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ABSTRACT

This paper assesses reading theory and its applications for methodology in second language reading. The investigation focuses on how the methodology recommended for teaching the commonly taught languages informs the teaching of a language such as Hindi. To accomplish this assessment, a teacher of Hindi at the U.S. State Department's Foreign Service Institute designed a case study to investigate a method of instruction for reading Hindi, and, with the cooperation and collaboration of the two students in his class, carried out the instruction. Following a brief discussion of the Hindi language and a review of the literature, the paper summarizes the results of the case study, which encompassed script introduction, reading aloud, reading authentic/non-authentic material and vocabulary development. It is concluded that studies such as this one, while they can yield only tentative results, can still be helpful for showing directions for more classroom and experimental research both at the Foreign Service Institute and in academia. (KM)

NEW SCRIPT, NEW LANGUAGE-- LEARNING TO READ HINDI

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INTRODUCTION

The theme of this symposium is "Research in Second Language Reading," and my co-presenters are addressing assessment. I have also chosen assessment as a theme, but rather than directly assessing students, I have attempted to assess reading theory and its applications for methodology in second language reading. Because I work with a language like Hindi, a language very different from commonly taught languages, such as Spanish, French, and English, I also wanted to investigate how the methodology recommended for teaching these languages informs the teaching of a language like Hindi.

To accomplish this assessment, I designed a case study to investigate a method of instruction for reading Hindi, and, with the cooperation and collaboration of the two students in the class, carried out the instruction. This paper summarizes the results of this case study.

THE HINDI LANGUAGE

As a framework for understanding the language learning situation of the student of Hindi, I here briefly describe the language. Hindi is an Indo-European language, or more precisely Indo-Aryan. It is spoken across northern India in several dialects. It is the official language of the Republic of India and is a derivative of Sanskrit, with which it shares the Devanagari script. The language has a Subject-Object-Verb (SOV) sentence pattern, and as in most SOV languages, there are postpositions rather than prepositions. Nouns have masculine or feminine gender, and adjectives and many verb forms usually agree with nouns in gender and number. Only two cases are marked, direct and oblique. These cases are dependent on postpositions, and are not

necessarily reflective of nominative, accusative, or other cases that exist in Sanskrit and Latin.

The Devanagari script as used in Hindi consists of 35 consonants and 11 vowels. The script is syllabic because each symbol represents a vowel or a consonant and a following vowel. Unless a vowel is appended to a consonant, that consonant has an inherent schwa sound. To eliminate the schwa sound, two or three consonants are written in special conjunct form.

The correspondence of sound to symbol is very close in Hindi. The letters are always pronounced the way they occur individually, but some rules for dropping the schwa sound inherent in consonants in word pronunciation have to be learned. These rules are regular and easily learned. As a result, students usually learn the essentials of the script quickly and easily, and they can use the sound-symbol correspondence to accurately pronounce unknown words.

REVIEW OF THE LITERATURE

First Language (L1) reading theory. The current view of the reading process is that it has many components, or stages, that interact to produce comprehension of text (Adams & Collins, 1979; Just & Carpenter, 1980; LaBerge & Samuels, 1974; Perfetti, 1985; Samuels & Kamil, 1984; Stanovich, 1980). Grabe (1991) listed six basic component skill categories required in reading comprehension. They are (1) automatic recognition skills, (2) vocabulary and structural knowledge, (3) formal discourse structure knowledge, (4) content/world background knowledge, (5) synthesis and evaluation skills/strategies, and (6) metacognitive knowledge and skills monitoring. The first two categories are generally considered lower-level, bottom-up processes, and the last four are considered higher-level, top-down processes (Perfetti,

1985; Stanovich, 1991).

These components are referred to as interactive because the activated information in one component can influence the analysis of another (Samuels & Kamil, 1984). In addition, a deficit in any knowledge base at any level will result in a compensatory reliance on other sources of knowledge (Stanovich, 1980).

Schema-theoretical views of reading comprehension have had a significant impact on L1 and L2 (second language) reading instruction (Adams & Collins, 1979; Anderson & Pearson, 1984; Carrell, 1983, 1987; Carrell & Eisterhold, 1988; Carrell & Wallace, 1983; Hudson, 1988; James, 1987; Swaffar, 1985; Swaffar, Arens, & Byrnes, 1991). A major contribution of schema theory was its emphasis on the reader's being an active information processor who links the information on the page to his or her background knowledge and makes predictions about the text material to come.

Research in reading has more recently focused on the crucial role of word recognition skills as a major factor in fluent reading (Ehri, 1991; Herdman & LeFevre, 1992; Just & Carpenter, 1980, 1984; Omanson, 1985; Perfetti, 1985, 1986, 1988; Stanovich, 1980, 1986, 1991, 1992). Gough (1984) declared that "word recognition is the foundation of the reading process" (p. 225). Letters are the basic perceptual unit, and the reader must recognize these with accuracy and speed to recognize words quickly.

Along with recognizing letter features, the reader must at some stage be aware of the sounds of the letters in the word (Gough, 1984). The question "is whether recognition of the printed word is mediated by some version of the spoken equivalent" (p. 235). The phonological recoding hypothesis proposed that the recognition of a printed word is mediated by its phonological form (Ehri, 1991; Gough, 1984). A word may also be accessed visually without

phonological mediation (LaBerge & Samuels, 1974; Stanovich, 1991). The visual and phonological access routes are both open to the reader, but visual access normally occurs when the word is frequently encountered, and phonological access occurs when a word is less well known (Gough, 1984).

Ehri (1991) summed up the role of memory in word recognition in the following way:

> The ability to read words rapidly is thought to be highly important for text comprehension, the explanation being the faster and more automatically that words can be recognized, the more space in memory is made available for the execution of higher-level comprehension processes. (p. 387)

Stanovich (1991) suggested that "not only does word recognition skill correlate with reading comprehension ability in adults, it is actually an independent predictor" (p. 419). He cautioned, though, that although word recognition is a necessary condition for good comprehension, word recognition alone is not a sufficient condition for that good comprehension to take place.

Stanovich (1991, 1992) has adopted the concept of modularity to further explain automatic processing, particularly in relation to word recognition. Essentially, modular processes that are encapsulated, that is, that occur rapidly and without attention and are not influenced by prior knowledge structures stored in long-term memory, are processes that occur rapidly and without attention. Because they are encapsulated, efficient word recognition skills operate independently of context. When readers need to use context to comprehend a word, they are using a compensatory mechanism that necessarily results in more attention being focused on the activity. Because readers' word recognition is less affected by context as reading skill develops "word recognition becomes increasingly encapsulated with skill development. Thus, the structure of processing becomes more modularized at the higher

levels of reading ability" (Stanovich, 1991, p. 443.)

L2 reading and instruction. The obvious goal of reading in L2 is to comprehend what is read. A fundamental question in L2 reading ability is how much success in reading in a second language is dependent on linguistic knowledge and how much it is dependent on one's ability to read in the first language (Alderson, 1984; Bernhardt, 1987, 1991a, 1991b; Carrell, 1991; Clarke, 1988). Alderson (1984) posed the question as the title of his paper "Reading in a foreign language: A reading problem or a language problem?". He answered the question in this way:

> The answer, perhaps inevitably, is equivocal and tentative--it appears to be both a language problem and a reading problem, but with firmer evidence that it is a language problem, for low levels of foreign language competence, than a reading problem. (p. 24)

Most researchers have accepted Alderson's answer. Readers transfer at least some of their reading strategies from their first language to the second language, but as Clarke (1988) suggested, these good strategies may be "short-circuited" by lack of knowledge of the L2. The reader then reverts to poor reader strategies (Bossers, 1991). The consensus is that when the linguistic code is no longer a problem, that is, when readers have threshold knowledge of the linguistic code, then readers with good L1 reading skills can apply reading strategies to the L2 that are productive in the L1. When and how this point of skilled L2 reading is reached is not at all evident. (Bernhardt, 1991b; Bossers, 1991; Carrell, 1991; Grabe, 1991; Hammadou, 1991; Segalowitz, Poulsen, & Komeda, 1991).

Much of the research on second language reading has focused on higher-level, often schema-driven, processes (Carrell, 1983, 1987; Carrell & Eisterhold,

1988; Carrell & Wallace, 1983; Hudson, 1988; James, 1987; Swaffar, 1985; Swaffar, et al., 1991). This is justifiable because a new language will obviously present problems in bottom-up processing to the new reader. Readers can compensate for this lack of linguistic code by employing higher level processes. To some extent, this idea is counterintuitive, because without the lower level processes operating efficiently, the higher-level processes are hampered in their execution. Skilled readers can devote the major part of their attention to the higher level, attention-absorbing, integrative processes, but the readers must have opportunities to develop the lower level processes (Segalowitz, et al., 1991). To create skilled L2 readers, Segalowitz and his colleagues (1991) suggested that training for students should focus on the

> lower level components of reading skills, both in terms of increasing their reading efficiency and in freeing up cognitive resources to enable them to attend to other aspects of the reading process, including the integration of information within the text and with their prior knowledge. (pp. 26-27)

Bernhardt (1991b) has suggested that when English-speaking readers of common European languages are reading, they are already fairly sophisticated in word recognition and therefore need little oral reading practice. The same reader learning non-European languages written in non-Roman alphabets is much more like an L1 child learner. Implied in this statement is that instructional strategies more like those used with children for L1 reading may be applied in classrooms of uncommonly taught languages.

Bernhardt (1991a, 1991b) has suggested that L2 reading instruction be based on principles rather than prescribed activities. This allows the teacher to adapt to the specific needs of the students. The L2 should assist students with understanding vocabulary and "learning within the context of syntactic

environment" (Bernhardt, 1991b, p. 41)

Authentic texts. Writers on second language reading have expressed the need for students to read authentic texts, and not texts written especially for learners of a language (Carrell, 1987; Krashen, 1992; Swaffar, 1985; Swaffar, et al., 1991). An obvious reason for using these types of texts is that they are what students will encounter outside the classroom. Another rationale for using authentic texts is that simplification can alter the patterns of redundancy and rhetorical organization, making the text more difficult to read (Swaffar, et al., 1991). Also, because authentic texts occur in genres that students have knowledge of, the students will be assisted in their reading of the text based on the knowledge they have of the form and content of these genres. For example, the formatting, headings, and illustrative material of authentic texts are clues that native readers use for comprehending the text (Swaffar, et al., 1991). Newspaper articles with accompanying headlines, pictures, and dates can therefore be easier for a second language student to read than a specially written text that is presented without these naturally occurring features.

European languages lend themselves to the use of authentic texts because the subject matter is likely to be familiar to the American reader, and the European language of the text will likely possess many cognates that the student can access for meaning.

On the other hand, some have defended the use of simplified texts (Davies, 1984; Simensen, 1990). Simplified texts are those that have been created with "a restricted set of features from the full range of language resources for the sake of pedagogic efficiency" (Davies, 1984, p. 183). They therefore serve a purpose because they prepare the reader for the eventual control of authentic texts. Davies (1984) asserted that

everything the learner understands is authentic for him. It is the teacher who

simplifies, the learner who authenticates. In the teaching of reading as in all language teaching the fundamental task of the teacher is that of selection or of judging relevance. (p. 192)

DESIGN OF THE STUDY

Subjects. Two students participated as subjects in this study. One subject was female, aged 33, who left graduate studies in French to join the Foreign Service. The male subject was 27, and had completed his Bachelor's degree in International Relations before joining the Foreign Service. Both subjects were experienced language learners, having used their second languages in countries where they were spoken. The female student knew French, Italian, and German, and had studied Latin. The male student knew Spanish and German. The two students were preparing for an assignment to New Delhi after the course. The female student studied for 16 weeks and the male for 23 weeks.

Location of the study. The class was at the Foreign Service Institute of the Department of State. The students studied Hindi full time, meaning five contact hours a day. Three hours of training in the morning were for spoken Hindi, and two hours in the afternoon for reading. One afternoon a week they attended a special South Asian Area Studies course conducted in English. They therefore had four days a week for reading class totalling eight hours of instruction. I was the teacher of the reading class, and one of the native speaking Hindi instructors acted as my assistant. The oral class was taught exclusively by the two native-speaking female Hindi instructors.

Interviews. As part of the study, I conducted formal interviews with the students to obtain concentrated feedback on the teaching method and

materials. I recorded and transcribed the interviews for later investigation. The female student participated in three interviews--the first after 10 weeks of instruction, the second after 14 weeks, and the last at the conclusion of 16 weeks of training. The male student had four interviews after 10, 14, 21, and 23 weeks of training.

Teaching methodology. Based on principles of adult education, I stressed to the students that I wanted them to comment freely on the methodology and make suggestions and comments as we conducted the course (Freire, 1992; Knowles, 1984; Knowles & Associates, 1984; Knox, 1987; Nunan, 1988, 1992). I asked them their opinion of exercises, and asked them to decide how long to spend on an activity, and whether to reread, review, or change materials. I would tell them what materials and options were available, and they made the choice based on that information.

I spent the first three weeks of class teaching the Devanagari script. The text I used was the First Year Hindi Course by Herman van Olphen of the University of Texas. We used the introductory section of this text, which is specially designed for teaching the script. This section of the book introduces the Devanagari letters, their Roman transliteration, and their sound and point of articulation. The first lesson has only isolated sounds, but the later lessons introduce actual words from the language for transliteration practice.

To make learning the script less abstract, and to provide a mnemonic, I began by writing the Devanagari letter on the board, pronouncing it, and showing and naming an object that began with that letter. For example, I had a pen, a flowerpot, and other items. After introducing the sounds and letters in this fashion, I indicated to the students in English the point of articulation of the sound, and the manner of producing it I did this for two reasons. The first is

that the order of the script in Hindi corresponds to the point of articulation of the letters.

The second reason for explaining the production of the letter in English is that Hindi has the phenomenon of aspiration, which is a new concept for most language learners. Hindi also has sounds that are not produced in English, and students therefore have difficulty apprehending them aurally.

After presenting the sound and the Devanagari letter, I wrote the transliteration on the board after the students pronounced the sound. I had prepared Devanagari and Romanized letters on 3 x 5 cards, and showed the card to the students for them to repeat. The students then took the cards and matched the transliterated letter card to the Devanagari letter card. After using a few transliterated cards, they told me they did not want transliteration, and so after the first few letters I wrote only in Devanagari on the board and used only Devanagari letter cards to teach the rest of the alphabet.

After the above steps, I used the exercises in the book for practice. The exercises consist of lists of words written in Roman transliteration, and the task is to transliterate these into Devanagari. The students first attempted to sound out the words from the transliteration. I pronounced the words after them. They then attempted to write the word in Devanagari. After they wrote the words, I showed them a card upon which the word was written, and they again read the word. After they had written and read all the words in the exercise, they reviewed by reading the words written on the cards. They associated the word with its meaning, and asked me the meaning if they forgot.

After they learned each set of letters in Devanagari, I gave the students a Hindi newspaper and they attempted to find the letters they had learned. The native-speaker Hindi teacher and I sat with the students and confirmed whether the students were reading the letters correctly and pronouncing them

accurately. We continued the process of using the newspaper for practice throughout the first three weeks of learning the script. Once the students learned enough letters to start sounding out words, the other teacher and I told them the English meaning of the words if they asked for it.

The students continued using the First Year Hindi Course in their oral class, and got additional practice in reading words and sentences in it. For the reading class, however, we used a book printed in India called Introductory Hindi Course. This book has dialogues in the first 8 lessons, and dialogues and prose readings after that. None of the readings are from authentic sources.

The students chose to read the book aloud, taking turns reading sentences. Because of the emphasis on phonological recoding in reading theory, I assumed that reading aloud was a good exercise because it allowed me to determine if the students were accurately deciphering the letters and recognizing the words they were reading.

After they read a sentence, I reread the sentences using natural parsing and pronunciation. I also answered questions that they had. When they finished a passage, they switched roles or read the sentences they had not read. After a few lessons, the texts had simple comprehension questions, and the students read them aloud and answered them.

By week six of the training, the students were able to read the passages in the book with relative ease. We made some attempts to read newspaper headlines and picture captions, and although the students could sound out the words, they could not make sense of the phrases or sentences because they did not know the vocabulary. We discontinued this activity because we decided it did not help build fluent reading.

I continued with the practice of using the textbook as the core of the class

until the end of week ten. I then started alternating short informational texts from the newspaper and advertisements from magazines with the book. The students agreed that we would spend one hour of class reading the authentic texts and one hour reading the textbook.

For much of the course, I used newspaper articles that were organized thematically by one of the Hindi teachers. For example, the teacher assembled five or six short pieces about elections, natural disasters, accidents, political visits, or other topics. The students approved of this kind of organization of texts because it created a contextual frame for the readings, and presented texts that had similar vocabulary.

The students chose to read the authentic texts aloud. By this point in the training, I was trying to make the students more independent, so I asked them to first read over the articles and tell me in English what the basic theme and any details of the piece were. I did not ask them to translate. After giving me the gist of the passage, they then read the text aloud sentence by sentence. By this time in the course, the students did not reread the material aloud and did not translate unless they felt they did not understand the message conveyed in the text.

At the suggestion of the male student, at week 14 we began the reading class with a review of the vocabulary introduced in the previous day's reading. I chose the words from the authentic texts that I thought were useful because the students would encounter them frequently. I wrote the words on the board, and the students attempted to tell the meaning of the word in English. I did this because this task would indicate whether the students could identify the words out of context. If they could not, I directed them to the part of the passage in which the word occurred rather than telling them the meaning directly.

After the female student left at the end of sixteen weeks, the male student and I continued to read both the authentic and nonauthentic texts. We stopped using the groups of short articles arranged thematically, and starting choosing longer articles directly from the newspaper. I sometimes chose the articles because I knew they were about a subject the student was interested in, or were about topics he was familiar with. Usually, however, I asked the student to choose an article he wanted to read and immediately made a copy so that we could read together. He continued to look over the article to first tell me in English what he thought was contained in it, and then he read it aloud, usually giving a loose translation of the sentences. I kept a dictionary handy, so that I could look up words when he wanted a precise meaning.

DISCUSSION AND RECOMMENDATIONS

Script introduction. The students felt that the method of introduction of the script facilitated their learning. I had chosen the method of writing on the board and pronouncing, and then immediately using cards for reinforcement because it helped to link the sound-symbol correspondence.

The female student made this comment about learning the script and associating it with words:

> "I liked that progression [the order of presentation], so that helped me to keep it straight. . . . Uh, I also liked that, you know, we we got words right away, you know, even when we just knew four letters, we got words right away, so that was helpful, so we yeah could actually use it and you could sound out a word immediately like after day one."

The male student had these comments:

> "And so yeah I think what helps me in what I did for the script was just repetition and I think it helped just in the way we went at in taking it in little

sections that were manageable so that you could memorize a certain it was like sort of with the four or the five . . . Of each varg [units of five letters], right, and that was helpful because I could remember in order and then . . . from that point it was just writing and then I'd just, take it home and try to remember each varg and write them out. Um, so I was I mean in the beginning it was pretty intimidating just because I have not had to deal with any type of non-European language before, but I don't know I don't think it was terribly frustrating I mean it wasn't like unmanageable it was like you could you can see those 50 characters or whatever and that's really easy to see that you're going to be able to learn it eventually and it's not like learning Chinese or something."

Reading aloud. The students felt very strongly that reading aloud was a good practice. They expressed throughout their training that they wanted to read aloud. I encouraged this practice, because I felt it was a way that I could determine the progress of their acquiring the linguistic code. Because speculation is that students must be able to control the linguistic code to utilize their reading strategies acquired in L1 reading, I believe the teacher needs to use oral reading to monitor the acquisition of the individual processes required for acquisition of the linguistic code.

In the period when students are learning the new alphabet, the teacher can determine whether the students are deciphering accurately and therefore developing the basic skills required for word recognition. Throughout the course, the reading aloud that the students did indicated to me that they had mastered most letters and commonly occurring words because they read them quickly and accurately. I also observed that even later in the course, the students were still missing some less frequently encountered letters and their

combinations, and they also read out more slowly new words. I assumed from this that they had only minimally mastered the automatic assigning of sound to symbol that is necessary for phonological recoding and eventual directly visually accessing words.

Reading aloud also alerted me to syntactic and morphological problems the students were having. Throughout the course, I observed the phenomenon that they sometimes read the first few letters of a word correctly but then made mistakes on the ends of words. This indicated to me that they were still not fixating on the words as whole units, and therefore were likely having difficulty recognizing the syntactic relationships among the words. In Hindi, most nouns, verbs, and adjectives have gender and number markers at the end of the word, and these endings serve as clues to case and syntax relationships for native readers. These lower-level processes should also be encapsulated forms for the fluent reader. Therefore, the students, to understand the texts, would compensate for their lack of lower-level abilities by relying on background knowledge and context to determine word meanings and relationships. This activity is resource-depleting and makes it harder for the reader to ascertain general meaning of the text. The form of reading the students demonstrated indicated that they still had the most difficulty with the linguistic code, and that they had not crossed the threshold that would allow them to use their natural reading skills acquired in L1 reading.

Here are some of the students comments about reading aloud that served to reinforce my own opinions:

(Female student): "Reading aloud twice wonderful because second time around, yeah, it uh it really goes faster and you can understand and you can see the mistakes, and I like reading what [the male student] read the time

before because again I think . . . I'm more aware of his mistakes, so I can see, you know I can go through what he read and say okay, yeah, that I understood and I can also hear him not stumble over what I stumbled over."

(Male student): "I just sort of like reading out loud because it's kind of I guess reassuring, reinforcing."

(Female student): "I think I can remember being in first grade and reading out loud and it made sense and so right now I'm in first grade and reading out loud makes sense but I think that I, I'd probably start to lip read if I had to read silently a lot right now." [Said after 16 weeks]

Reading authentic/non-authentic material. The students acknowledged that they needed to read authentic material for their future positions, and agreed to start reading the material after the tenth week of instruction. They always felt it was very difficult to do so, and said that they welcomed reading the textbook, because they felt they had some control over it. They commented that it recycled vocabulary and did not have the elaborate syntax used in authentic newspaper texts, and they therefore felt they were reading its passages as units.

Here are some comments each student made about using the book in the beginning stages of reading.

(Female student): "I love that book, A, because it's got,.uh, you know, great jokes in it. Yeah, no, I do because you feel kind of, you know, you look at a whole page and you think, wow, now I can understand that. And I find that the reading is getting easier, uh, you know, we're learning new tenses but I don't know, I think that we're starting to put it together a little bit more clear, . . . you know even the first time around I I can remember in the beginning, you know it was like one sentence and we would just have to talk about that sentence, you know, this goes here and this is because that, so I really, I

think that with that you can really see a progression . . . And that's very gratifying, uh, I mean, I, I, I'm not, you know, naive or it's not that I think I can just go out and read a book in Hindi, uh, but I think that you can see a progression and that's that's really helpful. Uh, I love the fact that they repeat vocabulary in that book, that is superb, because even as a language teacher I can remember teaching, you know, chapter one, here's the vocabulary, and good-bye chapter one, and here's the vocabulary for chapter two and it's never reinforced, whereas this really builds."

(Male student): "I made the comment today you start feeling really comfortable in this this certain in these types of stories that we're reading and I guess the one thing it has done is if you keep the vocabulary to a minimum you really learn that vocabulary I mean I feel like I have a pretty good grasp of a certain small number of words, but at least I know them and although it's really kind of intimidating when you look at the newspaper now."

The male student made these comments after we had begun introducing newspaper articles.

"You know I think the mix of the it's like I said still using the book is a nice thing because you feel like you can read something a little bit longer and or a story and you get to the end and you feel like well, you just understood all this and that's, I mean, I don't think I want to be reading little short articles all the time and struggling through each one of them I think that might get . . . but I like doing that too because it's more practical and there's vocabulary probably is more useful in the long run I guess for what we're going to be dealing with, but to be able to read some stories is helpful too just to get the flow or reading."

I believe that easy, nonauthentic texts are needed in languages like Hindi, because the demands of learning a new script, new vocabulary, and new syntax patterns are resource depleting in themselves. The use of nonauthentic texts allows mechanical practice in reading that can help students to reach the point at which bottom-up processes occur far more easily. If only authentic texts are used with students, they will take much longer to develop their lower-level skills. Nonauthentic texts thus can be used for the specific goal of developing the lower-level skills.

Ideally, we could dispose of nonauthentic texts in the classroom by the careful selection of authentic texts. A project such as this, however, would be time-consuming, and would have to be conducted in areas where Hindi is used. By carefully searching through a wide range of printed and written materials, and by taking photographs of material in the environment such as signs and billboards, one could create a collection of authentic materials that would serve students well. This activity would be labor intensive, and so until it is possible, using nonauthentic texts is a necessary step in literacy development in Hindi.

Vocabulary. The vocabulary of the authentic texts plagued the students throughout the course. They commented throughout the course that the most difficult aspect of reading newspaper articles was the large amount of unknown vocabulary. The amount of new vocabulary often made it impossible for the students to figure out the main idea of the text. The difficulty of vocabulary impeded progress throughout the course, and even adversely affected their performance on the reading proficiency test at the end of training.

Both students that lack of vocabulary affected their reading performance on the final test.

(Male student): "I think especially with those [articles] yesterday . . . if I had

seen words I knew I knew it would have been even worse, but I was just staring at them thinking, uh, not a clue, or just trying to take a guess . . . It's just . . . the type of things that you're not dealing with on a daily basis in class, it's just not the words that we're using or that you hear."

(Female student): "I was frustrated with the test yesterday that I couldn't understand more . . . It was vocabulary. I think it was vocabulary more than anything else."

Developing vocabulary knowledge in Hindi is difficult. Because written Hindi uses many borrowings from Sanskrit that are not used in speech, the written form is especially opaque to students. I believe that a way to develop vocabulary is to use prereading activities. The teacher can use pictures and discussion to elicit the vocabulary that the students know about a topic. If the students know spoken equivalents of the formal vocabulary used in the text, the teacher can supply the formal alternative. If the students do not have the vocabulary, the teacher can introduce the concept in spoken form, write the crucial words on the board, and supply the formal equivalents.

The teacher can also ask the students to skim the text to determine what vocabulary they know and guess from that what the content of the writing is. The teacher can use the methods described in the previous paragraph at this point to expand their vocabulary knowledge.

Reviewing the vocabulary out of context is a device that the teachers and students can use to determine the extent of word recognition that is taking place. The students should then use the text that was read as the basis for reviewing the words they did not remember, because most words that readers know in their L1 come from actual contact with texts.

CONCLUSION

A study such as this can only yield tentative results at best. The study looked at the possibility of applying principles derived from theory and research to the actual conditions in a Hindi classroom. These first results can only be seen as guides to the great amount of research that needs to be done in the field of teaching non-European languages. The teaching and learning conditions at the Foreign Service Institute are unique, and applying even these tentative results to the situation in academia is a questionable activity.

Due of the lack of research in lesser taught languages, however, I believe studies such as mine can be helpful for showing directions for more classroom and experimental research both at FSI and in academia. The study of classroom teaching based on principles suggested by research and theory needs to be continued. Just as importantly, research and theory also should be investigated in the light of actual classroom practice.

I hope that more teachers of less commonly taught languages conduct case studies in their classrooms, so that the language education community can have a more substantial foundation for discussion of the very real problems of teaching these languages to Americans.

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