

## Linguistics in High School

*A report of action research.*

IT is clear now that the discoveries of linguistic scientists during the past 30 years or so are going to revolutionize the teaching of English. In the fall of 1961 at the Convention of the National Council of Teachers of English in Philadelphia, there were seven programs and a special, heavily subscribed pre-convention workshop on structural linguistics. In the September 1961 number of *College English*, four major articles on linguistics appeared.

Publishers, too, have sensed the direction of movement. Although there are only three textbooks for secondary schools wholly dedicated to the structural approach, it is nearly impossible to find a recent text in grammar and composition that does not include some material on the new grammar. Finally, the Commission on English, established by the College Entrance Board, and headed

by W. Nelson Francis—himself a distinguished linguist—has stated that every college-bound high school student should attain “some competence in modern linguistic analysis through the study of modern grammar.” It is clear that this Commission intends to take giant steps to bring elements of the new grammar to colleges and secondary schools all over the country.

It is increasingly clear, also, that linguistic science will affect profoundly not only the teaching of usage and grammar, but also the teaching of composition, reading, spelling, punctuation and poetry. No longer is it a question of *whether* a school district should take up the study and application of the new grammar, but rather of *when* it will do so.

Experiments with the new approach began at Cheltenham High School in September 1959. The research data that this initial experiment yielded are described in some detail in the September 1960 issue of *The English Journal*.

The purpose of this article is to report on how we set up the initial experiment, on the research that followed it, on the results of our experiments, and on our in-service work and the development of a guide for the teaching of linguistics. In conclusion we shall raise and try to answer some questions about the urgent need for a modern language arts curriculum.

We were not convinced, when we began our experiments with the new grammar, that it was going to prove superior to the traditional school grammar, but we did believe that the latter was inadequate in certain ways and that our students' reactions toward it were extremely negative. Indeed, our research shows that 76 percent of our eleventh grade students found grammar “a colder, less exciting subject” than any they

studied in tenth grade; 85 percent of our eleventh graders found "most grammar lessons" neither pleasant nor interesting. These statistics were obtained in classes whose average verbal intelligence on the California Mental Maturity test was approximately 117.

Aware of the attitude of our students toward the study of grammar, the coordinator of secondary education began sending books and materials on linguistics to English teachers in the hope that the new grammar might contribute to the improvement of the situation. After about two years, one teacher expressed interest in exploring the instructional possibilities of this new approach.

The next step, taken about eight months before the first classes met, was the development of a research design. How could we know the values of this new approach to teaching grammar? How could we obtain evidence on which to make sound decisions for curriculum change and implementation? If the new grammar proved successful, how could we communicate effectively the results of the research to our own teachers? Once we had developed a research design, how could we test its validity? And finally, how could we remain objective in the development of the experiment and in the actual teaching situation?

These rather penetrating questions influenced us from the start. We were conscious of the need to be objective—of the need to have evidence and of the fact that the new approach could fail. We were conscious that many students had learned grammar through conventional methods, but we were also aware that a great number "hated" the subject. This latter fact influenced us to be concerned with student attitude as an important part of the research study. The former fact prompted us to seek out the relative

merits of various phases of the traditional approach.

Finding little in the way of objective tests to measure what we wanted to know, we designed two tests of our own. The first was a 37 item, multiple choice test, designed to measure the students' knowledge of the relationships of the parts of the sentence to each other and to the whole. We called it the Dynamics of Language Test. Our second test was a 98 item objective test of attitude toward grammar study. Both of these tests have proved successful, but we are revising them somewhat on the basis of our experiences.

In addition to our own tests, we used the Cooperative Test of Effectiveness of Expression in three classes and the STEP Writing Test in one. We also gave the students an essay question at the end of the year, asking them whether their attitude toward studying grammar had changed during the course of the year and, if so, how and why it had changed. All of these tests, except the last, were given before the year's work started and again after all work had been completed. The need to assess the atmosphere in each of the experimental groups was suggested at the ASCD Research Institute in 1959 in Washington. Here the research design was presented to a group by Cheltenham's Coordinator of Secondary Education for critical evaluation. In general the encouragement received from those who worked over the research design stimulated us to be more conscientious about our efforts, particularly with respect to the need for presenting extensive data to our own teachers as the

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project developed. If change was desirable—and the immediate positive response of many of our students suggested that it was—we knew we would have to involve other teachers in order to gain support and to collect sufficient data to justify the change to those who were skeptical.

In the first year of experimentation, four classes were involved. One class on each high school grade level studied the new grammar, using Paul Roberts' *Patterns of English*<sup>1</sup> as their text; a twelfth grade control class studied traditional grammar, using the *Century Handbook of Writing*<sup>2</sup> and supplementary material provided by the teacher.

In addition to the testing described above, the teacher wrote weekly reports on all classes, including an outline of the lessons he taught and an anecdotal record of class and individual pupil reactions. In some classes tapes were made, recording the students' discussions as they worked in groups. Weekly conferences, involving the teacher and the coordinator, were held. Perhaps one of the most significant observations came forth during one of these meetings, when the teacher related that he felt that his "traditional" classes expected him to have all the answers and that he found the class casting him in a very "authoritarian" role. Although he did not wish to have the group so dependent, he was indeed stereotyped by the structure and approach inherent in the traditional school grammar.

On the other hand, the classes studying the new grammar did not expect the teacher to have all the answers, but rather approached their work analyti-

cally, often challenging the teacher and creating an atmosphere that permitted him to become a part of the dynamics of a group willing to think. This raises a very important question: To what extent does the nature or structure of the curriculum determine the atmosphere of the group and the role of the teacher? Our experiences lead us to believe that the curriculum can be and is a powerful force.

In the 1960-61 school year a similar experiment was conducted with a different teacher. She taught the new grammar in two tenth grade classes, using Roberts' *Patterns* as the basic text, and traditional grammar in one tenth grade class, with *Building Better English*<sup>3</sup> as the text.

### Results of Experimental Tests

In the initial experience of our teachers there was no significant difference in test scores between the control and the experimental classes as far as knowledge of grammar was concerned. It is significant, however, that even with lack of experience on the part of the teacher, the pupils learned as much grammar through linguistic analysis as they did through the conventional approach. Moreover, we feel we have strong evidence that as the teacher achieves greater mastery of the new grammar, he achieves considerably better results with it than he does with the traditional school approach.

The teacher whose control class gained 10.7 percent in grammatical knowledge during the 1959-60 experiment had a 17.8 percent gain in an experimental class during the following year, even though the latter class spent only 40 percent as much time on grammar as did

<sup>1</sup> Paul Roberts. *Patterns of English*. New York: Harcourt, Brace & Co., Inc.

<sup>2</sup> Garland Greever and Easley S. Jones. *Century Handbook of Writing*. New York: Appleton-Century-Crofts, Inc., 1942.

<sup>3</sup> John J. DeBoer. *Building Better English*. New York: Row, Peterson and Company, 1955.

the previous year's classes. Even in the 1959-60 experiment, the experimental class that studied the new grammar last and thus had the benefit of the teacher's previous experience, gained 24.0 percent in grammatical knowledge, in spite of the fact that their verbal scores on intelligence tests were nearly ten points below those of the control group. Such results clearly point up the need for teacher education and experience with the new grammar and suggest that the better the background, the better will be the teaching and learning.

Dramatic results were achieved on the grammar attitude test. While the attitude in the control classes did not become more negative, there were insignificantly few cases in which the attitude became more positive. With the new grammar, on the other hand, two years of experimentation with two different teachers and seven separate eleventh grade sections shows that the percentage of students who regard grammar as "a colder, less exciting subject" than any they studied in tenth grade can be reduced from 76 percent to 53 percent. We believe that the latter figure could be reduced still further if the students began the study of the new grammar at an earlier grade level so that the amount of "unlearning" could be reduced. If such an improvement in attitude can be achieved through the study of the new grammar, this alone could be justification for change.

The results of the essay question—which students did not sign—were even more revealing. When the students' attitude toward grammar study grew more positive in the traditional classes, it was because *they liked the teacher*. In the classes studying the new grammar, on the other hand, students' attitude grew more positive because *they liked the*

*grammar*. In describing their attitude toward the new grammar, students called it "more interesting or challenging," "easier," "less boring," and "more logical" (than traditional grammar). We might add that the number of students interested in grammar for its own sake has increased considerably. They want to keep their textbooks and have purchased their own copies. Some of the brighter students have been reading on their own the work of linguists such as C. C. Fries, James Sledd, and W. Nelson Francis, and have developed term papers on language and linguistics.

There is, unfortunately, very little evidence that the study of either the new or the traditional grammar improves student writing. On the other hand, there was no attempt in any of the classes to relate grammar study to composition. (Our belief in this matter was that we should do one thing at a time.) Some evidence does exist to show that the new grammar is superior to the traditional for improving writing skills when an attempt is made to connect grammar and composition.<sup>4</sup>

Although our statistics are limited, we also have some evidence that students retain well what they learn in new grammar classes. A group of students who had been taught the new grammar in tenth grade were tested at the beginning of the eleventh grade. We found that they had not only retained what they had learned, but were able to show some gain in grammatical knowledge after the summer months. We are not trying to suggest that there is magic in the new grammar. It may well be, though, that because the new approach is more conceptual than the traditional,

<sup>4</sup>Lena Suggs. "Structural Grammar versus Traditional Grammar in Influencing Writing." *The English Journal*, March 1961.

students tend to remember and even internalize what they have learned.

At the conclusion of the 1959-60 experiment, a group of teachers who had expressed interest in the new grammar were brought together to discuss and share preliminary results. One of these teachers agreed to use the new grammar in all of his eleventh grade classes in the 1960-61 school year. Another teacher agreed to repeat the original experimental vs. control study in some tenth grade classes. It was decided by the group that experimentation in the twelfth grade should be discontinued because of the great amount of unlearning required on the part of the students. The group also felt that some attempt should be made to introduce the new grammar in our junior high schools.

Interest on the part of the teachers in the modern grammar grew so strongly in 1960-61 that our Language Arts Committee recommended that we offer an in-service course in structural linguistics in the spring of 1961. Approximately half of the English teachers in the township, as well as a half dozen foreign language teachers, attended this course regularly.

As a result of this in-service course and the experiments of the past two years, interest and conviction became so strong that we decided to use the structural approach in all tenth grade classes in the 1961-62 school year and to experiment with classes in grades seven and nine in the junior high schools. We are also using the structural approach in two tenth grade "gifted" sections and in one slow learning group of ninth graders. Results in both these groups have so far been very positive. (Previous experimentation had been done in the regular sections of college bound students only.)

Finally, we developed our own *English Teachers' Guide for Teaching Linguistics*

in the summer of 1961.<sup>5</sup> This 70 page manual is meant to serve as the basis for a curriculum for grade seven in the 1962-63 school year, but we are currently experimenting with it in grades 7, 9 and 10. In future summers we intend to add to the guide, until we have a complete curriculum in structural grammar, extending from seventh to tenth or eleventh grade. We felt the need to develop such a guide mainly because we could find no published materials that combined the new grammar with usage, composition, and vocabulary development. We also felt that there were certain elements of the traditional approach which we wanted to preserve and use and these our research has helped us to identify. The guide, finally, is our attempt to integrate various aspects of the language arts which are to be taught inductively, and which can be described logically in a structured curriculum which avoids unnecessary duplication of effort.

This year we are having regular bi-monthly meetings of all teachers using the new grammar in some or all of their classes so that we can share knowledge and reactions and improve our own curriculum. In these ways, then, the decision to effect change was made cooperatively by administrators and teachers and a new curriculum has evolved.

In conclusion, we believe that the new grammar has merit, that teachers can be trained to use it, and that teachers will use it once they are convinced of its efficacy. We do not believe that traditional grammar is "all wrong," but we do believe that its exclusive use has produced a narrow view of our language as well as some very unhealthy effects. We

<sup>5</sup> School District of Cheltenham Township. *English Teachers' Guide for Teaching Linguistics*. Philadelphia: Chilton Press, 1962 (in press). (\$3.50)

wonder, furthermore, how many administrators and teachers fully recognize the situation in their schools. We suspect strongly that if the students in most school districts were tested on their knowledge of grammar and their attitude toward its study and if the results of such a study were revealed at an English department meeting, teachers would be quickly persuaded that something should be done.

In our own eleventh grade classes we found that our students averaged only 45.4 percent correct on a traditional grammar test and that 85 percent of them found grammar lessons neither pleasant nor interesting. This situation we felt was not the result of a lack of grammar, or of grammar badly taught, but perhaps of too much repetition with a great deal of forgetting. Why should students remember what they have learned when they know it will be taught all over again?

Of course, the matter of teacher training is not easy of solution, especially if courses are not offered in area colleges. Opportunities to learn the new grammar, however, are increasing rapidly. The Commission on English will be setting up workshops all over the country next summer and the NCTE will undoubtedly co-sponsor workshops again in the summer of 1962, as it did in 1961 (such workshops are advertised in the May issue of the *English Journal*). Finally, a teacher who has studied at such a workshop and has had classroom experience teaching the new grammar may well be able to help his colleagues through an in-service program at his own school.

A still more difficult problem arises when we consider the need to integrate the study of the new grammar with other phases of the curriculum. Ideas developed by linguistic scientists have

ramifications that extend to spelling, punctuation, composition, reading and poetry; but as yet, little effort has been made to synthesize these new ideas. It is undoubtedly too early to hope for such a synthesis, but we believe that it is not too early for secondary schools to make a beginning and to share their work with others.

Finally, the administrator or teacher who investigates the new grammar will soon discover that it is a field in flux and that there are a number of conflicts among the linguists themselves. In spite of this, Harold B. Allen, Past President of the NCTE, among others, feels there is a great deal of common ground among the warring factions; and it is everyone's hope that internecine conflicts will not prevent the spread of new knowledge.

Indeed, we feel that one of the most exciting things about linguistics is that it is in a state of flux. If we can help our students to feel that grammar is not cold and unexciting, that there are few absolute truths about language, that new discoveries are made every day, and finally, that language itself changes constantly, we will have taught them a great deal.

#### Readings in Linguistics

H. A. GLEASON. *Introduction to Descriptive Linguistics*. New York: Holt, Rinehart and Winston, Inc., 1961

CHARLES C. FRIES. *American English Grammar*. New York: Appleton-Century-Crofts, Inc., 1940.

W. NELSON FRANCIS. *The Structure of American English*. New York: The Ronald Press Company, 1958.

JAMES SLEDD. *A Short Introduction to English Grammar*. Chicago: Scott, Foresman and Company, 1960.

GEORGE L. TRAGER and HENRY LEE SMITH, JR. *An Outline of English Structure (Studies in Linguistics, Occasional Papers, No. 3)*. Norman, Oklahoma: Battenburg Press, 1951.

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