

ESL Reading: Research and Applications

by **B. Araman and B. Wiggin**

The students in my course, TESL-Reading, did such excellent research Spring Semester that the graduate assistant and I felt it should be shared. We immediately thought of the TESL Reporter and have attempted to summarize their work and the issues and implications which we discussed in the class. All of the students have received a draft of the paper and are eager to have it published.

Bonnie Araman, University of Hawaii

Recent publications have exposed ESL teachers to Goodman's (1967) conception of reading as a "psycholinguistic guessing game" and to Smith's (1973) description of the three types of cues used by readers: visual, syntactic and semantic. Reports of reading research on ESL readers and suggestions for application in ESL classrooms are needed. Recently, graduate students at the University of Hawaii conducted studies on the reading ability of immigrants and foreign students who read English as a second language. Native speaker research was shown to be applicable to ESL learners in that ESL and native speakers were similar in their use of cue systems and their knowledge of redundancy. Hall (1977) observed miscues of beginning readers which were often graphically similar, syntactically correct and/or semantically acceptable. In addition, the judgments of foreign students correlate highly ($r = .84$) with those of native speakers when asked to judge "possible English words" on a list of pseudowords (Rafiq and Rafiqzad, 1977). Nevertheless, the extension of native speaker research to ESL readers also reveals interesting contrasts.

Discussion of Experiments

Koler's (1970) research with bilinguals indicates that meaning is stored in short-term memory and form is discarded. Work done by Keswick and Jennings (1977) showed that Japanese readers recall the meaning of a word rather than whether or not it was presented in English, Kanji or Romanji. Morris (1977) demonstrated the tendency of Japanese readers to use English in the oral reading of a bilingual passage in which half the words in the passage were

written in Japanese. Reading approaches that stress the ability to manipulate the "form" of language with a consequent decrease in emphasis on "meaning" will therefore not be successful. While form represents the surface of language, meaning is what is retained and manipulated at a deeper psychological level. Several other experiments done at the University of Hawaii suggest ways teachers can exploit what is on the surface to help students reach the depths.

Regression

The good reader makes economical use of graphic, syntactic and lexical redundancies to insure a rapid reading avoiding the constraints of short-term memory. Meaningful "chunks" of information must be identified in order to pass on to long-term memory. The economy of the good reader disallows the word-by-word linear reading so commonly found among ESL readers. Leister and Donahue (1977) identified the phenomenon of "vocabulary blockage" in which an unknown lexical item made it impossible for ESL readers to correctly answer questions about a math problem previously referred to. The more successful readers, they hypothesized, were able to refer to the context of the problem for a correct answer and thus did not succumb to "vocabulary blockage."

In a similar study, Wright (1977) found that ESL readers, in contrast to native English readers, miss information that precedes a definitional term. When required to regress for specific information, the non-natives failed to answer the test questions 70% of the time. Natives only failed to answer 7% of

such problems correctly.

These studies indicate that fluent reading involves not only the speed in comprehension facilitated by "guessing" but also a willingness or ability to regress for information not made explicit enough for retention. Native readers are undoubtedly more skilled at grasping implicit information on first reading. ESL students should be encouraged to regress for such information as they develop reading fluency in English.

Cloze procedure, used as a teaching rather than testing device, is excellent for aiding students in the development of useful reading strategies as it requires guessing and regression. After completing a cloze passage on their own, students can work in small groups to compare and discuss their answers. Often a student can explain to the others a concept which the teacher has been unable to convey. Stimulating questions in pre-reading discussions to which students seek answers helps them to search for meaning rather than definitions of individual words. Adamson (1977) has recommended the insertion of questions between the paragraphs of a passage which require readers to make predictions about what is to come, based on what they have read so far. If reproduction of special passages is inconvenient, the same result may be obtained by preparing such questions on required texts and having the students read portions silently and then discuss their predictions.

Redundancy

Much of the graphic, syntactic and lexical information presented to a reader is redundant. The accomplished reader needs less information from the printed page than does the problem reader. By the same token, the ESL reader generally benefits from increased syntactic and/or lexical redundancy.

Ahn (1977) discovered that Korean ESL readers are significantly aided when given an English passage with Korean nouns. Bowen (1977) found the comprehension of passages with unfamiliar words translated in Japanese directly above was better than with Japanese translations or English definitions included on a separate page.

By increasing the redundancy available to beginning ESL readers, we may be able to reduce frustration, allowing ESL students to

concentrate on the task of obtaining meaning from a text before being confronted with the whole reading process including pronunciation and exact definitions of new vocabulary. Immediate glossing or replacing difficult vocabulary with the native language permits the use of passages which are of high interest to readers without burdening them with long word lists or extensive use of dictionaries. Higher level students could help with the preparation (in their language) of such supplementary passages for beginning readers.

Although punctuation in written English often provides redundant information for native speakers, Moore (1977) found that ESL readers depend on punctuation to aid them in locating clause and sentence boundaries. Native speakers were able to recognize and correct mistakes in their oral reading of a passage which had been typed without punctuation or capitalization but non-natives were not. Increasing the redundancy in ESL materials by separating phrases and clauses with extra space has been suggested (Plaister, 1968). Hirano (1977) found that low level ESL students were more able to complete the half of a cloze passage which had been "phrased" than the half which had not. Such phrasing may help students to perceive sentence structure and to establish the proper relationships between words.

Teachers can select passages of interest to their students, phrase and type them on heavy paper (laminated, if possible) and make them available to the students. Short selections kept in a box on the side of a classroom provide material for individual study whenever students have the extra time. Another useful technique is to have students mark phrases with light pencil slashes as you read aloud. Then students reread silently and the syntactic and semantic relationships of the words between the slashes are reinforced. Note that this is not intended to increase the eye-span but is a way of providing extra cues to syntax. Also, explicit information about English punctuation in a reading class might aid students in gleaning the proper cues from the visual marks.

Context

The importance of context in word identification was demonstrated in three different studies. When Adams and Decker

(1977) presented only the top half of the visual information, all of their subjects (native speakers and adult Asian immigrants) were better able to write the words in a paragraph than frequency-matched words in a list. Although native speakers performed better than non-natives on both tasks, there was a significant difference ($p < .001$) between list and paragraph scores for both groups. Working with immigrant children in an elementary school, Togikawa (1977) found that students made significantly fewer miscues in oral reading of words in a paragraph than matched words on a list. Tabata (1977) demonstrated that knowledge of katakana symbols was not enough to permit American learners of Japanese to identify English-based loan words. Correct identification was significantly enhanced ($p < .02$) by placing the loan words in sentences.

The implications for language teachers are many. If the task of reading a word in a list is more difficult than reading a word in context, teachers should always present vocabulary in context. This enables learners to use the syntactic and semantic cues from the surrounding sentence(s), whereas list reading restricts them to the visual information. A simple way to contextualize new vocabulary prior to the reading of a passage is to use the sentences from the actual text. This serves a dual purpose as it can be an excellent pre-reading activity wherein students are provided background for the reading: cultural implications, grammatical complexities, etc. Reading teachers should also test vocabulary in context. Two easy ways to test in context are: Write a summary or synopsis of the reading passage to be tested, using vocabulary which should have been learned but delete it and leave blanks to be filled in by the students from an accompanying word list and (2) present sentences with underlined words to be defined or put in the correct grammatical form. Both of these testing techniques encourage the development of the right kind of reading strategy in which the relationships between the words are seen to be as important as their definitions.

Speed

Two studies focused on the reading speed of non-native speakers of English. In the first, Yamanishi (1977) measured the speed of oral and silent reading of college level foreign students mainly from Asian coun-

tries. She found a significant ($p < .01$) difference between their oral reading (105 WPM) and silent reading (163 WPM). In the second study, Wegner (1977) tested the effectiveness of "oral speeding," i.e. reading aloud while ESL readers follow silently. The subjects, students in an Adult Basic Education class, answered comprehension questions on comparable passages (SRA IIIB) without referring to the text. Oral speeding increased their reading rate significantly ($p < .001$) from 94 WPM on regular silent reading to 148 WPM with oral speeding. There was also a slight, but insignificant, increase in comprehension.

Since speed has been shown to be important for comprehension, ESL students should be encouraged to read silently rather than orally. This can easily be done by deemphasizing oral reading in the ESL classroom. Instead of calling on one student to read orally while the others follow, simply instruct all of the students to read silently. Discussion of the ideas expressed in the text may actually be enhanced since attention is focused on meaning rather than on correct pronunciation. Secondly, when working with students whose rate of reading is too slow to be effectual, ESL teachers may aid students in increasing their reading speed by having them follow along while a passage is read aloud. Where language lab facilities are available, reading passages may be recorded by a native speaker, thus freeing the teacher to discuss content.

Conclusion

In contrasting native English readers with non-natives we have posited special problems which should be dealt with in the ESL reading class. ESL students need to recognize the rhetorical as well as syntactic structure of English prose through regression. They must learn to exploit the redundancy of written language. They should be able to use context as an aid in determining meaning. They must be able to process the language quickly, participating all the while in the great "guessing game" called reading.

EXPERIMENTS

Adams, M. and M. Decker: "The Influence of Context on the Need for Visual Information"

(continued on page 21)

ESL Reading

(continued from page 6)

- Ahn, H.: "Native Lexicon in English Reading"
- Bowen, D.: "Gimme the Definition Quick"
- Hall, S.: "Some Preliminary Analysis of ESL Readers' Miscues"
- Hirano, J.: "Phrasing: Effect on Close Test Scores"
- Keswick, E. and H. Jennings: "Short-term memory storage and recall"
- Leister, J. and T. Donahue: "Vocabulary Blockage"
- Moore, J.: "A Study of the Effect of Punctuation on Reading Comprehension Among Native and Non-native Speakers of English"
- Morris, L.: "Reading in Two Languages at Once"
- Rafiq, S. and K. Rafiqzad: "Would you recognize a word if you saw one?"
- Tabata, M.: "Context and the Teaching of Katakana"
- Togikawa, C.: "Is a word in a list just a word?"
- Wegner, J.: "Oral Speeding"
- Wright, C.: "Is Regression Bad?"
- Yamanishi, C.: "Quiet: Silent Reading"

All of the above were presented at the ESL Symposium on Reading a Second Language, May 6, 1977, at the University of Hawaii.

REFERENCES

- Adamson, D. "Prediction and Explanation" *ESPMENA* No. 7, Summer 1977.
- Goodman, K. "Reading: A Psycholinguistic Guessing Game" *Journal of the Reading Specialist* May 1967.
- Kolers, P. "Three Stages of Reading" from *Basic Studies on Reading* H. Levin and J. Williams, Eds. Basic Books, Inc. 1970.
- Plaister, T. "Reading Instruction for College Level Foreign Students" *TESOL Quarterly*, 2 September, 1968.
- Smith, F. *Psycholinguistics and Reading* New York: Holt, Rinehart and Winston, 1973.