Video-Assisted Vocabulary Instruction for Elementary School Students with Learning Disabilities

JOY F. XIN
Rowan University
Department of Special Education/Services
201, Mullica Hill Road, Glassboro, NJ 08028 USA
xin@rowan.edu

HERBERT RIETH
Department of Special Education
306 SZB, The University of Texas at Austin
Austin, TX 7812 USA
rieth.herb@mail.utexas.edu

This study investigated the effects of using video technology as a tool for facilitating the vocabulary acquisition and reading comprehension skills of students with learning disabilities. Seventy-six, 4th, 5th, and 6th-grade students who were receiving reading vocabulary and comprehension instruction in special education resource rooms, were randomly assigned to a video or a nonvideo instructional group. The video instruction group learned word meanings and concepts in videodisc based contexts, while in the nonvideo group teachers taught students word definitions and concepts using a dictionary and printed texts. All students were administered pre, post, and follow-up tests two weeks after the completion of the intervention phase on word acquisition, generalization, and passage comprehension over the 30 target words taught. Findings indicated that students in the video instruction group had statistically higher word acquisition scores than those in the nonvideo instruction group.
Reading is often regarded as a basic and dominant subject for children during their school years. Poor reading, however, is the most frequently reported academic problem of students with learning disabilities (Lerner, 2000). These students have been found to exhibit significant deficits in a range of reading tasks including phonetic awareness, word recognition, vocabulary, and reading comprehension (e.g., Bos & Fili, 1984; Kameenui & Carnine, 1998). Common characteristics of this population include weak word recognition skills in relation to connected text (Richek, List, & Lerner, 1995), and spontaneously generating vocabulary knowledge (Simmons & Kameenui, 1990). Those weaknesses hamper their text comprehension during reading. However, the analysis of the causes of these deficiencies of students with learning disabilities is often focused on learner-based factors (Mercer & Mercer, 1998). To get more precise insight into the deficiencies of students with learning disabilities, research has recommended the interactive condition of learning. This theory assumes that the learner and learning environment (e.g., text, material, setting, teacher) constitute the basis of learning, and a student’s learning is directly affected by his/her learning environment (Mosenthal, 1982). Following this theory, one intervention strategy to counteract the problems encountered by students with learning disabilities involves creating a rich learning environment for the learner. Bransford and Heldmeger (1983) have analyzed some conditions that facilitate children’s successful learning and they suggest that semantically rich meaningful contexts provided by the environment allow children to make sense of their surroundings and can be used to help students organize previous knowledge and acquire new information.

According to Bransford and his colleagues (Cognition and Technology Group at Vanderbilt 1990), one way to create semantically rich meaningful contexts (called macro-context) in the classroom is to use video. They argue that video has three instructional advantages. First, it provides a rich source of information with opportunities to notice sensory images, dynamic features, relevant issues, and inherent problems. Second, it enables students to perceive dynamic moving events and to more easily form mental models. Third, video allows students to develop skills of pattern recognition, which are related to visual and auditory cues rather than to events labeled by the teacher.

These researchers have merged technology and cognitive learning theories into an instructional method called anchored instruction (Cognition and Technology Group at Vanderbilt, 1990). Anchored instruction refers to a multimedia environment created by video programs that serves as an “anchor” or “situation” to help learners develop skills. This approach begins with a focal event with a video program, the anchor, involving a certain kind of real situation to help learners notice the features of that situation.
that make particular actions relevant. The purpose of the anchored instruction approach is to promote a rich learning environment, a realistic context to make learning motivating, meaningful, and useful (Brown & Collins, & Duguid, 1989). This approach has been employed successfully to teach vocabulary (Gildea, Miller, & Wurtenberg, 1990), story comprehension (Johnson, 1988), and composition (Risko, Kinzer, Vye, & Rowe, 1990).

In teaching vocabulary, two prominent instructional approaches to increase word knowledge are teaching the meanings of individual words (definitional instruction) and teaching skills involved in deriving word meanings from context (contextual instruction) (Jenkins, Matlock, & Slocum, 1988). Researchers have indicated that an even more effective approach involved combining both of these techniques in a “mixed” method rather than relying exclusively on either strategy (Stahl & Fairbanks, 1986). Gildea, Miller, and Wurtenberg (1990) combined the mixed method with video technology to teach vocabulary. In their study, students were asked to read a text that described an episode from a movie (on videodisc) that they had just viewed. The text included certain words, that were specially marked and that the students were expected to learn. When students encountered one of those words they were offered three types of explanation. The students could choose to see dictionary definition, illustrative sentences, or illustrative scenes from the movie that could be reviewed at the student’s request. The results indicated that the proportion of correct answers on subsequent word tests were higher when more than one method of explanation was selected. The study indicated that a combination of definition, video segments, and sample sentences may be used to enhance vocabulary acquisition.

This approach allows students first to read a definition, to make sure the word is known. Alternatively, if the word is unfamiliar or the definition is confusing, students can sample video pictures that feature scenes that contextually depict the word. Finally, if the definition and video scenes do not provide a clear understanding, illustrative sentences can be read. The researchers reported that the video was particularly effective in enhancing the comprehension of new vocabulary concepts. Students were able to use words to describe scenes instead of simply supplying definitions. Thus, students were able to spontaneously use words rather than merely defining and memorizing them. Also, the visual image of the video motivated students in processing information in a multisensory context and provided a variety of textual clues that enable low achieving and at-risk students to find a path to word learning and comprehension (Risko, et al, 1990). However, little research has been conducted with students with learning disabilities. This study was designed to analyze the impact of a video-assisted anchored instruction on the vocabulary learning and reading comprehension achievement of students with learning disabilities. The purpose of the study was to
evaluate the effects of video anchored instruction on the vocabulary learning and reading comprehension achieved of students with learning disabilities.

**METHOD**

Samples

**Students.** Seventy-six, 4th-, 5th-, and 6th-grade students attending four elementary schools in a large urban school district located in the southeastern region of the United States participated in the study. Those students were identified as learning disabled by school district personnel using state eligibility standards, all had IEP objectives in reading, and were receiving remedial reading instruction at least one hour per day in special education resource rooms (Table 1).

<table>
<thead>
<tr>
<th>Grade and Gender Distribution of the Sample Students</th>
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<tbody>
<tr>
<td><strong>Group</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Video</td>
</tr>
<tr>
<td>Nonvideo</td>
</tr>
<tr>
<td>Total</td>
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The participating students in each school were matched by grade level and randomly assigned to a video or nonvideo group. Therefore, each participating school had one video and one nonvideo instruction group. To determine the initial level of the two groups, the reading subtests (vocabulary and reading comprehension) of Intermediate Level (Form E) of Stanford Achievement Test (SAT) (1989) were administered to all the students before the study began. The mean score of the SAT vocabulary subtest was 2.4 grade level for both video and nonvideo groups, and the mean score of the SAT reading comprehension subtest was 2.5 grade level for both video and nonvideo groups. An analysis of variance calculated to compare the raw scores attained by the two groups yielded $F(1,74) = .043, p = .84$ (vocabulary), $F(1,74) = .13, p = .91$ (comprehension). The data indicated no significant differences between the two groups of students.

**Teachers.** Seven special education teachers in the target schools participated in the study. Six teachers were randomly assigned to a video or nonvideo instruction group while the seventh taught both video and nonvideo groups. To avoid the influence of teacher effects, teachers assigned to provide video
instruction exchanged assignments with those teachers assigned to the non-video instruction after a three-week period of instruction.

These teachers were experienced in teaching students with learning disabilities. All had at least three years’ teaching experience in special education resource rooms. They had little experience with video-assisted instruction and use of videodisc equipment. Therefore, teacher training was provided by the researcher prior to the start of the study. Three meetings were held onsite with each participating teacher where principles and methods of anchored instruction and the use of videodisc equipment were modeled and practiced.

Research Design

A pre- posttest control group design with random assignment of subjects was used in this study. Teachers in three participating schools were randomly assigned to video or nonvideo instruction while the teacher in the fourth taught both video and nonvideo instruction. Thus, in each school there was one video and one nonvideo group. The experiment was conducted over a six-week period and all instruction was provided in special education resource rooms.

Instructional Materials

Video program. A commercial videodisc, “The Great Quake of ’89,” was selected. This program was compiled by ABC News and focused on the 1989 San Francisco earthquake. It was an interactive video program that contained 30 minutes of content on each side, which was presented in 28 chapters. Side one contained 12 chapters which included news materials describing the moments of and immediately after the tragic quake. Side two contained 16 chapters that described the testing and preparation for predicting earthquakes. Each chapter lasted between three to five minutes with a pause at the end to help viewers select each topic by frame number and review any segments using a control panel. Chapters 3-8 of side one of the videodisc were used during the six week’s instructional intervention.

Selection of target vocabulary words. The target vocabulary words were selected from 4th, 5th, and 6th grade basal reading textbooks including HBJ (1989), SRA (1988), Ginn (1985), Scott & Foresman (1981), Holt (1977), and Laidlaw (1978). Words which related to the content depicted in the earthquake video were selected as target words from these texts. A total of 50 words were selected. During a pilot test, each student was asked to pronounce
and orally define each of the 50 words. Thirty words were elected from those that less than 25% of subjects were able to read. Those 30 words were used during the vocabulary instruction.

**Reading passages.** Six narrative reading passages consisting of 150 words each were prepared by two reading teachers who had earned master’s degree in reading and were working in the local schools. Each of the six passages contained five different target words to be taught in the class session. The passage content was based on the video episodes shown in class. The readability level of each passage was calculated by two graduate students using the Fry Readability Scale (Fry, 1977). Each passage had an average of 153 words, 11 sentences, (with mean sentence length of 14 words) and 217.3 syllables which translated to an end of the 2nd-grade and beginning of the 3rd-grade level readability according to the Fry Readability Scale. These passages served as class reading texts. Finally, 10 comprehension questions were developed for each passage (Figure 1). They were printed on the same page but under the reading passage and were designed to stimulate class discussion.

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(CHAPTER 3)

On Tuesday, October 17, 1989, in the late afternoon, a huge earthquake hit the San Francisco Bay area. People were going about their business as usual. Working men and women were heading home from their offices after a busy day. Children were playing in their yards. All of a sudden, the ground began to move!

Houses and office buildings began to shake. In a bar, glasses and bottles danced madly up and down, back and forth, and finally crashed to the floor. The scared customers made a hasty exit. In a nearby Gym, some girls were playing basketball. When they felt the floor began to move under their feet, they abandoned their game and ran desperately for the exit. The Bay Bridge shook so hard that a wide crack appeared in it, and a passing car crashed down into the hole.

All over the San Francisco area, the earth trembled widely. The whole city was in a state of total chaos with buildings shaking and people running around in a panic.

**Questions:**
When did the earthquake strike?
Where did the earthquake strike?
What were people (working people, children) doing when the earthquake hit?
What did the earthquake feel like?
How did the people in the bar know there was an earthquake?
What did the customers do? Did they stay in the bar?
What happened in the Gym?
What happened on the Bay Bridge?
Did everyone remain calm during the earthquake? How do you know?
Pretend that you were there during the earthquake, tell me what you saw.

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Figure 1. As it happened: #1
**Illustrative sentences.** Five sentences were developed by the reading teachers to describe a scene in the video program and to illustrate target words. Each sentence contained one underlined target word with the number of the related video frames presented in brackets next to the word (Figure 2). The sentences and the correlated video segment were designed to convey the same meaning that was expressed in the narrative passages (rather than suggesting some new interpretation of the word). They were used as additional contexts to increase the likelihood that the target words would be understood.

![Figure 2. As it happened: #2](image)

**Sentence Cloze.** Sentence clozes were developed by the reading teachers to enable students to practice generalizing word meaning to context in addition to the context depicted in the video content. Each cloze contained five sentences and each sentence contained a blank space for students to fill in a target word taught during the session (Figure 3). The teacher read each sentence aloud and asked students to complete each blank using a target word. The answers to each item were checked by the teacher in class. The teacher shared the correct answer to each sentence with the class.

![Figure 3. As it happened: #3](image)
PROCEDURES

The instruction was implemented in the subjects’ special education resource room reading class three times a week for six weeks with each session lasting 30 minutes. All participating students watched the introduction chapter (Chapter 1) of the video disc. Subsequently, teachers implemented video-assisted instruction or nonvideo instruction with the students assigned to their instructional group. Instructional time devoted to video-assisted and nonvideo instruction was exactly the same.

<table>
<thead>
<tr>
<th>Video-assisted Instruction</th>
<th>Nonvideo Instruction</th>
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<tr>
<td>Students randomly assigned to the video group, completed one videodisc chapter each week. They reviewed an entire chapter (3-5 minutes) on Monday and reviewed it on Wednesday and Friday. This specific presentation components were adapted from the studies by Gildea et al., (1990), and Stahl (1983) as follows:</td>
<td>In this treatment the teacher did not use the video program. Instead, she provided the traditional vocabulary instruction as follows:</td>
</tr>
<tr>
<td>The first day:</td>
<td>The first day:</td>
</tr>
<tr>
<td>1. One chapter of the video program was shown.</td>
<td>1. The teacher told the story based on the first reading passage, then passed it to each student and read it in class.</td>
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<tr>
<td>2. The teacher led students in a discussion of the video content by asking the question “What happened that day?” or “What were the people doing?” The teacher reviewed some segments with the students during the discussion.</td>
<td>2. The teacher led students in discussion of the reading passage by asking the question “What happened that day?” or “What were the people doing?” The teacher reviewed some reading paragraphs with the students during the discussion.</td>
</tr>
<tr>
<td>3. The teacher assisted students to learn five target words depicted in the video content by writing the words on the board and asking students to look up the words in their dictionary.</td>
<td>3. The teacher wrote on the board the five words underlined in the reading passage and directed students to look up the words in the dictionary.</td>
</tr>
<tr>
<td>4. The students were asked to write the target words and their dictionary definitions on a sheet of paper.</td>
<td>4. Students were asked to write down the target words and the definitions from the dictionary on a sheet of paper.</td>
</tr>
<tr>
<td>The second day:</td>
<td>The second day:</td>
</tr>
<tr>
<td>1. A worksheet with illustrative sentences and video frame number was delivered. The five target</td>
<td>1. A worksheet with illustrative sentences without video frame number was delivered. The five target words</td>
</tr>
</tbody>
</table>
words and their definitions were reviewed by searching for the video frames and re-watching the segments.
2. The teacher modeled and students read illustrative sentences containing the five target words learned the previous class.
3. The class discussed the meaning of the words presented in the illustrative sentences while receiving accompanying video segments.
4. Students created one sentence, one for each of the five target words. Each student was asked to read their sentences aloud to the class.
5. Students reviewed the video again.

The third day:
1. Students read the first reading passage silently.
2. Students watched the video chapter again and answered the 10 comprehensive questions orally during a class discussion of the reading passage.
3. Students completed cloze sentences on individual worksheets. If the students could not identify the appropriate target words to accurately fill the blanks in the cloze sentence, they were allowed to review the handouts with illustrative sentences or request the teacher’s help. These activities were repeated for each set of five words, and video chapter. Therefore, five words a week were taught.

<table>
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<th>Dependent Measures</th>
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<td>Three measures on student achievement were recorded: (a) word definition, (b) sentence cloze, and (c) passage comprehension. Vocabulary definition test included 30 items divided into six sections. Each section contained 5 items.</td>
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</table>
five items with seven target words on the top. Each item presented a defini-
tional statement that was selected from a student dictionary and expressed
the same meaning as used during the instruction. Students were required to
read the definition, then pick the correct word at the top of the section and
write at the end of the statement to match with the definition. Each correct
answer was awarded one point with a total score of 30. Sentence cloze had
the same format as the definition test. The difference was that each item in-
cluded one or two sentences with one blank for a target word to be inserted.
The comprehension test included a passage of approximately 200 words in
length, containing 90% of the target words. The content was based on the
video story and included 15 questions underneath the passage. Each ques-
tion had four multiple choice answers. Each correct answer was awarded
one point, yielding a total score of 15.

The satisfaction of participating teachers and students was recorded,
using two survey questionnaires, one for the teachers, and the other for the
students. Each survey consisted of five open-end questions to report their
attitude toward the instruction and comments.

RELIABILITY

Measurement Reliability

The test and retest reliability of the three primary measures (definition
test, passage comprehension, and sentence cloze) was assessed using 10,
4th, 15, 5th, and 15, 6th-grade learning disabled students. Test-retest inter-
related correlation coefficients for the fourth grade students were .86, .80,
and .85; and .97, .93, and .84 for the 5th grade students; and .88, .81, and
.87 for the 6th grade students. These scores were well within the coefficient
of stability acceptable for a teacher-made test (Borg, Gall, & Gall, 1996).

Procedure Reliability

To ensure the teachers of video and nonvideo group following the in-
structional procedures and keeping the same instructional time allotment,
each class session was observed by two graduate students. The results of
these observations were used for weekly discussion with teachers. Thus,
each video or nonvideo group in the participating schools had same amount
of instruction time with same instructional procedures.
RESULTS

Pretest, posttest, and follow-up test results were analyzed using 2x3 repeated measure analysis of variance with condition (video versus nonvideo) serving as a between subject factor, and testing time (pre, post, and follow-up) serving as a within subject factor. Descriptive data for each dependent measure for the two groups are presented in Table 2, Table 3, and Table 4.

Table 2
Means and Standard Deviations of Word Definition Pretest, Posttest, and Follow-up Test

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pretest Mean</th>
<th>Pretest SD</th>
<th>Posttest Mean</th>
<th>Posttest SD</th>
<th>Follow-up Mean</th>
<th>Follow-up SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video</td>
<td>39</td>
<td>4.31</td>
<td>2.62</td>
<td>13.07</td>
<td>5.87</td>
<td>14.08</td>
<td>7.46</td>
</tr>
<tr>
<td>Nonvideo</td>
<td>37</td>
<td>4.70</td>
<td>2.55</td>
<td>10.21</td>
<td>5.88</td>
<td>11.46</td>
<td>6.98</td>
</tr>
</tbody>
</table>

For word definition test, the repeated measure analysis yielded a significant main effect for pretest to posttest and follow-up test scores, $F(1, 148) = 81.73, p = .000, (p < .05),$ and a significant interaction between time of testing and condition of instruction, $F(1, 148) = 3.35, p = .038, (p < .05).$ Table 5 presents the analysis.
Table 5
Analysis of Variance of Word Definition Pretest, Posttest, and Follow-up Test

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Cells</td>
<td>2762.90</td>
<td>148</td>
<td>18.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of Test</td>
<td>3051.42</td>
<td>2</td>
<td>1525.71</td>
<td>81.73</td>
<td>.000</td>
</tr>
<tr>
<td>Group by Time</td>
<td>124.89</td>
<td>2</td>
<td>62.45</td>
<td>3.35</td>
<td>.038</td>
</tr>
</tbody>
</table>

A post hoc one-way ANOVA analysis of each group’s posttest scores yielded a significant difference in favor of the video group, $F(1,74) = 4.50$, $p = .037$ ($p < .05$). In addition, while the follow-up test scores attained by the video group were higher than that of nonvideo group, the difference wasn’t statistically significant ($F(1, 74) = 2.49$, $p = .12$).

A repeated measure analysis of the sentence cloze test variance indicated that there was no interaction between instructional condition and testing time, although the scores of video group students were higher than the nonvideo group students. A repeated measure analysis of variance of passage comprehension test scores failed to reveal an interaction between instructional condition and testing time, although video group student scores were slightly higher than those of the nonvideo group.

The results of the survey questionnaire showed that 90% of the teachers in the video group reported that they liked to use a video program in their class, while 80% of the teachers in the nonvideo group mentioned that they felt that the vocabulary words were difficult for the students. Of the students in the video group, 85% reported being highly pleased with the program and enjoyed learning vocabulary words with the video. Of the students in the nonvideo group, only 30% indicated that they enjoyed learning, while most of them complained that the vocabulary words were too difficult and learning words was boring.

GENERAL DISCUSSION

Over the past years, the role of vocabulary knowledge and its relationship to higher level cognitive task performance has been extensively investigated (e.g., Bos, Anders, Filip, & Juffe, 1989; Gilda, Miller, & Wurtenberg, 1990). In these studies both definitional and contextual knowledge of a word’s meaning and semantic information about the word lead to better vocabulary learning. In this study, a video-based anchored instructional
program was used to provide a context for semantic information about the words and concepts taught.

Results of the study demonstrated that students in video-assisted anchored instruction statistically outperformed students in traditional instruction with a dictionary and printed texts on word meaning acquisition. Although students in both video and nonvideo group increased their vocabulary learning after instruction, significant differences favoring the video instruction students were obtained on the post definition test scores in the six-week instruction covering one grading period. Moreover, a significant interaction between time of test and instructional group indicated that video-assisted instruction substantially increased knowledge of word meanings. The total obtained gain scores on word definition for both groups were less than 60%, though a significant difference was found between groups. This finding is important since it suggests a positive direction. Therefore, it is recommended that the effects of the intervention need to be examined over a longer period of instruction with a larger sample of students.

No significant differences were found, however, between the two groups on word generalization. Although students in the video group made greater gains than the nonvideo group on the sentence cloze test, the gains were not statistically significant. The absence of a statistically significant relationship appearing on word generalization appears due, in part, to the limited duration (six weeks) of the intervention. Alternatively the greater achieved gain attained by the video instruction group suggests that the intervention has positive potential to increase word generalization since research suggests that generalization should be “actively” programmed as part of a student’s training (Campione & Brown, 1977). Thus, it appears that more time is needed to practice words in multiple contexts (Mezynski, 1983). It appears that diverse encounters and extension of word use beyond the target context are a very important part of learning processes to enhance vocabulary maintenance and generalization.

There was no significant difference on definition or on sentence cloze scores between the two groups on follow-up tests administered two weeks after the intervention was completed. It should be noted however, that students in the video group gained more than those in the nonvideo group. Generally, the maintenance of the vocabulary learning was not stable with the scores attained on the definition follow-up test being slightly higher than those of the posttest of both groups. Alternatively, scores of follow-up sentence cloze and reading comprehension tests were lower than both groups’ posttest. These findings may be due to learning disabled students’ deficiencies of using strategies on memory tasks. Compared with nondisabled children, students with learning disabilities have been found not to
apply rehearsal strategies to maintain good performance on reading tasks (Torgesen, 1980).

Reading comprehension is generally regarded as a high level cognitive task that is more difficult for learning disabled students (Lerner, 2000). They have difficulty spontaneously employing effective comprehension strategies to aid their understanding (Wong, 1980), and to monitor their reading comprehension (Bos & Filip, 1984). The results of this study indicated no significant difference between the two instruction groups on comprehension posttest and follow-up test scores. The reason may be that reading comprehension skills depend not only on reader’s vocabulary knowledge, but also on their background knowledge about the context of the passage (Pearson, Hansen, & Gordon, 1979). All of the students participating in this study had deficit language skills (e.g., word recognition and decoding, reading fluency), which when combined with other skill deficits may have impaired their comprehension. In addition, most questions developed in the reading comprehension test were related to the context, few were related to the learned vocabulary words. It appears obvious that those vocabulary words learned may not assist learners to comprehend the passage very much. Thus, reading comprehension skills are far more beyond vocabulary word recognition. It is clear that the problems related to teaching reading comprehension are far more complex than those of vocabulary, and comprehension skills may not be improved in such a short time period. Stahl (1983) indicated that two factors influence whether a vocabulary teaching has an effect on comprehension. First, enough words must be taught. Second, the words must be learned well, or students must know the words thoroughly and be able to understand the meanings automatically during reading. Vocabulary knowledge is not sufficient for reading. It must be “automatic” with rapid and effortless access to its meaning (Laberge & Samuels, 1974). Because of the limited time of the instruction and practice, it appears that students in both video and nonvideo groups have not reached the high level of automatically using words and obtaining meanings during their reading process. It seems likely that automatization of word knowledge requires a high level of exposure over prolonged periods. Thus, a longer period of teaching and practicing, and related strategies may be needed for those students to improve their reading comprehension skills.

Several findings from this study appear to have educational implications for special and regular education settings. First, reading instruction that includes video instruction mediated by a teacher and combines with traditional dictionary and text teaching strategy may provide a rich contextual environment for vocabulary learning. The video vignette required only
three to five minutes of class time to offer visual events for reading contexts. It appeared to be an effective and practical way to help learning disabled students understand word meanings, concepts, and reading contexts and highly motivated students to learn vocabulary, a task which had been characterized previously as a boring task. From the student survey, we found that most students enjoyed learning words using a video program as a tool. They remembered some words as what they reported that they remembered the video scenario. It may be easier for students to remember the visual scenes in the video describing the situation and context of the target words used than to remember word definitions from a dictionary or the context literally. In addition, this form of instruction is relatively easy to implement since it does not require teachers to have complicated video technology skills. It is, therefore, feasible as well as effective instructionally. Second, with the video as an anchor, teachers and students have shared an experience with the video story describing a real event. They worked together to explore information related to the words learned and contexts involved. Consistent with the anchored instructional approach, more contextualized references were made to vocabulary words during the class discussion. This activity may increase the interactions between the teacher and students in class, which has been shown to enhance reading instruction for students with learning disabilities (e.g. Bos, et al., 1989). Finally, the trends favoring video anchored instruction underscore the importance of conducting additional studies that employ the intervention for a longer period of time with larger number of students.

There are some limitations of this study. First, the duration of instruction and scope of sample students in the research are limited. Further research in special education could help clarify the present findings and add information on effects of video-assisted instruction using a wider range of disabled children. Second, although the video equipment is easy to use in class, the curriculum development coordinating with the video program may cost time and resources. For example, two reading teachers worked together to prepare for sentence practice, passage writing, and the vocabulary search in this study. They watched the video and discussed in a group several times to make the materials available. This cost and effect may need to be considered by school personnel. From this experience, it appears the anchored instruction approach has considerable potential for the remediation of deficits in vocabulary learning for students with learning disabilities.
References


**Note**

This study was supported, in part, by the U. S. Department of Education, Office of Special Education Program (Grant #H28B20028). Points of view or opinions stated in the paper do not necessarily represent the official position or policy of the funding agency, and no official endorsement should be inferred.

The authors wish to acknowledge the participating schools, teachers and students in the Davidson County School District of Nashville, Tennessee.