   | -35.3                      | 31.6                                   | -21.1                      |

The Board of Public Education  
Pittsburgh, Pa. 15213

Administration Building  
Ritzheld and Fisher Avenue.

Dr. Malcolm W. Praves,  
Director of Research

Pittsburgh Board of Public Education  
Office of Research

249 North Craig Street  
Pittsburgh, Penna. 15213