

DOCUMENT RESUME

ED 066 084

FL 003 366

AUTHOR Michel, Joseph; Patin, Paul
TITLE Some Techniques for Teaching Vocabulary. ERIC Focus Reports on the Teaching of Foreign Languages, Number 27.
INSTITUTION American Council on the Teaching of Foreign Languages, New York, N.Y.; ERIC Clearinghouse on Languages and Linguistics, New York, N.Y.
SPONS AGENCY Modern Language Association of America, New York, N.Y.; National Center for Educational Communication (DHEW/OE), Washington, D.C.
PUB DATE 72
NOTE 11p.
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Basic Vocabulary; Developmental Vocabulary; Instructional Program Divisions; Language Development; *Language Instruction; Language Skills; *Modern Languages; *Teaching Methods; *Vocabulary Development; *Vocabulary Skills; Word Frequency

ABSTRACT

Discussion of techniques for teaching vocabulary in language programs centers on five major areas: (1) "knowing" the word, (2) selection of vocabulary, (3) grading vocabulary for presentation, (4) teaching methods, and (5) vocabulary expansion in advanced levels. Theory of vocabulary instruction is largely supported by writings of Nelson Brooks, Robert Lado, and William Mackey. The general frame of reference for this study rests on the authors' belief that "the ultimate (instructional) objective must be the language as the native speaker uses it, both publicly and privately, and all that this use involves concerning sounds, graphic symbols, meaning, and cultural values. There must be some knowledge of the second language as it is possessed by a true bilingualist."

(RL)

FILMED FROM BEST AVAILABLE COPY

ED 066084

ERIC Focus Reports on
the Teaching of
Foreign Languages

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

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

FL 003 366

ERIC CLEARINGHOUSE ON LANGUAGES AND LINGUISTICS

The MLA/ERIC (Educational Resources Information Center) Clearinghouse on Languages and Linguistics was initiated by the Modern Language Association of America in June 1966 as part of a national network of such Clearinghouses, each responsible in its own area of education for improving the collection and dissemination of current information relevant to research and development. The ERIC system was organized and is coordinated by the United States Office of Education, and includes an ERIC Document Reproduction Service (EDRS), from which many significant documents (reports, monographs, studies, surveys, etc.) may be purchased in hard copy (HC) or microfiche (MF) form. (See inside back cover for address.) Lists of such EDRS documents dealing with the teaching of foreign languages may be obtained by writing to the MLA/ERIC Clearinghouse.

News and information about MLA/ERIC activities appear in a special section of each issue of *Foreign Language Annals*, the official quarterly publication of the American Council on the Teaching of Foreign Languages, 62 Fifth Avenue, New York, N.Y. 10011 (annual subscription, \$6.00).

This series of *ERIC Focus Reports on the Teaching of Foreign Languages* was conceived as a plan to provide detailed but succinct recent information on specific problems or issues in foreign language teaching, and to point the way to further related reading in selective bibliographies. Each *Focus Report* is written by an expert, and it is addressed not to fellow experts but to classroom teachers and school administrators.

All contents of this report may be freely quoted or reproduced without special permission. This report was prepared pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

Price: 50 cents

From MLA/ACTFL Materials Center

62 Fifth Avenue

New York, N. Y. 10011

1972

SOME TECHNIQUES FOR TEACHING VOCABULARY

By Joseph Michel and Paul Patin

No matter what view one holds of language, learning the words that constitute it is an essential task for the language learner. It follows that the teaching of vocabulary is one of the language teacher's most important functions. Effective instruction in this area depends to a great extent upon finding workable answers to the following questions: What does "knowing a word" mean? How should vocabulary be selected? How should it be graded for presentation? How can it be taught? How might it be expanded in the advanced levels?

Before techniques can be selected and developed, the general teaching method or approach must be chosen. Nelson Brooks states that a decision must be made at the outset for teaching vocabulary either in the target language in terms of itself, or by means of its restatement in the student's mother tongue. The latter holds little interest for us, since it is mere decoding. We prefer to choose the former approach, which means that "the ultimate objective must be the language as the native speaker uses it, both publicly and privately, and all that this use involves concerning sounds, graphic symbols, meaning, and cultural values. There must be some knowledge of the second language as it is possessed by a true bilinguist."¹

WHAT DOES "KNOWING A WORD" MEAN?

This definition of method determines the answer to our first question. "Knowing a word" does not mean translating that word into the native language. This would imply that every foreign-language word has an exact equivalent in one's native language. True bilinguals refute this by the evidence of their own thought process. "They do not think of English words at all" while speaking a foreign language. And when translating, they "first listen to a certain amount of the language - perhaps a sentence - comprehend what it expresses, and then reexpress that thought in English."² Nor does knowing a word's meaning consist of learning a word with its dictionary definition in isolation on a list. Rather, "meaning is best thought of not as a quality but as a function; what a word means depends upon how it is used. This is the basic reason why vocabulary should be studied in context."³

We may define knowing a word in terms of four elements that constitute knowledge of a word. Knowing a word involves acquaintance with the form, meaning, restrictions, and use of that word. Form is the phonemic or graphemic shape of the word. Meaning is the semantic content. Restrictions, or distribution, mean the privileges and limitations on how, where, and when a word can be used. Use is a skill which involves form, meaning, and distribution; it is the ability to handle a word in a manner similar to that of a native speaker.

We may proceed operationally and ask for a definition that can be tested by observation. Thus to know a word in speaking or writing is to be able to use that word at will almost instantaneously when its meaning is available. And in listening or reading, to know a word means to be able to recall its meaning almost instantaneously.⁴

HOW SHOULD VOCABULARY BE SELECTED?

The selection of vocabulary would be no problem for a person learning a language naturally, in the country where that language were the means of com-

munication. Nor is it a problem we have to deal with when we learn our mother tongue. In such cases the use of certain words comes about as a matter of need. Some highly technical words are never learned, since need for them is a rarity.

Applying these observations to the classroom, if the teacher and learner could determine which words most need to be learned, then their efforts could be more concentrated and fruitful. The question of selection, in the face of an infinite corpus of words is critical, and there are several criteria to help in compiling a vocabulary list.

Probably the first norm for selecting is the emphasis of the course. If the emphasis is audiolingual, then colloquial and formal vocabularies will have to be distinguished. Audiolingual courses generally stress colloquial vocabularies. A heavy reading-writing emphasis, on the other hand, would perhaps indicate an ultimate desire to use the language for scientific or esthetic purposes. This would call for a formal, technical vocabulary. A stress on receptive skills would require the learning of a larger vocabulary than that necessary for the productive skills since the speaker or writer can express and paraphrase within the range of the words he knows; he is not that free when someone else is producing the message.

In the end it often happens that the question of selection is of little concern to the teacher, insofar as he follows the material in his text. Unfortunately, many textbooks present what seems to be a random and inefficient mass of words that somehow must be learned. For the teacher who wants to select and control the flow of vocabulary, there are five variables, listed by William Mackey,⁵ that have been scientifically applied to the selection of words:

frequency: the number of times a word occurs in a number of running words (words selected from texts at random);

range: the number of different texts in which a word is found;

availability: the readiness with which a word is remembered or used in a certain situation and not in another (e.g., in a restaurant but not in a classroom);

coverage: the capacity of a word to displace other words (e.g., bag has greater coverage capacity than any of the other words it can replace: suitcase, valise, handbag, sack);

learnability: the ease with which a word is learned, based on such features as similarity to native words, clarity of meaning, brevity, regularity of form.

A high score in any one or several of these variables would indicate that a word is worth learning.

As an example of how word lists have been applied, we might consider word-frequency lists. As few as 1,000 words have been shown to account for about ninety percent of written language, and ninety-five percent of spoken language. These figures are based on English, but are applicable to many modern languages.⁶ Such percentages are indicative of vocabulary most likely to be found among a particular class of people, in a certain profession, or in particular contexts. But there is an important limitation on the usefulness of word lists. As Preller says when discussing the problems involved in the usage of such lists, "there is a definite need for word lists for at least the first two or three levels of instruction. Beyond that stage in the learning process, or, in other words, beyond the first two or three thousand words, the importance and usefulness of such lists becomes increasingly questionable."⁷

HOW SHOULD VOCABULARY BE GRADED FOR PRESENTATION?

In discussing the teaching of vocabulary, we need to divide words into two types. Function words are the connective and grammatically determined items used in manipulating the structures of a language. Content words are the items expressing the meanings that have correlatives in the real world.

Once vocabulary is selected, it must be graded for presentation. Robert Lado suggests that there be three stages in the presentation of vocabulary. "The first stage, vocabulary to operate the patterns and illustrate the sounds of the second language, should be kept as simple as possible in order to allow the teacher to concentrate on the grammatical patterns and the sound system."⁸ This means an emphasis on the function words. Content words are kept to a minimum and, for convenience, are taken from objects in the immediate environment.

In the second stage, "the student acquires the vocabulary items he needs to converse on contextual areas of wide currency."⁹ This means there would be an increasing emphasis on content words.

The third stage involves esthetic and technical vocabulary, and is not met until the more advanced and specialized stages of language study. The composition of such advanced vocabulary will depend chiefly on the choice of readings. This is because, at the advanced level, vocabulary is expanded principally through reading.

HOW CAN VOCABULARY BE TAUGHT?

When most people think of teaching vocabulary, they think this means teaching the meaning of a word. But meaning, as we have seen, is only one of the four important aspects of every word. In order for efficient learning of selected words to take place, methods and techniques must be developed for teaching all of the four elements which we have defined as constituting knowledge of a word: form, meaning, distribution, and use.

Form

To acquaint the student with the form of the word, Robert Lado suggests that the learner first hear the word in isolation and then in a sentence.¹⁰ Slow repetition and breaking the word into parts will help. The student should then pronounce the word, even if his aim is only reading or listening. Repeating the word out loud will help him remember it longer and identify it more readily.

What about reading and writing the word? Teachers seem to fear overdependence on the written forms once introduced, and so they delay this introduction. However, Wilga Rivers, who admits the dangers both of delaying and of hastening the introduction of the written form, says, "the advantages in the greater assurance with which many students will approach their oral work and mimicry after they have been given some opportunity to see in written form what they are to practice, far outweigh these rectifiable disadvantages."¹¹ Effective learning of the form of a word, then, involves aural, audio, and visual activities.

Meaning

Mackey clearly divides the various techniques for the teaching of meaning according to the procedures employed: differential, ostensive, pictorial, and contextual procedures.¹²

Differential procedures are those based on differences in word meaning between the first language and the second. These procedures involve use of the native and/or the target language in two ways: explanation and translation. One would use the native language if he thought he could save time and avoid misunderstanding in getting across the meaning. One would avoid using the native language, however, if he believed he could encourage thought in the target language, the ostensible goal of most courses.

"If the native language is used in explanation, then it is usually to explain such things as grammar rules, the production of sounds, differences in the structure of the two languages, and situations about which the language is to be used."¹³ If the native language is used in translation, then it should be used according to the following norms: If translation leads to mistakes, avoid it; if it helps to avoid mistakes, use it. If it helps learning, use it; if it hampers learning, avoid it. Some methods make no use of translation at all, in the belief that words don't have an exact equivalent in another language.

Ostensive procedures are those which demonstrate the meaning of words directly through the use of objects, actions, and situations. A concrete word can be explained by the obvious procedure of pointing to the referent object. But if the word is an abstract word, then pointing to the referent is not possible. In the case of a quality word, for example, meaning can be effectively presented in contrast with its opposite by means of an object which best brings out this opposing quality. For example, to demonstrate short, a long pencil can be placed beside a short pencil, and the contrast will be clear. To teach the meaning of class words, such as metal, a number of samples of that class can be shown. Abstract words indicating relationships, such as on, in, under, can be demonstrated through objects which are placed in positions illustrating this type of relationship.

Ostensive procedures make use not only of objects, but also of action and situation.¹⁴ Because of the danger of ambiguity and misunderstanding what is being explained in ostensive procedures, Mackey recommends that the following be observed:

1. The action should be completely isolated from other actions, significant or non-significant.
2. The timing of the action should reflect the tense of any verb involved.
3. The gestures should be clear and conventional.

These same warnings would apply to pictorial procedures, those that make use of illustrations. Pictures can serve one of several functions. The picture can be thematic, illustrating a theme contained, for example, in a text; mnemonic, designed to remind the learner of certain words or sentences already learned; semantic, intended to effectively convey a meaning. Perhaps also to be included in this group are visual aids such as illustrations of series, scales, and systems (days of the week, numbers, months), which Lado suggests are good for teaching words in lists.¹⁵

Pictorial procedures may be considered in terms of the media employed: textbook illustrations; films (slides, filmstrips, motion-pictures, video-tapes); wall pictures; and picture cards. Pictures can be useful as stimuli for oral compositions and for question-answer drills, especially if their sequence and rate of presentation can be easily controlled.

When the student has acquired a certain vocabulary, new words can be taught by contextual procedures, that is, by putting new vocabulary items into contexts where already familiar words give them meaning. "Context helps us to

guess the meaning of words. In fact, that is what we do when we learn our native language. A child learns many of his words by drawing tentative conclusions from a variety of contexts; multiplication of contexts helps to make meaning clear."¹⁶

Other contextual procedures mentioned by Mackey besides the above procedure of multiple context include definition, enumeration, substitution, metaphor, and opposition. Definition does not mean quoting a dictionary; this procedure involves defining new words in terms of words already known. Enumeration enables one to teach a meaning by listing what it includes. Substitution can be used to teach new words, for example, pronouns or synonyms; or to clarify meanings by indicating which words can replace others. The use of metaphor depends on the student's ability to see the analogy between two things that have a common feature, for example, the human foot and the foot of a mountain. Opposition is the use of antonyms to teach new words; if a student knows one word, the indication that a new word is its opposite will communicate the meaning. Finally, the meaning of a complex or compound word can be taught by dividing the word into its better-known parts and working with these parts.¹⁷

Distribution

Teaching the distribution, the third element, is a somewhat more difficult task than teaching either the form or the meaning. Distribution is a feature of a word which only a highly proficient speaker will handle perfectly, since it involves knowledge of all the syntactic and semantic restrictions on a word. For example, a near-fluent speaker of English would know the syntactic restrictions on the words say and tell. He would realize that while these two words seem equivalent in meaning, they do not have the same syntactic privileges of occurrence. Their respective distributions are different. Thus, "I told him to go" is grammatical, while "I said him to go" is not. Similarly, the respective distributions of the French verbs savoir and connaître are different, but their difference is due to semantic rather than grammatical restrictions. Both verbs mean "to know" when translated into English, but a literal translation fails to convey the sense of when and where each word can be used. The same is true of the Spanish verbs saber and conocer, and the German, wissen and kennen.

Related to this question of distribution is the problem of cognates. They are deceptively simple in appearance, but are actually quite difficult to learn because their range of meaning and distribution is not always identical in two languages. Students must take care to learn the nuances of meaning for words whose forms seem to indicate that they would be identical in meaning. The distribution and the use of a word will be learned better through varied examples in the language than through many specific techniques. However, if the teacher is aware of the principles on which this learning depends, he can perhaps make use of carefully contrived exercises. One such exercise suggested by Lado is the presentation of numerous sentences "that illustrate the range and variation of usage."¹⁸ This is based on the principle that a word is learned fully by being used in a multiplicity of contexts.

What seems to occur when a word is thus mastered is that a learner forms a concept of the word. "Concept" here has a special definition provided by Belyayev, a Russian psychologist of language learning. He stresses the need for giving examples of all the individual "meanings" of a word. Only then can an essential meaning or "concept" be grasped. As defined by Belyayev, "concept" is to "meaning" as "universal" is to "particular." "It is impossible to acquire or master a word unless that word is associated with the concept ex-

pressed by it. The meaning of a word on its own is quite insufficient, if only because a word usually has several meanings and one can only retain them all in the memory if they are united in sense and embraced by a general concept."¹⁹ In teaching the meaning of a word by the direct method, this warning of Belyayev is particularly relevant. Caution must be exercised to assure that the learner sees a sufficient number of examples of what a word means. Otherwise he might attach to a word only one narrow meaning rather than its full range of meaning.

Use

Teaching the use of a word is also important. Word usage is a skill which is mastered more by unstructured conversation than by any specific techniques. There are artificial frameworks which provide the student a somewhat unstructured situation in which to use a word in a variety of contexts. "Since in everyday life one has to use language not in any systematic order, but in answer to needs that arise, it would seem that the teaching method should fix an item not in a certain position but should allow for its use in many different conditions in order to provide for flexibility and independence of language habits from specific contextual stimuli."²⁰

Robert Lado mentions several techniques for inculcating a use of words to the point that this use becomes unconscious and habitual. The realia, pictures, and dramatizations which were originally used to teach meaning can now be used as stimuli to elicit a learned word or its opposite in free-recall, in oral-written compositions, and in question-answer situations. A somewhat related technique, called "shift of attention" by Lado, has the teacher provide a context, by description or through reading, which hopefully will elicit the use of particular words learned in a similar context. All the while the student's attention is on some non-vocabulary problem, so his recall of the word occurs unconsciously.²¹

Once the student has grasped a structure, substitution drills can help to expand vocabulary. Given a structure, the student replaces a known word with new vocabulary items of the same class. Moreover, if the language marks that by some device, such as -ment for adverbs in French, then he will learn the significance of the mark as well.

Nelson Brooks presents yet another approach in the form of three vocabulary drills. In one drill, the student hears in the target language a series of definitions and repeats each one aloud, twice. Then he hears a series of questions, the appropriate answer to each one being a definition he has just repeated. After giving the answer, he hears the original definition to reinforce or correct what he has said. In a second type of drill, he hears an English word or expression, then hears its equivalent used in a complete utterance in the target language. He then hears and repeats the target sentence several times for reinforcement. In a third type of drill, the student hears a sentence in the target language, then is given an expression in the same language that is to replace or paraphrase a part of the sentence. He gives the sentence with this replacement, then hears it redone for reinforcement.²²

HOW MAY VOCABULARY BE EXPANDED IN THE ADVANCED LEVELS?

After the first two levels, when structure and basic vocabulary are mastered, quick, efficient means, which do not rely heavily on the teacher, are needed to expand vocabulary. The following methods provide such means for the expanding of vocabulary through reading. They can all be used by a student working independently at his own pace. Though most are reading methods, they

are not in the tradition of reading by translation and one-to-one word equivalents. They are based on reading in the target language for itself, and provide perhaps the most efficient means of meeting and learning a larger vocabulary in context. They come under the label "direct-association" because they all use the target language in and for itself.

Nelson Brooks discusses three techniques based on reading. First, he recommends multiple readings of a passage to build up in the student an understanding, through contextual guesses, of new words met in the text. "The student is doing much more than making a guess when meaning is read into an unfamiliar word appearing in a context that is otherwise understood. What we often term a guess is rather a choice. . . . a segment of language means what it does because all other possible meanings are rejected through the processes of comparison and elimination" (p. 183).

In another approach, language-lab tapes are prepared containing sentences with vocabulary to be met in a text. These are listened to and repeated, then written on a self-correcting laboratory sheet prepared to accompany the tape. The student keeps this sheet for reference. All vocabulary items are met in the context of sentences and, in particular, sentences taken from the wider context of a passage being read at the moment in the class.

Brooks lastly suggests the use of facing translation in a text, a technique which at first appears to resemble the technique of the interlinear reader. What is special about this method is that the translation gives only new words, and leaves the rest of the page blank. This format makes meaning clear without the intrusion of English structure, as happens with interlinear readers. Furthermore, it avoids heightening the interference that is caused by suggesting there is an exact English equivalent for what is being learned.

A particularly simple method for vocabulary expansion, the Otto Bond method, is described by John Hughes (p. 92). A foreign language text is on one page, and facing this text is a good English translation. Each day two paragraphs are read in the following way: One paragraph is read in the foreign language, then in translation, and once more in the foreign language. The same is done with the second paragraph. The following day, the first paragraph to be read will be the second paragraph of the previous day. Words which are unknown still on the second day should be copied down in sentence context to be studied by the student.

The next two methods, from Robert Lado, involve reading less extensively than preceding methods. The first of his reading methods involves an introduction to new vocabulary in the context of "dehydrated" or simplified sentences. "The difficult words are presented in sentences for practice before the class reads the selection in which they appear. Then the selection is read through, and the new words are reinforced in their proper context."²³ The other Lado reading method involves the use of programmed frames. One frame introduces and defines a word, and another reinforces the new word by eliciting a recall.

Lado suggests two non-reading methods for expanding vocabulary which involve the use of analogy. In the first, students are asked to study examples of a derivation pattern for words, and then to build derived words by analogy. For example, from courageux/courageuse, they should be able to construct douteux/dout-euse. The second method asks the student to study families of words all built from a common root, and then to apply the analogy to another root to form a family of words: "reason, reasonable, reasonably" provides the scheme in English for "work, workable, workably."

This and all the other techniques mentioned in this paper are single aids which must be used side by side and arranged by the teacher who knows what he wants to accomplish. And since teaching is so personal, no one method will suit all teachers. Hopefully, this discussion has provided some sort of organized approach to the whole question of teaching foreign-language vocabulary. Hopefully, too, tentative answers were given to the five questions raised at the beginning which might be of some help in the classroom.

NOTES

¹Nelson Brooks, Language and Language Learning: Theory and Practice, 2nd ed. (New York: Harcourt, 1964), p. 107.

²John P. Hughes, Linguistics and Language Teaching (New York: Random, 1968), p. 35.

³Brooks, p. 182.

⁴Robert Lado, Language Teaching: A Scientific Approach (New York: McGraw-Hill, 1964), p. 118.

⁵Language Teaching Analysis (Bloomington: Indiana Univ. Press, 1964), p. 176.

⁶Mackey, p. 170.

⁷Arno G. Preller, "Some Problems Involved in Compiling Word Frequency Lists," Modern Language Journal, 51(1967), 402.

⁸Lado, p. 117.

⁹Lado, p. 118.

¹⁰Lado, p. 121.

¹¹The Psychologist and the Foreign Language Teacher (Chicago: Univ. of Chicago Press, 1964), p. 111.

¹²The outline for this section is taken from Mackey, pp. 239-53.

¹³Mackey, p. 240.

¹⁴For examples in implementation see Theodore B. Kalivoda et al., "The Audio-Motor Unit: A Listening Comprehension Strategy That Works," Foreign Language Annals, 4(1971), 392-400.

¹⁵Lado, p. 125.

- ¹⁶ Mackey, p. 252.
- ¹⁷ Lado, p. 125-26.
- ¹⁸ Lado, p. 126.
- ¹⁹ B. V. Belyayev, The Psychology of Teaching Foreign Languages, trans. R. F. Higley (Oxford, Eng.: Pergamon, 1963), p. 146.
- ²⁰ Albert Valdman, Trends in Language Teaching (New York: McGraw-Hill, 1966), p. 113.
- ²¹ Lado, pp. 126-27.
- ²² Brooks, pp. 259-60.
- ²³ Lado, p. 130.

BIBLIOGRAPHY

- Belyayev, B.V. The Psychology of Teaching Foreign Languages. Trans. R.F. Higley. Oxford, Eng.: Pergamon, 1963.
- Brooks, Nelson. Language and Language Learning: Theory and Practice. 2nd ed. New York: Harcourt, 1964.
- Hughes, John P. Linguistics and Language Teaching. New York: Random, 1968.
- Lado, Robert. Language Teaching: A Scientific Approach. New York: McGraw-Hill, 1964.
- Mackey, William. Language Teaching Analysis. Bloomington: Indiana Univ. Press, 1965.
- Michel, Joseph. Foreign Language Teaching: An Anthology. New York: Macmillan, 1967.
- Miller, George A., and Stephan Isard. "Some Perceptual Consequences of Linguistic Rules." Readings in the Psychology of Language. Ed. Leon A. Jakobovits and Murray Miron. Englewood Cliffs, N.J.: Prentice-Hall, 1967, pp. 219-31.
- Politzer, Robert. Teaching French. Waltham, Mass.: Blaisdell, 1965.
- Preller, Arno G. "Some Problems Involved in Compiling Word Frequency Lists." Modern Language Journal, 51(1967), 399-402.
- Rivers, Wilga. The Psychologist and the Foreign Language Teacher. Chicago: Univ. of Chicago Press, 1964.
- Smith, Philip D., Jr. A Comparison of the Cognitive and Audiolingual Approaches to Foreign Language Instruction: The Pennsylvania Foreign Language Project. Philadelphia, Pa.: Center for Curriculum Development, 1970.
- Valdman, Albert. Trends in Language Teaching. New York: McGraw-Hill, 1966.