USES OF PROGRAMMED MATERIALS IN TEACHING READING AND AURAL COMPREHENSION

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After several false starts, programmed language instruction appears to have overcome many of the difficulties which caused it to suffer initial setbacks. Snags in theory and technique have been worked out and its proponents have generally developed more cautious claims about what it can deliver. At a time when the language teaching profession is experiencing an undercurrent of dissatisfaction with the inefficiency of present methods and pedagogical theory, programmed instruction offers some possible new directions and techniques. The purpose of this paper is to describe some of the problems that pertain especially to teaching reading and aural comprehension of English as a second language, to suggest some of the potential uses of programmed learning in solving them and to report on some of the approaches we have developed in this regard at the Economics Institute. By "programmed learning" I mean any materials that (1) ask for student response (2) are self correcting (3) move systematically toward a specified goal of terminal behavior.

I make the initial assumption that the purpose of the ESOL course is to give the non-native student in the
United States a functional control over the kind of English he needs in order to compete without serious handicap with his English-speaking classmates. For the foreign student in the American university, this means he must be able to understand the flow of idiomatic speech in the lecture hall, to make himself easily understood in conversational and seminar situations, to read accurately at a rate of perhaps 200 words per minute, and to do the kind of writing (note taking, tests, term papers, etc.) required in college work. These requirements must, of course, be modified appropriately for ESOL classes in the primary and secondary schools.

We find an increasing amount of adequate materials at our disposal for the teaching of speaking and writing. In fact, the breakthroughs of the past two decades have been largely confined to these areas. The problems of reading and aural comprehension, however, have received relatively little emphasis, and the approaches, techniques, and materials available for this purpose remain basically the same as twenty, thirty or forty years ago. It is to the solution of these problems that we ought to direct our efforts.

As a first step let us recognize that these problems are basically different than those involved in
speaking. In speaking, the student is actively manipulating a number of structure and lexical items. He can usually get by with an active vocabulary of 1,000-1,500 words. The problem is to lead him from the level of controlled or directed utterance to the level of his own unique utterance, for which he selects the forms and words appropriate to the expression of his meaning.

In reading, on the other hand, the student needs to recognize and sort out unacceptable meanings, and he needs a very large passive recognition vocabulary of perhaps 10,000-15,000 words, as well as a passive familiarity with many more grammar patterns than he will ever use in speaking. In understanding he needs to develop the skill of hearing phrases or sense groups instead of the individual words he encounters in the written language. He needs to be able to hear the minimal grammar signals of contracted speech, to distinguish, for example, between he must come and he must've come. And in order to understand an American lecturer he must recognize a large number of colloquial and idiomatic expressions.

Each of the language skills must be developed separately. Data gathered from the 1960-61 NDEA Institutes in French showed that the participants in the Penn State Institute made an average improvement in
speaking ability of 47+ points as against a national average of 3+ points. However, the scores in listening comprehension showed an improvement of 2.5+ points, in reading 4.3 points and in writing 2+ points. The conclusion is that each skill is developed separately and requires a separate course of study which develops it.¹

In addition to these linguistic problems, there are several non-linguistic problems which bear upon the student's success. Students come into our classes from extremely heterogeneous backgrounds. Not all of them are able to work at the same speed, and not all of them need to work at the same things. But all of them need classes and materials which will move them ahead as rapidly as possible, for time is at a premium.

It is here that programmed materials based on sound linguistic analysis and concentrating on the right problems can substantially facilitate the acquisition of English. They free the student from the lockstep of the class and allow him to invest his study time in the areas where he has difficulties.

Of course, no program is better than the materials and organization which go into it. Programmed materials are not a panacea. There are good programs and poor

¹S. Belasco, "Where is Programmed Language Instruction Most Effective?" Paper read at Kentucky Modern Language Meeting, 1969.
programs just as there are good and poor varieties of conventional texts. But one of the ways in which PLI could be applied to the teaching of reading would be in providing an intensive concentration on the teaching of the function words and grammar structures of English.

Function words are much less numerous than content words but account for about 50% of the words on any given page of prose. Moreover, they are generally much more difficult for the student to learn than content words. At the University of Arizona, while developing a programmed approach to teaching reading knowledge of French, we found that four - six weeks after three initial encounters, students could still recall common content words such as usine (factory). They needed from 25 - 30 encounters of the ne...que construction, however, before they finally managed to recognize its meaning readily.

Since function words occur with such high frequency and since they are of basic importance in determining the context of content words, the process of learning to read can be more efficient if this body of materials is mastered at the outset. And it is precisely for this kind of task that PLI is best suited -- it can provide the student with an instrument by means of which he can
master a limited amount of material in a short time.

How about the problem of vocabulary building? At first, it might seem insuperable if we look at the language as a list of words to be learned if the student memorizes 50 words per week without fail, it will take him two years to build his vocabulary to 5000. But reading is basically a skill, and not a body of material -- among other things, the skill of drawing inferences and establishing relationships in a context. If this point seems obvious, I raise it only because so few of the reading materials available to us seem to take it into consideration. Now instead of merely providing marginal glosses and definitions of words, a programmed format could develop the skills of drawing inferences, of discerning relationships between word families, and of recognizing the semantic changes signalled by suffixes and prefixes.

The language lab has often been used simply as the place where class work is practiced and reinforced. When combined with programmed courses, however, it becomes a more flexible instrument and permits the student to learn and practice new material on his own.

At the Economics Institute at the University of Colorado we provided intensive preparatory, or reparatory,
courses in economics, math and English for newly-arrived graduate students. Many of our students come from countries where English is still taught principally as a written language, and they have great difficulty in attuning their ear to the flow of American speech. Their training has done nothing to prepare them for the contractions of spoken English, e.g. he should've come x he shouldn't've come; is he there x is she there; he'd eat it all x he'd eaten it all.

Our students are likewise unprepared for the abundance of multi-word verbs and idiomatic expressions with which American speech is replete. They have perhaps learned the verb "to call" but do not recognize "call up," "call off," "call down," "call on," "call in," and "call out."

To meet their needs we have developed a course of aural comprehension on three different levels: (1) phonemic distinctions of tense, etc., for the intensive group; (2) multi-word verb and idiom exercises for the intermediate level; and (3) mini-lectures on general classroom subjects for the advanced students.
Since these exercises are self testing and self correcting, (the correct answer being given on the tape) and are arranged in gradations of difficulty, the student can seek his own level and proceed without the aid of any other instructor than the program.

In short, the programmed format has the advantages of flexibility, efficiency and individualized instruction and offers the means of a possible breakthrough in foreign language teaching.

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