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ORAL-AURAL-VISUAL STIMULI APPROACH TO TEACHING WRITTEN
COMPOSITION TO 9TH GRADE STUDENTS. FINAL REPORT.

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RECORDERS, BURRIS LABORATORY SCHOOL, BALL STATE UNIVERSITY,

THIS STUDY INVESTIGATED THE EFFECT OF CERTAIN
ORAL-AURAL-VISUAL (OAV) STIMULI PROCEDURES ON DEVELOPMENT OF
ACHIEVEMENT IN WRITTEN COMPOSITION (AND OTHER ENGLISH SKILLS)
OF NINTH-GRADE STUDENTS IN BURRIS LABORATORY SCHOOL, BALL
STATE UNIVERSITY. THE STUDY WAS BASED ON THE ASSUMPTION THAT
THE PROFICIENT WRITER SAYS AND HEARS AT A SUB-VOCAL LEVEL
WHAT HE IS WRITING, AND IN THE PROCESS OF PRODUCING
ACCEPTABLE WRITING HE TESTS WHAT HE WRITES AGAINST HIS
INGRAINED VERBAL PATTERNS. THE OAV PROCEDURES, DEVISED TO
PERMIT THE STUDENT TO REINFORCE THE PROCESS OF WRITING WITH
HIS EAR, DEPEND ON USE OF TAPE RECORDERS AND OVERHEAD
PROJECTORS. A YEAR'S STUDY USING A PRETEST-POSTTEST CONTROL
GROUP EXPERIMENTAL GROUP DESIGN, RESULTED IN SIGNIFICANT MEAN
GAINS IN WRITING, READING, LISTENING, AND ENGLISH USAGE. A
SECOND YEAR'S STUDY, WITH STUDENTS STRATIFIED BY UPPER,
MIDDLE, AND LOWER ABILITY LEVELS, REVEALED THAT OAV-TAUGHT
STUDENTS HAD CONSIDERABLY HIGHER MEAN ACHIEVEMENT SCORES THAN
COMPARABLE MEAN SCORES GIVEN IN NORM DATA FOR THE TESTS USED.
THE OAV APPROACH SEEMED TO BE EQUALLY EFFECTIVE AT ALL
ABILITY LEVELS. RATING OF SAMPLE COMPOSITIONS WITH AN
EXPERIMENTAL EDUCATIONAL TESTING SERVICE RATING FORM PROVED
INCONCLUSIVE FOR BOTH STUDY YEARS. EVIDENCE GATHERED DOES NOT
SUGGEST THE OAV PROCEDURES HAVE SIGNIFICANT DIFFERENTIAL
ATTITUDINAL EFFECT. THE GENERALLY POSITIVE RESULTS OF THIS
STUDY INDICATE OAV PROCEDURES ARE A PROMISING TEACHING
APPROACH. (AUTHOR)

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HEALTH, EDUCATION, AND WELFARE

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Project No. 5-03892-12-1
Contract No. OE-3-10-120

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January 1967

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Ball State University
Muncie, Indiana

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I. INTRODUCTION

A. Statement of the Problem

The state of the teaching of written composition in our schools and colleges has come to be regarded by many as a "national problem." In fact, criticism of all English instruction is commonplace. Journalists, businessmen, parents, and teachers complain that students who spend more time in the study of English than in any other subject in the school curriculum cannot write effectively. The common cry is to demand more and more writing of students. Hook (14), however, advises that students do not automatically achieve excellence in written composition simply through doing a large amount of writing; rather, to be effective, all student writing must follow a carefully planned sequence, with adaptations for varying levels of ability. Recent research tends to substantiate this view. McColly and Remstad (19), testing the hypothesis that simply an increase in the amount and frequency of writing by junior and senior high school students will alone result in better writing, concluded after a year's controlled study that "the activity of writing in and of itself is fruitless . . . teachers should not assign writing for the purpose of developing composition ability unless the writing becomes the vehicle for functional instruction." Arnold (1), on the basis of a year's similar study with eight classes of tenth grade students, concluded that frequent writing practice does not in itself improve writing.

Perhaps the most clear-cut and forthright statement of the whole problem has come from English teachers themselves in the widely discussed report, The National Interest and the Teaching of English (29). The authors of that report recognize that teaching students "to put words onto paper in such a way that they express ideas well and thus communicate these ideas to others" is the English teacher's special task. As one means of improving instruction in writing, the authors of that study recommend that through better and more basic research English teachers be given answers to such crucial problems as the following:

1. the processes in development of language abilities in young people,
2. the effect of the study of the communication process on the improvement of pupils' oral and written expression, and
3. the effectiveness of new methods of teaching composition.

Although a distinct body of research on teaching English does exist, much of it is not directly related to the writing

process beyond teaching certain language concepts as these relate to structuring sentences. The possibility for doing extensive basic research in modern language learning and composition has been greatly increased with recent developments in electronic and audio-visual devices. Carlsen (2) has noted that in the fields of linguistics and psychology the recent and rapid accumulation of theories and findings about the nature of language and the processes of communication has made the present period one in which teachers of composition are "teaching on the edge of discovery." Although some instructors reject research in teaching writing as only a delusion because answers to certain pressing problems are so unsatisfactory, Russell (26) contends that acceptance of some answers may be a necessary act of faith, but that the processes and solutions of research can be a dynamic influence on the present and future teaching of composition.

The present research study investigated the effect of oral-aural-visual stimuli in the development of communication skills and the methods by which English teachers can take into account the use of such stimuli in teaching these skills to students at varying levels of linguistic competency. More specifically, the six basic and reciprocal problems to be studied, and variously suggested by Walcott (33), Furness (10), Carlsen (2), Mowrer (22) and others, are as follows:

1. The ability of the student to improve his writing through increased practice in the control of oral forms of language;
2. The ability of the student to recognize the basic sound system of the language which gives meaning to oral discourse, that is, intonation patterns (pitch, stress, juncture), and to apply this knowledge in setting off sentence units or in punctuating units of meaning in written language;
3. The ability of students to engage in systematic oral discussion of what they are going to put down in writing, before they attempt to write;
4. The ability of the student to test the patterns he writes against his ingrained oral patterns;
5. The ability of the student to give and to accept constructive criticism of his oral and written composition; and
6. The impact of the oral-aural-visual stimuli approach on student attitudes toward written composition.

B. Significance of the Proposed Study

Traditionally the teaching of written composition has been concerned in varying degrees with rhetorical principles and doctrines reaching back at least to the Golden Age of Greece, but, as Mersand (21) and Parker (23) have pointed out, until the past half century none of this traditional theory has been tested by systematic experimentation. As part of an extensive study of instructional practices of teachers in 179 junior and senior high schools in Colorado, Tovatt (31) found that the greater number of the teachers in the study used classroom procedures in teaching language and composition the demonstrated values of which have been made seriously questionable by research. Certainly in an age in which more precise means through research are available for testing hypotheses about practices, the extension of methods of science to the study of composition problems is appropriate.

Until James F. Hosis and his colleagues (15) called for a thorough-going reorganization of the teaching of English, instruction in writing was concerned almost exclusively with written, or literary, language, and ignored the relationship between the spoken language and the written form. This pioneer group asked that the intimate relationship between the expressional skills of speech in everyday use should be acknowledged by giving more time to the development of practical skills in oral expression and their subsequent application to written expression.

Linguists (12) have repeatedly pointed out that speech is the foundation for writing, that speech determines the major structures, and that a sound study of a language begins with its spoken forms. It is important, therefore, that students become thoroughly familiar with the nature of the relationships existing between the spoken and written forms and that pupils make application of this knowledge in both their speech and their writing. Especially significant to the ways of teaching written composition are studies such as the present one that aim at determining for what type pupils the techniques to be employed are particularly helpful in improvement of communication skills.

Significant to this study also was the attempt to determine students' attitudes generally toward the subject area of English, an area in which little or no research has been done. The relationships found here between attitudes and communication abilities should provide teachers with some insights and suggest some ways of working with students varying widely in language competencies.

Eash (8) concluded that evidence of the effectiveness of ability grouping within the present school structure is limited, that such grouping may actually be detrimental, and that many issues about grouping are unresolved. The findings in that phase of the present study using oral-aural-visual procedures with students of varying abilities in the same class should add to the fund of knowledge about achievement gains of students of high, middle, and low ability in English, and thus has implications for grouping in ninth grade English.

C. Psychological, Linguistic, and Research Foundations

Basic to this study are modern theories of learning and research in psychology related to transfer, motivation, the self-concept, and language development as outlined by Shaffer and Shoben (28), Piaget (24), and Vygotsky (32). In McConnell's (20) synthesis of attributes common to all major schools of thought about learning, the following specific principles are particularly applicable as guides for the activities proposed in this study:

1. That the behavioral environment is structured and that the individual's responses are characteristically complex and patterned;
2. That if what an individual does is to be described adequately, it must be done with respect to what he is in relation to the concrete situation in which he acts, i.e., an individual does not learn only the particular thing he is studying at a particular time and teachers must constantly consider the influence of one kind of experience upon other phases of development;
3. That the individual must be motivated to learn; this gives direction and regulates behavior toward achievement, i.e., the individual learns those responses which are relevant to his goals and purposes and which he perceives to be means to desired ends;
4. That what is learned is meaningful to the individual when it is learned to bring about consequences, i.e., the crux of the learning process is recognition of the appropriateness or inappropriateness of any of his acts after they occur;
5. That so-called trial-and-error behavior is never completely random but that motivating conditions within the individual and his perception of the situation combine to direct and limit his range of responses;
6. That transfer of learning from one situation to another is roughly proportional to the degree to which the situ-

ations are similar in structure, meaning, and to the degree that the individual perceives appropriateness of past learning to a new situation;

7. That in order to develop new meanings, or to integrate appropriate phases of previous experience into new and useful patterns, it is necessary to take many things out of their original contexts and to organize them in new relationships.

As Roberts (25) and Carroll (3) have variously reported, the linguistic scientist in the years since World War II has probably made the most important impingement on the teaching of English. The linguist is steadily finding out more about language, as exemplified by Chomsky's (4) recent studies in transformation. These findings in linguistic science are immediately important to the English teacher.

One of the basic tenets of linguistics is that although written communication must be distinguished from the spoken, the relationship between the two is close and intimate. Another basic contention of the contemporary linguist is that language is understood through its structural clues and patterns rather than through the meaning units of Latinized English grammar. Therefore it seems to follow that at any stage of a student's language development, learning to control the structural patterns of language is more important to speaking and to writing than learning the vocabulary of the language itself.

In support of this thesis Walcott (33) suggests that intuitively one learns to "write by ear," and advises that the student proceed as follows: As the student writes his thoughts, he is to listen in his mind to his own voice sounding the syllables. When he achieves smooth and melodious speech, he also achieves good writing. The chief task of proofreading his paper is to read his own sentences over and over to see that they form the right tune, and to see that every letter, every word is in its place, bearing faithfully its own portion of the melodic pattern. Practice in this is the essential method of learning to write. Furness (10) suggests essentially the same approach.

Early researches into the problem of motivating students to employ acceptable oral usage led Greene (13), who reviewed these early studies, to conclude that investigators generally agree that the evidence indicates that language skills in both speaking and writing arise through the proper exercise of desired "habits." Formulation of these habits is aided if the student is provided opportunity to make acceptable responses to a variety of language

situations, oral and written, under pleasantly motivated conditions. The caution is added that too much emphasis on the awareness of "error" may make the individual over-sensitive to the point of becoming self-conscious or stilted in his use of language. This is in substantial agreement with modern conceptions of the learning processes outlined above.

Cutright (6), in an effort to test the effectiveness of six approaches in securing acceptable usage, found the most effective language activity to be choice of two forms followed by oral repetition of the correct form. The value of oral response is reiterated in the Symonds (30) study.

The primary implication in these studies is that if teachers are to improve both oral and written usage through use of choice of construction exercises, they must provide adequate opportunities for oral response. The results of the Crawford and Royer study (5) further substantiate this contention.

Investigations of a variety of means of teaching sentence structure lend support to the premise that the student reinforces his written composition through vocalizing it or vocalizing about it. Frogner (9) used two methods with students in improving sentence structure. Equated on the basis of ability, age, sex, and other characteristics, the groups differed in the approach used by the teachers. The students in the one group were taught by a "thought approach," that is, they sought effective oral and written expression of ideas with no reference to grammar whatsoever. The students in the second group were taught by a "grammar-supplemented-by-thought approach," that is, they emphasized a grammatical understanding of the sentence to arrive at a clear expression of ideas.

The investigator explains the difference in methods as follows: If a student in the "thought" class were confronted with the following common type of awkward sentence: "The students made the money during the music festival that was used to buy instruments for the band," he would point out, orally or in writing, his thinking about the sentence thus: "The writer here means to say that the money not the music festival, was used to buy instruments for the band, therefore the sentence needs rewording for more exact statement." A pupil using the grammar method would point out that failure to express the thought accurately resulted from improper position of the adjective clause in relation to the noun which it logically modifies.

Pupils in the grammar classes definitely learned more grammar than those in the thought group, but the thought method brought about superior results in sentence structure as measured by general tests covering the work of the semester. Significantly in grades nine and eleven the thought method was definitely superior for all students with intelligence quotients below 105. Too, the thought approach required only eighty per cent of the time required in the grammar method. Salisbury (27) and Kraus (16) report comparable results in later studies.

More recently an investigation of similar nature, but more comprehensive and involving more emphasis on oral fluency, is reported by Weinfeld (34). During a ten-week period some 800 boys and girls in grades nine through eleven were grouped for instruction by two methods. The first method attempted to enhance verbal fluency and stressed some writing every day in addition to oral and written exercises to stimulate flow of words and ideas, in-class correction of papers, and cooperative rewriting of selected student papers. Emphasis by the teacher was placed on the student's saying what is meant in his composition. The second method for the control classes was based on traditional training in grammatical principles, rules, usage, and sentence structure.

Tests revealed that the experimental methods enhanced three abilities: theme writing, flow of words, and fluency of appropriate expression. Groups receiving conventional instruction in writing also showed improvements, but in different abilities: the flow of ideas and understanding of relationships between words. No significant difference in reasoning ability was found between the groups.

The basic premise upon which the present study rests is that a person "writes with his ear, hears what he is writing." This concept has been long espoused by professional writers. It has been applied by many teachers of composition who instruct their students having trouble in getting something down on paper simply to "write down what you have just told me that you want to say."

Alexander Pope, eighteenth-century writer and critic, attested to this phenomenon of the sound of writing in his Essay on Criticism, Part II:

True ease in writing comes from art,
not chance,
As those move easiest who have learned
to dance.

'Tis not enough no harshness gives
offense--
The sound must seem an echo to the
sense.

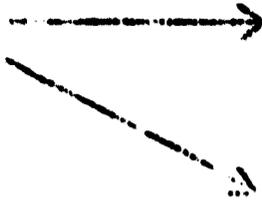
John Macy (18), twentieth-century editor, writer, and critic, propounds this thesis more directly as follows: ". . . every writer thinks of his work in print, the true writer both of verse and of prose writes with his ear, hears what he is saying." Recently Stanley Kunitz (17), Pulitzer Prize Poet in 1959, has averred: "I write my poems by speaking them--they are meant to be heard . . ." In a slightly different context, Professor

Walker Gibson (11) has stated ". . . the writer's task is to so surround his words with other words on the page that his reader may infer the quality of the desired speaking voice."

In accepting the premise that one writes with his ear, that there is a sound to writing, the investigators carried this concept a step further and assumed that if a person does indeed write with his ear, then each individual, within the bounds of his perceiving and being, continually acquires certain ingrained patterns of utterance which he reproduces in his speech, and other patterns that he reproduces in his writing and that the individual is constantly acquiring new patterns and modifying old ones in each instance. As a means of bringing the individual student to an awareness of the adequacies or inadequacies of these ingrained patterns and at the same time helping him to use these existing patterns as models for testing his writing, the investigators theorized that this process of contrasting, comparing, and modifying, through the use of magnetic tape recorders equipped with audio-active earphones, would lead the student eventually to "hear himself" when he wrote.

The rationale for having the student hear himself distinctly through the use of audio-active earphones is that the writer not only hears his voice as others hear him, but also that the reinforcement of hearing himself clearly leads to a greater objectivity in his eradicating (or editing) of speech faults transmuted to writing and, at the same time, allows him to hear what he wants to say and to test those utterances against his ingrained, and continually modified, language patterns. This oral, aural, and visual procedure might be visualized schematically as follows:

**Expression
of
Ideas**



tape recording of self---listen to self recording, play-back, and compare---rewrite and compare (self)

express to group (oral as well as projected written work)---listen (self and others)---rewrite and compare (constructive peer evaluation)

These procedures, utilizing the individual's endowments of oral control and his aural and visual perceptions, form the bases for this study.

Traditionally, a student's ability to communicate has been assessed largely by standardized tests that attempt to measure discrete mechanical facets of English ability. Further, it has been assumed that these facets viewed in toto reflect the individual's ability to communicate. There is, however, a serious question that the sum of these mechanical facets provide an accurate picture of an individual's ability to write, for writing is apparently an extremely complex cognitive process, one that develops slowly and at different rates for individuals.

It was the intent of this study to investigate both the mechanical facets of writing and writing as a molar phenomenon.

D. Objectives

Two major hypotheses underlie the study.

The first major hypothesis involves a comparison between the oral-aural-visual stimuli approach and the conventional classroom approach to teaching composition. The general hypothesis to be tested in this comparison is that students taught by oral-aural-visual procedures will achieve greater competencies in oral and written expression than students taught by conventional classroom procedures.

The second major hypothesis involves a comparison of student achievement gain in writing (pretest-posttest) when all are taught by oral-aural-visual procedures. The hypothesis to be tested is that students of different ability levels taught in the same class will make equal achievement gains with the oral-aural-visual stimuli approach.

II. METHOD

This investigation, covering the period June 1, 1963 - January 31, 1967, was conducted in four phases as follows: A. Planning Phase (June, 1963 - August, 1964); B. First Experimental Phase (September, 1964 - August, 1965); C. Second Experimental Phase (September, 1965 - June, 1966); and D. Teaching Materials Writing Project and Reporting Phase (June, 1966 - January, 1967).

A. Planning Phase (June, 1963 - August, 1964)

Activities in this period included the following:

1. Readying Physical Facilities

Classroom 227, Communication Laboratory 227A, and Office and Storage Room 225 in the Burriss School were identified and modified to serve the purposes of this study. Modifications included the following: a) addition of accoustical ceiling tile in Rooms 227A and 225, b) addition of electrical outlets in Rooms 227A and 225, c) lowering of ceiling and addition of 20-inch mobile fan, d) repainting of walls in Rooms 227A and 225.

2. Acquisition of Equipment

The Director of the Ball State University Office of Research, the principal investigator, the research associate, and the doctoral fellow for this study traveled to the following places in Indiana to determine the most suitable audio and visual equipment for this particular study: Earlham College, Richmond; Adjutant General School, Fort Benjamin Harrison, Indianapolis; Thermo-Fax Sales Inc., Indianapolis; Sarkes Tarzian Inc., Bloomington; Thompson Ramo Woolridge, Inc., Michigan City.

The following laboratory equipment was eventually acquired: 18 Uher Universal "S" Tape Recorders, 18 DuKane combination headphone-boom microphone sets, 18 sets of Peabody Seating Co. table and chair, 1 Model 76 Thermofax Dry Photocopier, and 2 Model 66 Thermofax Overhead Projectors, 18 sets of divider panels used to convert tables into writing carrels (constructed by the University Physical Plant).

A closed circuit television system was considered and rejected for the following reasons: a) It was beyond the project budget; b) It was not economically feasible for duplication in the majority of Indiana public schools.

3. Orienting Teachers, Preparing Materials, and Planning Procedures

On the basis of the early pilot work (Appendix A-1), the teachers of the respective experimental and control sections were oriented to the rationale for the study, and, working cooperatively with the project staff (Appendix A-6), they planned and prepared the outlines for the units of instruction that were developed and refined in later pilot work with ninth grade English classes in the Burris School during the eight-week summer term in 1963, and the academic year of 1963-1964. The teacher of the experimental classes (chosen by lot to teach all the experimental sections in both phases of the study) taught these pilot classes.

Student comments, tapes students used in recording-writing sessions, samples of student writings, and teacher assessment of the techniques used were evaluated. These were used, not only in revision of unit materials, but also in preparation of student instructional guide materials, for example, the Writing Lab Sheet No. 1 that identified the sequence of OAV procedures that the student initially followed (Appendix B-1).

Although the unit outlines in composition and literature used in the study were prepared and refined by the teachers and the project staff, the units in language used in the study had been developed and refined cooperatively by Mrs. Helen Sargent of the Burris English staff and by the director of this study over a period of years before the Program for English research was initiated (Appendix E-35).

Basic textbooks chosen and used in all experimental and control sections for the period of study were as follows:

Language: Paul Roberts, English Sentences, New York: Harcourt, Brace and World, Inc., 1962, 294 pp. (used in conjunction with the units in transformational grammar mentioned above).

Literature: E.W. Nieman and George E. Salt, Pleasure in Literature, New York: Harcourt, Brace, 1949, 654 pp. Robert C. Pooley, et al, Good Times Through Literature, New York: Scott, Foresman and Co., 1951, 516 pp. Herbert Potell, et al, Adventures for Today, New York: Harcourt, Brace, 1955, 623 pp. Harold H. Wagenheim, et al, Read Up On Life, New York: Henry Holt and Co., 1952, 507 pp.

Other Books: Included in the list of other books (hard cover and paperbound editions) used by the experimental and con-

control classes were the following: Harry Brown, A Walk in the Sun; Pearl Buck, The Good Earth; Howard Fast, April Morning; Paul Gallico, Snow Goose; Howard Pyle, Men of Iron; Marjorie Rawlings, The Yearling; E.M. Remarque, All Quiet on the Western Front; Conrad Richter, The Light in the Forest; John Steinbeck, The Pearl; R. L. Stevenson, Kidnapped; Jesse Stuart, Jesse Stuart Reader.

For the First Experimental Phase it was determined that the experimental class and the control class were to use the same text materials; were to meet at the same hour of the day; were to spend the same amount of time in writing activities (this time variable to be controlled as nearly as possible through the use of classroom log sheets); were to base their writing largely on literary selections, personal experiences, and the mass media; and, in addition to preparing the more formal classroom writings (essays, poems, stories, and plays) the students in both experimental and control classes were to write in a journal. The principal difference in instructional procedure was that while students in the control class were to be taught through the use of conventional classroom procedures, those in the experimental class were to be instructed through the use of the oral-aural-visual procedures developed for the study.

In planning for the Second Experimental Phase, the staff agreed that the three experimental sections were to use the same oral-aural-visual materials and procedures.

4. Selection of Experimental and Control Sections and Selection and Preparation of Evaluative Instruments

In cooperation with Burriss School administrators and personnel in the Ball State Office of Research the project staff accomplished the following:

- a. Gathered and organized available data on the ninth grade students for the academic year 1964-65,
- b. Administered tests to individuals for whom data were not complete,
- c. Identified and stratified the experimental and control groups for the First Experimental Phase,
- d. Scheduled class meeting hours in 1964-65,
- e. Scheduled pre-tests and post-tests,

f. Selected and purchased the following standardized tests:

- 1) Sims SCI Occupational Rating Scale
- 2) STEP Reading, Writing, Listening (Forms 3A and 3B)
- 3) Cooperative English Expression (Form 2A, 1960)
- 4) Words in Sentences (Part IV of Modern Language Aptitude Test, Form A)

g. Examined, pilot-tested, and eliminated the following instruments originally intended for use in the study:

- 1) Sims Motivational Record
- 2) Certain tests of creativity reported by Getzels and Jackson
- 3) Fre-1960 Cooperative English Test, the Usage Section
- 4) Remmer's "Attitude Toward Any School Subject"

h. Constructed and validated two attitude scales (Appendix C):

- 1) Composition and Literature Inventory
- 2) Communication Difficulties Inventory

i. Devised two socio-economic rating plans based on the Dictionary of Occupational Titles and occupation of parent (Appendix C-11),

j. Attempted to devise a rating scale to assess oral fluency. However, this work was abandoned after pilot tests revealed that the instrument had insufficient validity and reliability.

5. Working with Consultant

Paul B. Diederich, Director of Research in English, Educational Testing Service, Princeton, New Jersey, spent two days conferring with the project staff in March, 1964.

Important recommendations made by the consultant were as follows:

a. That four or five compositions be written by each student during the year for assessment by raters using the rating scale developed by ETS (7) (Appendix C-21);

b. That the composition ratings be accumulated for each individual and the resultant score used as a criterion measure of composition ability;

c. That the investigators be certain not to overlook the effect of the oral-aural-visual procedures in the elimination of language usage errors;

d. That the procedures previously planned for implementation and evaluation in the study be used.

6. Planning and Development of the Oral-Aural-Visual Procedures

In attempting to translate theory to practice, the project staff based their activities on the following three assumptions: 1) that the student learns to write largely through a self-shaping process with the teacher serving a positive role of confidant and intellectual midwife; 2) that since the student's oral memory is short and unreliable at best, he would need some sort of electronic device (a tape recorder) that would provide exact utterance retrieval and at the same time furnish him the reciprocal stimuli of listening to himself say aloud what he wrote as he wrote it; and 3) that the student must be engaged in purposeful activity if positive attitudes toward writing and toward the OAV procedures were to be engendered and maintained.

The experimental environment used in the pilot work and the actual study was set up as follows: A room adjacent to the experimental classroom was equipped as a writing laboratory. A door between classroom and laboratory permitted the students to move easily from one area to the other. In the laboratory were 18 writing carrels, and in each was an individually operated tape recorder equipped with a combination earphone and boom microphone headset. The earphones were of the audio-active type in which the student heard his own voice distinctly as he recorded.

That the student was able to hear himself distinctly seemed to the staff important to this study in the following respects: First, he actually heard himself as others heard him (for most this was an initial shock from which they quickly recovered). Theoretically this stimulus would sharpen the individual's ability to write with his ear. Gradually, too, the student should become more acutely aware of such matters as enunciation, pronunciation, and intonation. Second, his own voice had the effect of muffling ambient noise and thus building a sense of isolation that encouraged a direct involvement in the

act of transmuting his speech patterns to writing patterns.

During the writing periods (most writing was done at school), the students took turns using the recording equipment while the teacher moved between classroom and laboratory, supervising and holding individual and small group writing conferences.

One of the teacher's major responsibilities was to set and to maintain a climate of mutual respect, positiveness, and purpose. Thus the teacher attempted to make the oral-aural-visual classroom not a place in which someone constantly demanded proof of a student's literacy, but rather the place in which the writer could and did get from both teacher and peers positive suggestions for doing the best job of communicating of which he was capable.

One of several ways the teacher worked to establish this climate was by demonstrating each OAV procedure. He began by demonstrating not only the operation of the tape recorder, i.e., the buttons and knobs to be pushed or turned for volume control, record, pause, stop, rewind, and playback, but he also demonstrated the machine's function as a valuable tool. At every step of the way the teacher demonstrated.

In order to achieve a clearer picture of this process, the reader of this report is asked to visualize the following setting: The teacher stands by his desk. On the desk is a tape recorder brought from the laboratory. It is early in the school year. The students are launched in a thematic literature unit, "The World of Pricetags," and have discovered that the recorder is useful in getting the printed page "to talk back to them." They discovered this as they used the laboratory to practice reading individually chosen short selections on the unit theme in preparation for reading these selections to the class.

The teacher and students have spent some time in distinguishing the basic differences in the sound and structure of speech and the sound and structure of writing, that is, the difference between "talking talk" and "talking writing" (Appendix A-7). They have discussed the apparent phenomenon of writing with the ear and the part the tape recorder might play in improving an individual's writing.

The teacher, who has used this procedure to the point of feeling confident in demonstrating it, now asks the class to suggest a couple of writing topics on the unit theme for which he might develop the first paragraph or two. He studies their

half dozen suggestions, then makes a choice. Asking the students to observe carefully so that they may soon perform the same operation, he dons the headset, pauses a moment as in his inner ear he strives to catch the sound and rhythm of the beginning words he wants, then says the words as his pen puts them on paper and the machine records his voice. He pauses often in his oral discourse in order to allow his pen to catch up to the flow of speech.

When he has written a paragraph or so, he rewinds the tape and plays back what he has recorded, listening and reading, stopping the tape briefly from time to time as he inserts a word or phrase here, marks out a word or phrase there. Satisfied with the state of this draft, he takes the paper into the laboratory, quickly makes a transparency of it with the equipment there, and places the transparency on the classroom overhead projector. At the same time that he flashes it on the screen at the front of the room, he switches the recorder on "speaker" so that the students may hear the recording as they read the words on the screen.

The teacher points out why he chose this beginning, how he intended to develop the thesis, the point of view he wanted to establish for a particular group of readers (the students), and the tone he tried to engender. Thus the students can begin to see and to hear how a writer gropes toward structuring experience through testing patterns of utterance--adding to, deleting, marking over--until he comes close to talking onto paper what it is he wants to say. They can also begin to sense the tentativeness of beginning, the possibility of transitions that move the writer toward the finality of ending.

As he discusses his writing the teacher asks for positive student suggestions. He does so without false modesty or belittling his own writing effort. This is not to say that a writer is not ego involved, he is. The point is that the teacher is sincere in demonstrating to his students that while writing is an individual act, the writer can gain valuable insights through soliciting positive suggestion.

In addition to demonstrating this basic OAV procedure for the students (the one they will learn to use and modify throughout the year), the teacher is preparing them to think positively and purposefully about writing. He is also readying them eventually to accept the fact that good writing is achieved through sustained labor in three basic stages, i.e., prewriting, writing, and rewriting (Appendix E-19).

During the year variations of this procedure in the experimental class included the following: 1) using individual writings and recordings (i.e., transparencies and tapes) for small criticism groups or total class; 2) using cue word and phrase exercises (from reading or discussion) that the student organized in writing in order to facilitate verbal flow (Appendix B-5); 3) employing basic sentence patterns in varying the arrangement of nouns and verbs, and applying basic principles of modification and compounding; 4) applying observable facts about intonation to punctuation and meaning (Appendices B-6 and B-7); and 5) impressing on the student that his ability to use language effectively is a process of constant selection and arrangement when he has something to write about, a valid reason for writing it, and the skill with which to write it (Appendices B-8 and B-10).

B. First Experimental Phase (September, 1964-August, 1965)

During the First Experimental Phase the major hypothesis tested was that ninth grade English students taught by oral-aural-visual procedures would achieve greater competencies in oral and written expression than students taught by conventional classroom procedures. A secondary hypothesis tested was that ninth grade English students taught by oral-aural-visual procedures would develop more favorable attitudes toward English than students taught by conventional classroom procedures.

The seventy-two students in the ninth grade of the Burris Laboratory School were stratified into three ability groups (high, middle, and low) on the basis of California Test of Mental Maturity total scores and the Stanford Achievement Test Language scores. The tests were administered during the latter part of the spring semester of the eighth grade year. The scores for both tests were converted to standard scores, combined, and separated into two groups, male and female. The high, middle, and low group for each sex was established by dividing the scores into the top 1/3, the middle 1/3, and the bottom 1/3. Using the table of random numbers, the staff assigned students according to ability level and sex to a control group (30 persons), to an experimental group (30 persons), and to an overflow class (12 persons) not used as a part of the study.

During the first three weeks of the experimental year a series of standardized tests, attitude scales, and descriptive instruments were administered. This testing served as the pre-testing phase for the statistical analyses of the achievement and

attitude data, and provided socioeconomic and other data for describing the nature of the student population of this study.

At five separate times, spaced throughout the year, compositions were collected for analysis by raters. Topics for each of these compositions were related to the literature assignments pertinent at the time that each composition was written. Each composition was copied by means of a dry photo-copier and returned immediately to the teacher in order that regular correction and grading would not be delayed.

Names were deleted from the duplicated compositions and two five-digit code numbers were used so that the raters would not be aware of whose paper was being rated or at what point in the year it was written. The five-digit code number in the upper right hand corner of the paper designated the writer. The middle digit of the five in the upper left hand corner designated the sequence in which the paper was written. For example, the number 59160 indicated that this was the first paper written, just as 95377 for another student indicated that this was the third paper written. All code numbers were taken from the table of random numbers.

The raters were given no information about the meaning of these numbers. All they were told was that these were code numbers and should be copied faithfully on their rating cards. Papers were randomly sorted into two sets for each of the five composition topics. Order of the presentation of topics for reading was determined by use of the table of random numbers.

Prior to rating of the themes, two training sessions were held for the raters by the project staff. The following procedures were followed in these sessions.

First Session

1. Rationale behind the composition rating scale and the scale itself were explained to both raters by the research director and the research associate (Appendix C-21).
2. Three sample themes (one high, one middle, and one low) were appraised by both raters, the research director, the research fellow, the experimental class teacher, and the control class teacher. For the most part, all were in agreement in terms of the relative quality of each paper, i.e., assigned position of each theme.
3. Raters were given twelve practice themes to appraise according to criteria on the rating cards.

Second Session

1. Both raters and the research fellow turned in rating cards for the twelve practice themes. Reader reliability (the two raters) was .63, significant at the .05 level.

2. The research director and the raters examined themes on which there was widespread disagreement. This disagreement, in all probability, can be traced to the differences in the school climate of each rater.

Raters completed one set of compositions, then exchanged sets. A rating card was thus completed for every composition by each of the two raters. The compositions were read and rated during the summer following the first experimental year.

In addition to the more objective data gathered, teacher analysis of the series of themes for randomly selected individuals was completed. Here the emphasis was upon comparison of the various written products for each individual. Attention was focused on whether improvement of organization and development of ideas occurred in succeeding themes. Drafts of papers were also examined for evidence of increased use of the electronic equipment.

During the last three weeks of the school year the series of standardized tests (parallel forms when available) and attitude scales were readministered. After the completion of this post-testing and the completion of the rating of the compositions, statistical analyses were completed.

To test the major hypothesis, analysis of covariance with pretest scores and intelligence quotients used as covariates was employed. The Bio-Med. computer program O4V was used for the covariance analysis of the data. Criterion measures of improved oral and verbal communication skills were gain scores on the following standardized tests: 1) Sequential Tests of Educational Progress (STEP) Reading Test; 2) STEP Writing Test; 3) STEP Listening Test; 4) Cooperative English Test, Usage Section; and 5) Modern Language Aptitude Test, Words in Sentences Section.

Cumulative scores of the ratings of the five compositions (as rated by use of a modification of the Educational Testing Service Rating Form) were also used as a criterion measure.

In light of the disagreement between statisticians concerning the appropriateness of using ratings in the type of analysis

applied, two separate sets of covariance analyses were run. One set included the rating of the first composition as a covariate, and one set deleted this rating as a covariate.

To test the secondary hypothesis, chi squares were computed to determine if statistically significant differences existed between the proportions of control group members and experimental group members who changed during the year to more favorable attitudes (as measured by attitude scales) toward various aspects of English.

C. Second Experimental Phase (September, 1965-June, 1966)

During the Second Experimental Phase the major hypothesis tested was that ninth grade English students of different ability levels taught in the same class would make equal achievement gains with the oral-aural-visual stimuli approach. The secondary hypothesis tested was that ninth grade English students of different ability levels taught with the oral-aural-visual stimuli approach would not differ in terms of developing more favorable attitudes toward English.

The eighty students in the ninth grade of Burris Laboratory School were stratified into three ability groups (high, middle, and low) on the basis of California Test of Mental Maturity total scores and the Stanford Achievement Test language scores. These tests were administered during the latter part of the spring semester of the eighth grade year. The scores for both tests were converted to standard scores, combined, and separated into two groups, male and female. The high, middle, and low group for each sex was established by dividing the scores into the top 1/3, the middle 1/3, and the bottom 1/3. Using the table of random numbers, students were assigned according to ability level and sex to three classes. Each class was composed, as nearly as possible, of proportionally equal numbers of high, middle, and low ability level students of each sex.

During the first three weeks of the second experimental year a series of standardized tests, attitude scales, and descriptive instruments were administered. This testing served as the pre-testing phase for the statistical analyses of the achievement and attitude data, as well as provided socioeconomic and other data for describing the nature of the student population of this study.

At four separate times, spaced throughout the year, compositions were collected for analysis. Topics for each of these compositions were related to the literature assignments pertinent

at the time that each composition was written. All compositions were written in essay form.

Each composition was copied by means of a dry photo-copier and returned immediately to the teacher in order that regular correction and grading would not be delayed.

Two five-digit code numbers at the top of the composition were used to identify the writer and the point in the year when the composition was written (same procedures as described in the section on First Experimental Phase).

The raters were the same two people who rated the compositions for the First Experimental Phase. A refresher session concerning the rating scale and procedures was held prior to rating of the themes. The procedures for sorting and presentation of the compositions to raters were the same as for the First Experimental Phase.

Teacher analysis of themes for randomly selected individuals was completed with emphasis on evidence of improved organization (or the lack of it), development of ideas, and evidence of increased or decreased use of the electronic equipment.

In order to obtain additional information concerning the validity and reliability of the modified ETS rating scale (as used in this study), and the reliability of the raters, a sub-contract with Dr. Ellis Page, University of Connecticut, was completed. Under this contract the compositions were scored using the standard Project Essay Grade I (P.E.G.I) program.

During the last three weeks of the school year the series of standardized tests (parallel forms to those used in pretesting when available) and attitudes scales were readministered. After the completion of this posttesting and the completion of the rating of the compositions, statistical analyses were completed.

To test the major hypothesis, analysis of variance was used. The BMD01V and BMD05V programs were used for carrying out the analysis of variance. Criterion measures of improved oral and verbal communication skills were gain scores on the following standardized tests: 1) Sequential Tests of Educational Progress (STEP) Reading Test; 2) STEP Writing Test; 3) STEP Listening Test; 4) Cooperative English Test, Usage Section; and 5) Modern Language Aptitude Test, Words in Sentences Section.

Cumulative scores of the ratings of the four compositions were also used as a criterion measure.

To test the secondary hypothesis, chi squares were computed to determine if statistically significant differences existed between the proportions of ability groups (high, middle, and low) who changed during the year to more favorable attitudes toward various aspects of English.

D. Teaching Materials Writing Project and Final Report Phase
(June, 1966 - January, 1967)

A relatively short-term but important segment of the Ball State Program for English study was undertaken early in this phase (June 13 - August 19, 1966). Designated as the Teaching Materials Writing Project, the ten-week activity was an attempt by a team of junior and senior high school teachers of English to assist the project staff in evaluating and revising representative materials and procedures developed and used during the three-year period of this study.

The need for such an activity was suggested by the following set of circumstances: First, over the period of the study numerous requests had been received for teaching materials used in the research, for detailed instructions regarding the use of the materials, and for advice and assistance in initiating a program using the OAV procedures. The production of curriculum materials, however, had not been one of the objectives of this study. As a consequence, the experimental teaching materials were largely in outline form, had been modified from time to time, and, without considerable elaboration, would have failed to convey to the uninitiated reader the full extent of their use in the classroom. Second, since the results of the First Experimental Phase indicated that the use of the OAV procedures was a most promising approach, the staff believed that the preparation of representative teaching materials that clearly detailed the incorporation of the OAV procedures would be of value to English teachers interested in attempting this approach.

A request for permission to carry out the materials writing project was approved by the Project Officer, Division of Elementary-Secondary Research, Bureau of Research, in March, 1966, and the principal investigator immediately invited eight competent teachers of English in junior and senior high schools to join the project staff in the production of these materials. Under the direction of the principal investigator a staff of twelve teachers began the work of this adjunct to the study.

Since a major objective was to produce materials that would have the widest possible application (the staff eventually

designated the representative materials produced as "prototype"), teachers of varied teaching experience from schools of varying size and socioeconomic strata were invited to participate (Appendix E-1).

Using the facilities and resources of the Burris Laboratory School and the resources of the Ball State University Library, the personnel in this project (designated as the teacher writing team) met mornings and afternoons, five days a week, to evaluate materials and procedures used in the study and to utilize these materials and procedures in the production of prototype units.

The first week was spent in orientation and planning activities. During this time the visiting teachers, with the assistance of the project staff, studied teaching units, transparencies, and tapes developed and used during the pilot and research phases, discussed the significance of the findings of the First Experimental Phase, learned to operate the tape recorders, and observed high school students being initiated in the use of the OAV materials and procedures in a summer school English class in the Burris School. Later in the summer various members of the teacher writing team used this same class to try out materials the team had produced.

As the most expeditious means of accomplishing the summer's work, the writing team chose to operate much in the manner of a task force or group of task teams. For example, two persons whose major teaching assignments were with classes of students designated as "slow learners" worked together on representative materials embodying OAV procedures for students placed in this scholastic category (Appendix E-57). One person with supervisory experience in a metropolitan school system chose to help develop suggestions to supervisors and administrators who might wish to initiate the OAV approach in the teaching of English. Still another chose to work with the teacher of the experimental classes and the principal investigator in a three-man team producing representative materials in literature. When the occasion demanded, however, all members worked at the same task, e.g., searching out appropriate source materials for specific teaching units.

In the production of the prototype literary materials (Appendix E-3) and in the revision of the prototype language units (Appendix E-35), the writing team attempted not only to make these materials useful for as wide a teacher and student population as possible by suggesting objectives, approaches, and directions to teacher and student, and by adding lists of alternative literary selections, but the team also worked faithfully to incor-

porate into these materials the sequence of OAV procedures as these were developed and used in the experimental classes. It was not the intent of the writing team to complete the writing of all the prototypes, thus several exist only in outline form. However, it is the intent of the principal investigator and certain of his colleagues in the Burris School to work toward completion of these units in the months following the termination of the present study.

The Reporting Phase, as the name implies, involved the project staff in the collection and analyses of data, the writing of this final report, and the completion of the myriad activities necessary in ending a research study.

III. RESULTS

A. First Experimental Phase

In order to carry out the First Experimental Phase, an experimental group and a control group were identified according to procedures outlined in the preceding section of this report. The makeup of these groups by sex, past language achievement, and intelligence scores (California Test of Mental Maturity) is shown in Tables I and II.

Table I - Experimental Group

Sex	Number	X IQ	SD	X Grade Equivalent	SD
Female	15	112.20	13.47	9.04	1.42
Male	15	116.73	14.67	8.04	1.81
Both	30	114.47	14.73	8.54	1.69

Table II - Control Group

Sex	Number	X IQ	SD	X Grade Equivalent	SD
Female	16	118.75	15.10	9.33	1.93
Male	14	106.86	7.50	7.65	1.60
Both	30	113.20	13.13	8.54	1.99

Socioeconomic level of the population of this experiment is shown in Table III.

Table III - Socioeconomic Level

Instrument	Median Rating	Explanation
Education of parents*	5	College Graduate
Sims SCI Occupational Rating Scale	22	Middle class (real estate agent, H.S. teacher, etc.)
Dictionary of Occupational Titles Rating*	9	Proprietors, managers, and officials of business

*Appendix C-11

To test the null hypothesis of no significant difference in achievement related to writing between control and experimental groups five standardized tests (criterion measures) were administered at the beginning and at the end of the experimental school year (pre- and post-testing). Table IV shows the mean scores of these tests for the two groups.

Table IV - Mean Standardized Test Scores

Test	Experimental Group		Control Group	
	X pre	X post	X pre	X post
STEP Reading	282.40	291.87	285.37	285.91
STEP Writing	273.87	293.27	282.77	287.47
STEP Listening	287.13	305.00	288.16	297.42
Coop. Eng. - Usage	145.13	158.40	148.26	155.70
MLAT - Words in Sentences	11.53	21.33	11.95	19.07

The combined ratings of the five compositions collected at separate times during the year were also used as a criterion measure and in one set of analyses the rating of the first composition was used as a covariate. Table V shows the mean ratings for the first compositions and the combined compositions (1-5).

Table V - Mean Composition Scores

Group	X rating on 1st composition	X ratings for compositions 1-5
Experimental	33.87	170.87
Control	38.72	204.60

The coefficient of reliability between the two raters for total scores (all seven scales summed for each paper) for each set of compositions and the index of reliability for each set are reported in Table VI.

Table VI - Rater Reliability

Set No.	Correlation between Rater 1 and Rater 2	Index of Reliability
1	.82	.90
2	.77	.87
3	.83	.91
4	.77	.87
5	.73	.84

Analysis of covariance yielded the following results (Table VII) using IQ (California Test of Mental Maturity), pretests of the five standardized instruments, and ratings of the first student compositions as covariates.

Table VII - Analysis of Covariance
(including first composition as covariate)

No difference among treatments - experimental vs. control		
Criterion Measurement	F ratio (1,49df)	Significance
STEP Reading	33.758	<.01
STEP Listening	7.377	<.01
STEP Writing	15.915	<.01
Coop. Eng. - Usage	13.094	<.01
MLAT - Words in Sentences	4.223	<.05
Compositions - ETS Rating	0.014	NS

Analysis of covariance yielded the following results (Table VIII) using IQ (California Test of Mental Maturity) and pretests of the five standardized tests as covariates but eliminating the ratings of the first student compositions as a covariate.

Table VIII - Analysis of Covariance
(excluding first composition as covariate)

No difference among treatments - experimental vs. control		
Criterion Measurement	F ratio (1,50df)	Significance
STEP Reading	32.702	<.01
STEP Listening	7.840	<.01
STEP Writing	16.141	<.01
Coop. Eng. - Usage	11.239	<.01
MLAT - Words in Sentences	3.916	NS
Compositions - ETS Rating	0.778	NS

To test the null hypothesis of no significant difference in change to more favorable attitude toward various aspects of English between experimental and control groups, chi squares were computed. First pre and post scores on the Composition and Literature Inventory and the Communication Difficulty Inventory for each individual were compared: If post scores were more favorable, they were assigned a + (plus) and if post scores were the same as pre scores or less favorable they were assigned a - (minus). On all measures larger numbers of the experimental group subjects changed in the direction of more favorable attitude. Table IX shows the resultant chi squares.

Additional statistical analyses are given in Appendix F.

Table IX - Chi Square Analysis of Attitude Change

Attitude Scale	χ^2	Significance
Composition and Literature Inventory*		
Composition	.805	NS
Literature	3.807	<.05
Communication Difficulty Inventory*		
Speaking	6.918	<.01
Writing	1.038	NS
Reading	5.784	<.025
Listening	2.543	NS

*Appendix C-12 and C-16

Coefficients of correlation are reported in Tables X, XI, and XII to show some of the relationships pertinent to the interpretation of the results of this study. Table X shows the relationship between IQ (as measured by the California Test of Mental Maturity) and criterion measures.

Table X - Correlation Coefficients Between IQ and Criterion Measures

IQ Correlated With:	Pretest Coefficient	Significance*	Posttest Coefficient	Significance*
STEP Reading	.686	<.01	.618	<.01
STEP Writing	.717	<.01	.635	<.01
STEP Listening	.626	<.01	.604	<.01
Coop. English	.780	<.01	.651	<.01
MLAT - Words in Sentences	.605	<.01	.588	<.01
First Composition	.628	<.01		
Compositions 1-5			.527	<.01

*Taken from Table IX, Appendix B in Statistical Methods in Educational and Psychological Research, by Wert, Neidt, and Ahmann (35)

Table XI shows the relationships between post scores for the various criterion measures.

Table XI - Correlation Coefficients Between Post Scores of Criterion Measures

Relationship between		Coefficient	Significance
Pre Test	Post Test		
STEP Reading	STEP Writing	.907	<.01
STEP Reading	STEP Listening	.815	<.01
STEP Reading	Coop. English - Usage.	.877	<.01
STEP Reading	MLAT Words in Sentences	.772	<.01
STEP Reading	Compositions 1-5	.619	<.01
STEP Writing	STEP Listening	.856	<.01
STEP Writing	Coop. English - Usage	.915	<.01
STEP Writing	MLAT Words in Sentences	.793	<.01
STEP Writing	Compositions 1-5	.596	<.01
STEP Listening	Coop. English - Usage	.842	<.01
STEP Listening	MLAT Words in Sentences	.770	<.01
STEP Listening	Compositions 1-5	.442	<.01
Coop. English-Usage	MLAT Words in Sentences	.831	<.01
Coop. English-Usage	Compositions 1-5	.663	<.01
MLAT - Words in Sentences	Compositions 1-5	.504	<.01

Table XII reports the correlations between related sections of the attitude scales.

Table XII - Correlation Coefficient between Sections of the Composition and Literature Inventory and the Communication Difficulty Inventory

Relationship between		Pre Co-efficient*	Post Co-efficient*
Scale	Scale		
Composition Inventory	Writing Diff. Inventory	-.423	-.706
Literature Inventory	Reading Diff. Inventory	-.576	-.494
Composition Inventory	Literature Inventory	.587	.387
Writing Diff. Inventory	Reading Diff. Inventory	.684	.797

*All significant <.01

B. Second Experimental Phase

In order to carry out the Second Experimental Phase, it was necessary to assign students to three classes with balanced numbers of high, middle, and low ability students of each sex. Scheduling difficulties and attrition caused the deviations from complete balance shown in Table XIII.

Table XIII - Ability Make-Up of Classes

Classification	Class #1	Class #2	Class #3	Total
Lower Male	5	2	2	9
Lower Female	5	4	5	14
Middle Male	4	3	5	12
Middle Female	4	5	7	16
Upper Male	3	3	3	9
Upper Female	7	5	8	20
Totals	28	22	30	80

The mean intelligence quotient (California Test of Mental Maturity) and the mean past language achievement (Stanford Achievement Test) of the students participating in this phase is shown in Table XIV.

Table XIV - Student Characteristics

Sex	Number	\bar{X} IQ	SD	\bar{X} Grade Equivalent	SD
Female	50	111.52	11.61	8.80	2.07
Male	30	117.61	15.53	8.37	2.24
Both	80	113.88	14.03	8.61	1.93

Socioeconomic level of the students of this Second Experimental Phase is shown in Table XV.

Table XV - Socioeconomic Level

Instrument	Median Rating	Explanation
Education of Parents	5	College graduate
Sims SCI Occupational Rating Scale	23	Business owner
Dictionary of Occupational Titles Rating	9	Proprietors, managers, and officials of business

To test the null hypotheses of no significant differences in achievement (related to writing) between the ability groups (lower, middle, and upper) taught together, the five standardized tests were given pre and post. The achievement gains by ability level groups are shown in Table XVI.

Table XVI - Achievement Gains

Group	STEP Reading X gains	STEP Writing X gains	STEP Listen- ing X gains	Coop. Eng. X gains	MLAT X gains
Male lower	15.56	16.44	18.33	10.67	5.22
Female lower	15.86	16.50	11.07	8.14	6.00
Total lower	15.74	16.48	13.91	9.13	5.70
Male middle	18.33	12.50	17.50	8.08	5.92
Female middle	16.88	17.94	14.44	11.81	7.56
Total middle	17.50	15.61	15.75	10.21	6.86
Male upper	15.56	15.56	25.78	9.11	7.33
Female upper	15.55	16.60	22.35	11.35	9.05
Total upper	15.55	16.28	23.41	10.66	8.52

Table XVII reports the mean ratings for the combined essays (1-4) by sex and ability group (lower, middle, and upper).

Table XVII - Mean Composition Scores

Group	X ratings, Essays 1-4
Male lower	113.11
Female lower	124.54
Total lower	119.86
Male middle	142.33
Female middle	153.67
Total middle	147.37
Male upper	168.00
Female upper	185.90
Total upper	180.34

Tables XVIII, XIX, and XX represent data from the subcontract with Dr. Ellis Page for analysis of the essays (Second Experimental Phase) with the standard P.E.G. I computer program.

Table XVIII shows the means, standard deviations, and correlations for the two raters.

Table XVIII - Correlations for the Two Ratings

Scale	\bar{X} of Rater #1	\bar{X} of Rater #2	S.D. of Rater #1	S.D. of Rater #2	Correlations Between R 1 & R 2
Quality and development of ideas	2.76	2.71	1.05	1.00	.51
Organization, relevance, and movement	2.73	2.92	1.13	1.01	.52
Style, flavor, and individuality	3.02	2.96	1.01	.96	.55
Wording and phrasing	2.69	2.66	.99	.94	.62
Grammar and sentence structure	2.90	2.64	.80	.98	.55
Punctuation and capitals	2.35	2.39	.88	.93	.57
Spelling	2.62	2.54	.90	.98	.58
Total	2.72	2.69	.81	.84	.68

Analysis of variance was used to further analyze the reliability of the two ratings. A randomized block design was employed. The correlation coefficients for this analysis are reported in Table XIX.

Table XIX - Rater Reliability Estimate Via Anova

Scale	Reliability Estimate
Quality and development of ideas	.67
Organization, relevance, and movement	.67
Style, flavor, and individuality	.71
Wording and phrasing	.77
Grammar and sentence structure	.68
Punctuation and capitals	.72
Spelling	.73

Eight multiple regression equations were calculated predicting a total-average rating and ratings on each of the seven subscales. The multiple correlation coefficients obtained for each equation are a measure of how successful the weighted linear composite of proxies is in approximating the human rating. Table XX presents the obtained multiple correlations.

Table XX - Multiple Correlation Coefficients

Scale	Correlation Coefficient
Quality and development of ideas	.656
Organization, relevance, and movement	.686
Style, flavor, and originality	.667
Wording and phrasing	.661
Grammar and sentence structure	.597
Punctuation and capitals	.561
Spelling	.693
Total	.673

Analysis of variance (single classification) for each criterion measure between two ability levels (i.e., upper vs. lower) at a time by male, female, and both (total) was computed. The resultant F ratios and significance levels are reported in Table XXI, XXII, and XXIII.

Table XXI - Anova for Upper Vs. Middle

Criterion Measure	Sex	F ratio	DF	Significance
STEP Reading	Female	0.1288	1,28	NS
	Male	0.9252	1,19	NS
	Both	0.7639	1,49	NS
STEP Listening	Female	1.0450	1,28	NS
	Male	0.0460	1,19	NS
	Both	0.5099	1,49	NS
STEP Writing	Female	0.3768	1,28	NS
	Male	1.1630	1,19	NS
	Both	0.1768	1,49	NS
Coop. English - Usage	Female	3.3510	1,28	NS
	Male	0.9046	1,19	NS
	Both	0.4298	1,49	NS
MLAT - Words in sentences	Female	1.7976	1,28	NS
	Male	0.0243	1,19	NS
	Both	1.0892	1,49	NS
Essays 1-4 - EPS Rating	Female	6.5774	1,28	<.05
	Male	3.8806	1,19	NS
	Both	9.9706	1,49	<.01

Table XXII - Anova for Middle Vs. Lower

Criterion Measure	Sex	F ratio	DF	Significance
STEP Reading	Female	0.3860	1,34	NS
	Male	0.9705	1,19	NS
	Both	1.3729	1,55	NS
STEP Listening	Female	6.8593	1,34	<.05
	Male	10.0752	1,19	<.01
	Both	12.9255	1,55	<.01
STEP Writing	Female	0.2968	1,34	NS
	Male	0.4478	1,19	NS
	Both	0.0861	1,55	NS
Coop. English - Usage	Female	0.0667	1,34	NS
	Male	0.1434	1,19	NS
	Both	0.0839	1,55	NS
MLAT - Words in sentences	Female	1.1433	1,34	NS
	Male	0.5786	1,19	NS
	Both	2.2477	1,55	NS
Essays 1-4 - ETS Rating	Female	15.3143	1,34	<.01
	Male	3.9657	1,19	NS
	Both	19.7267	1,55	<.01

Table XXIII - Anova for Upper Vs. Lower

Criterion Measure	Sex	F ratio	DF	Significance
STEP Reading	Female	0.0145	1,32	NS
	Male	0.0000	1,16	NS
	Both	0.0107	1,50	NS
STEP Listening	Female	13.1488	1,32	<.01
	Male	3.1039	1,16	NS
	Both	13.7938	1,50	<.01
STEP Writing	Female	0.0015	1,32	NS
	Male	0.0334	1,16	NS
	Both	0.0075	1,50	NS
Coop. English - Usage	Female	2.5469	1,32	NS
	Male	0.3549	1,16	NS
	Both	0.9197	1,50	NS
MLAT - Words in Sentences	Female	5.3649	1,32	<.05
	Male	0.6944	1,16	NS
	Both	5.8859	1,50	<.05
Essays 1-4 - ETS Rating	Female	46.4843	1,32	<.01
	Male	10.5679	1,16	<.01
	Both	51.5478	1,50	<.01

Analysis of variance (multiple classification) for each criterion measure was computed to detect possible effects from the experimental variables. F ratios for ability level (upper, middle, lower), sex, and interaction were obtained. The results are reported in Tables XXIV, XXV, XXVI, XXVII, XXVIII, and XXIX.

Table XXIV - Anova Results for STEP Reading

Source of Variation	F ratio	DF	Significance
Sex	0.11245	1,73	NS
Ability level	0.66904	2,73	NS
Sex x ability level	0.15689	2,73	NS

Table XXV - Anova Results for STEP Listening

Source of Variation	F ratio	DF	Significance
Sex	4.93250	1,73	<.05
Ability level	7.52341	2,73	<.01
Sex x ability level	0.44695	2,73	NS

Table XXVI - Anova Results for STEP Writing

Source of Variation	F ratio	DF	Significance
Sex	1.38170	1,73	NS
Ability level	0.17507	2,73	NS
Sex x ability level	0.71274	2,73	NS

Table XXVII - Anova Results for Coop. English - Usage

Source of Variation	F ratio	DF	Significance
Sex	0.69035	1,73	NS
Ability level	0.12813	2,73	NS
Sex x ability level	1.83770	2,73	NS

Table XXVIII - Anova Results for MLAT - Words in Sentences

Source of Variation	F ratio	DF	Significance
Sex	1.68528	1,73	NS
Ability level	2.26047	2,73	NS
Sex x ability level	0.20992	2,73	NS

Table XXIX - Anova Results for Essays 1-4 - ETS Rating

Source of Variation	F ratio	DF	Significance
Sex	3.39600	1,73	NS
Ability level	22.06866	2,73	<.01
Sex x ability level	0.05707	2,73	NS

To test the null hypotheses of no significant differences in change toward more favorable attitude toward composition and writing difficulties between ability levels and between sexes, chi squares were computed. Table XXX and XXXI contain the results of these computations.

Table XXX - Chi Square Analysis for Sexes

Attitude Scale	Sex	χ^2	Significance
Composition Inventory Total Group	Female vs. Male	.38	NS
Composition Inventory Upper Group	Female vs. Male	.03	NS
Composition Inventory Middle Group	Female vs. Male	0.00	NS
Composition Inventory Lower Group	Female vs. Male	.85	NS
Communication Difficulty Writing - Total Group	Female vs. Male	1.35	NS
Communication Difficulty Writing - Upper Group	Female vs. Male	.87	NS
Communication Difficulty Writing - Middle Group	Female vs. Male*	5.25	.05
Communication Difficulty Writing - Lower Group	Female vs. Male	.39	NS

*greater change to more favorable attitude

Table XXXI - Chi Square Analysis for Ability Levels

Attitude Scale	Level	χ^2	Significance
Composition Inventory	Upper vs. Middle	.27	NS
	Middle vs. Lower	2.41	NS
	Upper vs. Lower	1.54	NS
Communication Difficulty Writing	Upper vs. Middle	1.42	NS
	Middle vs. Lower	.51	NS
	Upper vs. Lower	2.32	NS

In this experimental phase comparison of achievement and achievement gains for students of three ability levels (lower, middle, and upper) all taught by the OAV program was carried out. In addition to the significance of differences in achievement gain for the three levels, one must question whether the gains observed are significant in terms of the amount of gain usually resulting from any type of teaching procedure. The following graphic presentations use the mean scores (for the beginning of the ninth grade and the end of the ninth grade) of the normative data from the technical manuals of the tests as baselines for comparing the scores of the OAV subjects.

Figure 1: Profile of the Mean Scores of the OAV Sample on the STEP Writing Test

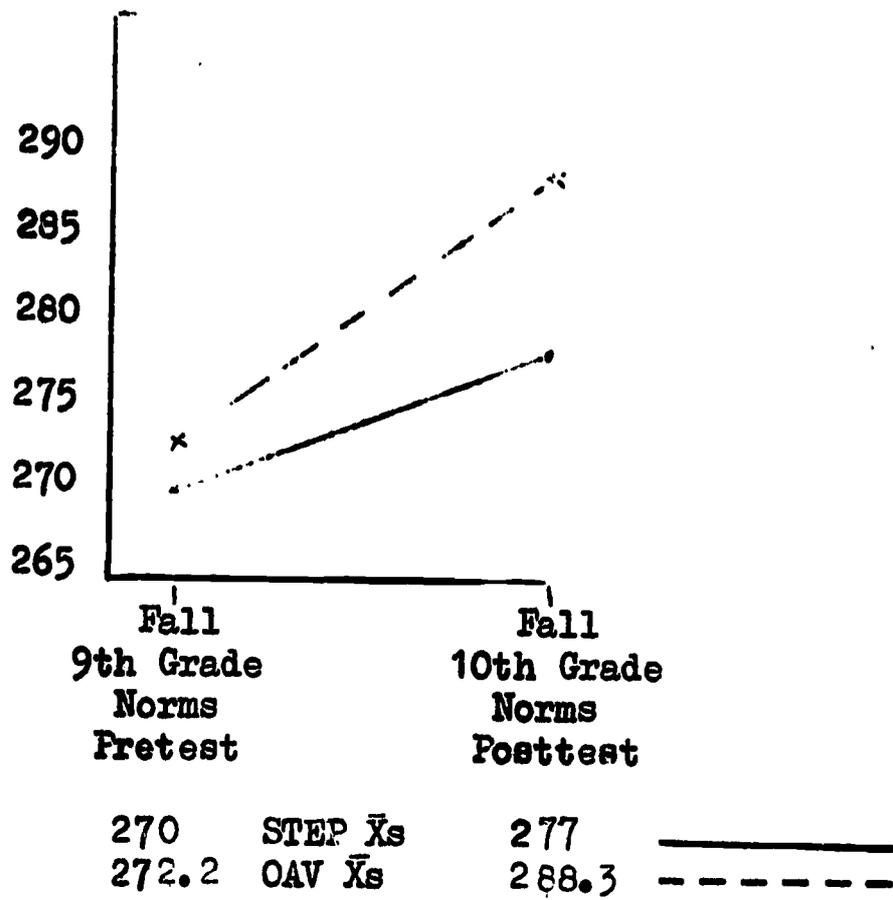


Figure 2: Profile of the Mean Scores of the OAV Sample on the STEP Reading Test

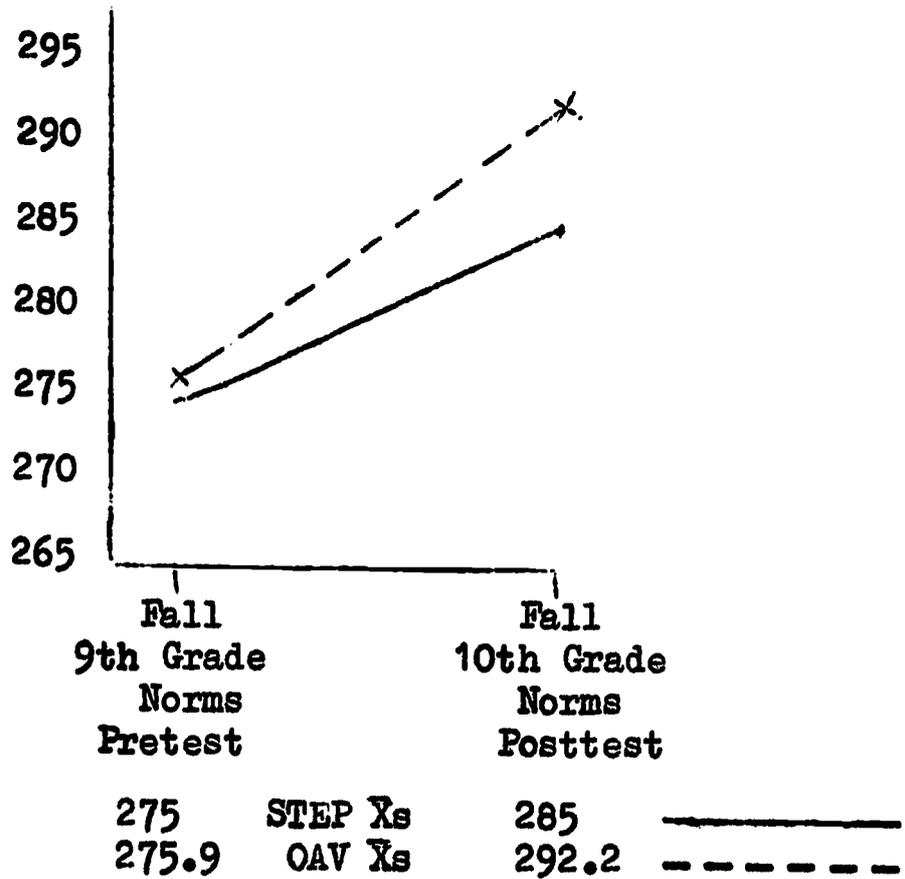


Figure 3: Profile of the Mean Scores of the OAV Sample on the STEP Listening Test

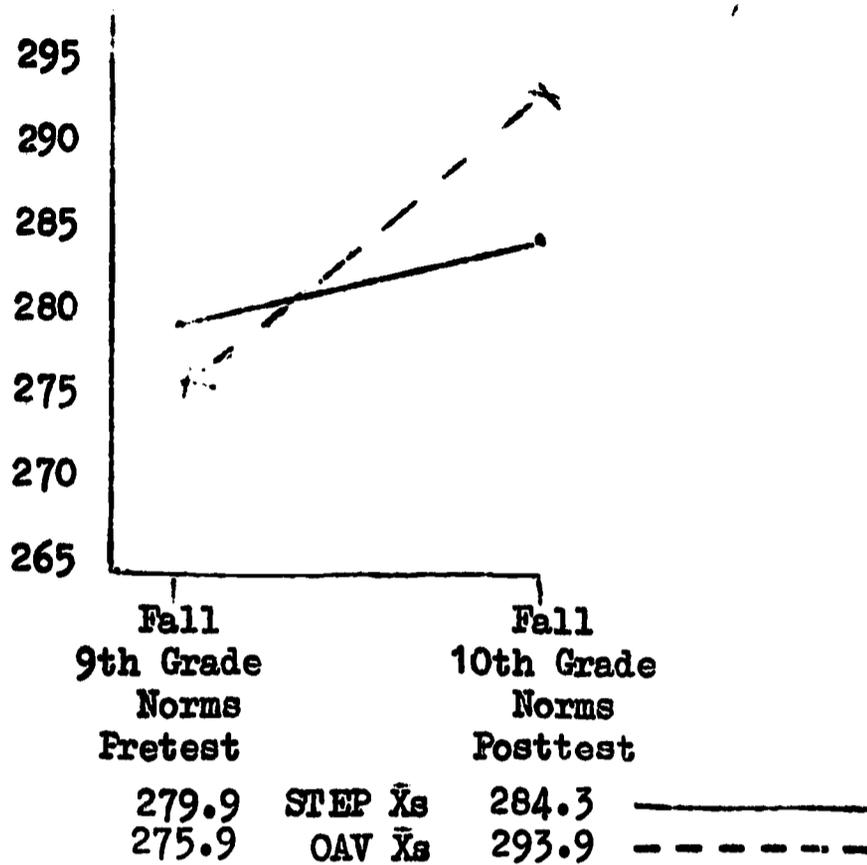


Figure 4: Profile of the Mean Scores of the OAV Sample on the Coop. English Test (Usage Section)

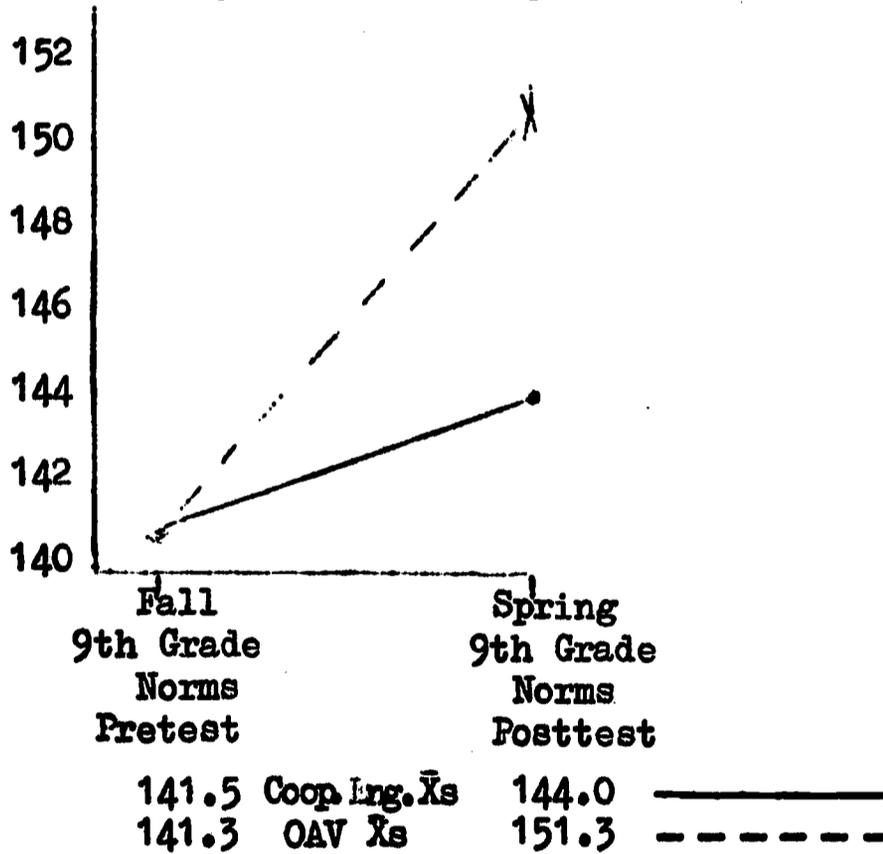


Table XXXII reports the correlations between related sections of the attitude scales.

Table XXXII

Relationship Between		Pre Co-	Post Co-
Scale	Scale	efficient	efficient
Composition Inventory	Writing Diff. Inventory	-.346*	-.442*
Literature Inventory	Reading Diff. Inventory	-.416*	-.311*
Composition Inventory	Literature Inventory	.529*	.187*
Writing Diff. Inventory	Reading Diff. Inventory	.637*	.644*

*Significant $\leq .01$ xNot significant

Although not reducible to objective data, the assessment by the teacher of the experimental classes of the OAV approach does provide the reader of this report with additional insight into the study. Asked to comment on what he felt was of most value to the students in this approach, the teacher of the experimental classes said that he believed that the OAV procedures demonstrated for the students that their writing does indeed have a sound and that employing the procedures helped the students to shape that sound as they wrote. He also stressed that the constant practice of reading aloud, with the sound of their own voices sounding loudly and clearly in their own ears, helped most students to read aloud more effectively--not only in deriving meaning but also in getting the page to "talk back to them" as they made preparations to share their reading aloud with others.

The most dramatic improvement in writing made by a student during the First Experimental Phase, in the instructor's judgment, was that of a boy possessed of above average intelligence whose openly expressed attitude toward English at the beginning of the term was negative and apathetic. Initial paragraphs from three of his compositions drawn at random from those written at various times during the year are given in Appendix D-1.

Representative of one type of analysis that the teacher of the experimental classes made of the writing of individual students is the teacher's commentary following the student writing samples given in Appendix D-2 through D-11. Names of the three students were drawn at random from the roll of the experimental classes and typescripts made of two writings by each student and of the teacher's appraisal of each pair of papers. The first composition was written in November and the other in January of the Second Experimental Phase.

The teacher's attempt to evaluate each student's progress through comparing the individual's earlier and later compositions

is typical of effort by a teacher to appraise student work on an individual basis whenever possible.

IV. DISCUSSION

A. First Experimental Phase

It should be pointed out to the reader that this study shares with many research studies conducted in a regular school setting certain methodological inadequacies. Increase in the number of control groups and a more complete control over randomization of subjects and treatments would undoubtedly have decreased the possibility of error. However, in general the design and the procedures (the most rigorous possible in this situation because of limited numbers and the administrative structure of this particular school) seem to have resulted in reasonably adequate data.

The degree to which the results of a study such as this can be generalized is dependent to a large degree on the sample of students in the control and experimental groups. Although there is a relatively high degree of correspondence between the control and experimental groups on bases of sex, IQ, language grade equivalent, and socio-economic class, examination of Tables I, II, and III shows that the sample of students for this study was not typical of the ninth grade student population of the United States in general. Therefore, it is quite clear that the results must not be too broadly interpreted without replication of the study with students of more divergent characteristics.

Teacher differences must be considered as a possible source of error in this first phase, since the control group and the experimental group each was taught by a different teacher. However, English achievement gains of ninth grade students taught in the past by these teachers demonstrated no consistent discernible differences. Both are excellent, experienced English teachers. The investigators have no reason to feel that teacher differences are significant sources of error in this phase of the study.

Possible experimental effects ("Hawthorne Effect") were anticipated and all groups (experimental, control, and overflow) were given all pretests, wrote the same number of compositions, and in general were led to feel that they were a significant part of the study. It was not possible to keep the students unaware that a study was being conducted, but everything possible was done to avoid emphasizing this fact. The Burris Laboratory School students used in the study were rather used to novel approaches, classroom observers, and numerous other teacher education activities since most of them had spent several years in the

laboratory school setting. Therefore, it seems reasonable to believe that any experimental effects were minimal in this experiment.

The standardized instruments used for criterion measures were generally effective, with the possible exception of the Modern Language Aptitude Test - Words in Sentences Section. This test was extremely difficult for these ninth grade students and may not have discriminated as well as a somewhat less difficult test might have. Because of the somewhat unique information it yields, this test was used in the hope that it might add at least tentative information.

It is always difficult to admit procedural errors, but in the hope that others will benefit from their experience the investigators point out the following information about the composition scores. Simply equating topics for five different compositions on the basis of general student interest and student knowledge about these topics does not guarantee uniform handling of the topics by students. One student may write an essay about a topic while another student creates a story about the same topic. Without specific directions (e.g., write an essay) the same student may write an essay on one topic, a story on another, and a play on still another. This undoubtedly confounded the problems of rating the compositions and may have resulted in much of the unevenness of scores for individuals for the five separate compositions (during the second phase of the study all four papers rated for each student were in essay form). This is not to suggest that if all had been essays that significant differences would have resulted, for this is something that will never be known. The investigators tend to doubt that ratings as currently obtained present a reliable or valid enough measure over a period of only one school year to indicate very conclusively the amount of student growth in ability to write. It is also their feeling that a person who writes essays well does not necessarily write stories, or poems equally well. The ability to write (anything) well is undoubtedly an extremely complex process and in judging a product (or a series of products written during a year) one may tend to interpret conformation to rules of grammar, usage, punctuation, and spelling as progress toward being able to communicate ideas and/or feelings. The rationale for rating written products (as used in this study) seems most logical for an essay type of writing.

Not necessarily a procedural error, but certainly an important qualification for the interpretation of the composition ratings, is the fact that these papers were drafts written in one sitting. This means that the factor of time for ideas to develop (stressed in much writing about creativity) was severely

limited. Self-editing, rewriting, and refinement were thus minimal. In this matter the researcher is faced with the dilemma of maintaining experimental control (making sure the work is solely that of the subject and comparable amounts of time are expended) and at the same time allowing sufficiently for individual differences in such a complex process as writing.

Analysis of covariance statistical analyses using IQ (California Test of Mental Maturity), pretests of the five standardized instruments, and ratings of the first student compositions was used to test the null hypothesis that no statistically significant differences existed between the experimental group and the control group mean gains in English achievement.

In all cases the experimental group had larger mean gains in achievement as measured by standardized tests.

For the STEP Reading Test the F ratio (Table VII) was significant beyond the .01 level of significance, indicating that differences this large would occur by chance less than one time in one hundred. The null hypothesis is therefore rejected and it is assumed that the observed differences probably were the result of the treatment rather than chance. Reading is an essential aspect of the OAV procedures for teaching composition and probably an essential aspect of any method of teaching composition, therefore this result indicates one area of success for the OAV procedures.

Listening ability has long been assumed to be an incidental by-product of traditional teaching methods. The OAV procedures using the specially modified electronic equipment deliberately set out to improve listening ability and to use this sensory avenue in helping the individual to write. The obtained F ratio (Table VII) was statistically significant beyond the .01 level of confidence. The null hypothesis of no difference between the experimental and control group was rejected and observed differences are assumed to be the result of the treatment.

Although the STEP Writing Test has been criticized as an overall criterion of ability to write, most critics would have to admit that it is at least one well standardized instrument in an area where no adequate objective instrument to measure the universal ability to write exists. The investigators contend that the results of this test (at this stage of measurement of ability to write) are both pertinent and important evidence as concerns writing ability of ninth grade students. The obtained F ratio (Table VII) was significant beyond the .01 level of significance indicating that differences this large would occur

only one (or fewer) times in one hundred as the result of chance. The null hypothesis was rejected and the significantly larger mean gains by the experimental group are assumed to be the result of the treatment (OAV procedures vs. conventional procedures).

Accuracy of English usage is rather highly related to other aspects of English ability and ability to communicate by writing (Table XI). Usage errors have long presented a persistent problem for English instruction and any procedure purporting to improve writing ability should have some positive effect on usage. The obtained F ratio (Table VII) for the Cooperative English Test--Usage Section, was significant beyond the .01 level of significance. The null hypothesis was rejected and the significantly larger mean gains are attributed to the experimental treatment.

As noted earlier in this section, the Modern Language Aptitude Test--Words in Sentences Section, was perhaps overly difficult for the ninth grade students of this experiment, raising the question of the extent to which chance figured into the obtained scores. Although probably less accurate than those obtained from the other standardized measures, the results of the MLAT--Words in Sentences Section are considered by the investigators to be worthy of inclusion in this report. The obtained F ratio (Table VII) was significant beyond the .05 level of significance, allowing the null hypothesis to be rejected. Since differences this large would occur only five or fewer times in one hundred, there is a good possibility that these differences are the result of the treatment.

In order that statisticians who strongly disagree with the inclusion of rating data in covariance analyses (and other similar analyses) would not discount all of these findings, separate covariance analyses, excluding the first student composition as a covariate, were computed. For the STEP Reading Test, the STEP Listening Test, the STEP Writing Test, and the Cooperative English Test--Usage Section, the obtained F ratios (Table VIII) were all significant beyond the .01 level of significance. However, the F ratios for the MLAT - Words in Sentences Section, changed from 4.223 to 3.916 and failed to exceed the .05 level of significance set as the acceptable level of significance in this study.

Despite the difference in the mean cumulative scores of the five compositions for each of the two groups (Table V), the F ratios obtained from the covariance analyses (Tables VII and VIII) were less than 1.00 and thus not significant (a difference no larger than this could occur by chance). On the basis of this way of measuring writing ability (discussed earlier in this section) it was not demonstrated that either the conventional

procedures or the OAV procedures were significantly better or poorer in increasing writing ability.

Correlation coefficients shown in Tables X and XI demonstrate at least two pertinent aspects of the data collected. The first is that there is a high degree of relationship between IQ as conventionally measured and the criterion measures of this study. The second is that there is a high degree of relationship between the various criterion measures, with the lowest correlation being between ratings of the compositions and the other criterion measures.

An individual's ability to compose in writing, and for that matter his ability in almost all aspects of the subject area of English, is at present rather broadly defined as a generalized type of verbal ability, circumscribed rather closely by convention. It seems likely that the student who deviates from these conventions, or set patterns, who is creative (defined in terms of "uniqueness") in his approach to writing does, in all likelihood, experience difficulty in being judged high in ability to compose in writing. Therefore he is forced back into the somewhat stereotyped, convergent pattern for producing acceptable writing.

Paul B. Diederich, in discussing a factor analytic study of the ratings made by teachers and readers using the ETS Rating Scale (Appendix C-22), reports that the five factors and their principal components collapse to just two: a sort of "general goodness" factor and a distinct mechanics factor. He interprets this as an "indictment" of teachers and readers for their lack of ability to be very sensitive to anything except these rather highly conventional factors. Thus, serious questions can be raised over the effectiveness of using ratings as a means of assessing student writing in order to help them improve their writing. For example, the use of such ratings may facilitate the learning of straightforward expository skill, but on the other hand their use may tend to hamper the student's progress toward being able to write creatively. Because of this and the related procedural difficulties, the project staff is unable to interpret the results of the composition ratings in this phase of the study.

Measurement of attitudes toward a school subject in a school setting is tenuous at best. Attitude scales dealing with any but the most controversial objects in a threat-free situation are well known for measuring, at best, degrees of favorable attitude. Scores of the semantic differential-type Composition and Literature Inventory in general did just this, with mean literature scores higher than mean composition scores in all groups (includes all standardization groups as well as those in the study). The Communication Difficulty Inventory tended to elicit fair expression of the negative aspects of feelings about English.

Perhaps the somewhat indirect approach of this instrument elicited somewhat less guarded student responses.

In any case the magnitude of changes to a more positive attitude was not great individually or collectively. Perhaps the matter should be left there. However, to determine if there was any indication that the oral-aural-visual stimuli approach was accompanied by a positive or a negative effect on student attitudes toward the subject and/or its aspects, chi squares were computed. In all instances a larger proportion of experimental group members showed a change to more favorable attitude. Only on the Speaking and Reading sections of the Communications Difficulty Inventory and the Literature section of the Composition and Literature Inventory were the chi squares statistically significant (Table IX). Although the OAV procedures tended to make a significant improvement in attitude of experimental subjects over control subjects toward literature, reading, and speaking, they did not significantly affect positive attitude toward composition writing and listening.

B. Second Experimental Phase

As in the First Experimental Phase, the sample of students for this Second Experimental Phase was not typical of the ninth grade student population of the United States in general (Tables XIV and XV). Consequently the degree to which the results may be generalized is open to question. The three ability level groups represent the lower portion, middle portion, and upper portion of the eighty students in grade nine available for the study and not a more general or conventional low, middle, and high categorization (this is the reason for use of the terms lower and upper). Because student enrollment for the Burris Laboratory School did not materialize as predicted, the investigators were limited to dividing the available students into three ability levels. Both the total number and the number in each ability level group were smaller than desired. The resultant ratio of five females to three males must also be considered less than ideal. The findings would be a great deal more generally meaningful if the groups were larger and more conventionally defined (e.g., middle group with a mean IQ of about 100 and a mean grade equivalent score near 8.0). However, the available ninth grade student population was rather diverse and the data do reflect achievement of three fairly distinct ability level categories.

Teacher differences do not appear to be a serious source of error. The same teacher taught all three groups in this experimental phase and seemed to interact in an equally effective way with all groups in spite of any differences in circumstances (i.e., time of day, dynamics of the group, etc.).

If there were experimental effects (Hawthorne Effects) they would tend to be consistent across all three groups since all subjects were taught by OAV procedures. Again the investigators doubt that significant experimental effects were present. In fact most of the students were not aware that a study was being conducted during this year.

The standardized instruments used for criterion measures were again generally effective with the possible exception of the MLAT - Words in Sentences Section, which proved again quite difficult for these ninth grade students.

Student writing was all in essay form and again was limited to drafts of essays written within the time limits of one class session. Plans for a fifth essay over the same topic as the first topic had to be abandoned because of unexpected administrative conflict at the end of the year. Comparisons of these two papers were planned to gather information relative to group and individual growth in ability to write essays. Unfortunately the results of such an analysis will never be known. However, replication studies or field testing studies could make use of this kind of analysis.

Information from the subcontract for analysis of the essays with the standard P.E.G.I. computer program indicates several things about the raters and the ratings.

First, the agreement between raters was rather close (Tables XVIII and XIX). The obtained coefficients were consistent with results from Dr. Page's previous work. These coefficients were also similar to coefficients on the ratings for the First Experimental Phase.

Second, the multiple regression equations (Table XX) calculated predicting the total-average rating and ratings on each of the seven sub-scales (approximating human ratings from computer scores) suggests the possible use of computer scoring for research studies such as this one. However, ratings of compositions or any approximation of these human ratings are of questionable value as criterion measures to evaluate growth in ability to write. This condition might be attributed not only to unreliability of ratings (even with the best procedures for training raters) but also to the seeming inability to define adequately the process or processes of learning to write.

In this experimental phase the investigators were attempting to determine the effectiveness of the OAV stimuli procedures with students of different ability levels as most often defined for purposes of ability grouping in public schools. That is, on the

basis of IQ (defined in terms of group IQ test scores) and past achievement (defined in terms of a standardized achievement test scores) in the area of study. In order to maximize the degree to which all students being compared received the same instructional treatment (minimize error due to procedural differences) students of all three ability levels were included in each of the three classes. Therefore, it must be realized that data were not gathered on achievement of students of different ability levels taught in classes containing only students of one specific ability level (i.e., lower ability). Also data were not gathered for students who received instruction by OAV procedures specially adapted for slow or accelerated students. These and other pertinent questions remain to be tackled in future research.

Single classification analysis of variance for each criterion measure was used to test the null hypotheses of no significant differences among different ability groups identified by sex (male, female or both).

The F ratios (Tables XXI, XXII, XXIII) for gains scores were significant beyond the .05 level of confidence between the middle and lower groups and the upper and lower groups on the STEP Listening Test. This was true for all comparisons for female and for both (male and female combined) but was true for males only in comparing the middle and lower groups. It should be noted that the F ratios for the MLAT - Words in Sentences Section, for females and both between the upper and lower ability groups were also significant beyond the .05 level of significance. The small size of the lower male group (as well as the small size of the other male groups) suggests the increased possibility of chance error playing a significant part.

The analyses of STEP Reading Test, STEP Writing Test, and Cooperative English Test - Usage Section, resulted in F ratios (Tables XXI, XXII, XXIII) that were not significant.

Although STEP Listening Test gains (Table IV) for the experimental (OAV procedure) subjects for the First Experimental Phase were quite large, the mean gain of 23.41 for the upper group in the Second Experimental Phase was an unexpected result. It would seem that the OAV procedures as used in this study are most effective in increasing listening skills (as defined by the STEP Listening Test) of students of high verbal ability.

Interpretation of the results of the analyses of the MLAT - Words in Sentences Section, is quite difficult. It is not clear whether the observed differences are a reasonably accurate reflection of ability or an artifact of the high difficulty level (for these ninth grade students) of the test and/or size

of the groups. The investigators tend to favor the artifact explanation.

Generally F ratios (Tables XXI, XXII, XXIII) for the analyses of the mean gains of the different ability groups were not significant and the null hypotheses could not be rejected. The three ability groups defined for this study tended to have mean achievement gains that did not differ significantly from each other.

The ratings of the essays do not represent gains but rather represent a score accumulated over the period of one school year. Examination of the ratings from the essays in this Second Experimental Phase showed that they differed from the compositions (essays, compositions, etc.) for the First Experimental Phase in two noticeable ways. First, the ratings for an individual's four essays showed less unevenness. Second, there seemed to be signs of a pattern of progressively higher scores from the first essay to the fourth essay. Undoubtedly ratings of essays over a much longer period of time would have provided a clearer and more conclusive picture. The investigators feel that longitudinal research (despite the research difficulties involved and the present lack of favor by funding agencies) is the key to obtaining more definitive information about the writing process and the attendant measurement problems.

The F ratios (from single classification Anova) for essay ratings (Tables XXI, XXII, XXIII) were all significant beyond at least the .05 level of significance, except for comparisons between males of the upper and the middle groups and males of the middle and lower groups.

Essay ratings for females were higher than for males in each of the three ability groups. Essay ratings were higher for the middle group than for the lower group and higher for the upper group than for the middle group. Examination of ratings of the first essays showed that essentially the same kind of differences existed at the beginning of the experiment.

Rejection of the hypotheses of no significant differences in scores on essays between the various ability groups indicates that observed differences this large were not likely to happen on the basis of chance alone (less than five times in one hundred --- actually less than one chance in one hundred in all but one analysis). Differences seem to exist in ability to write essays on the basis of ability levels (as defined in this study) and the OAV procedures did not seem to dissipate or exaggerate these differences appreciably.

Because of the sample problems described earlier in this section, the investigators place more confidence in the results of the multiple classification analysis of variance. F ratios (Tables XXIV through XXIX) for sex were not significant, except for STEP Listening Test mean gains (beyond the .05 level of significance). In this case this reflects larger gains (Table XVI) at all ability levels for males.

The F ratios (Tables XXIV through XXIX) for ability level were not significant except for STEP Listening Test mean gains and Composite Essay ratings (beyond the .01 level of significance).

In all instances F ratios (Tables XXIV through XXIX) for interaction between sex and ability level were not significant.

Essentially the null hypotheses of no significant differences among ability groups and between sexes could not be rejected and differences as large as those observed are well within the limits of chance happenings. Differences for sex and ability level on STEP Listening Test mean gains and for ability level on composite essay mean scores are the exceptions.

The OAV procedures did seem to have differential effects on both different ability levels and on males and females in achievement of listening ability (as measured by STEP Listening Test). The essay rating differences seem to reflect only a maintenance of already existing differences between ability levels in essay writing rather than differences that are a result of the OAV procedures.

Since it was not possible to include control groups during this second experimental phase, the investigators wished to add the dimension of comparison of pre and post test scores with some outside criterion. It seemed pertinent and necessary to include some indication of whether the gains observed for the OAV students in this phase were adequate gains. Figures 1, 2, 3, and 4 are a graphic comparison of the mean scores for the OAV students with the mean scores from the technical manuals of the three STEP tests and the Cooperative English Test. It seems quite clear that at the beginning of the year the OAV students' mean scores did not deviate greatly from the mean normative scores on any of the tests. However the OAV students' mean scores at the end of the year were noticeably higher on all the tests. This information reflects positively upon the general effectiveness of the OAV procedures.

Chi square analyses (Tables XXX and XXXI) of change to more favorable attitude on the basis of sex or ability levels resulted in chi squares which were not significant. The only

exception was a comparison of male vs. female scores on the writing section of the Communication Difficulty Inventory. A larger proportion of males changed to a more favorable attitude (significant beyond the .05 level). Generally the evidence gathered does not suggest that the OAV procedures have a differential attitudinal effect on students of different ability levels or on males and females.

Correlation coefficients between related sections of the attitude scales (Table XXXII) seems to be consistent with past findings (standardization information and results of the First Experimental Phase) except for the post coefficient between the Composition Inventory and Literature Inventory. In this case there was considerable positive change in attitude toward literature with little change in attitude toward composition.

V. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

A. Conclusions

During the First Experimental Phase the OAV procedures demonstrated a general superiority over a conventional classroom approach in increasing student abilities in writing, reading, listening, and language usage. The rating of five sets of compositions from each of the two classes, however, failed to demonstrate that either the OAV approach or the conventional approach resulted in superior improvement in composition ability.

In the Second Experimental Phase significant achievement gains among three ability levels of students and by males and females were demonstrated in the area of listening. The observed gains in reading, writing, and English usage, as well as listening, were better than the gains indicated by the normative information in the technical manuals of the standardized tests used in this study.

Ratings of essays indicated that the OAV procedures maintained differences among ability levels present at the beginning of the Second Experimental Phase, rather than creating or exaggerating these differences.

Subjective evaluation of student behavior indicated that the OAV procedures seemed to be attractive and dramatically effective with some individuals. With others the procedures appeared to be much less attractive and generally ineffective.

The OAV approach did not seem to result in an impressive change toward more positive attitude toward various aspects of English. However, the generally high achievement of students taught by OAV procedures implies the possible presence of a positive motivational element.

As a whole, the results of this study indicate that the OAV stimuli approach is a promising practice in the teaching of general skills in English at the ninth grade level. The researchers believe that the results of this study justify continued experimentation and research using the OAV procedures.

B. Implications

Research studies tend to suggest as many questions as they answer. This study is no exception.

In view of both the positive results and the limitations of this study, the investigators feel that research efforts with the following emphases should be undertaken:

1. A study testing the effectiveness of the OAV procedures with students of different characteristics (e.g., socioeconomic backgrounds, ability levels--such as slow learners, educable mentally retarded, and underachievers);
2. A study testing the effectiveness of these procedures at grade levels above and below grade nine;
3. Field tests of the OAV procedures using teachers of widely different characteristics and orientations;
4. Longitudinal studies of the processes of learning to write--studies vital to future research in this area.

C. Recommendations

This study, as well as other studies in this area, demonstrates our present inability to define writing ability operationally. It also reveals the decided lack of theoretical formulations on the processes of learning to write. Truly adequate evaluation of any instructional procedure for teaching written composition depends upon obtaining a great deal more knowledge than is presently available. The investigators make the strongest possible recommendation that researchers in pertinent disciplines and agencies funding research concentrate efforts on this vital area.

VI. SUMMARY

A. Background

This study, covering the period June 1, 1963 to January 31, 1967, investigated the effect of certain oral-aural-visual procedures on the development of skills in written composition (and other communication skills) of ninth grade students in the Burris Laboratory School, Ball State University. Basic to this study are the following: 1) modern theories of learning and research in psychology related to transfer, motivation, and the self-concept that stress the importance of the individual in any learning situation; 2) major tenets of modern linguists, i.e., that although speech and writing are different, they are intimately related--that speech is the foundation for writing, that speech determines its major structures; 3) the assumption that the good writer "writes with his ear" (an assertion certain professional writers and teachers have made for some time), that he actually "hears" at the sub-vocal level what it is that he is writing, and that in this process he tests, perhaps unconsciously, what he writes as he writes it against certain ingrained patterns of writing he has acquired in his verbal development--patterns he is constantly modifying; and, 4) the promising results of pilot work using oral-aural-visual techniques in a high school English class during an eight-week summer school term in 1962.

B. Method

In developing the oral-aural-visual (OAV) procedures in order to stimulate the student to "hear" himself as he writes and thereby improve his writing skills, the staff based its activities on the following assumptions: 1) that the student learns to write largely through a self-shaping process with the teacher serving a positive role of confidant and intellectual midwife; 2) that since the student's oral memory is short and unreliable at best, he would need some sort of electronic device (a tape recorder) that would provide exact utterance retrieval and at the same time furnish him the reciprocal stimuli of listening to himself say aloud what he wrote as he wrote it; and 3) that the student must be engaged in purposeful activity if positive attitudes toward writing and toward the OAV procedures were to be engendered and maintained.

The study utilized a writing laboratory adjacent to an English classroom. In the laboratory were 18 individual writing carrels, each of which had an individually operated tape recorder

with an audio-active combination boom microphone-headphone set. The tape recorder allowed the student to hear distinctly what he said as he wrote it (as he "talked writing onto paper"); to pause for thinking or editing; and, through playback, simultaneously to listen and read what he had vocalized and written, and thus test what he had written against his ingrained verbal patterns. In addition, the laboratory was equipped with copying machines that transferred compositions to transparencies for overhead projection to the class for positive criticism and discussion. Before the students undertook a reading, writing, listening, or speaking assignment using this equipment, the teacher demonstrated a suggested approach to the class.

Variations of OAV procedures included the following: 1) using individual writings and recordings for small criticism groups or total class; 2) using cue word and phrase exercises (from reading or discussion) that the student organized in writing in order to facilitate verbal flow; 3) employing basic sentence patterns in varying the arrangement of nouns and verbs, and applying basic principles of modification and compounding; and 4) applying observable facts about intonation to punctuation and meaning.

Basic and reciprocal problems studied included: 1) The ability of the student to improve his writing through increased practice in the control of oral forms of language; 2) The ability of the student to recognize the basic sound system of the language which gives meaning to oral discourse, and to apply this knowledge in setting off sentence units or in punctuating units of meaning in written language; 3) The ability of students to engage in systematic oral discussion of what they are going to put down in writing, before they attempt to write; 4) The ability of the student to test the patterns he writes against his ingrained oral patterns; 5) The ability of the student to give and to accept constructive criticism of his oral and written composition; and 6) The impact of the oral-aural-visual stimuli procedures on student attitudes toward written composition.

C. First Experimental Phase

In the academic year 1964-1965, the research staff used a pretest-posttest control group-experimental group design to stratify the ninth grade students into three ability clusters (high, middle, and low) on the bases of past English achievement and intelligence quotients, then to make random assignments of the students to a control and an experimental class according to ability level and sex. Each group initially contained 30 stu-

dents. At the end of the year, 28 members remained in the control group and 30 in the experimental. Students with pronounced sight, hearing, or speech defects were not included in the study.

Each class was taught by a capable, experienced teacher who was assigned on a random basis. The classes met at the same hour of the day, used the same teaching materials, attempted to spend the same amounts of time in the same types of activities, but differed in the approach to writing, i.e., the experimental class used the writing laboratory and the OAV procedures; the control class employed a conventional classroom approach to writing.

The major hypothesis tested was that ninth grade English students taught by OAV procedures would achieve greater competencies in oral and written expression than students taught by conventional procedures. A secondary hypothesis tested was that the students taught by the OAV procedures would develop more favorable attitudes toward English than students taught by conventional classroom procedures.

To test the null hypothesis of no significant difference in achievement between control and experimental groups, the following standardized tests were used: 1) Sequential Tests of Educational Progress (STEP) in Reading, Writing, and Listening; 2) Cooperative English Test--Usage Section; and 3) Modern Language Aptitude Test - Words in Sentences Section. In addition compositions (form not restricted) were written by each student at five separate times during the year and ratings of these compositions were made by two raters using a slight modification of the experimental Educational Testing Service (ETS) Rating Form. To test the null hypothesis of no significant difference in attitude change between the control and experimental groups, two specially devised instruments (the Communication Difficulty Inventory and the Composition and Literature Inventory) were used.

Findings and Discussion

The Bio-Med. computer program O4V was used for covariance analysis of the data. All mean gains, with the exception of the combined ratings of the compositions, were larger for the experimental group. The following F values were obtained: STEP Reading (Sig. $\leq .01$), STEP Listening (Sig. $\leq .01$), STEP Writing (Sig. $\leq .01$), Cooperative English Test - Usage Section (Sig. $\leq .01$), Modern Language Aptitude Test - Words in Sentences Section (Sig. $\leq .05$), Compositions, ETS Experimental Rating Form (Not sig.).

Chi square analysis of attitude change revealed that on all measures larger proportions of members of the experimental class changed in the direction of more favorable attitude. Attitude change indicated by the Composition and Literature Inventory revealed that attitude change toward composition was not significant, but toward literature the change was significant beyond the .05 level. Change indicated by the Communication Difficulty Inventory revealed the following: Speaking (Sig. $\leq .01$), Writing (Not sig.), Reading (Sig. $\leq .025$), Listening (Not sig.).

Despite the fact that an increased number of control groups and a more complete control over randomization of subjects and treatments would undoubtedly have decreased the possibility of error, the data from this phase seem to have been reasonably adequate. With the possible exception of the Modern Language Aptitude Test - Words in Sentences Section, the standardized instruments used for criterion measures were generally effective. This test was extremely difficult for these students and may not have discriminated as well as a somewhat less difficult test might have.

The F value for the five compositions judged, using the experimental EFS Rating Form, was not statistically significant and the null hypothesis could not be rejected. Reliability coefficients for raters and ratings ranged between .73 and .91. It may be that no differences in ability to write compositions resulted from the two different approaches, or it may be that the investigators simply failed to measure accurately this complex skill. The investigators tend to doubt that ratings as currently obtained present a reliable or valid enough measure over the period of only one school year to indicate very conclusively the amount of student growth in ability to write. The fact, too, that the compositions were the result of one sitting and were not restricted as to form may have accounted for some of the unevenness of scores for individuals.

D. Second Experimental Phase

During the school year 1965-1966, the major hypothesis tested was that ninth grade English students of different ability levels (upper, middle, lower) taught in the same class would make equal achievement gains with the OAV approach. The secondary hypothesis tested was that these students, by ability level, would not differ in terms of developing more favorable attitudes toward English.

Stratification of the eighty students in the ninth grade class was made on the basis of the same measures as those used in the First Experimental Phase. Each class was composed, as nearly as possible, of proportionally equal numbers of upper, middle, and lower ability level students of each sex. The three classes were taught by the same teacher.

To test the major hypothesis, the BMD01V and BMD05V programs were used to carry out analysis of variance. Criterion measures of improved verbal communications skills were gain scores on the same standardized tests used in the First Experimental Phase. To test the secondary hypothesis on attitude change, chi squares were computed.

Cumulative scores of ratings of four essays were also used as a criterion measure. The compositions, restricted to essay form, were collected for analysis at various times over the year. These essays were evaluated according to the ETS Form by the same raters employed in the First Experimental Phase. In order to obtain additional information concerning the validity and reliability of the ETS Form and the reliability of the two raters, the sets of essays were scored using the standard Project Essay Grade I (PEG I) program developed by Dr. Ellis B. Page and his associates at the University of Connecticut.

Generally F ratios for the analyses of the mean gains of the different ability groups were not significant and the null hypothesis could not be rejected. The three ability groups defined for this study tended to have mean achievement gains that did not differ significantly from each other.

The F ratios (from single classification analysis of variance) for essay ratings were all significant beyond at least the .05 level of significance, except for comparisons between males of the upper and middle groups and males of the middle and lower groups. Essay ratings for females were higher than for males in each of the three ability groups. Differences seem to exist in ability to write essays on the basis of ability levels defined for this study and the OAV procedures did not seem to dissipate or exaggerate these differences appreciably.

The ratings for the essays in this phase differed from the compositions from the previous phase (compositions not restricted as to form) in two noticeable ways. First, the ratings for an individual's four essays were not as uneven as those of students in the first phase. Second, there appeared to be a pattern of progressively higher scores from the first essay to the last

essay. Undoubtedly ratings of essays over a longer period would have provided more conclusive measures.

F ratios for ability level were not significant except for STEP Listening mean gains (Sig. $\angle .05$) and composite essay ratings (Sig. $\angle .01$).

A comparison of pre and post test mean scores of the OAV subjects with the mean scores from the technical manuals of the three STEP measures and the Coop. English Test (none available for MLAT) are given:

1. STEP Writing:

Fall 9th grade norms to fall 10th grade norms of STEP are 270 to 277

Fall OAV 9th grade pretest norms to posttest norms were 272.2 to 288.3

2. STEP Reading:

Fall 9th grade norms to fall 10th grade norms of STEP are 275 to 285

Fall OAV 9th grade pretest norms to posttest norms were 275.9 to 292.2

3. STEP Listening:

Fall 9th grade norms to fall 10th grade norms of STEP are 279.9 to 284.3

Fall OAV 9th grade pretest norms to posttest norms were 275.9 to 293.9

4. Coop. English - Usage Section

Fall 9th grade norms to fall 10th grade norms of Coop. Eng. are 141.5 to 144.0

Fall OAV 9th grade pretest norms to posttest norms were 141.3 to 151.3

The noticeably higher posttest mean scores for the experimental classes reflects positively upon the general effectiveness of the OAV procedures.

Chi square analysis of change to more favorable attitude on the basis of ability level and sex revealed only one change that was statistically significant. Evidence gathered does not

suggest the OAV procedures have a significant differential attitudinal effect.

E. Teaching Materials Writing Project

For a ten-week period in the summer of 1966, eight competent English teachers were invited to join the research staff in evaluating and revising representative teaching materials and procedures developed and used during the three-year period of the study.

The receipt of numerous requests for teaching materials and explanations of the OAV procedures suggested to the staff the need for such a project. The fact, too, that the results of the First Experimental Phase indicate that the use of the OAV procedures was a most promising approach to teaching English prompted the investigators to request that this activity be approved.

The group operated as task teams to produce representative materials embodying the OAV procedures in the areas of literature-composition-language.

F. Conclusions and Implications

The OAV stimuli procedures demonstrated in the First Experimental Phase a general superiority over a conventional approach in increasing student abilities in writing, reading, listening, and language usage. However, rating of compositions from the control and experimental classes was inconclusive in establishing the superiority of either approach.

Mean gains in reading, writing, listening, and English usage for the OAV classes in the Second Experimental Phase were considerably better than the gains for a comparable grade level given in the normative information of the technical manuals of the standardized tests used. Rather than creating or exaggerating differences in essay ratings among ability levels present at the start of this phase, the OAV procedures evidently maintained these differences.

Although the OAV approach did not seem to result in impressive change toward more positive attitude toward English, the generally high achievement of students taught by OAV procedures indicates the possible presence of a positive motivational element.

Implicit in the generally positive results of this study is the indication that the OAV stimuli approach is a promising practice in teaching general skills in English to ninth grade students. Thus the investigators believe the results of this research justify continued experimentation and research using OAV procedures in a variety of school settings and among students of varying ability, socioeconomic, and age levels.

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APPENDIX A

Early Pilot Work
Burriss Laboratory School, Summer, 1962

During this eight-week summer session the principal investigator conducted a short pilot study in one of his high school English classes, trying out a variety of approaches based on the premise that the individual "writes with his ear, hears what he is writing."

There were 29 students in the class. They came from an area within a thirty-mile radius of the Burriss Laboratory School. No cumulative records were available, since school administrative offices were closed for the summer. Most of the students had afternoon and evening jobs. Many who lived in Muncie got off work as late as 7:00 a.m., then came to school for the first bell at 7:55.

The students ranged in age from thirteen to nineteen, in verbal competence from poor to excellent, in attitudes toward English and English teachers from extremely negative to positive. They ranged in grade from nine through twelve. The class met for two hours daily, five days a week. All of the writing and most of the reading was done during class time.

Four tape recorders were made available by the school librarian. These were used first in the classroom, then, when their use in this setting proved to be a distraction, were moved to an adjacent office. There the investigator set up four individual recording bays by simply isolating each recorder, a small table, and a chair among the several filing cabinets in the office.

The students used the recorders in shifts. Within a short time they learned to say aloud what they wrote as they wrote, then using immediate playback, they read their efforts as they listened and edited those parts that "did not say what the writer wanted to say."

As a way of getting the class into the swing of this new approach, the following kinds of activities were undertaken:

1. Students discussed in small groups of five or six topics for writing, or made constructive criticisms of papers written. Considerable use was made of both the opaque and overhead projectors.

2. The class spent some time in discussing the differences between "talking writing" and "talking talk" and the ways speech reinforces writing.

3. Students were encouraged to reinforce their writing by saying aloud what they wrote as they wrote.

Those writing in the classroom the first two days said aloud (sotto voce) what they wrote. Later (hopefully) the sub-vocalized as they wrote. In using this approach the investigator discovered the need for considerable unlearning among older students. The older students were generally more resistant to change than the younger ones, and certainly more inhibited than the younger ones in the use of the recording equipment.

Obviously for the first few days there was a good deal of confusion. There was also the strong and rather widely held conviction that the teacher was some kind of a nut and that his classroom procedures were unorthodox, to say the least. However, after the initial shock wore off, the majority of the students began listening to themselves with an apparent intentness that they had not previously displayed.

At random are some observations from the investigator's notes during this time:

Thursday, June 14, 1962

Most are pretty well over the surprise of hearing their own voices. Novelty of using the recorders is beginning to wear off. Several more caught errors in usage today. Elaine found this one: "I want my children to be raised as good as I was." Suspect Judy helped her here.

Oscar (considerable uncertainty about where to end sentences) for the first time "heard" where he should have ended several.

Friday, June 29

Progress! Kent (first string tackle, originally hostile) came up second hour to tell me that he had discovered he had been leaving out endings, and "whole words, even!"

His comment: "No wonder nobody could never read what I wrote!" One of his sentences written in the classroom: "I was play baseball and this guy try to fastball but I choke up and triple."

Revised (after recording and playback): "I was playing baseball and this guy tries to fastball me but I choked up on the bat and hit a triple."

Monday, July 2

Some of the better students having problems. Find it difficult to gear swiftness of thought and speech to writing.

First hour tomorrow: Better demonstrate to the people having trouble how to use the recorder pause button more effectively. (This is a problem of varying levels of maturation. Some are fluent enough to record and write in word groups, others record-write word-by-word.)

Tuesday, July 17

First hour: Typed these five words on each of four cards and placed one card at each recorder: skid, fuzzy, tomato, limousine, lipstick.

Asked students to tie these words in order into a composition of two or three paragraphs.

Considerable frustration, but Eureka! They are beginning to get the idea that a composition requires a central idea and a form!

Try this again tomorrow. Go over today's papers with class.

Pleased with progress . . .

For the teacher, perhaps the most dramatic and encouraging example of the validity of this approach to writing was the "discovery" made quite early in the course by nineteen-year-old Harvey (a senior who needed an English credit to be graduated).

On the second day of the term, when the students were asked to write briefly on what they liked to read or liked to do, Harvey simply sat. In response to the teacher's queries he stated quietly and matter-of-factly that he could not write.

In an adjacent office, answering the teacher's query: "Just what kind of trouble do you have with writing?" Harvey said:

"Well, I don't know . . . I guess I got trouble every way. Every time the teacher said to write, she handed back my paper and she said she couldn't make it out. All my English teachers . . . they said it didn't make no sense. They said I can't ~~never~~ write until I know my grammar . . ."

As a way out of the dilemma Harvey agreed reluctantly with the teacher that the latter could help with this problem only if Harvey would write something. After a brief exploration of possi-

ble topics, Harvey decided to describe something about his work as a carry-out boy in a local super-market. Before the end of the period he had produced the following:

Store

Night people come running in and running or the people coming in an walk slow a say "do we need this," and reply "why done you spind all my mony" and the woman say "I an tring" Than you come the registers That is alway clingng. The cashers are alway on move they try get people check out as fast possibly a say "can I help you" "is this all" "that be "whot you have to her, you alway thank it to much then comes the change" your change is "thank you a comt back"

As an initial and motivating exercise the students were asked to take turns in recording these first papers. They were then to play-back and listen for any parts that "did not say what they wanted to say." Harvey, who began this task with some reluctance, soon startled those around him with a street-corner expletive, yanked off the headset, and sought out the teacher to explain, with some bewilderment, that his paper really had not started the way it should at all!

Instead of "People come running in and running or the people coming in an walk slow . . ." it should have been: "At night some people come running in the store and others they walk in slow. A woman walks along and she say, 'Do we need this?' And her husband reply, 'Why don't you spind all my money?' And the woman she say, 'I am trying . . .'" (from tapescript)

This seemed the time for the teacher to point out to Harvey that although his paper needed a great deal of work, it had much to commend it. It "moved"--people ran in and out and cash registers clanged; it had humor and was enlivened with conversation--the man and wife talked about spending money; and it revealed that the writer had a sense of organization--the people progressed through the shopping tour and were checked out by the cashier.

Motivated by the teacher's positive view of what he had written and by the fact that he was trying to improve his writing skill in a way new to him, Harvey went back to the tape recorder with renewed zeal. For perhaps the first time, or at least the first time in a long time, Harvey actually read and heard what he had written, or thought he had written. As a result, he overstayed his allotted time at the tape recorder, in recording, playing-back, innovating, expostulating with himself, and in

trying to comprehend how he had actually put on paper what he had. In those first few days other students also made discoveries-- that words had been omitted, that sentences needed recasting-- but no discovery was as dramatic or satisfying to the teacher as Harvey's.

Although the students did not make phenomenal strides during the summer, certainly they made some progress and became more acutely aware of word endings and usage. Dale, who wanted to go into the tool and die business, began the term writing sentences like this: "I taken her home about 11:00 and every since then I have went with her." But by the last week of school, he could write fairly consistently a sentence like this: "I chose this trade because I was influenced by my uncle that works at Boing Aircraft near Settle, Washington. I would like a job like his."

During the second week, Janice, reflecting on the strange behavior of Walter Mitty, in James Thurber's "The Secret Life of Walter Mitty," wrote: "First he is hen-petted and he daydreams to get away from his wife and he daydream what he think he would like if he was away from his wife to do what he wanted to do. I think it is good for to daydream once in a while and to get away from his problems of life when your hen-petted." After working to improve her paper in two sessions at the tape recorder, and guided to some extent by suggestions given by her classmates in group criticism activity, she edited it to read: "Walter Mitty really is hen-pecked and he daydreams so he can get away from his wife. He thinks what he would like to do if he didn't have his wife and he could do what he wanted to do.

"I think it is good to daydream once in a while and to get away from the problems of life, especially when your hen-pecked."

Teacher and student judgments about the effectiveness of these oral-aural-visual techniques were generally favorable. In addition to the feeling that they had learned some new ways of going about the business of writing, ways that might serve not only in preparing papers for an English class, but also in handling the bread-and-butter writing jobs beyond the classroom, the students revealed a shift in attitude about writing (and English) from negative toward positive. Perhaps one of the most significant indications to come from the summer's work was that this approach seemed to be especially helpful to students with low verbal abilities. However, several of the better writers said that they felt this emphasis on "writing with the ear" had helped them to listen to themselves harder and consequently to "sharpen" their writing.

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Program for English #5-03892-12-1, Burriss Laboratory School,
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STUDY SHEET I

LANGUAGE: SPEECH AND WRITING

Language, our language, can be divided into two categories: speech sounds and writing. Speech sounds are those noises that we make to each other, and writing consists of those marks we make on paper. May we say, then, that speech is noise and writing marks? Not really, because noise and marks are not enough for the purposes of communication, for the matter of making ourselves understood to another human being. This, for example is a mark: , and if you will take your hand and slap the desk, you will hear a sound, yet neither of these really communicates nor means. Something more is needed before communication can occur, and that something is form. Our world is full of forms, and our mind demands form so that it may recognize and comprehend, but to be of use to us, form must have a repeatable pattern. We have this pattern in our speech and in our writing. Just as our hands can shape a piece of clay, our mouth can shape sound and shape it again and again in the same way. I can make the sound "dog," and so can you. You recognize and find meaning in the noise that is shaped "Run!" and so do I. When we want to be understood by our marks we have to shape them properly, or they fail us.

We refer to this matter of form in writing when we say that someone has nice handwriting. It means that his "e" is properly formed and does not look like it might be an "i". In our English alphabet we have 26 letters, the forms of which are fairly well standardized, and the young are taught these patterns and are made to practice drawing them until they can repeat them. The same is true for the child learning to make the correct word sounds. He struggles with the form. At a certain age he may have trouble with the sound represented by the letters "s" and "o" in the alphabet. He will substitute some other sound which he has mastered for the "s" sound. He says "fleep" for "sleep." With a few exceptions, most children have mastered all the sound forms in the language before they enter the first grade.

One aspect of language, then, that is held in common by both the written and the spoken is FORM.

Before we proceed, perhaps we should realize that the spoken language is the basic language. We know that writing is at least 6000 years old, but we do not know just how long man has been gifted with a system of speech sounds. Linguists suggest 50 to 150 thousand years, perhaps longer. In short, man spoke a long time before he organized a useful system of marks. All men on

earth today have a spoken language--even the most primitive tribes. There are literally thousands of sound systems (spoken languages) in the world today, but not every sound system, not every group, has a system of marks.

Why this is so, we have no real way of knowing. Perhaps some speech groups did not feel that they needed a system of marks. Need may be an important factor here. For example, when a culture reaches the stage in its development where some of its members find a need to keep records (business records or a record of events) then a way must be devised to do this. The information must be important enough that men are unwilling to entrust these records to human memory alone. The more complicated the culture, the more abstract and complicated we may expect its system of writing to be. To illustrate this, we need only observe the American Indian tribes who developed and used what we may call a picture language. If they were out on a hunting party and wanted to tell the members of the tribe following them which direction the hunt was going, they took rocks and laid them out in the form of an arrow with the pointed end (the pointed end on a real arrow being, of course, that end which determined direction) indicating their route. Indians even attempted to tell stories in pictures. They drew crude pictures of men and animals, and if they wanted to show that they killed eight deer on one hunt, they painted eight deer in the picture. Obviously, it took the Indian artist more time to draw or paint eight deer than it will take you or me to make the following marks on a piece of paper: "8 deer" or "eight deer." Evidently time was not money to the early American Indian. But it was to the ancient Phoenicians. They were traders with ships plying the seas, and they probably felt that they could not spend all day drawing pictures of ships and cargoes. They wanted a quicker system, and so they invented one. Now, note the word "invented," because that is just what writing is, an invention. It is not a natural occurrence or development as is man's speaking or the whale's losing its legs and becoming strictly a sea creature. No, not at all. At some point in time, at some place on earth, a man or men invented a system of marks, one that would be easier to use than pictures; one that required less time for the writer. At first, the new invention was a slight change from the old picture kind of writing, but as time passed and men wanted to write quickly the marks grew less like pictures and easier to make. Examine the chart (front of room) which shows the development of cuneiform. The early pictures require more skill and thus more time. The latter pictures, while they may look as though more skill is required, are really more simple, because a triangular shaped reed was the writing instrument and provided a form ready-made. Look now to the hieroglyphic sample (front of room). This would, obviously,

take skill and time. Keep in mind the increasing need for simplicity, and examine next the chart showing the growth of the modern alphabet. You should very quickly perceive that an "A" is a matter of forming three lines into a simple pattern. The Sinaitic forms are just not as easy to make.

So there we have a brief look at writing, the cause of its development, and a bit of its history. We have compared writing marks to speech sounds and have observed that both are dependent for sense or meaning on form and patterning. Where, then, do we go from there? Well, knowing that speech and writing marks do have a relationship and do have features in common we might now explore the ways in which the two differ.

STUDY SHEET II

LANGUAGE: SPEECH AND WRITING

The first and most obvious difference between speech and writing is that speech must be heard and writing must be seen (or, in the case of the blind, felt; in any event they require us to use different senses.) A second thought causes us to recognize the fact that when we utter the sounds, "Go to the store and get some apples," we are using our vocal system to make the air vibrate in a precise manner, i.e., we are creating the forms "Go," "to," "the," and so on. Form ceases to exist however, when we stop our vocal cords and close our mouths. The unfortunate result of this may well be that we go to the store and return with oranges. On the other hand, if we make the following marks on paper, "Get apples." and take the paper with us to the store, and if we look at the marks on the paper while we are shopping, it's pretty safe to assume that we will return fully prepared to "keep the Doctor away." Now what word may we use to describe the difference illustrated above? How about permanence? Writing is more permanent than speech sounds. (Line up and send a message down the line.) Speech, on the other hand, is a faster, more flexible way of communicating than writing. When we are in a situation where we can see and observe the listener, we make use of one kind of flexibility. Suppose we send someone out of the room and then hide an object for him to find when he returns. We will aid him with speech sounds during his search. We can observe him, and when he does not understand what we are telling him to do, we can repeat ourselves. This is an advantage that we do not have if we write instructions. This flexibility exists even when we do not see our listener. We repeat if necessary when we talk on the telephone or in the dark of night, and we use other advantages that cannot be used in writing. We use what is called inflection, and inflection is a matter of (1) pitch and (2) stress. Pitch concerns the highness or lowness of one's voice. Stress is the emphasis in our voice that allows us to discern the difference between such words as refuse, the verb, and refuse, the noun; convict, the verb, and convict, the noun. Pitch and stress are signals that the speaker and listener use and recognize immediately, but, since writing does not involve the use of sound, we do not have the advantage of these signals when we make marks on paper. Finally, speech and writing do share one advantage, and that is junction. The inventors of writing adapted this device because it was a natural thing to them as speakers. To examine the importance of junction, read the following well-known text:

When in the course of humane events it becomes necessary for one people to dissolve the political bands which have connected them with another . . .

The trouble you have with this must be attributed to the lack of juncture in the excerpt and the necessity for you to supply this juncture before you get the message.

By showing that speech is quicker and more flexible, we have at the same time pointed to one of the writer's biggest problems. The writer, because he cannot use pitch and stress, and because he cannot see his reader and change or restate his message when a frown appears on the face of the reader (showing that he does not understand what the writer is trying to make him understand) must plan carefully what he is going to say and how he is going to say it. He must spend more time planning than the speaker because he will have only one chance to make the reader understand him. Anyone who has tried to write has experienced this problem and it will always be a problem. The difficulty becomes very painful when we reach the point where we know what we want to write about, but we don't know how or where to start our message. The problem is one of deciding where the beginning is for our reader, and not where the beginning is for us. If you are an expert on restoring automobiles and you are going to write an explanation of your methods of painting and refinishing an old car, you are going to have to ask and answer the question: "How much does my reader know about my subject? Is he a novice, or is he an experienced hand like myself?" If this is for the inexperienced, then you dare not assume that he knows about the types of paint used, spray equipment, abrasives, and so forth.

Thus, you will begin on a more elementary basis for the new-comer, and you will define more terms than you would if you were writing for someone who knows about the hobby. This would not be the case if you were telling your method. The listener could ask questions and show you when, where, and what he does not understand.

Speaking, you will rightly conclude, is the much easier of the two language categories. We have already agreed that it is more natural for us. Unless we have a physical defect, we cannot avoid learning to speak, and we have almost mastered the ways of speaking by the time we have reached the age of six. Writing, however, is never natural, and it presents problems every time we have to do it. If you go to a dance you will probably notice that those who dance the most are those who become the best at dancing. The same situation exists between writing and speaking. Writing is the "wall-flower" of language, because it is the language activity that we do the least of.

Most of our language activity during our lives is spent listening; second is speaking; third is reading; and writing gets the least amount of time.

Our speaking mechanism is built in. It comes with the set, and it's very easy to use. But learning to write is not natural and not easy. (Writing was invented, remember?) It is like using a knife, fork, and spoon. The human baby comes equipped with hands, and when those hands are close to food, they reach out and grasp the food and deliver it to the mouth. Give a child a spoon, and he will deliver the food to his ear or his left eyebrow, because the spoon of course, is not built in; it is artificial--invented, like writing.

There is something else about writing that makes it a bit difficult. Writing, as we have noted, is pictorial. It started as pictures and became something else. But what is a picture? A picture of a house is not the house; it is the image of the house; it stands for the house. In other words, when we utter or write a word--say, "desk"--we are dealing with two things: the real desk and the word (written or uttered) desk. So we may say that a word or a picture "stands for," or "represents," or symbolizes the real thing; and it is the idea of a symbol that we must now examine.

STUDY SHEET III

LANGUAGE: SPEECH AND WRITING

The pictures in the early writings were symbols of the things that were real. At first, these "letters" had a recognizable relationship with things in nature. The picture for "bird" looked like a bird. Gradually, as you can see, the pictures grew more abstract, and the bird came to look less like a real bird and more like a "mark." Finally, the ancient writers really out corners by inventing a system that gave us a symbol for each sound made in the spoken language. This cut down on the number of marks that they had to learn to make. Think of the endless numbers of things in nature and the endless numbers of words in a language. Imagine trying to memorize a symbol for each word in the English language. We have better than a half million words in our language. Our job is not as tough now as it might have been if those ancient inventors had simply settled for the pictorial system. Suppose you now had to draw pictures to represent this sentence: "I believe that all men are created equal." You could draw a picture of men, but what picture would you use for I, believe, that, all, are, created, and equal? These very complicated words are not "seeable," so there are no pictures for them. We would have to do without them in a strictly pictorial writing system. We could, of course, symbolize each word. We could say let  stand for the idea "I," and let  stand for the idea "believe," etc.; but if we did, we would have to come up with a symbol for each word, and learning to write by memorizing all the words and symbols would be an almost impossible task.

Our English alphabet of 26 letters gives us a bit of trouble, because we make more than 26 sounds. In our alphabet we have the sound "k" represented by three letters, "k" and "c" and "q." We have the letter "a" to represent more than one sound. The sound in rat is not the same as that in rate, although the final "e" is provided to signal the correct way of saying the sound. But this signal can no longer be trusted. There is a final "e" in the word some, but it does not indicate that the letter "o" should be shaped as it is in the word wrote. We have only 26 letters, and yet linguists list at least 26 consonant phonemes and nine vowel phonemes as being used by English speakers. A phoneme is a unit of sound in a language that can be heard as being different from other sounds. We know that pin is not the same as nip, pin, tip, because of the difference we hear between the "p" phoneme and the "t" and the "n" phonemes. Our problem of letters vs. phonemes is partly a matter of mathematics: 26 plus 9

equals 35, not 26. Actually, it's worse than this, because when the linguists are pinned down they list more sounds than this, some claim over 40 sounds. If our alphabet were phonetic (one symbol for each sound) we would have a much easier time of it, and anyone who could hear and speak would be able to read and spell with very little trouble.

Our language has taken over half of its words from other languages, and this borrowing is useful and is still going on, the word Blitzkrieg, for example. Borrowed words are no problem to us when we speak because we knew all we needed to know about shaping sound when we were six, and while "saying" is easy, spelling is a difficult matter in English today because we did borrow words and we ignored the phonetic way to spell the word in English and kept the word in its foreign form. For example, we borrowed the words debt and doubt from the French, and the words had come into the French language from Latin. The French had dropped the b's because they were not sounded by the speaker. Scholars in England, however, felt that Latin was a superior language and therefore wanted to show the Latin background in these words. So they insisted that the b remain in the word. It would be phonetically more honest to drop the b and spell them det and dout. The same thing happened with the tion words. The Latin t was kept even though the English sound was made with a sh. In short, many of our spellings, because of borrowing, are illogical in terms of the sound we make and the symbols we use to stand for those sounds. Consider the "o" sound in go. "O" is an easy sound to make, but look at the number of letter combinations that are used to symbolize this sound: goat, sew, tow, know, though, doe, vote. Confusing, isn't it? To prove the point, consider that it is "logically" possible to spell the word fish as ghoti in English: gh as in rough, o as in women, ti as in nation. We have confusing items like fine and sign, no and know, smile and aisle, through and cough. This confusion exists because of the rapid changes that occurred in those early times, and the changes occurred because the language needed new words to match new ideas. Indeed, one thing that the modern student--the modern user of language--should realize is that English has changed and is changing even now. Language, like culture, does not stand still. New ideas need new words in order to be clear. In the course of events--a war, a scientific discovery, man's entry into space--old words are discarded and new words are formed or borrowed to meet the needs of the people. Even our system of sounds changes. Listen to this sample of Old English and you will see that the vowel sounds and the inflection of the language were very different in the year 1000 from what we have today. (Recording) And the process continues. Linguists report that we are beginning to make the "b" and the "p" sound alike.

They suggest that each generation learns its language from the preceding generation, and learns it imperfectly. This, over the centuries, explains the changes in the way we speak.

Experiments are now underway in England and the United States with a new alphabet. It is called the Initial Teaching Alphabet, and as you examine it you will probably discover that you have very little trouble reading it because you have already learned the harder alphabet. See if you can tell from this poem I hand you how the alphabet is organized. Try writing with the I.T.A. symbols and see what happens. To really see the advantages that this kind of alphabet would give the reader or the speller, pick a word you do not know how to spell and write it with this system of marks. This alphabet would certainly make our written language a much easier learning task and raise our grades in spelling. Or would it? Just suppose that you have mastered the I.T.A. Suppose again that you are an English teacher (tremendous people, English teachers) in southern Indiana and you receive the following sentence from one of your students:

ie weesh ic kexed u deesh uv feesh

What would you say to him? Suppose you taught here in Muncie and a pupil wrote "weesh" and "wiche" for "when" and "which." What could you do? Why would this happen?

If you pay attention to the way people speak, you know that they do not all say the same words in the same way. This points up another difference between speech sounds and our system of marks or symbols. Writing is always the same. The late President Kennedy only said "Kuebr." When he put it on paper, he wrote C/u/b/a, just as you and I do. In short, there are many ways to say a word but generally only one or two ways to write it. We can say this in spite of the confusion in English spelling that has already been cited. The important thing to remember here is that we speak one way and write another, and yet speech does have an effect on our writing. You will note, if you concentrate, that when you read you hear a voice talking to you. If you listen closely you will discover that it isn't really your voice, and the words certainly aren't arranged just the way you would arrange them if you were saying the story or idea that appears on the paper. The writer has (because the words are his and he chose them and arranged them) charge or control of your thoughts. He has control of the voice and pattern you use to communicate to yourself. Again, I remind you that this pattern is not your speech pattern. In other words, you should be able to see that we have patterns for speech and different patterns for writing. Your problem is to learn the patterns used when men write English. One pattern you are familiar with

begins "Once upon a time..." and ends with a familiar four-word pattern. What are the final four words? Patterns in writing differ because the writers are different, but it is worth our time to look at the ways they have of putting words together. The ways or patterns are similar to an amazing degree. Listen to the way writers begin a story for the magazine True Romances. Notice the patterns in Outdoor Life. These examples may seem "natural" to you, but if you think about it, they do not pattern the way they would if the writer (or you, for that matter) were telling the story. One pattern is writing, and the other is speech.

To demonstrate this point, let us choose one member of the class and send him out of the room. We'll then choose another member, and I will read a poem or story to him, and we will ask him to write something that will tell the student in the hall about the story read. We'll then pick up the paper. When the last member of the class returns, we'll experiment a bit to see if we can clarify the difference between writing and speech.

Recognition of the fact that speech patterns differ from writing patterns should help us in writing. Remember the voice you heard when you read? That voice must be heard when you write, and it must talk writing, not speaking. To do this you must call upon your storehouse of patterns--the storehouse is, of course, the mind. We noted at the beginning that the mind reaches out and comprehends forms (patterns), and it takes pictures of these forms; pictures that it stores away for the future. Thus, if you decide to write and your mind has vivid pictures of the writing patterns, you will reproduce those writing patterns. If the mind has only speech patterns, then you will write speech patterns and find that they fail to communicate due to the differences that we have already discussed. Writing patterns are going to have our concentrated attention this year, for if we can improve the stock we have in our minds, then the task of setting our thoughts on paper will be less frightening and a bit less painful.

In order to help you hear "that voice" and see the pattern, we have tape recorders for your use in writing. The recorders are equipped with head phones and a microphone. The mike sends the sound of your voice back to your ear at the same time it records. The idea is to get you to hear your writing voice more clearly and to get you to compare what you hear with the marks you're making on the paper. Thus you are saying, hearing, and seeing at the same instant. And the more you perfect the

coordination of these three senses, the better your writing will communicate. Even now, for instance, as I write these words, I am saying them, seeing them, hearing them. When I say, hear, or see something I don't like, I realize that the reason I don't like it is because it violates or does not match the model, the pattern I have in my mind. When this happens, I scratch what I have written out and replace it with something more pleasing. This is what I want you to be able to do, and this is what the tape recorders will aid you in doing.

SOME LIKENESSES AND DIFFERENCES IN SPEECH AND
WRITING AS LISTED BY STUDENTS AFTER USING THE STUDY SHEETS

SPEECH

- 1) Has form...
- 2) Origin unknown...
- 3) Easy, natural, quick...
- 4) Dependent on senses of sound and sight...
- 5) Impermanent (unless recorded)...
- 6) Used constantly...
- 7) Pronouncing is rather easy...
- 8) Has many dialects in same language...
- 9) Has its own patterns and rhythms...

WRITING

- 1) Has form...
- 2) Invented...
- 3) Difficult, requires planning...
- 4) Dependent on senses of sight and sound...
- 5) Permanent (as long as print lasts)...
- 6) Not used as much as listening, speech, or reading...
- 7) Spelling differences and other oddities hard to remember...
- 8) Has few spelling variations, is more rigid in other ways...
- 9) Has patterns and rhythms different from speech, but writer must hear these...

OBSERVATIONS OF SOME DIFFERENCES BETWEEN SPEAKING
AND WRITING AS LISTED BY STUDENTS AFTER STUDYING STUDENT
WRITING SAMPLES AND LISTENING TO TAPES OF SMALL GROUP DISCUSSIONS

- | | |
|--|--|
| 1) Individuals tend to repeat themselves, to start then change direction, say "uh" while they search for words or ideas... | 1) Writers have to think their sentences, to <u>hear</u> themselves get going in the patterns and rhythms of writing before they set down sentences for the reader to test with his eyes and ears. The writer has to organize better and it takes longer... |
| 2) Speakers tend to ramble, to let words flow loosely, have less thinking time... | 2) Writers are forced to make sentences more compact, to match the <u>sound</u> of written forms... |
| 3) Speakers tend to throw ideas in or add them on without too much thought; this tends to make their presentation choppy and less logical... | 3) Writers have to be more logical; they can't just toss in ideas without organizing them; this, of course, takes longer than speaking... |
| 4) Speakers often fail to inflect for meaning, to punctuate orally, thus they leave word groups "hanging" for the listener... | 4) Writers have to put in punctuation marks because without the speaker's voice to give the words meaning, the words do not communicate as they should... |
| 5) Speakers often get from one idea to another (effect transition) through reference to what someone else in a conversation has said... | 5) Writers cannot do this (unless they write dialogue) because the reader is lost without knowing what the reference is; thus the writer has to use the transition devices of connectors, pronouns, etc... Getting smoothly from one place to another is the hardest job in writing... |

APPENDIX B

Writing Lab Sheet No. 1

What happens when you write?

Many things happen all at once.

First, of course, you need to have something to write about and something to say about it. For example: If the writing topic is "Words in Popular Songs," you will need to have some ideas about the way pop singers pronounce words, what the words mean (or do not mean), why they do or do not seem to mean anything, which songs are easy and which are hard to listen to, etc.

Second, you have to start somewhere, so you generally toss around possible opening words in your mind until you hit upon a combination that seems right and that sounds right.

Example: Does this sound right?

"This party was held at a friend of mine's house."

Third, you hear yourself saying the words to yourself as you put them down in order to test the way they sound together in your mind.

To get the idea here, take a breath. Hold it. Now listen to your "inner voice" saying, "I think I will be able to get the license tomorrow." Hear it? If you don't hear it the first time, say it again and listen harder. After a while you get used to hearing yourself.

Fourth, you write down what seems to be a logical way of hooking a series of sentences together. You do this until you have worked your idea through. B-1

There are two important things to remember about writing:

One: You are hearing yourself say to yourself what it is you want to say to somebody else. No one really writes for himself.

Two: In order to hear yourself say to yourself what it is you want to write, you have to let your senses work for you. You can't do this if you are talking to somebody or simply avoiding the business of putting strings of words down on paper by just letting your mind wander. In short, you have to concentrate on getting the right hook-up going for you---talking it over to yourself and then writing down that talk.

In order to write well, you have to practice. The special tape recorders in the Writing Lab are there to help you practice. Use them well and they will help you become a better writer.

SIX STEPS IN USING THE TAPE RECORDERS

STEP ONE

Sit down to the tape recorder and try to imagine that you are off by yourself---perhaps on an island. The idea is to forget that there are other people around you.

STEP TWO

In order to help you get into this frame of mind, do the following:

1. Switch on the set
2. Write the meter reading at the top of your paper
3. Put on the headset
4. Before you start to record, try to hear yourself saying silently the first sentence you want to write about the topic.

STEP THREE

- >Just as soon as you can hear yourself loud and clear, start recording.
- >Be sure to say aloud each word at the same time you write the sentence word-by-word.
- >This will be a slow process at first, but don't worry about it. Just talk and write down each word as you say it.

STEP FOUR

- >As soon as you get down a sentence or two, push the Stop Button. Then record what you have written. Read it as you would read it aloud to somebody.
- >When you have done this, go right ahead with the next sentence, and the next, and the next---saying each aloud as you write it word-by-word.
- >Record the paragraph, when you finish it.
- >If you happen to notice something you want to change, hold down the Pause Button, make a quick check mark (✓) or write a brief word or two in order to cue you later; then go ahead reading and recording.

STEP FIVE

- >When you have written most, or all, of your paper, run the tape back and listen to your recording at the same time that you read silently what you have written.
- >As you listen, think how you might make changes. Use the Pause Button to allow you time to make check marks, or the Stop Button if you want to make some major repairs. Complete listening to your first draft.

STEP SIX

- >As soon as you finish the first draft, set it aside for a little while.
- >Get your mind off the paper by reading some other material or just letting your mind wander a bit. Don't bother somebody else trying to get his paper worked out.
- >After this pause, start re-writing and putting in the changes you want to make in your first draft.

- >When you've re-copied the first draft, record it, and play it back as you read it silently.
- >If you still find a few places in which you want to make changes, do as you have done in the first draft.
- >Copy your final and corrected draft for handing in.

Example Materials Used in Program for English #1989,
Ball State University

WRITING TOPICS

- CUE WORDS -

Developing a View

Racing

View A	View B
roar	bleacher
zoom	yell
swerve	hot
squeal	hot dog
thud	dizzy
crunch	sick

Swimming

View A	View B
splash	towel
cool	sand
stroke	shell
chlorine	sun
seaweed	glare
breathe	shade

Basic Questions To Be Answered In Your Writing

1. Who are you?
2. Where are you?
3. Who is your audience?
4. What do you have to say?

Note: The teacher asks the class to consider the sequence of words in each frame and to try to visualize, to hear, and to feel the action each sequence suggests. Using View A or View B or both, the writer is asked to develop a brief narrative. He may use the words in the sequence as part of his narrative. He may, however, wish to supply his own words to narrate what the sequence suggests to him.

In both the pre-writing and the writing he is to be particularly aware of Questions 1, 2 & 3, so that he clearly establishes point of view.

Name _____

RUN-TOGETHER SENTENCES

Correct the following sentences either by inserting a semicolon or by using a period and starting a new sentence. Listen carefully! (.) or (;)

1. Many of the first clocks had no faces, they told the time by striking a bell.
2. Our fullback ran into the goal post and broke his leg, our guard wrenched his back blocking a tackle.
3. In spite of his solemn air and dead-pan expression, he has a sense of humor.
4. A week before the dance you must turn in the names of your proposed guests to the Dean of Girls, that is a school rule.
5. The full-dress review at West Point is a colorful and thrilling sight, from all over the nation people gather to watch the cadets on parade.

Correct these sentences by using an appropriate coordinating conjunction (and, or, but, for). Listen to the finished expression!

1. Andy and Pete tried every trick they knew, they still couldn't persuade the horse to jump.
2. We always like to throw salt into the fire, it turns the flames bright yellow.
3. New Year's Day was past, we still hadn't taken down our Christmas tree.
4. Don't start putting Jackie's plane together without reading the directions, you'll just waste time.
5. Mudville's baseball fans were grieving, mighty Casey had struck out.

Name _____

Hearing Punctuation

(Use of the period, the comma, quotation marks.)

Listen to the tape recording of this news item and punctuate what you hear.

Beatles Needn't Worry About K9 Corps at Airport

LONDON (AP) -- London Airport officials have called off the police dogs for Sunday's arrival of the Beatles from their current Continental tour there will be no restrictions for the Beatles' fans this time said an airport spokesman Thursday I can assure the fans that this time there will be no police dogs standing by when the Beatles left on their tour last month enraged fans protested that police dogs with uniformed handlers prevented them from giving their idols a proper sendoff asked why the change of heart an Aviation Ministry spokesman said there's been no change of heart what happened when the Beatles left London Airport the last time was the result of coincidence they happened to be departing when Commonwealth prime ministers were arriving for the Commonwealth conference he said the police and the police dogs were at the airport as an extra safety precaution for them

HOW TO ORGANIZE A THEME

General Organizational Pattern:

Every paper you write must have a beginning, a middle, and an end. The beginning is important since it is likely to determine whether or not you will have a reader. The end is important in that it either makes or fails to make a lasting impression on your reader. The middle is important in that it bears the weight of your ideas and gives you a chance to develop them.

The Beginning:

How you begin your paper depends upon your subject and your reader. However, always remember that your first aim is to attract the attention of your reader and make him want to read all that you have written.

There are numerous ways to begin a paper: you can start with a question ("Are you ready to fight?"); you can start with a startling statement ("Sometimes I hate myself!"); you can begin with a narrative passage ("When my father was a young man, he . . ."); you can begin with a quotation from literature ("The trouble with a kitten is that / Eventually it becomes a cat."); or you can begin with a discussion of the background of your topic ("The business of advertising is a relatively old one.").

The Middle:

In organizing the middle of your paper, keep two steps in mind: the grouping of similar ideas together, and the arrangement of groups of ideas in a logical sequence.

The End:

The purposes of your conclusion are to create a sense of finality and to make a final impression on your reader.

To conclude your paper you can: summarize what you have already said (" . . . In other words, total world peace is not in the offing."); leave a question in your reader's mind (" . . . What this could mean is more self-discipline."); close with an apt quotation (" . . . After examining his life, we can truly say 'there was a man!'"); or suggest possible results or implications (" . . . Our trouble in the East could lead to a full-scale war").

Transitions:

Trying to tie together the separate parts of a theme into a unified whole requires the use of devices known as transitions.

Common transitions are words like he, they, and that ("Willie Mays is a spectacular player. He . . ."); numbers like first, second, and third ("The Yankees failed to win the pennant for a number of reasons. First, they . . ."); words like furthermore, in addition, and similarly ("They had no power. Furthermore, they . . ."); and words like because, therefore, thus, and consequently ("Consequently, they . . .").

A SAMPLE THEME:

Suppose you wanted to write a paper about the lack of .400 hitters in baseball. You could begin your paper in the following way---

"The four hundred hitter in baseball is just as rare a bird as the legendary dodo. In fact, not since 1954 has a National League player reached the .400 mark."

Now that you've set the stage for what you're going to write about, you could begin the middle of your paper in the following manner---

"Perhaps the National Leaguer who has the best chance for hitting such an average is Hank Aaron of the Atlanta Braves."

You could then go on and spell out why you think Aaron "has the best chance." In your paper, you could say the following---

"With his great speed, his power, and his natural hitting ability, Hammerin' Hank is certainly ready to join the select circle of .400 hitters."

Name _____

Date _____

Class Period _____

SAMPLE ESSAY

You are to use this class period (70 minutes) to organize and compose an essay on the topic that appears on the blackboard. We will do this several times throughout the year for the purpose of measuring the progress you are making in expressing your ideas on paper. Your goal should be to do the best job you can on each of these samples. There is to be no talking, and you are on your own.

Consider the following matters:

1. Introductory statement: you should introduce your main idea to your reader.
2. The middle: you should explain your idea or attitude to the reader.
3. Conclusion: you should end on a final, summary note.
4. Title: you should invent an effective title.

PLEASE HAND THIS SHEET IN WHEN YOU HAND IN YOUR ESSAY. SEE THAT YOU DO WHAT IS SUGGESTED BELOW.

I hereby indicate that I have (check box)

1. Carefully examined my introduction and find it to be sound.
2. Decided that my explanation of my idea is clear.
3. Seen to it that my conclusion sums up my stand.
4. Provided an effective title.

B-10

APPENDIX C

INSTRUMENTS DEVELOPED

The following information provides a sample of the validation work of the two attached attitude instruments. It also demonstrates the kind of dissemination activities carried out during the course of the study.

Text of an article published in the Indiana English Leaflet, Volume 7, Nos. 3-4, Spring, 1965.

ASSESSING ATTITUDES TOWARD ENGLISH¹

Anthony Tovatt

Ebert Miller

For a number of years reports of studies attempting to assess student attitudes toward English have shown that this curricular offering has been generally regarded as unpleasant and of limited utility. This negative attitude toward this one subject in the total curriculum allotted more time than any other has been a major concern. Available methods and instruments for assessing attitudes have held little promise for providing additional insights into the affective aspects of English. Hopefully, the writers of this report envision that the semantic and problems approach herein discussed will provide a meaningful dimension in studies in the language arts curriculum.

Any comprehensive study of techniques of teaching necessitates not only an appraisal of achievement, but also an assessment of attitudes. As one of the pilot activities in a three-year Program for English study testing an oral-aural-visual approach to teaching ninth-grade composition, the researchers developed two instruments. The first, the Composition and Literature Record*, was constructed to evaluate general student attitude toward these two areas. The second, the Communication Difficulties Inventory, was devised both to explore negative aspects of student feeling toward the language arts and to help pinpoint individual student problems.

One aspect of the validation study of the Composition and Literature Record led to the investigation of attitudes on the bases of socio-economic class and sex. In order to demonstrate maximum differences, only the extremes of the socio-economic continuum are reported. The Dictionary of Occupational Titles was the basis for defining socio-economic class. The upper socio-economic group included 100 ninth

*Title later changed to Composition and Literature Inventory.

grade students (51 male and 49 female) whose "breadwinner" parent had an occupation which corresponded with the following occupation description: professional, semi-professional, proprietors, managers, and officials. The lower socioeconomic group included 59 ninth grade students (21 male and 38 female) whose "breadwinner" parent had an occupation which corresponded with the following: unskilled occupations, farm laborers, factory and building laborers, other laborers, and servant classes.

Composition and Literature Record

The Composition and Literature Record is a semantic differential instrument which includes seven bi-polar scales (e.g., meaningful to meaningless and boring to interesting) to be marked in one of seven positions ranging from most favorable through neutral to least favorable (e.g., meaningful _____; _____; _____;

(most favorable)

_____;

(neutral)

_____;

_____ (least favorable); meaningless). The least favorable position is assigned a value of 1 and each succeeding scale position is one point higher, resulting in a scale value of 4 for neutral and 7 for the most favorable position. The ranked value for the seven composition scales is summed to obtain the composition attitude score for each individual, and the ranked value for the seven literature scales is summed to get the literature attitude score. These scales are all "evaluative" in nature, and their use is in accordance with the rationale proposed by Osgood, Suci, and Tannenbaum in their book The Measurement of Meaning.²

Because the distribution of attitudes cannot be assumed to be normally distributed, a distribution-free statistical technique (Median Chi-square) was applied to determine if the obtained results differed significantly from chance. Table I summarizes the results of this analysis.

TABLE I

Groups	ATTITUDE TOWARD COMPOSITION		Significance*
	Median	Chi-Square (1 degree of freedom)	
Upper Male-Lower Male xx	34.5	.67	< .50
xxUpper Female-Lower Female	38.0	4.58	< .05 ✓✓
Upper Male-Upper Female xx	37.5	3.2	< .10 ✓✓
Lower Male-Lower Female xx	35.0	.13	< .75
Total Male-Total Female xx	37.0	1.45	< .25
xxTotal Upper-Total Lower	37.0	2.37	< .20

ATTITUDE TOWARD LITERATURE			
Groups	Median	Chi-Square (1 degree of freedom)	Significance*
xxUpper Male-Lower Male	41.5	2.10	< .20
xxUpper Female-Lower Female	42.0	1.45	< .25
Upper Male-Upper Female xx	42.0	.46	< .50
Lower Male-Lower Female xx	40.0	.46	< .50
Total Male-Total Female xx	42.0	.06	< .90
xxTotal Upper-Total Lower	41.0	8.13	< .01 ✓✓

✓✓ < .10 arbitrary level of acceptable significance
 xx=most favorable attitude

*Levels of significance from Appendix B, page 423 of Statistical Methods in Educational and Psychological Research by James E. Wert, Charles O. Neidt, and J. Stanley Ahmann, 1954, Appleton-Century, Crofts & Co.

Summary of Results

1. In all comparisons between male and female groups, the female group was the most favorable in attitude. However, only in attitude toward composition was the difference in the comparison between the upper male and female groups large enough to meet the level set for statistical significance (<.10).
2. In comparisons between upper and lower socio-economic female groups the upper female group was most favorable in attitude. In attitude toward composition, the difference was large enough to be significant beyond the .05 level of confidence.
3. In comparisons between upper and lower socio-economic male groups, the lower male group was more favorable toward composition and the upper male group was more favorable toward literature. However, neither of these differences was large enough to be statistically significant.
4. Median literature scores were higher than median composition scores for all groups compared.
5. Comparison of literature scores for the total (male and female) upper socio-economic group with the scores for the total lower socio-economic group demonstrated the greatest difference. This difference was statistically significant beyond the .01 level of confidence, the upper group being more favorable in attitude.

6. Examination of individual scores revealed a range from 7 (the most negative score possible) through 49 (the most positive score possible). The median scores ranged from 34.5 to 42.0 (score of 35 indicates neutrality). The scale seems to reflect degrees of positive attitude to a greater extent than it reflects degrees of negative attitude.

Communication Difficulties Inventory

To complement the Composition and Literature Inventory, which tends to reflect positive general attitude, the researchers devised the Communication Difficulties Inventory. This second instrument is focused on individual language arts problems and thus has a more negative orientation. It attempts through a series of rather specific stimulus statements to have the student identify his problems in reading, writing, speaking, and listening.

The fourteen statements under each of these four language arts categories represent the most pervasive student difficulties. Each statement is a synthesis of responses made by ninth grade students in six selected schools representative of different ability levels as well as different socio-economic levels in Indiana and Illinois.

The student is directed to mark each statement as representing a major difficulty, a moderate difficulty, a small difficulty, or not representative of any difficulty as that statement applies to him (e.g., "My vocabulary is poor." \triangle major difficulty, \triangle moderate difficulty, \triangle small difficulty, 0 does not apply). Symbols of different size are used to help the student be more consistent in his interpretation of each problem. A major difficulty is assigned a score of 3, a moderate difficulty, 2, a small difficulty, 1, and not applicable, 0. Summation of the scores for the fourteen statements under each of the four language arts categories (reading, writing, speaking, and listening) yields a score which reflects the magnitude of difficulty in that category as perceived by the student.

Before computing Pearson product-moment coefficients of correlation, the scores for 284 ninth grade students (141 male and 143 female) were examined to make certain that all necessary statistical assumptions were met. The relationship between attitude toward composition (as revealed by the Composition and Literature Inventory) and perceived writing difficulty (as revealed by the writing section of the Communication Difficulties Inventory) and the relationship between

attitude toward literature (as revealed by the Composition and Literature Record) and perceived reading difficulty (as revealed by the reading section of the Communication Difficulties Inventory) are presented in Table II.

Of the four language arts areas in the Communication Difficulties Inventory, writing and reading, respectively, correspond most closely with composition and literature in the Composition and Literature Record.

TABLE II

RELATIONSHIP BETWEEN ATTITUDE TOWARD COMPOSITION
AND PERCEIVED WRITING DIFFICULTY

Group	Number	R	Significance*
Male	141	-.68	<.01
Female	143	-.44	<.01
Both Male and Female	284	-.59	<.01

RELATIONSHIP BETWEEN ATTITUDE TOWARD LITERATURE
AND PERCEIVED READING DIFFICULTY

Group	Number	R	Significance*
Male	141	-.40	<.01
Female	143	-.22	<.01
Both Male and Female	284	-.35	<.01

*Significance levels from Appendix B, page 424 of Statistical Methods in Educational and Psychological Research by James E. Wert, Charles O. Neidt, and J. Stanley Ahmann.

Summary of Results

1. All obtained coefficients of correlation are significant beyond the .01 level of confidence.
2. There is a higher degree of relationship between scores for males than there is between scores for females.
3. There is a higher degree of relationship between attitude toward composition and perceived writing difficulty than there is between attitude toward literature and perceived reading difficulty.
4. All obtained coefficients of correlation are negative. (It is to be expected that high values of positive attitude will be associated with low values of perceived difficulty.)

5. Examination of responses of groups divided according to socio-economic level (as defined in the above study of attitudes toward composition and literature) revealed certain qualitative differences. For example, the major problem in writing for the upper socio-economic group was, "I don't like to write on assigned topics," while the major problems for the lower socio-economic group were "I can't organize my themes," and "I have trouble finding subjects to write about."

The major reading problem for the upper socio-economic group was, "I can't get interested in reading what is assigned," while the major problem of the lower socio-economic group was, "I just don't like to read."

6. Examination of the responses of individuals disclosed a wide range of differences within groups as well as between groups.

Summary

In the populations investigated it seems that literature generally is viewed in a more favorable light than is composition. Indication is that females are generally more favorable toward both composition and literature than are males. Also, youngsters from the higher socio-economic level seem to be more favorably inclined toward these two subjects. These results seem to be in general agreement with much of the literature concerning attitudes toward English composition and literature.

However, these results should be cautiously interpreted as they apply only to these specific groups. The wide variance within the groups as well as the rather limited operational definition of socio-economic class place limitations upon any generalizations to individuals, other groups, and other situations.

The Composition and Literature Record seems to promise usefulness as a research tool in examining overall student attitude toward these two facets of English. Additional research in the remaining two years of this Program for English study may further substantiate its utility as a more objective means of getting at a student's general attitude toward literature or composition than often subjective and rather haphazard teacher assessment.

The Communication Difficulties Inventory seems to have research utility for assessing the negative side of general attitude. In addition, it should be quite useful in helping both English teachers and individual students pinpoint difficulties, thus contributing to more realistic and profitable learning situations.

During the two remaining years of this Program for English study the combined use of these instruments to evaluate the negative and positive aspects of attitude change toward English should provide a means of assessing the affective impact of the oral-aural-visual technique. Hopefully, the instruments will be available for general use at the termination of this study.

NOTES

¹U. S. Office of Education Program for English, Cooperative Research Project, No. 1989, Burriss Laboratory School, Ball State University. Dr. Tovatt is the director of the Project; Dr. Miller is research associate.

²The Measurement of Meaning. Urbana: University of Illinois Press, 1957. Pp. 189-216.

* * * * *

Text of an article published in the Indiana Teacher, Volume 109, No. 3, January - February, 1965.

"Researchers Can Spot Pupil Difficulties with Communication Inventory"

By Anthony Tovatt and Ebert Miller
Project English #1989
Ball State Teachers College

When Miss Snow finally caught Roger's eye, she could see the obvious signals of distress. Roger just didn't have anything to write about the assignment: My Problems in English.

"Can't you think of at least one problem you have in English?" Miss Snow whispered as she bent down to his desk. "What about your difficulties in grammar?"

"Yeah, that," Roger said, "but if you want to know the truth, my big problem is having to take English in the first place. I think it's really a big, fat waste, and I can't see how it's going to help me get a job."

"But, Roger," she reasoned, "you must learn to communicate well, to read with intelligence and appreciation, and to speak with clarity and confidence. Where can you learn these skills better than in an English class?"

"I get along all right now. People I talk to know what I'm saying. I don't want to hurt your feelings, Miss Snow, but like I said, my biggest problem in English is just sitting it out so I can graduate."

"Oh, Roger. . ." Miss Snow was concerned. "You must see that English is vitally important in your life. The object of this first assignment in the term is to try to help you realize some of your weaknesses so we may work on them."

"Just write down briefly your most pressing problem," she encouraged him as she moved toward a raised hand at the rear of the room.

While this is a familiar scene in English classrooms, unfortunately many English teachers are less successful in getting children to express their problems as directly as did Miss Snow. Roger's inability to recognize his real difficulties in English is also a common one. However, his overall frustration with English and his inability to pinpoint his problems provide Miss Snow and himself with few insights, indeed, into his specific difficulties in the subject.

Tangential to the work of pilot-testing evaluative instruments for Project English Research Study #1989, Burriss Laboratory School, Ball State Teachers College, the research staff developed the Communications Difficulties Inventory. This instrument attempts, through a series of stimulus statements, to help the pupil identify his specific problems in reading, writing, speaking, and listening.*

Under each of these categories are 14 statements which represent the most pervasive difficulties. Each statement is a synthesis of responses made by ninth graders in six selected schools in Indiana and Illinois, representative of different socio-economic and ability levels.

*C D Inventory is not yet available to teachers.

As a first step the researchers set down three sample stimulus statements under each of the four categories of reading, writing, speaking, and listening. The purpose in devising the statements was to prime student thinking in a specific category. For example, the statements under WRITING were:

I can't seem to put my ideas down on paper.
I dislike revising and rewriting a theme.
I have trouble finding subjects on which to write.

These statements were checked to insure that they were plainly understandable by pupils in Grade 6 and above.

This preliminary instrument, in which the pupils were encouraged to add in their own words their specific problems under each series of statements, was administered to a sample of ninth grade students in six schools in Muncie, and in the Calumet area of Illinois.

The student responses were examined to identify common difficulties in English, the researchers synthesizing the multitude of responses into concise, understandable statements. Problems dealing with physical disabilities were excluded, e.g., poor vision. In the second version of the instrument the staff placed the synthesized statements under each of the four categories of reading, writing, speaking, and listening. In the directions, the pupil was asked to pinpoint individual trouble-spots and to indicate the degree of difficulty by marking along the following scale:

If the pupil believed the statement described a major difficulty, he encircled the largest of the three triangles set opposite the statement. If he believed the problem to be a moderate one, he encircled only the middle triangle. Encircling the small triangle, of course, indicated that he felt the statement represented only a small problem to him. If he did not feel the statement applied to him, he simply encircled the zero.

This use of  visual correlates (symbol and comparative term) helps the student to be more consistent in his interpretation of each problem.

This version of the instrument was tested and revised with new ninth grade groups in the schools already cited. Revision included simplifying directions and removing ambiguities from the statements.

The final instrument, with the 14 statements under each of the four categories, was administered to determine its reliability and validity in relation to the known characteristics of the different school samples making up the population, e.g., academic achievement, sex, and occupation and education of parents.

One of the interesting facts revealed from examination of the data is that students from different socio-economic levels perceive their problems in English differently, as shown in the following table.

Major Problems in Communications

	Upper Socio-Economic Group*	Lower Socio-Economic Group
Reading	Like to read only what is interesting.	Am slow reader and can't understand what is read.
Writing	Don't like to write on assigned topics.	Can't organize themes or find topics on which to write.
Speaking	Am nervous in front of class.	Am afraid of making mistakes.
Listening	Don't like to listen to poor speakers.	Don't like to listen to people who use big words.

*Dictionary of Occupational Titles classification system: Upper Socio-Economic includes professional, semi-professional, proprietors, managers, and officials. Lower Socio-Economic includes unskilled laborers and servants.

The orientation of the lower socio-economic group toward specific difficulties, e.g., "I am a slow reader," "I can't organize," "I am afraid of making mistakes," suggests different teaching approaches from those suggested by the concerns of the upper socio-economic group with their critical evaluation of learning materials and situations, e.g., "I don't like to listen to poor speakers," "I don't like assigned topics," and "I like to read only what interests me."

Perhaps the most practical use of the Communication Difficulties Inventory is in helping pupils enumerate and evaluate over-all difficulties in English through considering their specific problems. In addition, the instrument not only provides the English teacher with insights into class and individual difficulties, but also furnishes her information upon which to make plans that are meaningful and pertinent to students.

Both Miss Snow and Roger would, we believe, have found the inventory valuable in their attempt to come to grips with realities in the English classroom.

SOCIOECONOMIC CLASSIFICATION BASED ON THE DICTIONARY
OF OCCUPATIONAL TITLES

Professional and semi-professional	10
Proprietors, managers, and officials	9
Clerical, sales, and kindred occupations	8
Skilled occupations in manufacturing	7
Semi-skilled occupations in manufacturing	6
Other semi-skilled occupations	5
Unskilled occupations, farm laborers	4
Unskilled occupations, factory building laborers	3
Unskilled occupations, other laborers	2
Unskilled occupations, servant classes	1

SOCIOECONOMIC CLASSIFICATION BASED ON EDUCATIONAL LEVEL
OF HIGHEST EDUCATED PARENT

Graduate work	6
College graduate	5
Some college (not graduate)	4
High school graduate	3
Some high school (not graduate)	2
Grade school	1

COMPOSITION AND LITERATURE INVENTORY

Name _____ Date _____ School _____

Grade _____ Age _____ Girl _____ Boy _____ (check one)

Explanation:

We want you to tell us how you feel about written composition and literature. In the following pages you will find sets of words people might use to describe how they feel about composition and literature. Beneath each set of words is a 7-point scale. You are to judge how the words describe your feelings towards these subjects and then record your judgment on the scale.

This is NOT a test. There are NO RIGHT or WRONG ANSWERS.

Here is how you use these scales. If you feel that written composition is VERY DIFFICULT or VERY EASY for you, you should place an X as follows:

difficult X : _____ : _____ : _____ : _____ : _____ : _____ : easy

or

difficult _____ : _____ : _____ : _____ : _____ : _____ : X : easy

If you feel that written composition is QUITE DIFFICULT or QUITE EASY for you, you should place an X as follows:

difficult _____ : X : _____ : _____ : _____ : _____ : _____ : easy

or

difficult _____ : _____ : _____ : _____ : _____ : X : _____ : easy

If you feel written composition is ONLY SLIGHTLY DIFFICULT or ONLY SLIGHTLY EASY for you, you should place an X as follows:

difficult _____ : _____ : X : _____ : _____ : _____ : _____ : easy

or

difficult _____ : _____ : _____ : _____ : X : _____ : _____ : easy



WRITTEN COMPOSITION

Mark each scale to show YOUR feelings about written composition.

good _____: _____: _____: _____: _____: _____: _____: bad

unimportant _____: _____: _____: _____: _____: _____: _____: important

meaningful _____: _____: _____: _____: _____: _____: _____: meaningless

disorganized _____: _____: _____: _____: _____: _____: _____: organized

useful _____: _____: _____: _____: _____: _____: _____: useless

boring _____: _____: _____: _____: _____: _____: _____: interesting

pleasing _____: _____: _____: _____: _____: _____: _____: annoying

Go on to Page 4

LITERATURE

Mark each scale to show YOUR feelings about literature.

good _____: _____: _____: _____: _____: _____: _____: bad

unimportant _____: _____: _____: _____: _____: _____: _____: important

meaningful _____: _____: _____: _____: _____: _____: _____: meaningless

disorganized _____: _____: _____: _____: _____: _____: _____: organized

useful _____: _____: _____: _____: _____: _____: _____: useless

boring _____: _____: _____: _____: _____: _____: _____: interesting

pleasing _____: _____: _____: _____: _____: _____: _____: annoying

THAT'S ALL. PLEASE TURN IN YOUR PAPER.

COMMUNICATION DIFFICULTIES INVENTORY

Name _____ Date _____ School _____

Grade _____ Age _____ Girl _____ Boy _____ (Check one)

Explanation:

In order to pinpoint your individual trouble-spots in communicating--this means both in school and out of school--we have listed a number of statements on the four pages of this Inventory. Each statement deals with a common difficulty in speaking or writing or reading or listening. You will recognize some of them as things that have been troubling you. Others may apply to you, yet cause you no great concern. Still others may not apply to you at all.

Read each statement carefully.

If you feel the statement describes a MAJOR difficulty for you, draw a circle around the big triangle:



If you feel the statement describes a MODERATE difficulty for you, draw a circle around the middle triangle:



If you feel the statement describes a SMALL difficulty for you, draw a circle around the small triangle:



If you feel the statement describes a difficulty that DOES NOT APPLY to you at all, draw a circle around the zero:



Remember, make just one circle for each statement.

SPEAKING

- | | | | | |
|--|---|---|---|---|
| 1. I feel confident when I speak to my friends, but am uneasy when I am talking to a teacher or another adult. |  |  |  | 0 |
| 2. I use poor grammar. |  |  |  | 0 |
| 3. If I have to express my opinion, I'm afraid people will laugh at me. |  |  |  | 0 |
| 4. I'm nervous when I'm in front of a class. |  |  |  | 0 |
| 5. I'm afraid I'll make mistakes. |  |  |  | 0 |
| 6. My vocabulary is poor. |  |  |  | 0 |
| 7. I have trouble memorizing a speech. |  |  |  | 0 |
| 8. I talk too fast. |  |  |  | 0 |
| 9. I get flustered when I forget even a small part of my speech. |  |  |  | 0 |
| 10. I really don't improve my speaking after I have criticism from the teacher. |  |  |  | 0 |
| 11. I laugh when I'm in front of a group. |  |  |  | 0 |
| 12. I just can't express myself orally. |  |  |  | 0 |
| 13. My speech is cluttered with <u>uh's</u> and <u>ah's</u> . |  |  |  | 0 |
| 14. I have trouble understanding how teachers tell a good speech from a bad speech. |  |  |  | 0 |

WRITING

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|---|
| 1. I can't seem to put my ideas down on paper. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 2. I dislike revising and rewriting a theme. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 3. I have trouble finding subjects to write about. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 4. I have trouble with grammar and punctuation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 5. My handwriting is poor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 6. My spelling is poor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 7. My vocabulary is limited. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 8. I don't like to write on assigned topics. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 9. I just don't like to write. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 10. I can't organize my themes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 11. My ability to write does not improve. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 12. I don't see how writing will help me in my other classes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 13. I am upset and don't learn to write better when the teacher puts unfavorable comments on my paper. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 14. I have trouble understanding how teachers tell good compositions from bad compositions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |

READING

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|---|
| 1. I can't recall what I have read. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 2. I can't seem to concentrate on a book for more than a short period of time. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 3. I have trouble finding literature that interests me. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 4. I can't get interested in reading that is assigned. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 5. I'm a slow reader. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 6. I just don't like to read. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 7. My vocabulary is limited. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 8. I read too fast and miss important details. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 9. I don't understand why the classics are more important than other literature. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 10. I lose my place quite often. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 11. I can't tell the difference between well written selections and poorly written ones. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 12. I can't see how reading can help me understand myself. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 13. Reading bothers my eyes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 14. I can't see how reading can help me get a job. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |

LISTENING

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|---|
| 1. I have trouble concentrating on what the speaker is saying when a disturbance occurs. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 2. I don't like to listen to people I dislike. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 3. I have trouble getting the main idea in a talk or lecture. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 4. I listen only when I'm interested in the subject. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 5. I can't listen and take notes at the same time. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 6. I have trouble hearing. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 7. I don't like to listen to people who use big words. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 8. I don't pay attention to poor speakers. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 9. I have trouble telling the difference among facts, opinions, and suggestions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 10. I get upset when the speaker's point of view doesn't agree with mine. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 11. I think that too often I judge a speaker on his looks. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 12. I have trouble concentrating on what people say. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 13. I am easily swayed by people who express strong opinions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |
| 14. I would rather talk than listen. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0 |

to the topic and the writer's purpose. The next largest cluster was influenced by mechanics: by the number of mistakes they found in usage, punctuation, and spelling. Third largest cluster was interested in organization and analysis. The fourth stood highest on wording and phrasing. The fifth emphasized style, interest, and sincerity, the personal qualities of the writing--its "flavor."

ETS next asked teachers and readers in three large high schools to rate papers for a year on these five factors and their principal components. A factor analysis was made. The five factors collapsed to two: a sort of "general goodness" factor and a distinct mechanics factor. From this test run and others the rating scale was devised.

ETS reports that "ordinary" teachers who have had only one day of instruction and practice in use of the scale can achieve an inter-reader reliability of about .7 per paper. This reliability is considered excellent even for experienced College Board readers.

Dr. Diederich reports that the findings of the series of studies "are generalizable at least to the kinds of topics for short, expository papers that are often assigned in high schools and colleges. I do not know whether they apply to the explication and criticism of literary texts. Since writing about writing is usually the worst writing that students do, and since only one in a hundred thousand will ever engage in such writing in later life, I do not regard this exception as very important."

The rating scale is being used in many U. S. classrooms and in several research studies. In some English classes students practice self-appraisal by rating their own papers before submitting them. The rating scale is also being used in some lay-reader programs and in student writing competitions.

The following definitions of High, Middle, and Low Points in the Rating Scale are syntheses of the definitions set down by the readers and are quoted from Dr. Diederich's report.

Quality and Development of Ideas

High. This paper interests me. It says something a bit fresh or original or puts an old thought in a new light. Within the limits of student knowledge and experience, the points are sound; at least, no nonsense is written that the student would know to be absurd if he had only stopped to think.

The student has given real thought to the topic; he has not merely echoed what is usually said about it. While the treatment is limited to the points the student wants to make, there are no obvious gaps and there is no padding. Each main point is developed; it is treated at sufficient length to make it clear, convincing, or appealing. The details chosen are usually specific, vivid, and concrete.

Middle. This paper does not interest me. It has familiar and conventional thoughts; it says what is expected; it plays safe. The points made are true enough, but there is often no vivid realization of what they mean. There is often a tendency to generality and loftiness in statement. The writer does not stick to what he knows but writes what he thinks will "sound good." The development of ideas tends to be sketchy and superficial.

Low. This paper annoys or disgusts me; I definitely dislike it. Its ideas are painfully childish or primitive. Many of the statements are nonsense; the student would have recognized their absurdity if he had only stopped to think. Some points are treated at unnecessary length while others, which cry aloud for treatment, are omitted. There is little development of ideas; sometimes it is hard to guess what they are. The arguments, if any, frequently do not support the point they are intended to make and contain inconsistencies and fallacies. In a narrative, many of the details seem pointless. The writer naively reveals traits of thought and feeling which guarantee that his ideas are of little value.

Organization, Relevance, Movement

High. The paper starts at a good point, moves in a straight line, gets somewhere, and stops at a good point. There is nothing that obviously does not belong in it, and nothing essential to the writer's purpose is left out. The paper follows a plan that is apparent to the discerning reader. The topic is broken up into reasonable parts, and the connection of one part with another is clear. There is a feeling of movement toward a foreseen conclusion. One is never at a loss as to where one is or where one is going. This feeling of movement lies closer to the heart of organization than conformity to a logical outline.

Middle. The organization tends to be obvious and conventional: "I shall discuss A, B, and C. First, A. Second, B. Third, C. Conclusion." In a narrative: "It all started when . . . Then we . . . Then we . . . Then we came home." The bare bones of the outline are too plainly exposed.

The adroit can suggest the main divisions of the paper without such obvious markers.

Low. The paper seems to have no plan; it merely rambles. It starts anywhere and never gets anywhere. There is usually some attempt at an ending but it is not natural and inevitable; it is stuck on. At many points one asks, "Where is this heading?" Any guess one makes is usually disappointed.

Style, Flavor, Individuality

High. The writer reveals traits of thought and feeling that are distinctive, individual, and in some way admirable. He may be a rascal, but if so, he is an appealing rascal. He does not put on airs. He is willing to reveal himself as he is, confident that the reader will understand and be interested. He puts himself into his writing. It sounds like a person, not a committee.

Middle. The writer who most obviously belongs in the middle category is the cliché expert--the one whose choice of words is predictable. One may also put here the student who overdoes his experiments with uncommon words--who uses too many of them when simpler words would serve his purposes better. If this were not a promising trait, it could fail a paper, but it is so natural at this stage of development that it should be treated tolerantly. One may correct a malapropism but preferably with the attitude, "Nice try!"

Low. The writer uses words carelessly and inexactly and gets far too many of them wrong. These are not conscious experiments with words in which failure may be pardoned; they represent groping for words and using them without regard to their fitness. A paper written entirely in a childish vocabulary may also get a low rating, even if no word is demonstrably wrong.

(Definitions of grammar, punctuation, and spelling have been treated so extensively in other sources that they are omitted here.)

APPENDIX D

Writing Samples by Same Student

a. (September)

The Mad Mad World of a Freshman

It started last year the end of eighth grade. I was promoted I was hopping for this and I tried hard to make it happen (it did). I thought, what will being a Freshman be like. I knew a lot of Freshman (that is sophomores now) they told me that it was hard. I was kind of worried: not too much just a little. Well the summer went fast, before I knew it school had started. Well I saw most of my old friends and met some new.

b. (November)

That Free Feeling

I get that "free feeling" in the morning. I like to get up about three in the summer when everything is quiet. The reason I get up at three is not only that I have a paper route, (I could get up at six to do that) but I like it when no one is around. You feel like you own the world. You can think and do anything you want to. Usually I try and figure out my next move, and what I'm going to do the next day.

c. (April)

The Something

It was dusk and it was humid. I looked up and the dark clouds were turning over and over like oil being mixed with water.

I was walking through a forest outside of town. I often came here just to be by myself. The woods had an eerie affect, but I couldn't quite pinpoint what was wrong. I guess that was what made it so eerie. I stopped and listened to the wind blowing through the leaves and the crickets and something else made me just stand there listening. The leaves and the crickets didn't bother me--it was that something else. I just couldn't place it.

EXHIBIT

Writing Samples of Three Ninth-Grade Students (first semester,
1965-66) Participating in the Program for English Research
Study, #1989

Of the two papers from each student, the first was written in November, 1965, and the second in January, 1966. In each case the teacher announced the topic at the beginning of the class period and the students were given 60 minutes in which to complete their papers. The papers, then, are essentially first drafts. The teacher's assessment of progress made by each of the students is given.

Steps to Follow When At a Dance

Student behavior at dance is very important because it might conclude if you will have another one or not.

First we will talk about the kind of dancing. A dance is for fun so I think you should let the kids let lose to a certain extent. Don't make them dance any certain kind of dances, because then they won't enjoy it and they're here for fun.

Secondly would be dress. If it's a formal dance they should wear suits. If its a fun dance after a ballgame or just a dance at someones house, sportshirts and good pants will do fine.

Third, if refreshments are served you should not bring them out of the planned area onto the dance floor. And remember good manners when eating. Don't hog the food, remember there are others. Don't spill your food, but if you do, help your hostess clean it up.

Fourth is politeness to your host and hostess(s). If you were sent an invitation and can't come, send a thank-you note. If you can come, don't bring anyone with you, because they probably have planned for a certain number of persons. And always remember to thank them for having you over and that you enjoyed it (if you did or didn't).

Fifth don't scream. Keep your voice in at a normal tone.

Sixth. If games are planned, participate in them. They took the time to plan them, so you should at least play.

Always put yourself in the host and hostess(s) place. You would see how hard they've worked to arrange this dance. So show them a little appreciation by following the points I have shown you. If you do, you will have many more dances and will be invited to many more.

Am I Capable of Making My Own Schedule

I, Don Gronendyke, feel that a person in High School or older should be able to be his own boss and make his own schedule.

Parents, Teachers, Councelers, and others are always stressing that students our age are now young men and will have to really put our brains to work for a college education, yet time after time when you want to do something they say "sk me first and I'll see if it's all-right for a person your age." It's just counterdicting what they've been saying before.

I think a student should be allowed to make his own schedule and to figure out his own budget, and show it to his parents and see if they agree. This will build up the students' spirit and let him feel that he is running a good schedule and he can act grown up just as they wish him to be.

Now just because I've said that a student should be his own boss, doesn't mean that he should be allowed to go wild. I think the parents should still be the boss and cut anything real bad for him out of his schedule. But they shouldn't be a "big bossy" and cut out a lot of things.

In conclusion, I feel that a kid has his rights, too. He should be able to make his own schedule, but be it a good one. Then he will think better of his parents and they will think better of him.

Don Gronendyke

I can see progress in comparing Don's second writing sample to his first. Looking at the opening statements in each paper, I find that Don has apparently responded to the work we did concerning the idea of a "thesis statement." The second theme is a more strongly worded--more concise statement of opinion than that expressed in the November sample. Secondly, the complexity of the rhythm of the sentences is greater in the January paper, and rhythm is a matter for the ear. In the earlier sample, Don expresses himself in short, simple sentences and thus his expression lacks variety. This is due in part to his choice of technique (a listing technique). In his latest theme one idea is related more closely to the one before it.

The two titles indicate, perhaps, a changing concept in Don's mind regarding written expression. The title "Am I Capable of Making My Own Decisions?" finds the writer posing a "thought problem." The earlier title, "Steps to Follow When At a Dance," does not really set a problem before the writer. It merely allows him to list some rather trite rules; it's a "how to" paper.

Finally, I am impressed with the conclusion in his most recent sample because it indicates that the writer retained a sense of "where he had been." In other words, he listened--reheard the ground that he had covered. Don has made greater use of the tape recorders on the second sample than on the first, and this fact is reflected in the attitude of the writer, the organization and development of his ideas, and the retention of the varied patterns of phrasing and intonation found in the oral language.

Behavior At A Dance

At a dance is the students behavior up to what it could be?

Most of the time the answer is no.

I believe that alot of kids think that its just a place to go with a boy or just an excuse to get out of the house.

I think students know how to act at a dance but don't feel its necessary to show good behavior.

I think when a group of kids starts forming there's bound to be some misbehaving.

There is always a couple at a dance which thinks there tops and they have to let everybody else know that they are.

When a couple starts making sure everyone sees them thats usually when the misbehaving begins, but I think thats also where it can stop.

I think that kids today should have enough good sense in them that they would know how to behave while in a rowd.

I think parents have alot of baring on the behavior of there kids.

I imagine some kids have seen the way there parents have acted at a party and have followed there example.

I also think that parents attending the dance should do more than sit around and talk. They need to reinforce the behavior which is expected of them.

I think students should be grateful for being able to have a dance to go to and they should show there respect in a manner which parents and teachers will appreciate.

Teenagers Being Their Own Bosses

Teenagers don't have enough self control over themselves to be their own bosses. They think they have to go along with the majority if their with a group of kids. For instance, if someone suggests going to the golf course and riding the golf carts around in the middle of the night, would there be someone speak up and say this was wrong? Maybe so, but the majority of teenagers would go along "for the ride."

Being my own boss doesn't mean disrespecting my parents word. Teenagers think being their own boss means not having to listen to their parents, so they go ahead and ride golf carts over the course and if they get away with that they go on to something more challenging.

Teenagers should have the chance to be their own boss but the parents should set some regulations which the teens can follow.

Some parents just let their kids go and do what they want when they want to. When this happens teenagers take advantage of it and lose their self-control over the whole matter.

With a little guidance from adults teenagers would be a lot better off and would learn the true meaning of "being my own boss."

Dianna Sharp

Two significant observations may be made of Dianna's papers before we read them: 1) The latest paper is a bit shorter than the first; 2) The second paper has blank spots indicating erasures while the first has none.

Brevity in the second sample indicates that Dianna saved time from the writing period to use for proofreading her paper on the recorders. Use of the eraser illustrates what happened when she heard her statements. The January statement is compact and concise. Notice that Dianna did not repeat phrases in her second sample as she did on the first; notice the absence of such repeated phrases as "I think." She is developing a critical ear through her use of the recorders.

Its A Fun, Fun Night

'Bout a year ago today, being first basketball game and all, I attended this Fun Night, ya see. I went walking in with a group of guys and girls. We went into the dimly lit room in front of us, decided we'd wait and see whether we would want any thing to eat or drink (there was another room for that) or even if we wanted to stay. Well, we looked around and like nothin, know what I mean? Oh, they had a small school band alright, and a few guys were dancing but after seeing that I felt like saying 'Take me where the action is,' right? Well, there were two ways out of that place and I was trying to decide which one to take when the rest of the gang had practically voted we stayed. "Your kiddin' me right? You don't really want to stay." When Charlie comes up with what he thought was a tough idea, he decides we should like 'a liven it up some. Its the least we could do for the poor kids, right? Well I needin' tell you I didn't want anything to do with it, not even from the start. But Lirch, (a 6 ft. 6 in. blue eyed blond giant we nicknamed him Lirch, needin' explain why, right?) said I was out voted, and seein's that we were very democratic in our ways, I's got to go along with it. Well, I said, guess thats the way its got to be. But just cool it one second! Hows do you intend to get these walking corpses moving. Oh, I s'pose you didn't think of that, right? Well ya better think of something good then, and like fast! Freddy came out with, we could clear the building real quit with a fire alarm. "Don't be cute, what are ya anyway, some kind of a nut?" Don't think much of Freddy will ya, maybe he's not too swift out of school but he's got a memory like an elephant and makes straight A's so he can't be all bad. Cause if anyone can act like that an get straight A's I'm pullin' for them. Meanwhile back at the computers they think they got a couple ideas. Well some decided that they'd start playin' the bands instruments and they got up there and maded a bunch of racket and some others were chasin each other around the room and others playing Lorance of Arabia or ghosts or something with sheets, don't know were they got them scaring some of the girls and others makin out on some couches and chairs that surrounded the room. And yellin' and stuff. And if you were there, ya would have seen me standin' in the lit door way sayin' 'Is this any way to act?'

Individuality

Individually, being my own boss is a thing I value most highly. Why? Because in our great world today there is not enough individuality. More people should have some sort of want for such a feature in their character. I am so glad that I am aware of this and working on this on my own. And my only hope is that so many more will become aware of it too, and will try as I have tried.

Too many wish for others to decide for them and are actually satisfied with that person's decision on the matter which includes them. I know because I have also been guilty of committing that crime, seemingly small, but actually it comes to a point where it is a must to ask for someone's advice continually, not wanting to upset anything.

I have been trying to see when I have made these mistakes and making fewer of these mistakes all the time because I do realize when it is happening. It is my hope that in the future people will begin to treat others as individuals, rather than followers. Perhaps people will want to stand out from all the rest, if more will try. It is my belief that it is a far better feeling to know that I am my own boss rather than someone else's robot to command as he pleases.

Susie Pine

The change and effect brought about by work on the recorders is, in this case, quite dramatic. In her first sample Sue had no understanding of exposition. You will note that she intended to entertain with girlish cuteness. She uses the expressions "'Bout," "you see," "Well." There is merit in this paper and it has to do with her ability to record truthfully the attitude of speech--the mode or rhythm of informal narration, but it does not answer the problem set before the class, exposition (argumentative expression of opinion).

In the second paper she has the idea and accomplishes her task very successfully. The tape recorders are responsible for the editing that is evident in this second sample. She struck out those instances where she found herself in the second person, and the impressive thing about all of this lies in the fact that this young lady was very inhibited about writing and was more concerned with filling up space than being brief. Yet, here she was short and to the point, and she found time to read and revise her work. This is tremendous progress for Susie Pine.

APPENDIX E

Personnel

Teaching Materials Writing Project, Summer, 1966, Program for English #1989, Burriss Laboratory School, Ball State University

Writing Team

Bernard M. Bidelman: Teacher and Head of English Department, Kuhner Junior High School, Muncie Community Schools, Muncie, Indiana. Teaching experience: 3 years.

Mrs. Camille Boykin: Teacher of English, Crispus Attucks High School, Indianapolis, Indiana. Teaching experience: 2 years.

Edwin G. Bruell: Teacher and Chairman of English Department, Bremen High School, Midlothian, Illinois. Teaching experience: 27 years.

Ted D. DeVries: Teacher and Research Fellow, Program for English, Burriss Laboratory School, Ball State University, Muncie, Indiana. (Member of writing team June 13 to July 15.) Teaching experience: 10 years.

Mrs. Lois Jarret: Teacher of English, Winchester High School, Winchester, Indiana. Teaching experience: 8 years.

Mrs. Georgia V. Nead: Teacher of English, New Castle Junior High School, New Castle, Indiana. (Illness forced Mrs. Nead to withdraw from the project after the first week.)

Mrs. Katheryn Offutt: Teacher and Chairman of the English Department, Noblesville High School, Noblesville, Indiana. Teaching experience: 28 years.

Miss Helen Riordan: Teacher and Chairman of the English Department, New Haven Junior High School, New Haven, Indiana. Teaching experience: 43 years.

Mrs. Helen Sargent: Assistant Professor of English, Acting Chairman of the English Department, Burriss Laboratory School, Ball State University, Muncie, Indiana. Teaching experience: 13 years.

Stuart L. Sheeley: Assistant Professor of English, Burriss Laboratory School, Ball State University, Muncie, Indiana. Teaching experience: 7 years.

Joseph Waggener: Graduate Assistant, Program for English, Burris Laboratory School, Ball State University, Muncie, Indiana.
Teaching experience: 1 year.

Consultant

Malcolm Julian: Teacher of English at Southside High School and Supervisor of Language Arts, Muncie Community Schools, Muncie, Indiana.

Director and Principal Investigator

Anthony L. Tovatt: Professor of English, Burris Laboratory School, Ball State University, Muncie, Indiana.

Representative Materials
from
A PROTOTYPE UNIT IN LITERATURE

Unit I
EXCITEMENT AT YOUR ELBOW

Note: The following materials are representative portions of one thematic literature unit developed during the Teaching Materials Writing Project. These materials are included in this Appendix so that the reader of this research report may determine unit format, major objectives, method of orientation for both teacher and student (portions of the material are addressed to the student, others to the teacher), and the manner in which the OAV procedures are incorporated.

The other five thematic literature units are represented in this Appendix by the inclusion of the summary sheet for each. These sheets follow the listing of source materials at the end of this unit.

RATIONALE FOR THE UNITS

In the six thematic literature units the students study the selections not only as these relate to the theme but also as they become vehicles for the oral-aural-visual procedures in reading, listening, speaking, and writing.

Teachers seeking justification for the time expended in using the oral-aural-visual procedures organized in these units may rest assured that this time is well spent. The findings of the study in which these procedures were used clearly demonstrate that the students in the experimental classes made significant achievement gains over those in the conventional classes in reading, writing, speaking, listening, and language. In addition, student attitudes toward English were more positive in the classes using the oral-aural-visual procedures than those in the conventional classes.

ESTABLISHING A POSITIVE CLIMATE

As a means of establishing a positive climate for these procedures, the class begins with a consideration of some observations and judgments about the language spectrum. In order to do this, it is suggested that the teacher begin with the use of the Think Sheets.

The Think Sheets pose problems that focus on the establishment of the point of view and the approach that will characterize the study of the six units. In other words, allowing the students to arrive, more or less inductively, at some conclusions about the nature of their language and the ways they use it is an attempt to get them to begin to think about the implications in using the oral-aural-visual procedures.

The Think Sheets provide an excellent vehicle for stimulating discussion and launching an interesting unit. The items have appeal for the student because they do not put him on the spot to come up with knowledge he does not have or cannot acquire easily. For the most part the items simply require him to speculate, to observe, and to examine thoughtfully in the light of his own experience.

THINK SHEET NUMBER ONE

(This is not a test)

1. Human beings have been able to talk for _____ years.
2. Human beings have been able to write for about _____ years.
3. A child begins to talk when he is _____ years old.
4. When a child first begins to talk, he uses single words like "Mommie" and "Doggie" because _____.
5. Most children are able to say what they want to say by the time they are _____ years old.
6. Writing is taught to children when they are about _____ years old.
7. Reading is taught to children when they are about _____ years old.
8. Talking in conversation is (easier) (harder) than writing.
9. Reading is (easier) (harder) than writing.
10. Listening is (easier) (harder) than talking.
11. When a person reads, he also has to listen. (True) (False)
12. When a person writes, he also has to listen. (True) (False)
13. When you are in school you spend time reading, writing, listening, and talking. Rank these language activities in order of frequency--the one you do the most will be number (1); the one you do the least will be number (4).

(1)
(2)
(3)
(4)

14. Out of school you spend time reading, writing, listening, and talking. Rank these language activities in order of frequency--the one you do most often will be number (1); the one you do the least will be number (4).

(1)
(2)
(3)
(4)

SUGGESTED USE OF THE THINK SHEET

The teacher may use the sheet in a variety of ways. However, whatever method is chosen, it is important that the teacher supply no answers until after the students have struggled through the items and a synthesis of their responses has been made. In passing up the temptation to supply the quick solution, to resolve an impasse, the teacher is forcing the student to do some thinking and probing on his own. Three ways of using the sheet that have proved successful are as follows:

1) In Buzz Groups

Students may be divided into small groups (no more than six members) and the blanks may be completed from group consensus. At the end of a specified time (not more than 10 minutes) the group discussion leader can report his group's ideas. Minority dissent must be reported faithfully.

When all reports are in, the teacher and the class can cooperatively synthesize and formulate some tentative conclusions. It is important that the teacher and class agree that, in view of the lack of specific information, the conclusions can be nothing more than tentative, but that they provide places to start studying the language and the ways people learn to communicate.

2) As Classwork

The teacher may ask the individual students to fill in the blanks in no more than six or seven minutes. Then the teacher can poll the class for responses, keep a rough tabulation, raise some questions about the results, and attempt with the class to arrive at some tentative conclusions regarding the items.

3) As Homework

The teacher may ask students to take the sheet home and involve their families in discussing the items. This has the effect of heightening student interest and spurring later class discussion.

REINFORCEMENT PROCEDURES

When a synthesis of responses has been made, when the students have obviously exhausted the topic, the teacher, through

supplying a minimum of information and asking the students to participate in specific exercises, should be able to lead the students to sharpen their thinking about the significance of each item on the sheet. The teacher might proceed as follows:

"Now that we have thought about and discussed these items at some length, let's see if we can firm up our conclusions a bit by taking each item in turn." (Some of the following suggestions, of course, will need to be altered in view of the conclusions already reached by the class.)

Items 1 and 2

Certain scholars (archaeologists, anthropologists, historians, and linguists) have been studying about people and language for many years. At present they tell us that all of the evidence they have found indicates that man has been able to talk for many thousands of years. Exactly how long is not known. The estimates range from 50,000 to a half million years.

They do tell us, however, that people have been able to write for only about 6,000 years. (Here the teacher may want to illustrate briefly the evolution in writing--pictograph, cuneiform, alphabet.)

Significance: In addition to learning that man has been speaking much longer than he has been writing, the student should be led to see that the way one sets words down in writing has much the same order that words have in speech, i.e., that writing is based largely on speech patterns. This is an important concept in readying the students to use the OAV procedures.

Items 3, 4, 5

Conclusions here will vary, certainly, but it is generally agreed that most children begin to talk somewhere in their first two years, that their earliest recognizable words are single ones because they are influenced by people and things closest to them. For example, the child begins to make recognizable sounds like "muh-muh," "Dad-duh," and "Gog" (dog), because his parents and other members of his family say certain single words over and over in situations that permit the small child to associate these words with persons and things. By the time most children are six years old (scholars agree) they can string together words in sentences so that with few exceptions, these utterances are meaningful and serve the child's immediate needs.

Significance: In concluding that children can generally "say what they want to say" by the time they are around six years old, the class should be led to consider the tremendous progress in language development by a child in the years from two to six. In fact, the child learns to use all of the basic speech patterns of the language by his sixth birthday.

Items 6 and 7

Although most children today have been "exposed" to reading and writing before they come to school, and some have learned to read simple things and to write a few words (their names, for example), generally children start the process of learning to read and write in the first two grades in school. Through the elementary grades there is much more emphasis on oral work than in junior high and high school. For example, teachers spend much time reading to students, and students spend considerable time in "read aloud" situations. This helps to make the words on a page come alive for them. It helps them put expression into their reading. In many ways they imitate the ways the teacher, parent, or older brother or sister express themselves when they read to the child. When they write, many children in the early elementary grades say the words (sometimes almost inaudibly) as they write them on paper. (The teacher might ask the students at this point to discuss the reasons small children often do this.)

Significance: "Taught" is a key word in items 6 and 7 because reading and writing are not natural forms of the language. They were consciously invented and must be consciously learned. Yet the learning of these new forms and successful use of them depends to a large degree upon whether or not the student is able to bring to bear all that he "knows" about the oral language. The sooner he perceives that the printed page is "talking" to him the sooner he finds satisfaction in reading. The same is true of his writing.

Items 8, 9, and 10

The class will probably conclude that talking is easier than writing, that reading is easier than writing, and that listening is easier than talking. (It may be interesting to question them at the end of the course to see if their feelings about the ease of listening are the same as they were at the beginning of the course.) In considering these 3 items the teacher can ask the students to look at the conclusions already drawn from the other items.

Significance: The students should begin to see that all of their conclusions are beginning to have some kind of a direction: that is, that speech is the most natural form of expression (practically automatic), is learned earliest, is used most often, and is most flexible, e.g., we can talk and listen in complete darkness but need light and certain materials to read and write. They should conclude that writing and reading, as inventions, require, in most situations, more effort and concentration than do speaking and listening.

Items 11 and 12

In all likelihood students will not have thought about the existence of an "inner ear" and its relationship to reading and writing. It is possible that class consensus is that both items be marked "false." If this is true, the teacher has an excellent opportunity to introduce two simple experiments that should help to clarify what the term "listening" implies here.

In reference to Item 11, the teacher can read the following two situations to the class:

Situation 1: A girl comes into the house after having a fight with one of her friends. She sits down in a chair and her little brother sneaks up on her and begins to tickle her neck with a feather from his Indian hat. Here in print is what the girl says to him. (To be put on chalkboard) "Don't do that!" (The class is asked if they can hear it--hear just how it would sound.)

Situation 2: The same girl is at a party and having a good time. The hostess, who is the girl's closest friend, tells the girl that she is going to announce her to the rest of the people and ask her to play her guitar and sing. The girl wants to be asked to sing and is secretly glad that her hostess calls for the group's attention, but the girl says, "Don't do that!" (To be placed on chalkboard. The class is again asked to hear it. Obviously a good discussion is likely to arise when students compare the words that are graphically arranged in the very same pattern twice but do not have the same oral form. The situations will make clear to them that the first "Don't do that!" is said in anger or irritation, while the second will be expressed with less intensity and will have a tone of good humor.)

To get at Item 12, the teacher can say to the class: "I want you to think of a friend you might write a letter to. I want you to sit back, put your pencils on your desks, and observe what I am doing at the chalk board. Then, I want you to hear'

in your mind the first two lines that you are going to write for that friend telling him what I am doing at the board. I want you to hold those two lines in your mind, 'to hear' them so clearly that you could come up and write them quickly on the board if you were asked to do so."

(Teacher draws squares, circles, or picture.)

In about a minute the teacher asks some of the students to repeat their two opening lines. The teacher should ask the students then if they really did not need to "listen" in each of the three situations.

Significance: The students should see that when they read or write something, they really are listening to themselves, to the built-in models in their minds. When the printed page becomes the stimulus for the reader, the reader's mind takes a fast inventory of the models stored there and selects the one that fits. There is a dialogue model, a narrative model, and so on. The same activity takes place when the individual decides to produce writing. His mind selects a model which it feels will do the job. It recognizes, for instance, that writing situations differ, that a note to a friend in class is not the same kind of communication problem as a letter, or a theme.

Items 13 and 14

Undoubtedly the rankings here are varied, however, the fact that the student thought about these language activities and gave them an order is more significant than the order he decided upon because the activity itself forced him to consider the matter (perhaps for the first time) and produced interest and attention. The teacher now can simply tell him that studies have shown that people listen more than they talk, read, or write, that they speak more than they read or write, and that they read more often than they write. Writing is the least used language activity. In school, language activities fall into a different order. Listening is still at the top of the list and writing is still the least used form of language, but reading ranks second and talking third.

<u>In school</u>	<u>Out of school</u>
listening	listening
reading	talking
talking	reading
writing	writing

The teacher should pose the question: "Why do school language activities fall into a different order from the order for the population as a whole?" This will require the class members to examine the reasoning behind the order they chose and should lead them to discover some interesting differences between language behavior in and out of school.

Significance: It should be clear to many students that schools concentrate upon improving the skills inherent in the least natural forms of the language---reading and writing.

They should also be ready to consider the fact that listening is: 1) the heart of language behavior, 2) present and operating at all times if only by implication. If it is not functioning, the success of the would-be communicator is threatened or impaired. That is to say, that we learn to speak by listening. The degree to which the printed word communicates depends upon the reader's ability to hear it, and the ability to hear himself has a great impact upon how well he writes.

Summary Sheet

Unit I

EXCITEMENT AT YOUR ELBOW

TO THE STUDENT:

Not everyone can be an all-pro quarterback or a teen-age Miss America. However, through reading, everyone can experience the thrill of completing a long-gainer for a game-winning six points or autographing photographs for avid admirers.

TO THE TEACHER:

"Nothing exciting ever happens to me" is the theme song of most adolescents. To them, adventure is something extremely unusual, something that occurs only in the lives of other persons. Although the primary purposes of this unit are to initiate the students in the use of the oral-aural-visual procedures through providing meaningful experiences and to give students a pleasurable reading experience, other objectives are to help them discover that: 1) Adventure lies within everyone. 2) Adventure does not have to be exotic. 3) Adventure can be a vicarious experience as well as an actual experience.

UNIT I: EXCITEMENT AT YOUR ELBOW

Suggested Introductory Remarks to the Class: Selection Number 1

For the next few weeks I am going to let you read stories that are meant to excite a reader, to give him adventure in the confines of the school room. For example, we are going to read a story today that takes place on a Caribbean island and pits one man against another. As we read the stories for this unit, as we discuss them and write about the things that happen in them, you should keep in mind what we have discovered about the relationship that exists between speaking and listening and reading and writing, because as the weeks go by, I am going to ask you to do more and more of the kinds of things that will improve your communication. All of these activities will grow out of the things we have covered in these first days.

Today, for instance, you and I are going to read a story together. I will read it aloud and you will follow along silently. While you follow along, looking and listening, try to catch yourself saying the words in your mind. You are likely to find that you hear one of the passages or one of the characters differently from the way I read it. I may not make a character sound the way you think he should sound. Tell me if this happens to you. Now, please turn to page _____ in your books.

Suggestion to Teacher: Preparation for Reading

In preparation for reading this story aloud to the class, you might want to hear your voice as it sounds to others. There are several ways of doing this. The ideal way is to practice with a tape recorder. If this is not possible, one may use a telephone as follows: Pick up the phone and dial the first digit of your own phone number. This will eliminate the dial tone and permit you to hear your own voice as others hear you. If you have neither of these mechanical devices, you may achieve a similar effect by closing off one ear with the palm of your hand as you read.

If hearing your voice in this way is a new experience to you, you may find the mechanical reproduction different from your expectations. This is a common experience. However, in time you will grow accustomed to your oral patterns. Listening to yourself will not only give you insight into your own oral effectiveness but will also increase your confidence in making judgments about student performance.

Selection One: "The Most Dangerous Game" (short story), Richard Connell.

Oral Reading Time: Aprox. 40 minutes

*Sources: OTL, p. 36; LFL, p. 3

Activities:

Teacher: Brings the words to life in interpretive reading.

Student: Listens and follows reading as teacher reads to class.

Purpose and Rationale

To begin establishing the necessary climate for the use of the OAV procedures. To encourage the student to enjoy listening to and reading a story. To provide the student with an OAV experience.

As the teacher reads, the student participates in the following ways:

- 1) He sees the words as the teacher says them (reading reinforcement);
- 2) He has the aural experience imposed by the teacher's interpretation, i.e., pace, inflections, implications in story elements;
- 3) He sees and hears the translation of the visual cues (quotes, punctuation, paragraphing, etc.) as the teacher translates them--and more easily so, since the teacher is helping him do this;
- 4) He comprehends more readily because he recognizes words in his (larger) listening vocabulary than he does from depending on his (smaller) sight recognition vocabulary;
- 5) He is being gradually prepared, through the teacher's model interpretation, for the time that he reads aloud.

*The sets of letters, OTL and LFL, refer to titles of ninth grade literature anthologies (see materials at end of this portion of a unit). The list of these source books is made up of titles of those anthologies that the teacher writing team judged to be the most widely used in English classes across the country, thus offering the prospective user of these prototypes a wide range of sources.

Using Student Journals

What is a student journal?

The student journal is an integral part of the oral-aural-visual procedure. Very simply stated a journal is an "idea book." The journal differs from a diary, which is often little more than a record of events, in that the journal is a record of thoughts, ideas, observations, feelings, and opinions. It is, in a sense, an intellectual autobiography, and it is a major link between the teacher and the individual student. A journal can be any kind of notebook, but the small five and three-fourths by nine inch stenographer's spiral notebook, the one with at least 80 pages, has proven to be the most portable and useful. It is suggested the teacher collect the cost of a journal (25¢ or so) from each student and purchase the notebooks himself. This assures a standard size and makes things easier for the teacher when he wants to take thirty journals home to read.

How is the journal used?

The journal is used both in the classroom and outside of school. In school the teacher at various times asks the students to talk to him, to hold an on-paper discussion rather than one before the class aloud. Outside of school the student finds opportunities to write on his own. He may watch a T.V. show and find he has something to say that is important enough to write. A journal entry may be the result of a family discussion, an argument with a friend, a news item, or a day dream.

To make efficient use of the journal, the teacher should first have the students take time to go through the blank pages and place a mark on each page six full lines from the bottom. This will remind them that each time they make an entry they must leave the bottom six lines for the teacher's entry. Second, they should be told to write on one side of the page only. If the students write on both sides of a page, the teacher will find the reading of the entries cumbersome because he must not only flip the page but he must also turn the notebook around. It is much less time consuming to read one page, flip it up, and find the next page positioned for continued reading.

Important: In the student's journal, the teacher reacts and replies only to the ideas. The journal, to achieve its full value and potential, must not be used to correct a student's spelling, grammar, usage, or punctuation. The teacher's only role, his only major responsibility is to carry out his half of

the basic communication process. He is a receiver of ideas and a respondent to ideas. He is positive and respects the student because he has ideas and is willing to let the teacher know these ideas. This point of view regarding the use of the journal is vitally important in establishing a positive climate for the use of the OAV procedures.

UNIT I: EXCITEMENT AT YOUR ELBOW

Suggested Introductory Remarks to the Class: Selection Number 2

Today we are going to read another story, one in which a young boy has to perform a difficult task even though he is afraid. Again, I am going to read with you, but this time I will read only part of the story aloud with you. I will stop reading somewhere early in the story, and you will finish it on your own. When I stop reading, when you begin to read for yourself, I want you to make a conscious effort to hear the story the way you would want it to sound if you were reading it to the class. I want you, in other words, to bring the story "to life" in your mind.

When you finish, please write in your journal one place in the story you felt that you could really hear a character talking -- a place where you knew just how he would say what he said. Now turn to page ___ in your books and follow along as I read, please.

Selection Two: "An Underground Episode" (short story), Edmund Ware.

Reading Time: Approx. 20 minutes.

Sources: PPE, p. 392; VIL, p. 46

Activities:

Teacher: Reads the story up to the point at which the momentum is such that maximal class involvement is apparent.

Student: Listens to the teacher reading a short portion of the selection, then continues on his own, trying to "hear" how it would sound if he were reading it aloud. In other words, he reads silently but is trying to hear himself with his "inner ear."

Purpose and Rationale

To continue to bring students to an awareness, a discovery through their own experience, of what is involved in the oral-aural-visual procedures. In this activity, the student becomes involved in the following ways:

- 1) He listens for the way he imagines his own voice sounds;
- 2) He gains experience in translating, on his own, the visual clues;

- 3) He profits once again by the reading interpretation the teacher has given;
- 4) He increases by one more degree his sense of security in preparation for the first time he reads aloud for the teacher;
- 5) He makes his first use of the journal, and talks his ideas onto paper.

UNIT I: EXCITEMENT AT YOUR ELBOW

Suggested Introductory Remarks to the Class: Selection Number 3

Twice now we've read together and you have probably been influenced to some degree by my oral interpretation. I would hope that the way I've read has given you a few ideas concerning this business of bringing the action on the printed page "to life." Today, I'm going to set you free and let you read entirely on your own.

You'll recall that the title of this unit was "Excitement at Your Elbow." We have read the first two stories in the unit, "The Most Dangerous Game" and "An Underground Episode." Both of these stories and the one you are going to read now, entitled "That's What Happened to Me," contain excitement. But as I think of them and compare them, it is my opinion that each story presents a different brand of excitement. After you have read this story, I want you to think back over the three tales to see what I am getting at. Tell me in your journals about the three stories and the differences in excitement they represent.

Selection Three: "That's What Happened to Me," (short story),
Michael Fessier.

Student Reading Time: Approx. 20 minutes.

Sources: PPE, p. 51; TFA, p. 382.

Activities:

Teacher: Gives the students time to read. Gives them time to make a journal entry.

Student: Adds to his experience in reading and writing.

Note on the Second Journal Entries

The student may miss the point in discussing the different kinds of excitement in the three stories. This should give the teacher an opportunity to call attention to the unit theme by pointing out that the kind of excitement engendered in "The Most Dangerous Game" is that produced by an adventure in an exotic setting far removed from the everyday. In "An Underground Episode" the excitement is as close and believable as the construction project in the next block, while in "That's What Happened to Me," Bottles conjures up the excitement of the universal daydream--a person coping with the real world by inventing one in which he is capable of manipulating people and events for his own gratification. Bottles, in a real sense, is a teen-age Walter Mitty.

After reading "That's What Happened to Me," students in the Program for English study have written highly interesting journal entries in which they placed themselves in situations that met their favorite daydreams. Not only do these entries give the teacher valuable insights into the student's personal world, but they provide him with an excellent opportunity to respond in a positive tone to various facets of that world.

Purpose and Rationale

The student is on his own in this activity and may find this to be a welcomed variation. In addition to giving him variety, the activities continue to initiate him to the OAV procedures:

- 1) He will repeat his efforts to hear the printed word on his own;
- 2) He will, by way of the journal, begin to consider the problem posed in the theme;
- 3) He will use the journal for the second time and will thus further his willingness to express himself on paper.

Since the objective in presenting only a portion of one prototype literature unit is to give the reader of this report a capsule view of the format and content, the other activities in the unit up to the terminal exercise in writing are omitted.

UNIT I: EXCITEMENT AT YOUR ELBOW

A Terminal Exercise in Written Communication

Pre-Writing: As one means of demonstrating the selectivity a writer can exercise and at the same time lead students to discover that there are exciting events to write about in their own lives, if they will but look at the events with a certain degree of selectivity, the teacher will find the following technique productive:

The teacher begins by asking the class to explore with him the meaning of the following statement that he writes on the chalk board: "Any event occurs in a certain time and place."

After the class has discussed this statement briefly, the teacher asks the students to volunteer events in their lives that seemed exciting to them at the time those events occurred.

He lists these, indicating the approximate month and/or year of occurrence. Six or seven events should suffice. He works with the students and lets them arrange the events in chronological order, then draws the following diagram for their use.

<u>4th grade</u>	I fell out of a boat.
<u>4th grade</u>	I had a fight after school.
<u>5th grade</u>	A dog bit me.
<u>6th grade</u>	I was called to the principal's office.
<u>7th grade</u>	I was lost in the woods.
<u>8th grade</u>	I won a contest.

The use of the vertical graph emphasizes the separateness of these events, and students, if queried, will probably decide that such a life as portrayed in the six incidents above is not equal in excitement to the lives of characters in books. They are ready, therefore, to consider the possibilities for selection and compression of events.

The teacher asks the students to make some slight changes in the graph; he asks them to pick three exciting events from the list on the first graph and transfer them to the graph below.

<u>May 23</u>	Fell out of boat 10 a.m.	Lost in woods 11 a.m.	Dog bites me 4:30 p.m.

The transition to the horizontal graph is intended to illustrate compression of time and place, and to bring students closer to the purpose of this particular assignment in written communication---inventing a story for the rest of the class.

Now that the student has established the limits of time and place, and has in his hands a rough map of where he is going, he is ready to work out the details. He is ready to develop his opening. (The teacher may give him copies of magazines and ask him to examine the ways modern writers get their stories going. The Reader's Digest features a first person narrative that may

serve as a model for students. The Digest is popular, and students can bring in back issues to be used in class.)

Students may find it easier to write a fictionalized account of events in their own lives if they write about themselves in third person. Some may choose to invent a character name. Both of these devices make the narrative a bit less personal and thus less inhibiting.

Writing: The actual writing, the problem of working out the rough draft, will require three or four days during which time the teacher will work with individuals.

A quiet room is the vital ingredient in the writing act. Ask anyone who writes to describe the setting or situation he provides for himself when he puts words on paper. Isolation and silence are almost certain to be common factors in any of these descriptions. Needless to say, the average classroom situation is such that isolation is next to impossible to attain, and silence cannot be total. Students should be impressed with this fact, and the teacher and the class should agree to make a conscious effort to keep noise and distraction at a minimum while the writing is being produced. It should be agreed at the outset that conferences between students and between the teacher and a student be held in the hall.

If the classroom desks are movable, they should be moved before the writing begins and students should make an attempt to create as much isolation as possible. They should spread out and get comfortable. The degree to which we perceive "outside" noises determines to a large extent the degree to which we hear our own inner voice.

If the teacher will carry a note pad with him during the writing process, he can settle many minor problems with a note. If a student, for example, wants a word spelled, the teacher can write it on the pad and hand it to him. More complex matters can be taken to the hall.

Using the dictionary and a thesaurus are certainly habits that the student should acquire, but the teacher needs to make the student see that it is not wise to interrupt the flow of his thought with a trip to the reference shelf. If he does, he may lose sight of an excellent idea or phrase for the sake of a word. Proofreading and mechanics can be left until a more convenient time. Writing with the tape recorder, it should be noted here, will, in many cases, prevent the loss of ideas. The recorder is a memory bank as well as a preserver of inflection, tone, and

rhythm. When the student is working at the tape recorder his purpose is to get the ideas into language (out of himself). A dictionary is not needed at the tape recorder.

At one time or another during the time devoted to writing, each student will probably solicit the aid of the teacher. The normal request of "Will you please read my paper?" is to be expected. When this happens the teacher should sit next to the student and read the paper silently while the student reads it aloud. The student must always be involved in the OAV process. If the teacher reads the paper while the student simply "stands by," the teacher is denying the young writer one more opportunity to hear his writing.

During the writing activity the teacher needs to provide the student with opportunities to use a tape recorder as he writes. However, it is imperative that the teacher demonstrate the use of the tape recorder in the writing of this particular assignment, as he does for every assignment.

Since a rather complete description of the teacher demonstrating the use of the recorder is given in the body of the report (II. METHOD, A. Planning Phase), a similar description appearing in the prototype unit is omitted here.

The teacher writing sample that follows was produced in a classroom demonstration by the teacher of the experimental classes. It is based upon events in the writer's teens---events that were really separated by years but which are treated in this sample as though they happened in one day. The sample is representative of the kind of writing the teacher can produce for and discuss with his class.

Teacher Story Sample
(First Draft)

The bees did it. The bees were the straw that broke the camel's back that day. Jack Kendall and I were friends then, and we still are, but events of that day almost ruined our friendship. We were still buddies after our race across the river, and the fire cracker that blew a hole in the upholstery of my car made me angry with Jack for awhile, but even that

never seriously threatened our relationship. No, now that I think back upon that hectic day I'll have to give the bees most of the credit for our falling out. Let me explain here and now that Jack was forever a schemer where his father was concerned. It always seemed to me that Jack would have lied to his father even when he didn't need to lie (which, come to think of it wasn't very often.) There existed, I'm sorry to say, a mutual feeling of distrust between the older and younger Kendall, and this is probably the only reason that Jack lied about the bees that day and got me in dutch with his lying.

The first sign that our day together was going to be memorable came early in the morning. In our usual search for something to do, Kendall and I had made our way to the river. It was there that I decided to have some fun with Jack's biggest weakness, his inability to ignore a dare or a challenge . . .

As soon as the class has studied and discussed the teacher's opening paragraphs in the rough draft, they are ready to begin this process on their own. The teacher can initiate the actual writing with something similar to the following remarks to the class:

The time we have spent using the graphs and the demonstration and discussion of my writing problems, has given you the preparation you'll need to write your story. You have a method for selecting and arranging the events of your story, a means for reducing the element of time. You saw how the tape recorder makes it impossible to forget what was said and you know that without a recorder it's easy to forget because no one can write on paper what he hears as fast as he hears it. You are also aware that the tape recorder lets you hear how your writing sounds, and this is good because you and I will each want to know how our story sounds before we read it to the class.

You're ready to begin writing. Move your desks and isolate yourselves as much as possible. Use the tape recorders. The room will be quiet because all necessary conversation will take place in the hall. Good writing takes time and I'm going to give you the next three or four days to work your details into an effective story. Remember that the first step is to listen carefully, and get the ideas down. Later, you can make them read better, and you can get the spelling right. You may get started.

When each student has produced a rough draft, he should be ready to begin the rewriting process.

Re-writing: The student has known from the beginning of the writing assignment that his main purpose is to shape and to communicate events in his life that he will read to his classmates, his audience. This goal automatically makes him concerned about the sound of his paper--its readability. A teacher, with or without a tape recorder, can vitalize this concern during the re-writing period by arranging students in reading-listening pairs. Each member of the team helps the other member by listening to his paper, by reading the paper aloud to the writer, and by offering his views on the possibilities for improving the paper's effect. This activity gives each writer the unique opportunity of checking his anticipations regarding the sound and the sense given his creation by another person. (After a time students working in this fashion gradually learn to adjust their voices so that they are not distracting others. The sessions become private affairs and the participants are inclined to keep their stories secret so that there is an element of surprise left for the oral presentation to the class.)

This re-writing process may begin as soon as the student has a first draft, or it may be postponed for a class period to give the student objective distance. Through reading his story into the tape recorder, or reading orally with a reading partner, he has greater assurance that his story will sound pleasing to his listener, and through fictionalizing these events, he is building excitement into his story. All of these writing concerns are of greater importance than mere polishing of writing mechanics. The question of mechanics is an individual problem to be treated on an individual basis. In some cases the teacher can simply supply the period or question mark, can write in the necessary homonym or change verb tense while the student watches and listens. This is a positive act on the part of the teacher and can be performed while the student is reading his paper orally and the teacher is following. The student then sees the teacher as someone who is helping him.

Rewriting should also be teacher-demonstrated to reassure the students that all human beings attempting written communication do rewrite, erase, crossout, resay, rehear. This demonstration precedes student re-writing and the result must be visually presented either with an overhead or opaque projector. (Note: If the teacher has access to a modern copying machine, one that can produce a transparency of his paper, he will find the demonstration of revision to be more effective. The transparency can be placed on an overhead projector, shown on a screen, and revised

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as students watch and listen. Special marking pens are available in colors and will, if used, make the teacher's changes most vivid. The "ink" from these pens will dissolve in water, and the transparency can be used again and again.)

The teacher, by reading short segments of his original writing and then by reading the revision scratched in, over, and around that original copy, can bring the re-writing process to the aural and visual experience of every student. In all probability, the teacher can and should re-write certain segments of his writing during this demonstration. Students can and should be drawn into the teacher's re-writing problems. By asking their advice, by saying to them at various times, "Do you see my problem? It doesn't sound right to me. What do you think?" The teacher is illustrating the need of everyone who commits himself to written communication to recognize the importance of points of view other than his own.

The following is the second draft of the teacher sample, presented as the writer actually reacted to and re-wrote the story the day following the original writing:

Jack Kendall and I were friends then, and we are still friends today, but there was a time when the events of one day almost ended our friendship. I'll never forget it! The whole day was hectic. Our race across the river lit the fuse; the fire cracker that blew a hole in the upholstery of my car kept it going, and the bees caused the final blowup. Looking back makes a difference. It doesn't seem very serious to me now, but I still remember the embarrassment I felt when Jack and I had to face his dad, when we got caught in a trap we'd set.

I should explain right now that Jack was a schemer where his father was concerned. It always seemed to me that Jack would have lied to his father even when there was no need for him to lie. (Come to think of it, the occasions when Jack had no need to lie to his father were practically nonexistent.) Jack was forever doing exactly what his father had forbidden him to do. So there existed, I'm sorry to say, a mutual and abiding feeling of distrust between the elder and younger Kendall. Indeed, it was habit that caused Jack to concoct his wild story about the bees--habit that got Jack and me in dutch. I know now that I can't place all of the blame on Jack. If I had been thinking that day I could have seen the trouble flags flying and avoided that final scene in Jack's living room before his father.

The first sign that our day together was going to be memorable came early in the morning. We had gone down to the river in our everlasting search for something to do. We found nothing there to relieve our boredom, and when throwing rocks in the water became a drag, I hit upon a marvelous idea. I decided to have some fun with Jack's biggest weakness, his inability to ignore a dare or turn his back on a challenge.

After the teacher demonstration of the re-writing process (again, orally and visually presented with class participation), the student should be ready to begin his own re-writing. He should now be aware that 1) He needs to hear his story again (via the recorder or with his reading partner, for it must "sound right" to an audience); 2) He needs opinions of other people about his story to insure greater success in communication; 3) he realizes that all people who write, even teachers, do revise original copy; 4) He has a graphic model of what revision looks like; and 5) He realizes re-writing is not merely a matter of punctuation and mechanics but essentially an endless reshaping of language in order to attain the highest possible degree of communication, a constant search and testing for balance of the rhythms and tonal qualities of language.

Oral Presentations

In the eyes of the student, the oral presentation will be the most important moment in the unit. All of his efforts, and planning, the writing, and the reading practice have been intensified by the realization that the time would come when he would read what he had written to his classmates. In the eyes of the teacher, the process that produced the student's story is of greater interest and significance than the product, because it is in the "doing" that the student learns.

However, the oral presentation is also important to the teacher, first of all because it's important to the student, and second because it affords the student another opportunity to communicate.

In order to provide the most positive atmosphere for this first oral reading, the teacher should 1) insist that each student remain in his seat while reading his paper, and 2) offer only positive comments to the reader. (The teacher can find something good in every presentation. With one student, it can be a comment on the effectiveness of his reading; with another praise

can be given for the way the story began. With a third, the teacher compliment may involve the selectivity demonstrated in the story. The negative aspects of a presentation can become mental notes for the teacher to use when working with individuals as the year progresses.)

The psychological sensation that "we are all in the same boat" tends to create positive reception in the listeners, the peer group. The majority will be anxious about their first reading performance and that fact will create empathy.

After all have read, the teacher can increase the student's satisfaction with his accomplishment by posting all papers on the bulletin board. It might be possible to have a typing class make type-written copies of the papers. If this can be done, it will impress most students simply because they have never seen their writing in "print," have never seen it "looking so good." With many students the experience of seeing their words typed and posted for all to read results in a more sincere concern for their writing and a deeper commitment to communicating.

EVALUATION

Because one of the goals in this first unit was to give students a pleasant and enjoyable experience in reading, it seems questionable to construct a final test which attempts to measure literary insights, or memorized detail. In order to assure and keep the positive atmosphere so necessary for proper development of these OAV procedures, evaluation should be treated as positively as any other student experience. A glance through individual journals and consideration of the student's oral presentation will give the teacher a means for evaluating student ability. The final paper can also become an instrument for judging a pupil's achievement. If, however, a teacher feels that a test must be given, then an open book exercise is suggested. A problem such as one or more of those cited below might be presented to the class.

Choose one of the following and write about it. Wherever possible use events in the story to support your opinions.

A. General Zaroff's philosophy:

"Life is for the strong, to be lived by the strong, and, if needs be, taken by the strong. The weak of the world were put here to give the strong pleasure. I am strong. Why should I not use my gift? If I wish to hunt, why should I not? I hunt the scum of the earth--sailors from tramp ships--lascars, blacks, Chinese, whites, mongrels--a thoroughbred horse or hound is worth more than a score of them."

(CHOOSE ONE)

1. Examine the story and cite those clues in Zaroff's life and his present situation which explain why he is able to hold this attitude toward people.
2. Select one of the following well known quotations and discuss how Zaroff might react to it:
 - a. The meek shall inherit the earth.
 - b. If a man strikes you, turn the other cheek.
 - c. Do unto others as you would have them do unto you.
 - d. All cruelty springs from weakness . . .

The rest of the Evaluation section is omitted.

SOURCE BOOKS

Abbreviations for source books:

1. AIR - Adventures in Reading; Harcourt, Brace and World
2. AFT - Adventures for Today; Harcourt, Brace and World
3. OTL - Outlooks through Literature; Scott Foresman
4. VAN - Vanguard; Scott Foresman
5. VIL - Values in Literature; Houghton, Mifflin
6. LFL - Literature for Life; Houghton, Mifflin
7. UL - Understanding Literature; Ginn
8. PPE - Prose and Poetry for Enjoyment; Singer
9. TFA - They Found Adventure; Prentice Hall
10. CLW - Cavalcade of Life in Writing; Allyn and Bacon

Suggested Alternative Selections for Prototype Unit I

Short Stories

1. "Adventure of the Speckled Band," Arthur Conan Doyle, OTL, p. 3.
2. "Cat Man," Charles Combs, VAN, p. 318.
3. "Death at Donner Lake," Virginia Murphy, OTL, p. 188.
-

Plays

1. The Happy Journey to Trenton and Camden, Thornton Wilder, LFL, p. 181.
2. A Shipment of Mute Fate, Martin Storm, AFT, p. 15, VAN, p. 118.
-

Poetry

1. "Cargoes," John Masefield, VIL, p. 329.
2. "High Flight," John Gillespie Magee, Jr., TFA, p. 421.
3. "Dunkirk," Robert Nathan, PPE, p. 360.
-

Recordings

Stories of Sherlock Holmes, read by Basil Rathbone, "Adventure of the Speckled Band," "The Final Problem," Caedmon TC 1172.

Films

Shane, sd. bw., 117 min., Films, Inc.



Summary Sheet
for
A PROTOTYPE UNIT IN LITERATURE
UNIT II
CLOSE-UPS

Nature might stand up
and say to all the world
"This was a man!"
Shakespeare

TO THE STUDENT:

You have just experienced adventure through the eyes and emotions of a variety of characters. Now you are going to read primarily about real people. In most cases, the accounts of the lives of these people are going to be just as exciting as any tale spun by an adventure writer. Select someone you admire, then record in your journal one segment from his life that reflects either a triumph or a tragedy.

TO THE TEACHER:

Most people tend to negate their own worth and overrate the capabilities of others. A typical attitude seems to be: "The other fellow can accomplish what he sets out to do because he is a superior being, because he has great ideas. Everything I attempt to do is only commonplace."

In short, "the grass is always greener on the other side of the fence," and life for the other person is a simple matter, while life for oneself is complex, i.e., filled with uncertainty and fears, primarily the fear of failure and the fear of the future.

To begin this unit, have the students relate to the rest of the class high or low moments from the lives of people they admire. During the entire unit, this activity can serve as an excellent yardstick for helping students to answer for themselves the all-important question--What enables a person to gain either fame or infamy?

Summary Sheet
for
A PROTOTYPE UNIT IN LITERATURE
UNIT III
WANDERING THE WEIRD AND THE WAY OUT

"Ghoulies and ghosties and long-legged beasties
and things that go bump in the dark."

TO THE STUDENT:

As you read these words you are in a classroom surrounded by other people. Is it possible to leave your surroundings by riding your imagination back into the past or forward into the future? Can you invent a moment on paper that will frighten or fascinate your classmates with its strangeness? You need not tell a story as such. You need only to make the moment as full as possible. Let your reader see what you see, hear what you hear, feel what you feel.

TO THE TEACHER:

The unknown has always fascinated man. Throughout ages man has speculated concerning whether or not ghosts really exist, if there is life on another planet, or whether those individuals live who are able to foretell the future. Even though the world of the weird and the way out naturally concerns itself with fantasy, it deals primarily with the eternal problems that have perplexed mankind since the beginning of time. For example, a majority of the science fiction writing being done today centers around such problems as the value of human life, the subservience of man to machine, the loss of individuality, etc.

Although the primary objective of this unit is to help students discover that reading about the weird and the way out can be both enjoyable and stimulating, other objectives are to enable adolescents to see that writing which fits this category 1) deals with basic human values, 2) sometimes is an attempt to fashion a better world--science fiction, in particular, is often the product of individuals who are not satisfied with the way things are: consequently, they shape things more to their liking both through and in their dreams, 3) often prophesies what the future will be like and what mankind's place will be in that future, 4) often foretells the future quite accurately, and 5) takes a great deal of imagination.

Summary Sheet
for
A PROTOTYPE UNIT IN LITERATURE
UNIT IV
WAR AND THE INDIVIDUAL

"Yes; quaint and curious wars!
You shoot a fellow down
You'd treat if met where any bar is,
Or help to half-a-crown."
Thomas Hardy

TO THE STUDENT:

From the very beginning of time, man has waged war against his fellow man. These wars have been recorded in song and story. Following is a quote which reveals one man's attitude towards war--"Never think that war, no matter how necessary, nor how justified, is not a crime. Ask the infantry and ask the dead." Record in your journal what you think the author is trying to say about war.

TO THE TEACHER:

Direction

The primary purposes of this unit are to help the student discover: 1) How war affects the individual, 2) His inner feelings concerning the nature of war. In order to reach these objectives, the teacher should provide the student with readings that reflect a variety of opinions concerning war. For the most part, there should be a balance between readings that romanticize war and those that portray it realistically.

To begin this unit, read aloud to your students poems that represent war both as exciting and noble and as vicious and inhumane.

Summary Sheet
for
A PROTOTYPE UNIT IN LITERATURE
UNIT V
THE SOUND OF DIFFERENT DRUMMERS

TO THE STUDENT:

"If a man does not keep pace with his companions,
perhaps it is because he hears a different drummer.
Let him step to the music which he hears, however
measured or far away."

Henry David Thoreau

Look around the world you live in and list those individuals
who, in your opinion, are in step with a different drummer. You
might get some ideas by choosing covers of recent magazines.

TO THE TEACHER:

Direction

To some students, a rebel is "a person who depends on no one
and does exactly as he wants." To others a rebel is "a person
who is very brave and is a great hero." To still others a rebel
is "a person who has assumed the right to change what he doesn't
like in society." To all, a rebel is a man who "does not keep
pace with his companions" because "he hears a different drummer."

Although the word "rebel" has both negative and positive
connotations, most people seem to think in terms of the negative.
The primary purposes of this unit are to help students discover
that: 1) The rebel quality can also be expressed in terms of the
positive; 2) People rebel for a number of reasons (just to be
different--beatniks; for a cause--Civil Rights demonstrations;
because of circumstances beyond their control--the youngster who
escapes from his environment by running away); and 3) The rebel
quality is within each individual.

To begin this unit, confront the students with the question:
WHO IS THE REBEL, THE OUTSIDER, THE MAN WHO DOESN'T FIT IN, THE
INDIVIDUAL WHO CHOOSES THE "ROAD NOT TAKEN"? This question re-
quires little more than that the student observe--he need only
note what people fit into this category. After posing the question
of Who?, then set forth the more challenging problem of Why? (The
latter requires greater mental effort because it calls upon the
individual to examine a series of situations, note the "facts" and
then make statements or reach conclusions as to cause and effect.)

Summary Sheet
for
A PROTOTYPE UNIT IN LITERATURE
UNIT VI
THE HIGH COST OF LIVING

TO THE STUDENT:

"Two roads diverged in a wood, and I --
--I took the one less traveled by
And that has made all the difference."

Most people are reluctant to make choices, particularly those that directly and immediately affect them. In the poetic excerpt quoted above, the speaker tells about a choice he made, a choice that was neither popular nor common. In your journal, record an occasion when you made a choice that was not in line with the rest of the crowd. Did this decision, like the author's, make a difference?

TO THE TEACHER:

Direction

It seems reasonable to characterize the age of adolescence as one where the individual wants to be free and yet protected. He wants to go his own way, make his own choices, enjoy what he sees as adult freedoms. Generally speaking, however, the adolescent fails to acknowledge the personal responsibilities that accompany the freedom he demands.

More than any other unit, "The High Cost of Living" is meant to encourage student discussion and thought. Since it clearly involves values, there can be no predictable outcome or understanding. The teacher's goal here is to stimulate self-expression, doubt, discussion. The primary objective of the unit is to help the student discover that he as an individual is free not only to make wise choices and reap rewards but also to make poor choices and pay the price.

Perhaps the best way to begin this unit is to have students relate to the rest of the class decisions they've made that have made a difference.

Representative Materials
from
THE PROTOTYPE UNITS IN LANGUAGE
Unit I

Note: Most of the content for these language units had been developed before this Program for English study was undertaken. The oral-aural-visual procedures were incorporated in the units during the study.

Only the general introductory material and the first two lessons of Unit I are given here.

INTRODUCTION

For far too long a time in some schools, the course of study in English has limited student learning activities to repetitious drills in grammar. Year after year the students have methodically completed exercises on "the same old" usage, and teachers have faithfully red-penciled the same old errors. The outcome? Boredom, distaste for English, confusion about the half-truths¹ found in definitions and rules, and far too often no gains in pupil achievement on standardized tests.

¹Example of a half-truth: An adjective is defined as "a word modifier that describes or points out a noun." Identify which of the words in the following sentence are truly adjectives: Those laughing fellows there are basketball players. Actually there are no true adjectives in this sentence but there are a number of modifiers: laughing (a verbal), there (adverb), basketball (a noun).

This language unit is not a solution to all of the problems of language study, but it is an attempt to confront some of the problems. Perhaps a few of the suggestions might even promote a student-centered program in which discussions about language can be fun, because people freely share ideas and actually listen to one another.

Description of the Unit

This unit provides less time for usage and more time for the study of the English language: specifically the nature of English grammars, some of the history of our language, its vocabulary, its variations in different speech communities,² and its capacity for vivid, exact communication.

²Example: In a formal situation with a counselor the student might say, "I received an A in mathematics," while to his buddy at a soda fountain he might shout, "Hey, Man, I aced math!"

This unit aims to create a positive learning climate. Instead of drills, the lessons involve an inductive approach as a method of inquiry. They make the student think. They challenge him. They might even stump him, for some problems in language have no answer or have several possible answers. In these instances, the student has to draw his conclusions from the available information. (Example: Is there a cross-relationship among these words: fire (English), feu (French), and feuer (Ger-

man)?³

Etymological guesswork says "maybe." Since the historic support is lacking, the answer might be "no." See Stuart Robertson and Frederick G. Cassidy, The Development of Modern English (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1961), p. 275.

Instead of confusing half-truths and obscure definitions, the lessons describe how English words actually function, not how they ought to function. The student learns that the informal "Who am I talking to?" and "It's me" are used more often in oral communication than the traditionally correct "To whom am I talking?" and "It's I."

The lessons in this unit are varied so that the teacher can select from each set of lessons those materials that the students actually need. The students who are capable of abstract levels of thinking in mathematics and language (Levels I and II) can master the lessons on kernel sentences. These students can understand the symbols and formulas for kernel sentences. They can also apply these formulas to problems in usage, subordination, modification, and punctuation.

On the other hand, the students who cannot master the abstractions of algebra and geometry are also unable to master abstractions in language study. They need less formal grammar and more opportunities to observe how the language actually functions. In the variations are suggestions on how these students can learn about English by manipulating words in sentences to create a variety of new sentences. Those students in Level III are not interested in terms and generalizations (the what), but they are interested in using the language (the how of communication).

The language study in this unit reflects all of the grammars of English. (See the Glossary following for an explanation of terms.) The lessons in the unit borrow from traditional grammar the terminology generally accepted by both traditionalists and linguists. They extract from structural grammar some refinements in terminology, some descriptions of how words function grammatically in sentences,⁴ and some observations on how language changes. The lessons emphasize transformational grammar by capitalizing on the creative language ability of students to produce (to generate or transform) a multitude of new sentences from basic sentence patterns (the simplest pattern having a subject and a predicate: Squirrels chatter).

4A speaker of English would accept immediately the following set of words as an English sentence: The brilliant cardinal perched in the pine tree. On the other hand, when that set of words is scrambled, the same speaker would not accept the random order of words as an English sentence, because the random word order would not be typical of English grammar: Perched in pine the brilliant tree the cardinal.

The language study in this unit employs the OAV techniques. Even if his classroom lacks electronic equipment, the resourceful teacher can still use these techniques by organizing his class into teams or small groups, by emphasizing oral discussion, and by following the inductive approaches to inquiry.

Familiar Oral-Aural-Visual Techniques

The teacher might be tempted to avoid the units, because he feels that the material is new. Actually there is nothing new about the techniques involved. What is new is an insight on how these techniques can be used.

Surely, on many occasions the teacher himself has struggled to clarify an essay question, reading the question aloud, revising, shifting modifiers, re-reading, re-writing. Finally, the phrases and modifications will fall smartly into logical order. But before the teacher reaches for the ditto master, he might read the question aloud once more (oral) to test its logic on his ear (aural).

Also, what is his answer to the student who pokes a theme at him and mumbles that the theme just doesn't sound right? Isn't the answer likely to be "Read it to me, Meg"? In this oral-aural-visual procedure the problem of written communication is exposed and resolved.

The teacher can learn to capitalize on the importance of hearing, speaking, and seeing. He might even begin to feel less guilty about ignoring the workbooks which have been gathering dust on the bookshelf for most of the semester.

TEACHER ORIENTATION MATERIALS

Orientation material for the interested teacher is "capsulized" in the following pages.

The Learning Climate

1. General atmosphere should be that of a purposeful workshop. The students should feel relaxed.
2. The role of the student is that of a researcher or inquirer. He should work independently or in a small group. He should assume responsibility for his own learning and progress; hence, most of the exercises require self-correction. He should want to avoid mediocre or careless work.
3. The role of the teacher is that of a consultant. This is not the time to catch up on papers or preparation. The teacher should use these laboratory or workshop periods for individual help and conferences. He should maintain a positive attitude by praise.

Taping Techniques

When taping any of the exercises the teacher should:

- 1) state the subject or problem ("This lesson should help you use commas effectively. Read silently as I read aloud the hints on the ditto copy . . . ");
- 2) give specific directions for using the tape;
- 3) have models for the student to see, to complete, to correct, etc.;
- 4) record the lesson allowing time for the student to respond;
- 5) when reinforcing the response, give the correct answer immediately after he thinks the student has responded;
- 6) give final instructions and any advice or information about the lesson;
- 7) for best results, limit taped exercises to short intervals of time (sometimes even 5-10 minutes).

Sounds in Speech

There is "punctuation" in both oral and written communication. Punctuation clues the ear can detect are as follows:

Juncture: This general term is used for four kinds of pauses.

- a. Open juncture: an imperceptible pause between words. The pause enables the listener to differentiate between ice cream and I scream.
- b. Single bar juncture (/): a slight pause between closely related parts of a sentence such as between subject and verb, subject and restrictive modifier. Examples: My

- friend/is late. All athletes/who observe health rules/
become stars.
- c. Double bar juncture (//): a longer pause marking a series, non-restrictive clause modifiers, etc. Examples: Apples//oranges//and grapes are my favorite fruits. My brother John//who joined the Marines//is home on leave.
 - d. Double cross juncture(#): a long pause followed by silence. Example: The sun rose#

Pitch is the term for the four levels of sound. The levels are numbered 1 - 4 with the lowest numbered 1 and the highest pitch numbered 4. The level of pitch conveys meaning. The lowest level (1) in the comment come¹ might suggest a matter of fact request made by the speaker. The second level (2) come² denotes a command. The third level (3) and the highest level (4), come³ and come⁴, reflect intense excitement as in a situation in which an officer orders his platoon to take cover upon the first burst of enemy gunfire.

Stress: Although there are four stresses, the loudest, termed primary stress (/) is the only one that is important. Stress enables the listener to distinguish between the white house (a house painted white) and the White House (the official residence of the United States President).

Symbols for stress are: primary /, secondary ` , tertiary ` , weak `.

Learning Language Skills by Ear

Punctuation

Students in Levels I and I can learn about punctuation both through an analysis of modifications in the sentence patterns and by hearing the clues provided by stress, pitch, and intonation. Students in Level III punctuate best "by ear."

The ear can be trained to hear the punctuation clues. Students can learn to identify variations in stress, pitch, and intonation by:

1. Listening (aural) to prepared tapes while reading (visual) the passage already punctuated. To make these marks stand out, the teacher might circle the punctuation marks or punctuate with colored inks or crayons.
2. Listening to prepared tapes while following the junctures (/, //, #) marked on a ditto copy. (Example: Mary//you have already met my brother/Jack/haven't you#)

3. Marking junctures on dittoed materials (visual), then reading (oral) this material into a tape recorder. In the playback (aural), the students should check to be sure the junctures were identified (in the process of recording by variations in length of pauses).

4. Listening (aural) to taped material while punctuating a dittoed copy (visual) and then connecting the exercise with available master copies (preferably on transparent overlays).

5. Testing his own skill at punctuating original material by reading (oral, visual) it into a recorder and hearing (aural) the clues.

6. Developing through listening a keen ear for the variations in stress and pitch and how these variations relate to each of the junctures (namely, single bar (/), double bar (//), and double cross bar junctures (#)).

Here are the aural clues the student needs to know. When no punctuation is needed, the nouns, verbs, adjectives, and adverbs are stressed; the pitch is kept at about the same level and only slight pauses are used to mark the division of subject and verb and restrictive modifiers. This slight pause (juncture) can be symbolized with a single bar juncture (/).

- Examples:
1. My brother/John/is coming.
 2. People/who bring lap robes/remain warm during a football game.

When a comma is needed, the word preceding the mark of punctuation is stressed and is lengthened slightly and the pitch is raised. The pause is longer and can be symbolized by a double bar juncture (//).

- Examples:
1. Mary//shall we go now?
 2. John Webster//who is my brother//is coming.
 3. Since the skies looked threatening//we brought umbrellas.

End punctuation is signaled by falling pitch, lengthening of the final syllable of the last word, and silence. End punctuation can be represented by a double cross juncture (#).

- Examples:
1. The snow is drifting#
 2. Is the snow drifting#
 3. How the snow is drifting#

Spelling

The students should use the tape recorder for spelling. They might dictate on to the tape individual lists of words they want to master. Each student should say the word, play back the word, and compare his pronunciation with the word on the list.

An alternate idea would be for the student to observe the following steps: 1) look at the word by syllables (on a ditto copy), 2) hear the teacher's taped pronunciation of the word, 3) say the word with the teacher as the word is repeated by the teacher on the prepared tape, 4) note any variations in how he, the student, pronounces the word, 5) write the word while saying the word into the tape recorder, and 6) check his spelling of the word against that on the ditto copy.

Either of the procedures would correct errors such as 1) a letter left out because it is not pronounced (government, February, library); 2) a syllable omitted in the pronunciation and spelling (probably); and 3) a syllable added because of mispronunciation of the word (the four-syllabled mischievious instead of the correct mischievous, and warsh instead of wash).

Students might also develop their own mnemonic devices for difficult words. Examples of the standard devices are the principal is a pal of students, while a principle is a rule. Students will, however, remember their own devices longer, particularly if they add the visual image to the memory aid. Example: princiPAL = PAL; princiPLE = ruLE

Other Skills

Skills in usage, word attack (vocabulary), and sentence building and revision can be developed with the tape recorder (by ear).

Sentence Patterns: An Overview

The sentence patterns are explained from both the traditional approach of function and from the descriptive approach of word order. For the teacher who wants neither, there are actual examples he can use. Some teachers will employ all of the information (using all of the grammars). Others will prefer to teach only part of the information.

All of the statements uttered by native speakers of English can be reduced to one of the ten kernel sentences:

Three of the kernel sentences have intransitive verbs:

Pattern 1 consists of a noun phrase and verb phrase or a subject and predicate. In the predicate can be an optional adverb of time, place, and/or manner. Example: Dogs bark loudly.

The pattern can be illustrated through symbols using N₁ for the subject or noun dogs, V-i for the intransitive verb barks, and (Adv-m) in parentheses, because all optional aspects in sentence formulas are enclosed in parentheses, for the adverb of manner. The formula for the sentence Dogs bark loudly would be

N₁ + V-i (Adv-m)

The formula can be generalized by showing the optional determiner (D) and all of the possibilities for adverbs:

Pattern 1: (D)N₁ + V-i (Adv-t
-p
-m)

Function:	Subject	Intransitive Verb	Adverb
Example:	Dogs	bark	loudly.

Pattern 2 also has an intransitive verb that functions as a linking verb such as the verb seems (represented in the formula as V-i), followed by a required adjective (predicate adjective or subject complement).

Pattern 2: (D) N₁ + V-i (seems) Adj

Function:	Subject	Linking Verb (seems)	Subject Completer or Predicate Adjective
Example:	(The) soup	seems	hot.

Pattern 3 has the intransitive or linking verb such as become (represented in the formula as V-i), followed by a noun (predicate noun or subject complement). Because the predicate noun refers to the subject, both nouns are numbered 1.

<u>Pattern 3:</u>	(D) N ₁	+	V-i (become)		(D) N ₁
Function:	Subject		Linking Verb (become)		Subject Completer or Predicate Noun
Example:	Mary		became		(my) friend.

Four of the kernel sentence patterns have transitive verbs followed by objects (direct objects, indirect objects, and object completers or object complements).

Pattern 4 consists of the subject, a transitive verb (represented as V-t, t for transitive), followed by a direct object. Because the object is a second noun, different from the subject (N₁), the object is identified by the symbols N₂.

<u>Pattern 4:</u>	(D) N ₁	+	V-t		(D) N ₂
Function:	Subject		Transitive Verb		Direct Object
Example:	Men		hunt		lions.

Pattern 5 consists of the subject, a transitive verb such as give (represented as V-t), followed by an indirect object and a direct object. Some grammarians number the nouns consecutively with the subject being number 1, the indirect object 2, and the direct object 3. Students, however, find it makes "more sense" to number all direct objects 2, and the indirect object 3. These formulas follow the students' recommendations.

<u>Pattern 5:</u>	(D) N ₁	+	V-t (give)		(D) N ₃	(D) N ₂
Function:	Subject		Transitive Verb such as <u>give</u>		Indirect Object	Direct Object
Example:	Boys		give		girls	valentines.

Pattern 6 has a transitive verb such as consider (V-t), followed by a direct object and an object completer which can be a noun or an adjective. Because the noun object completer refers to the direct object, both nouns are numbered N₂ to demonstrate the relationship.

Pattern 6: (D) N₁ + V-t (consider) (D) N₂ (D) N₂

Function: Subject Transitive Verb Direct Object Object Completer is a noun
 such as consider Object
 Example: Pat considers John a friend.

Alternate Pattern 6: (D) N₁ + V-t (consider) (D) N₂ Adj

Function: Subject Transitive Verb Direct Object Object Completer is an adjective
 such as consider Object
 Example: Pat considers John friendly.

Pattern 7 has a transitive verb such as elect (V-t) followed by a direct object and a noun object complement. The object and object complement or object completer are both represented by the symbols N₂ to demonstrate the relationship.

Pattern 7: (D) N₁ + V-t (elect) (D) N₂ (D) N₂

Function: Subject Transitive Verb Direct Object Object Completer
 such as elect Object
 Example: (The) class elected Mary (our) secretary.

The next three patterns, Patterns 8, 9, and 10 parallel Patterns 1, 2, and 3 except for the verb. In the last three patterns, the word be is substituted for the standard verb. Be differs from the standard verb in that instead of five possible forms it has eight: be, am, are, is, was, were, being, been. (The verb has five possible forms: infinitive, third person singular, present participle, past tense, and past participle).

Pattern 8 has be substituted for the standard intransitive verb. The adverb of manner cannot function here, nor can the adverb of time function alone. The adverb of place is required in this pattern.

Pattern 8: (D) N₁ + be Adv-p

Function: Subject be adverb of place (and time)

5. To join kernel sentences using relatives (or relative pronouns):

Mary is my friend. Mary, who is my friend, won a prize.
Mary won a prize.

6. To join kernel sentences using subordinating conjunctions:

John lost the election. Although we planned his campaign carefully, John lost the election.
We planned his campaign carefully.

7. To condense kernel sentences into noun phrases with modifiers:

The girl seems pretty → The pretty girl
The man lives upstairs → The man upstairs
The people are picking tomatoes → The tomato pickers
The men are working in the fields → The field workers
The man sells ice cream → The ice cream man

Glossary

Grammar: a finite system of rules that generates a number of grammatical sentences of a given language.¹

¹Andreas Koutsoudas, Writing Transformational Grammars: an Introduction, (New York: McGraw-Hill Book Company, 1966), p. 1.

The Grammars:

1. Traditional grammar, which began basically in the 18th century although some rules can be traced back 2,000 years to Greek grammarians, treats English as if it were derived from Latin. It prescribes rules to make English come closer to the "purity" of classical Latin. It also prescribes correctness and uses the terminology of Latin grammar.

2. Historical grammar, beginning in the 19th century, traces the relationship of English to other languages. It records the history, notes the changes in vocabulary (borrowings, blends, spelling variations, and changes in connotations), and attempts to explain the reasons for some of the changes.

3. Structural grammar, originating in the 20th century, concentrates on the sentence once already spoken or written. It analyzes the grammar of the sentence with no concern for the meaning, hence, nonsense words could pattern grammatically as an English sentence. It also describes the function of words in sentences.

4. Transformational grammar of the 20th century moves from a description of basic patterns of the structural linguists to predicting and creating possible variations of basic patterns. The resulting variations of basic patterns are called transforms. The generating process is called a transformation.

Kernel sentence: A basic sentence from which all other sentences can be derived. The basic sentence has two grammatical parts: a noun phrase or NP (subject) and a verb phrase or VP (predicate).

Example: Kittens sleep.
Noun Verb
Phrase Phrase

Sentence patterns: All of the statements uttered in English can be reduced to one of ten kernel sentences. Chief differences among the kernel sentences are seen in the variations in the verb phrase.

Kernel Sentence: Noun Phrase (NP) + Verb Phrase (VP)
Example: Kittens sleep.

<u>Pattern 1:</u>	noun	+	intransitive verb and an optional adverb	
Symbols:	N ₁		V-i	(Adv)
Function:	Subject		predicate	adverb
Example:	Kittens		purr	contentedly.
<u>Pattern 2:</u>	noun	+	intransitive verb and an adjective	
Symbols:	N ₁		V-i	Adj
Function:	Subject		linking verb such as <u>seem</u>	subject complement
Example:	Kittens		seem	gentle.
<u>Pattern 3:</u>	noun	+	intransitive verb such as <u>become</u>	and a noun
Symbols:	N ₁		V-i	N ₁
Function:	Subject		linking verb	subject complement
Example:	Kittens		become	pets.
<u>Pattern 4:</u>	noun	+	transitive verb	and a noun
Symbols:	N ₁		V-t	N ₂
Function:	Subject		transitive verb	direct object
Example:	Kittens		drink	milk.
<u>Pattern 5:</u>	noun	+	transitive verb such as <u>give</u>	and two nouns
Symbols:	N ₁		V-t	N ₃ N ₂
Function:	Subject		verb	indirect object, direct object
Example:	We		give	kittens milk.
<u>Pattern 6:</u>	noun	+	transitive verb such as <u>consider</u>	and two nouns
Symbols:	N ₁		V-t	N ₂ N ₂ *
Function:	Subject		verb	direct object, object complement
Example:	We		consider	kittens friends.

*Alternate Pattern 6: The object complement can also be an adjective. We consider kittens friendly.

<u>Pattern 7:</u>	noun	+	transitive verb such as <u>elect</u>	and two nouns
Symbols:	N ₁		V-t	N ₂ N ₂
Function:	Subject		verb	direct object, object comple- ment
Example:	We		elected	John president.
<u>Pattern 8:</u>	noun	+	word <u>be</u>	and a required adverb
Symbols:	N ₁		be	Adv
Function:	Subject		verb	Adv
Example:	Bob		is	here.
<u>Pattern 9:</u>	noun	+	word <u>be</u>	and an adject- ive
Symbols:	N ₁		be	Adj
Function:	Subject		verb	subject comple- ment
Example:	Kittens		are	gentle.
<u>Pattern 10:</u>	noun	+	word <u>be</u>	and a noun
Symbols:	N ₁		be	N ₁
Function:	Subject		verb	subject comple- ment
Example:	Kittens		are	pets.

Verb forms: Verbs have five forms: the infinitive, the third person singular, past tense, present participle, and past participle.

Regular verbs form the past tense and past participial forms by the addition of -ed to these forms. Verbs that show any departure from regular verb forms are called irregular verbs.

Example:

<u>Infinitive</u>	<u>Third Person</u>	<u>Present Participle</u>	<u>Past</u>	<u>Past Participle</u>
to + verb	-s	-ing	-ed	-en
Regular				
to walk	walks	walking	walked	walked
Irregular				
to give	gives	giving	gave	given
to sing	sings	singing	sang	sung
to put	puts	putting	put	put

Word Classes (Structural Grammar)

1. Large word classes: Linguists do not as a rule use the term parts of speech. Instead they classify words into two classes, the large word classes and small word classes (large and small because of the number of words in each classification).

Words in large word classes function as nouns (N), verbs (V), adjectives (Adj), and adverbs (Adv). These words have inflections and affixes. They are stressed, and are sometimes "signaled" by structure words. For example, the structure words a, an, and the often precede a noun (hence "signal" a noun). These words form the bulk of the English vocabulary.

2. Small word classes: Words in this classification function as structure words. They are few in number; they are not inflected nor stressed. Structure words are:

Determiner (D), words that function as a, three, those.

Intensifier (I), words that qualify adjectives such as rather, somewhat, pretty, cold, and adverbs such as very, extremely, somewhat, and slowly.

Preposition (Prep), words that function as at in the example at the gate.

Connectors: Coordinating Conjunctions (C), words that join or connect such as and, but, and or.

Subordinating Conjunctions (S): when, while, since.

Relatives (R): who (whose, whom); which, what, that.

Auxiliaries (Aux): Forms of be and have which enable verbs to "tell" tense and to "signal" verbs.

Modal (M): Words such as must, can, will which "signal" verbs and expand the verb phrase.

Symbols

- Adj (Adjective): Words like kind, costly, young. These words occur in the verb phrase of Pattern 2. Example: That girl looks young.
- Adv (Adverb): Words like faithfully (adverb of manner), yesterday (adverb of time), and there, in, out (adverbs of place). Example: We studied faithfully yesterday.
- Aux (Auxiliary): Forms of be and have that enable the verb to "tell" tense. Example: I am going today. I have gone often.
- be (be): Words which differ from verbs in that be has eight forms (be, am, is, are, was, were, being, been); while verbs have five forms.
- D (Determiner): Words that function with and "signal" nouns. Common determiners are a, an, the, many, some, your. Example: a boy, the hat, and some people.
- C (Coordinating Conjunction): Words like and, or, and but which function as connectors. Example: They fight like cats and dogs. (And connects nouns.) They study, and they also play. (And in this example connects two clauses.)
- I (Intensifier): Words like very, and quite which qualify the adjectives and adverbs. Example: He is quite handsome. (Qualifies an adjective.) He runs quite fast. (Qualifies an adverb.)
- M (Modal): Words like must, can, may are used in verb phrases. Example: I must leave now.
- N (Noun): Words like boy, and chair which function as subjects, direct and indirect objects (etc.) in English sentences.
- P (Pronoun): Words that replace nouns. Common pronouns are personal pronouns (I, you, they), demonstrative pronouns (this, these, that), indefinite pronouns (each, nobody, and all).
- Prep: Connecting words or structure words. Example: in the house, around the farm.
- R (Relative): Words like who, what, that that function as sentence connectors.

S (Subordinating Conjunction): Words like when, since, because that function as sentence connectors.

V (Verb): Words that function in the predicate of a basic sentence. Examples of verbs: He walks, drives, sings. The verb has five forms: the infinitive, third person singular, present participle, past and past participle.

Example: Infinitive -s -ing -ed -en
 walk walks walking walked walked

V-Adv (Verb-Adverb): Often a one-syllable verb plus adverb function as one word. Example: We put off (postponed) our decision.

V-i (Intransitive Verb): A subclass of verb occurring in Patterns 1, 2, and 3.

V-t (Transitive Verb): A subclass of verb occurring in Patterns 4, 5, 6, 7.

→ (Consists of): The single arrow in a formula means "consists of." Example: A sentence consists of a noun phrase and a verb phrase and can be written as a formula: $S \rightarrow NP + VP$.

⇒ (Becomes): The double arrow is used to designate changes or transformations. Example: The girl is pretty becomes The pretty girl can be written: $D N_1 \text{ be Adj} \Rightarrow D \text{ Adj } N_1$

UNIT ONE

Introducing Lessons:

By the time the teacher is ready to begin the language unit, he will be familiar with the techniques demonstrated in Literature Unit I: **EXCITEMENT AT YOUR ELBOW.**

Before he begins the unit, the teacher ought to review the students' responses to the "Think Sheets," Unit I. He should note the students' attitudes toward language, their knowledge about the English language ("built-in" knowledge), and their ability to produce both orally and in writing an infinite number of English sentences.

Lessons I and II capitalize on the students' ability to use English and to communicate.

Lesson I: Communicating without Words

Purpose: Students should become aware of the ways in which they communicate without words through gestures (kinesics) and voice qualities (paralanguage).

Activities:

1. Have the more aggressive students demonstrate how these feelings can be communicated by gesture alone: anger, fear, joy. Then have them illustrate by using only gesture the following situations:

- a. Hey, Jack, get back to your seat, Miss _____ (the English teacher) is coming!
- b. Sorry, Sandy! I don't have any money!
- c. I'll get clobbered! I'm late again.

2. Have the students add voice qualifiers to the above statements. For example, a sigh or a "humph!", a break in the voice, clearing the throat to suggest "pay attention."

3. Have students use both kinesic and paralingual clues to communicate these ideas:

- a. A boy or girl reluctantly giving a friend consent to read his theme. Words he should use are: "OK. I'll let you read it!"
- b. A student silently derides an unpopular show-off who is trying to win a bet. Place is the study hall. The bet is that the show-off cannot persuade the most popular girl in class to give him (the show off)

- the answer to the bonus mathematics problem. The student's line, "He's getting nowhere . . ."
- c. The girl questions the excuse her date gives for being thirty minutes late. All she can say is, "Oh?"

4. Problem: In written communication, how are the kinesic and paralingual clues illustrated? Have the students find and read examples of such illustrations from their current literature assignments.

Additional Activities:

1. Kinesics in the game of charades.
2. Kinesics and a comedy act on television. (Example: Red Skelton's pantomimes in "The Quiet Spot")

Lesson II: Communicating with Words

Purpose: To demonstrate the facility students have with words.

Review the "Think Sheets" for information on how long ago they have been using the English language. Discuss how this facility to use English is almost "built-in" or inherent. Note how the students effortlessly produce new sentences (never heard before).

Demonstrate how the students would have to think when speaking, if the grammar of English were suddenly altered. Example: Suppose that English lost the pronouns I and me. Instead of the pronoun, the name of the speaker would be inserted where I and me are used normally. Have the students dramatize simple requests such as:

1. A boy invites a girl to a coke date at the local teenage "haunt." The girl accepts.
2. A student explains to one of his parents the need for an increase in his allowance.

Reinforce the idea that students have actually mastered the grammar of English by having them observe how readily they can apply their knowledge in the following activities:

1. They are able to recognize the word order in English. Put a scrambled sentence on the board. Have the students write the sentence in the proper word order. Have students provide additional scrambled sentences for discussion. Have them look for several ways to unscramble the words into sentences. Here is also an opportunity to observe word order at work. The follow-

ing words can be unscrambled in many ways: The, angry, fierce, tiger, man, the, ate. Here are several, but not all, of the ways: The angry man ate the fierce tiger. The fierce man ate the angry tiger. The angry tiger ate the fierce man. The fierce tiger ate the angry man. The fierce, angry man ate the tiger. The fierce, angry tiger ate the man.

2. Demonstrate how students can expand sentences. Write on the chalkboard a sentence with a subject and verb. (Example: Dogs whine.) Have students add modifiers. (What kind of dogs? How did they whine? When? Where?).

Divide the class into small groups. Have these groups add more information to the sentence Dogs whine. Have some of the examples written on the board.

3. When the students have mastered Step 2, the teacher might demonstrate how students can reduce an expanded statement to a basic (kernel) sentence. Write the sentence on the board. Begin by having them cross out any information set off by commas or parentheses. Then guide them into crossing out all modifiers, phrases, clauses. This is an optional activity.

4. Demonstrate how students can convert the following statements into questions:

John will try-out for the school play today.

John got the lead.

Mary did not get a part.

Explain that in sorting out scrambled sentences, in expanding or reducing sentences, and in asking questions the students have used their knowledge of English grammar.

The other prototype units in language deal with the following: Building Sentences, Word Order, The Kernel Sentence, Patterns 1 through 10, Review of Patterns, The Passive Transformation of Pattern 4, Expanding the Noun Phrase, Expanding the Verb Phrase, and Transformation.

Representative Materials

from

MODIFICATION OF A PROTOTYPE UNIT IN LANGUAGE

Unit I

SAYING A SENTENCE AND TELLING A PARAGRAPH

Note: These materials are representative of those developed for ninth grade students designated as "slow learners."

INTRODUCTION

The activities in this unit have been devised to aid the teacher in the teaching of sentence structure and paragraph development. No attempt has been made to put time limits on these activities, for no one class is like another. Some teachers will want to add to or subtract from this material.

Topics have been suggested for paragraph assignments. These suggestions may not be suitable for your students. We always have to remember that a student must have a reason for writing, even though that writing may be only a few sentences. In trying to find the interests of the group, it might be helpful to have the students write two or three questions or topics that they would like to discuss during the year. The teacher could select from these as often as possible. Too, it is usually more productive to give the class a choice of two or three topics rather than assigning one for everybody. It is axiomatic that we all write best about those things we are interested in, have experienced, have opinions about, or would like to speculate about.

When it is suggested that written material be handed in, we are assuming that the teacher will read it in order to use examples from it or for understanding of class progress, not necessarily for evaluation. However, in some schools there may be a rule that all written work must be graded. Again, this is a matter for the individual teacher to decide.

One last thought: Students, particularly slow students, enjoy activities that involve movement. To them, it is fun to go to the board, to use the tape recorder, to work in groups. A class period spent without some fun is usually a period lost. It is our hope that, after using some or all of these activities, a teacher may be rewarded by hearing the greatest three words she can hear, "I like English."

ACTIVITIES

I. Have the class write anything from one sentence to several sentences, using O A V procedures. Suggest some timely and interesting topics for them to write about: cars, motorcycles, making money, record collections, etc. Before the papers are given to the teacher, students could make sure they are the best sentences they can write by reading them over to themselves, or exchanging with a classmate for criticism and correction.

II. Before the next class session, the teacher reads the papers and selects several sentences for class use. The teacher writes one of the basic ones on cards and spaces them along the chalk rail, thus:

John rides a Honda

Each student should have four or five blank sheets or cards (typewriter paper folded in half the long way and cut in two is a good size). Everybody should have a heavy black pencil or a crayon. The class shows how this basic sentence can be expanded by adding all kinds of modifying elements. The students write these on the sheets. The teacher calls on individuals to place their cards in the proper places in the sentence. For example, some modifying elements might be:

red to school every day
rain or shine my best friend

As expansions are put up, have the class keep testing the sentence by reading aloud to see if it sounds right. Other students may want to change a phrase or two to make the sentence more effective or more exciting.

This activity can be continued with one or two more basic sentences, until it seems likely that the class is aware that a sentence is not hidebound and immutable, that it is really loose-jointed and flexible. As a reverse process, the teacher may now write a long sentence on the board and, by erasing various elements, have the class reduce it to its basic structure.

III. At this session the teacher returns the sentences written during the first class period. The students now rewrite, making long sentences out of short ones by expanding them, and reducing long sentences to their basic elements. O A V procedures are used for this. In order to illustrate graphically that they have really accomplished this change-over, the students could make a graph of their sentences which will show pictorially what they have done. They might measure actual sentence lengths by using a ruler, or they might count the words in each sentence and graph them to scale ($\frac{1}{2}$ inch per word, for instance). The graph might look like this:

A: Sentence 1: _____.
B: Sentence 1: _____.

A: Sentence 2: _____.
B: Sentence 2: _____.

The class might then discuss how well they have succeeded, or ask about a sentence they have had trouble with.

The teacher will probably want the papers turned in now, and she may evaluate (grade) them if this seems necessary. At the least, it seems that a few comments are in order, or even some suggestions as to how something could have been handled differently or better. Most students prefer that the teacher read their work and do something about it, even though they do not necessarily expect a grade.

IV. By now, students should have some idea of the way sentences sound. At this point, the teacher might write an everyday sentence on the board, such as "This is my pencil." and have it read with varying emphases: This is my pencil. This is my pencil, etc. Hopefully, this will help impress upon the class that it is as important to listen to one's writing as it is to write one's writing. The class might want to make up some examples of their own.

V. Now the class is ready to write another group of sentences on a new topic. Here are some suggestions: Should boys help with housework? Should the school tell a boy to cut his hair, or tell a girl to lengthen her hem? Should a teen-ager keep all the money he earns, or should he pay board and room, for instance?

O & V processes should be employed in the composition of these "essays." The class should be asked to pay special attention to sentence lengths, since variety in the length of sentences helps to avoid monotony. Each student might draw a graph of his essay, as before, just to prove to himself that he has--or has not--used a good variety of sentences.

Each student might be asked to select the longest sentence he wrote, write it on cards or small squares of note paper (one word per card) and then arrange it in two different ways. He could be asked: Which way sounds better? Why? Most teachers will collect the papers, either to read and make comments on, or to grade, if this is the customary procedure.

VI. After the preceding experiences with expanding and reducing sentences, and after thinking about the places in sentences where certain kinds of words go, because they sound right there, the class is to some degree conscious of word order. This consciousness might be further developed by the use of scrambled sentences, again taken from the students' own writing. The teacher could use dittoed sheets of this exercise, which is probably better than putting the words on the board, unless the teacher wants the class to work as a group.

Here are some sample sentences:

1. a, anyone, be, can rebel
2. a, in, near, he, lake, lived
3. this, not, I, like, book, did
4. a, Michael, Dan, quickly, knife, gave, new (more than one arrangement?)

Now try some nonsense sentences:

5. a, the, welk, flar, down, wibbled (more than one way?)
6. a, the, was, doopest, abbling, taff, baff (more than one way?)

The students might try to show how they know where the words go in the sentence. They might try substituting real words for the nonsense words. Further, they could make up some nonsense sentences of their own, and write them on the board for everybody to read.

VII. For further experiences with sentence sounds and word order, the teacher could use Lesson 1, Step 3 (Optional), from the prototype language units.

VIII. Now that the student has some ideas about acceptable--or standard--ways to say things, it might be well to let him memorize a basic sentence, of his own composing, as a pattern for his spoken and written language. Each one writes a sentence on a card, gets it fixed in his mind, then turns the card over. The teacher talks about something else for 30 seconds, or holds a stopwatch for that time, then asks students to say their sentences aloud. For instance, one boy might write, "John drives a hot rod." When he remembers this at a later time, he subconsciously notes the agreement of subject and verb without its ever being called to his attention or put in the form of a rule--which would probably mean little or nothing to him in another sentence. It will serve as a prototype for his future usage.

Another way to use this technique is as follows: The teacher tape records some sample sentences to show the class how to proceed. For instance, the teacher says on tape, "Does John drive a hot rod?" "Yes, John drives a hot rod." (Pause) "Does Mary like to dance?" "Yes, Mary likes to dance."

Then the teacher asks the class to answer the question in like manner, before they hear the teacher's answer on the tape:

"Does Dan earn his own money?" (Pause while the class answers)
"Yes, Dan earns his own money." "Does Ellen make good pizza?"
(Pause) "Yes, Ellen makes good pizza."

To follow this up, the students might want to make some exercises of their own. This is really a kind of drill, but a drill with a difference since it has the added ingredient of novelty.

PARALLEL STRUCTURE

In expanding sentences, students will probably use some parallel forms and could now be brought to see that elements of a series should be of the same grammatical construction.

One way to approach the problem might be by the use of blocks of words and phrases on cards, the board, or even dittoed sheets. For example, the blocks could be like this:

gay	to play	spinning	to the store	beautifully
to jump	running	to the house	steadily	simple
pretty	to dance	playing	to school	quickly

The students could identify the ones that are the same form by looking at them, trying them out by saying them aloud. They could work alone or in pairs or in groups.

Using one group of similar elements at a time, the students can compose sentences. These should be written by the O A V process, of course. Someone may come up with a sentence like this: "When he was a child, John learned to play, to jump, and to dance."

The class might want to go one step further and make up their own exercises, and put together sentences of their own making. Everybody could contribute a phrase or two and write them on the board; then the class can make sentences together, if they like.

PARAGRAPHS

Up to this point the teacher has not mentioned the word paragraph, except perhaps in passing. But the students have been writing paragraphs all the time, when they were developing ideas in their sentence series.

The teacher might introduce the subject by explaining that we don't even talk just in sentences. Every time we say, "Here's something else, now--" or "Listen, this idea just occurred to me," we are getting ready to say a paragraph, whether we know it or not.

For example, the teacher might start, "The funniest thing happened on the way home yesterday." That of course is a sentence. But if she stops there, her listener doesn't know very much and probably wants to know more. It is up to her to supply the rest of the information that she hinted at in that opening--or topic--sentence. She might proceed thus: "I was driving along, not exceeding the speed limit or anything like that, when right behind me I saw a red light flashing and heard a siren screaming. A police car came up alongside me, and of course I didn't argue! I just pulled over and stopped. The cop got out of his car, came up to me, and said very politely, 'Lady, did you know that your coattail is hanging out under the door and I'm afraid it's going to get dirty.'"

Further examples of this technique can be found in such sources as the "Humor in Uniform" and "Life in These United States" pages in Reader's Digest. The teacher could read a few of these, then perhaps read the opening statement of one and let the class guess what follows. They can probably see by now that what follows a first sentence (topic sentence) almost always explains or describes or gives some examples of the idea that was suggested at the beginning.

Now the class is ready to try writing some original paragraphs. Using O A V procedures, they might spend some time developing an original paragraph. The teacher should probably suggest some topics. The first sentence could start with, "I like-----" or "I hate-----" or "I remember-----" or "I wish I could forget-----" or "The longest day I ever lived was-----".

Someone will be sure to ask, "Does this have to be the truth?" It needn't be, if it is interesting and if it does develop the topic sentence.

This writing can be taken up by the teacher and evaluated (graded) if it seems necessary. At the very least, it probably should be read by the teacher and some suggestions or comments made about interest and about good paragraph development. When the papers are returned, some may be read, and questions answered if any arise.

After these intensive activities with sentences and paragraphs, the students should have become aware of some of the fundamental principles involved in the use of language. Every time they write, or speak, these basic ideas should be reviewed

and re-reviewed. Not everyone will automatically become a good writer as a result, but almost everyone will get a little better. As one child said, "I can't write a book like Shakespeare, but I can write like me!"

APPENDIX F

STATISTICAL ANALYSES

ANALYSIS OF COVARIANCE TABLE
 Reading Post (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	394.9835				
Error (Within)	56	12713.3613	11086.2771	1627.0842	49	33.2058
Treatment + Error (Total)	57	13108.3448	10360.3056	2748.0393	50	
Difference for Testing Adjusted						
Treatment Means ...					1	1120.9551

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 33.758$

ANALYSIS OF COVARIANCE TABLE
 Reading Post (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	394.9835				
Error (Within)	56	12713.3613	11050.6849	1662.6765	50	33.2535
Treatment + Error (Total)	57	13108.3448	10358.2152	2750.1296	51	
Difference for Testing Adjusted						
Treatment Means ...					1	1087.4532

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,50) = 33.702$

ANALYSIS OF COVARIANCE TABLE
 Writing Post (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	374.3000				
Error (Within)	56	20929.6310	16033.3514	4896.2796	49	99.9241
Treatment + Error (Total)	57	21303.9310	14817.3117	6486.6193	50	
Difference for Testing Adjusted						
Treatment Means ...					1	1590.3397

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 15.915$

ANALYSIS OF COVARIANCE TABLE
 Writing Post (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	374.3000				
Error (Within)	56	20929.6310	16022.5560	4907.0749	50	98.1415
Treatment + Error (Total)	57	21303.9310	14812.7584	6491.1726	51	
Difference For Testing Adjusted						
Treatment Means ...					1	1584.0977

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,50) = 16.141$

ANALYSIS OF COVARIANCE TABLE
 Listening Post (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	639.1901				
Error (Within)	56	16772.4651	12281.2768	4491.1883	49	91.6569
Treatment + Error (Total)	57	17411.6552	12244.2735	5167.3816	50	
Difference for Testing Adjusted						
Treatment Means ...				676.1933	1	676.1933

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 7.377$

ANALYSIS OF COVARIANCE TABLE
 Listening Post (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	639.1901				
Error (Within)	56	16772.4651	12276.2683	4496.1968	50	89.9239
Treatment + Error (Total)	57	17411.6552	12210.4882	5201.1669	51	
Difference for Testing Adjusted						
Treatment Means ...				704.9702	1	704.9702

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,50) = 7.840$

ANALYSIS OF COVARIANCE TABLE
 Coop. English Post (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	81.2095				
Error (Within)	56	7576.6698	5963.5302	1613.1396	49	32.9212
Treatment + Error (Total)	57	7657.8793	5613.6695	2044.2098	50	
Difference for Testing Adjusted						
			Treatment Means ...	431.0702	1	431.0702

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 13.094$

ANALYSIS OF COVARIANCE TABLE
 Coop. English Post (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	81.2095				
Error (Within)	56	7576.6698	5866.2694	1710.4004	50	34.2080
Treatment + Error (Total)	57	7657.8793	5563.0274	2094.8519	51	
Difference for Testing Adjusted						
			Treatment Means ...	384.4515	1	384.4515

Null Hypothesis, No Difference Among Treatment After
 Adjusting with Covariates.
 $F(1,50) = 11.239$

ANALYSIS OF COVARIANCE TABLE
 MLAT Post (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	56.9794				
Error (Within)	56	2440.1240	1244.7969	1195.3272	49	24.3944
Treatment + Error (Total)	57	2497.1034	1198.7566	1298.3468	50	
Difference for Testing Adjusted						
			Treatment Means ...	103.0197	1	103.0197

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 4.223$

ANALYSIS OF COVARIANCE TABLE
 MLAT Post (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	56.9794				
Error (Within)	56	2440.1240	1230.7679	1209.3561	50	24.1871
Treatment + Error (Total)	57	2497.1034	1193.0291	1304.0744	51	
Difference for Testing Adjusted						
			Treatment Means ...	94.7183	1	94.7183

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,50) = 3.916$

ANALYSIS OF COVARIANCE TABLE
 Compositions 1-5 (with first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	12658.1428				
Error (Within)	56	210364.0125	186587.9356	23776.0768	49	485.2261
Treatment + Error (Total)	57	223022.1552	199239.4141	23782.7411	50	
Difference for Testing Adjusted						
			Treatment Means ...	6.6643	1	6.6643

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,49) = 0.014$

ANALYSIS OF COVARIANCE TABLE
 Compositions 1-5 (without first composition as covariate)
 First Experimental Phase

Source	df	yy	Sum-Squares (Due)	Sum-Squares (About)	df	Mean-Square
Treatment (Between)	1	12658.1428				
Error (Within)	56	210364.0125	126081.1529	84282.8596	50	1685.6572
Treatment + Error (Total)	57	223022.1552	137427.2507	85594.9045	51	
Difference for Testing Adjusted						
			Treatment Means ...	1312.0449	1	1312.0449

Null Hypothesis, No Difference Among Treatments After
 Adjusting with Covariates.
 $F(1,50) = 0.778$

ANALYSIS OF VARIANCE READING
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	39.1535	1	39.1535	0.7639
Within Groups	2511.4348	49	51.2538	
Total	2550.5882	50		

ANALYSIS OF VARIANCE WRITING
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	9.5823	1	9.5823	0.1768
Within Groups	2656.4177	49	54.2126	
Total	2666.000	50		

ANALYSIS OF VARIANCE LISTENING
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	42.6102	1	42.6102	0.5099
Within Groups	4095.0761	49	83.5730	
Total	4137.6863	50		

ANALYSIS OF VARIANCE COOP. ENGLISH
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	14.8339	1	14.8339	0.4298
Within Groups	1691.3230	49	34.5168	
Total	1706.1569	50		

ANALYSIS OF VARIANCE MLAT
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	12.3157	1	12.3157	1.0892
Within Groups	554.0373	49	11.3069	
Total	566.3529	50		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Middle Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	8050.7892	11	8050.7892	9.9706
Within Groups	39565.2500	49	807.4541	
Total	47616.0392	50		

ANALYSIS OF VARIANCE READING
Upper Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.4505	1	0.4505	0.0107
Within Groups	2099.6072	50	41.9921	
Total	2100.0577	51		

ANALYSIS OF VARIANCE WRITING
Upper Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.5255	1	0.5255	0.0075
Within Groups	3515.5322	50	70.3106	
Total	3516.0577	51		

ANALYSIS OF VARIANCE LISTENING
Upper and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	1157.8125	1	1157.8125	13.7938
Within Groups	4196.8606	50	83.9372	
Total	5354.6731	51		

ANALYSIS OF VARIANCE COOP, ENGLISH
Upper Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	29.8203	1	29.8203	0.9197
Within Groups	1621.1604	50	32.4232	
Total	1650.9808	51		

ANALYSIS OF VARIANCE MLAT
Upper Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	89.9192	1	89.9192	5.8859
Within Groups	763.8501	50	15.2770	
Total	853.7692	51		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	45700.4662	1	45700.4662	51.5478
Within Groups	44328.2069	50	886.5641	
Total	90028.6731	51		

ANALYSIS OF VARIANCE READING
Middle Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	54.0732	1	54.0732	1.3729
Within Groups	2166.1724	55	39.3850	
Total	2220.2456	56		

ANALYSIS OF VARIANCE WRITING
Middle Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	6.3702	1	6.3704	0.0861
Within Groups	4068.4717	55	73.9722	
Total	4074.8421	56		

ANALYSIS OF VARIANCE LISTENING
Middle and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	836.6980	1	836.6980	12.9255
Within Groups	3560.2845	55	64.7324	
Total	4396.9825	56		

ANALYSIS OF VARIANCE COOP. ENGLISH
Middle Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	2.7691	1	2.7691	0.0839
Within Groups	1815.2660	55	33.0048	
Total	1818.0351	56		

ANALYSIS OF VARIANCE MLAT
Middle Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	39.2599	1	39.2599	2.2477
Within Groups	960.6700	55	17.4667	
Total	999.9298	56		

ANALYSIS OF VARIANCE ESSAYS
Middle Group and Lower Group (total-male and female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	16896.5782	1	16896.5782	19.7267
Within Groups	47109.4569	55	856.5356	
Total	64006.0351	56		

ANALYSIS OF VARIANCE READING
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	39.6825	1	39.6825	0.9252
Within Groups	814.8889	19	42.8889	
Total	854.5714	20		

ANALYSIS OF VARIANCE WRITING
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	80.0159	1	80.0159	1.1630
Within Groups	1307.2222	19	68.8012	
Total	1387.2381	20		

ANALYSIS OF VARIANCE LISTENING
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	3.5714	1	3.5714	0.0460
Within Groups	1475.0000	19	77.6316	
Total	1478.5714	20		

ANALYSIS OF VARIANCE COOP. ENGLISH
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	34.3214	1	34.3214	0.9046
Within Groups	720.9167	19	37.9430	
Total	755.2381	20		

ANALYSIS OF VARIANCE MLAT
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.3214	1	0.3214	0.0243
Within Groups	250.9167	19	13.2061	
Total	251.2381	20		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Middle Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	3928.6706	1	3928.6706	3.8806
Within Groups	19235.1389	19	1012.3757	
Total	23163.8095	20		

ANALYSIS OF VARIANCE READING
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	7.7357	1	7.7357	0.1288
Within Groups	1681.4643	28	60.0523	
Total	1689.2000	29		

ANALYSIS OF VARIANCE WRITING
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	15.4292	1	15.4292	0.3768
Within Groups	1146.4375	28	40.9442	
Total	1161.8667	29		

ANALYSIS OF VARIANCE LISTENING
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	84.6006	1	84.6006	1.0450
Within Groups	2266.8661	28	80.9595	
Total	2351.4667	29		

ANALYSIS OF VARIANCE COOP. ENGLISH
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	100.5482	1	100.5482	3.3510
Within Groups	840.1518	28	30.0054	
Total	940.7000	29		

ANALYSIS OF VARIANCE MLAT
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	18.2292	1	18.2292	1.7976
Within Groups	283.9375	28	10.1406	
Total	302.1667	29		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Middle Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	4410.2881	1	4410.2881	6.5774
Within Groups	18774.6786	28	670.5242	
Total	23184.9667	29		

ANALYSIS OF VARIANCE READING
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.0000	1	0.0000	0.0000
Within Groups	382.4444	16	23.9028	
Total	382.4444	17		

ANALYSIS OF VARIANCE WRITING
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	3.5556	1	3.5556	0.0334
Within Groups	1702.4444	16	106.4028	
Total	1706.0000	17		

ANALYSIS OF VARIANCE LISTENING
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	249.3889	1	249.3889	3.1039
Within Groups	1285.5556	16	80.3472	
Total	1534.9444	17		

ANALYSIS OF VARIANCE COOP. ENGLISH
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	10.8889	1	10.8889	0.3549
Within Groups	490.8889	16	30.6806	
Total	501.7778	17		

ANALYSIS OF VARIANCE MLAT
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	12.5000	1	12.5000	0.6944
Within Groups	288.0000	16	18.0000	
Total	300.5000	17		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	14112.0000	1	14112.0000	10.5679
Within Groups	21365.7778	16	1335.3611	
Total	35477.7778	17		

ANALYSIS OF VARIANCE READING
Upper Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.7769	1	0.7769	0.0145
Within Groups	1716.6643	32	53.6458	
Total	1717.4412	33		

ANALYSIS OF VARIANCE WRITING
Upper Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	0.0824	1	0.0824	0.0015
Within Group	1806.3000	32	56.4469	
Total	1806.3824	33		

ANALYSIS OF VARIANCE LISTENING
Upper Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	1047.5803	1	1047.5803	13.1488
Within Groups	2549.4786	32	79.6712	
Total	3597.0588	33		

ANALYSIS OF VARIANCE COOP. ENGLISH
Upper Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	84.7063	1	84.7063	2.5469
Within Groups	1064.2643	32	33.2583	
Total	1148.9706	33		

ANALYSIS OF VARIANCE MLAT
Upper Group and Lower Groups (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	75.6088	1	76.6088	5.3649
Within Groups	456.9500	32	14.2797	
Total	533.5588	33		

ANALYSIS OF VARIANCE ESSAYS
Upper Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	29477.8891	1	29477.8891	46.4843
Within Groups	20292.7286	32	634.1478	
Total	49770.6176	33		

ANALYSIS OF VARIANCE READING
Middle Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	39.6825	1	39.6825	0.9705
Within Groups	776.8889	19	40.8889	
Total	816.5714	20		

ANALYSIS OF VARIANCE WRITING
Middle Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	48.0159	1	48.0159	0.4478
Within Groups	2037.2222	19	107.2222	
Total	2085.2381	20		

ANALYSIS OF VARIANCE LISTENING
Middle Group and Lower Group (male)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	352.3968	1	352.3968	10.0752
Within Groups	664.5556	19	34.9766	
Total	1016.9524	20		

**ANALYSIS OF VARIANCE COOP. ENGLISH
Middle Group and Lower Group (male)**

	Sum of Squares	df	Mean Square	f ratio
Between Groups	5.4325	1	5.4325	0.1434
Within Groups	719.8056	19	37.8845	
Total	725.2381	20		

**ANALYSIS OF VARIANCE MALT
Middle Group and Lower Group (male)**

	Sum of Squares	df	Mean Square	f ratio
Between Groups	10.3214	1	10.3214	0.5786
Within Groups	338.9167	19	17.8377	
Total	349.2381	20		

**ANALYSIS OF VARIANCE ESSAYS
Middle Group and Lower Group (male)**

	Sum of Squares	df	Mean Square	f ratio
Between Groups	4136.6706	1	4136.6706	3.9657
Within Groups	19819.1389	19	1043.1126	
Total	23955.8095	20		

**ANALYSIS OF VARIANCE READING
Middle Group and Lower Group (female)**

	Sum of Squares	df	Mean Square	f ratio
Between Groups	15.6056	1	15.6056	0.3860
Within Groups	1374.7000	34	40.4324	
Total	1390.3056	35		

**ANALYSIS OF VARIANCE WRITING
Middle Group and Lower Group (female)**

	Sum of Squares	df	Mean Square	f ratio
Between Groups	15.9014	1	15.9014	0.2968
Within Groups	1821.7375	34	53.5805	
Total	1837.6389	35		

ANALYSIS OF VARIANCE LISTENING
Middle Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	556.5125	1	556.5125	6.8593
Within Groups	2758.4875	34	81.1320	
Total	3315.0000	35		

ANALYSIS OF VARIANCE COOP. ENGLISH
Middle Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	1.9014	1	1.9014	0.0667
Within Groups	968.9875	34	28.4996	
Total	970.8889	35		

ANALYSIS OF VARIANCE MLAT
Middle Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	19.6681	1	19.6681	1.1433
Within Groups	584.8875	34	17.2026	
Total	604.5556	35		

ANALYSIS OF VARIANCE ESSAYS
Middle Group and Lower Group (female)

	Sum of Squares	df	Mean Square	f ratio
Between Groups	11218.0056	1	11218.0056	15.3143
Within Groups	24905.5500	34	732.5162	
Total	36123.5556	35		