# The Effects of Read-Along Tapes on the Reading Comprehension of Middle School Students

*Thomas Cloer, Jr., Gail R. Denton*

The utilization of read-along materials in listening centers has been acknowledged as a strategy compatible with the whole language philosophy. Read-along packages, books with accompanying cassette recordings of the texts, have been marketed with increasing frequency with longer and more difficult selections for middle school and older students. The question of just how effective these materials might be with different types of students has not been fully answered.

## Significance of the Investigation

The purpose of this study was to examine the effects of providing auditory narration of text during silent reading on below average, average, and above average eighth-grade readers. Does this procedure help the weaker readers comprehend? Would this procedure interfere with more gifted readers' comprehension? Such a study has value for classroom teachers because conclusions and recommendations might help address the large range of achievement levels typically found within an eighth-grade middle school classroom.

Another significant issue is the matter of accommodating individual differences in learning styles. Would others get consistent results with Carbo (1978) who found that remediation with second through fifth grade student's recorded books yield positive results in reading? Bowman and Davey (1986) studied the effects of presentation mode on

comprehension monitoring of learning disabled students in grades 9 through 12. Silent reading was compared to silent reading while listening. The authors stated that the multi-modal presentation seemed to depress the scores of these learning disabled high school students. These researchers suggested that the confusion and interference created by the input from two modalities simultaneously led to the decrease in comprehension. Therefore, if those with one learning style benefit from this type of instruction, do those with another learning style suffer a decline?

These issues require a more comprehensive review of the literature to yield insights into the effectiveness of the strategy of read-along tapes.

## Review of Literature

Extensive research during the 1950s and 1960s led to better insights into the relationship between listening and reading. Devine (1978) concluded that listening and reading share a common thinking base. Both listening and reading are receptive language skills that share the common goal of comprehending meaning. Devine pointed out that instruction can take advantage of this common base by utilizing strategies that have applications to both reading and listening, such as teaching inferencing.

Durrell (1969) concluded that listening vocabulary was superior to reading vocabulary at the lower grades but that reading and listening vocabularies become somewhat equal around eighth-grade level.

Sticht and James (1984) concluded from an analysis of 44 studies that the gap between the two skills gradually narrowed and agreed with Durrell that around the seventh or eighth grades the reading and listening abilities become similar. Sticht and James (1984) also advised that reading instruction should include activities that bridge the gap between listening and reading. Miller and Smith (1990) examined silent reading, oral reading, and listening proficiency of poor, average, and good readers. Their study of subjects in grades 3 through 5 indicated differences by ability level for listening and reading. For poor readers, they found that oral reading and listening comprehension were both superior to silent reading.

Homan, Hall, and Topping (1986) reported results of a wide-scale project that involved 4000 fifth-grade students in testing that provided for oral reading of standardized test items to both good and poor readers. The findings showed that having teachers read test items aloud

yielded higher scores than having students read items silently. Both good and poor readers reflected similar gains.

In another comparison between standardized testing and listening-reading testing, Edwards (1970) found that fourth- and sixth-grade students who were poor readers gained significantly. Edwards suggested that the read-along method should be limited to the few students who might benefit from the strategy.

Holmes and Allison (1985) showed that subjects in their study, 48 fifth-grade students, did not benefit from the listening-while-reading treatment. Furthermore, good readers seemed to be negatively affected by the listening-while-reading tasks.

Klein (1989) compared the performances of sixth-grade subjects in three test modalities: listening, silent reading, and reading-while-listening. The study tested specifically for inferencing skills in social studies content. Klein found that the listening-while-reading strategy produced more correct inferences than silent reading or listening.

None of these studies dealt with the problem of eighth-grade readers reading significantly below and above their grade norms. The current study sheds light on whether or not these readers will be helped in making inferences in reading comprehension.

## Method

### Subjects

The subjects were chosen from a middle school in a large district of upstate South Carolina. The school had a faculty of 63 teachers and 1,100 students in grades six through eight.

Participation in the study was limited to 60 students chosen from eighth-grade classes in literature and language arts. All students with scores at or below the fourth stanine in reading comprehension as measured by the eighth edition of the *Stanford Achievement Test*, Form L, were grouped as below average readers. Students with scores in the fifth stanine were designated average readers. Students with scores in or above the sixth stanine were categorized as above average readers. For each of the three populations of students, 20 subjects were selected randomly. These students were invited to participate in the research study. All of the students selected in the sampling process participated voluntarily in the project.

**Materials and Procedure**

For the testing procedure, reading selections and questions on the third edition of the *Gates-MacGinitie Reading Tests*, Level 5/6, Form L, were read orally and recorded on audio-cassette. A pilot test was administered to evaluate adequacy of pause-time allotted for marking answer sheets. After necessary revisions, the audio-cassettes were produced.

The first task had the 60 subjects complete the comprehension subtest of the *Gates-MacGinitie Reading Tests*, Level 5/6, Form K, by reading silently (MacGinitie & MacGinitie, 1989). For the listening task, the 60 subjects completed the comprehension subtest of the third edition of the *Gates-MacGinitie Reading Tests*, Level 5/6, Form L, by reading the material silently while listening to simultaneous narration of the selections and questions on audio-cassette. Testing in both modes was untimed. The subjects listened to the narration through earphones as they followed the printed material visually. They were allowed to rewind the tape and listen again to any of the material if they wished.

## Results

Table 1 gives the means, standard deviations, and *t*-test results for the below average readers, the average readers, and the above average readers.

**Table 1**

**Mean Gates-MacGinitie Scores and Standard Deviations of Groups by Ability Levels**

| Group[a] | Mean | SD |
|---|---|---|
| Below Average Reader | | |
| Reading Silently | 30.85 | 7.25 |
| Reading & Listening | 30.90 | 6.35 |
| Average Reader | | |
| Reading Silently | 35.85 | 5.94 |
| Reading & Listening | 34.40 | 4.72 |
| Above Average Reader | | |
| Reading Silently | 40.20 | 4.71 |
| Reading & Listening | 38.45 | 4.76 |

[a]n=20

For those below average readers, the mean scores for each task, reading and reading while listening, were almost identical. A *t*-test for dependent means showed no significant difference ($t(19)=.04$, $p=>.05$) between the two means. For the average readers, the mean score for listening while reading was not significantly different ($t(19)=1.16$, $p->.05$) from the mean score for reading silently. However, with the above average readers, the mean score for listening while reading was statistically significant ($t(19)=2.75$, $p=<.001$), and was significantly lower than silent reading. Therefore, listening while reading not only failed to enhance reading comprehension overall for any of the three groups, it actually interfered and resulted in lower comprehension for the group of above average readers.

Table 2 includes all the students within the below average, average, and above average groups whose scores increased, decreased, or remained the same when reading and listening simultaneously. Notice that as many scores of students in the below average group dropped significantly while listening as those of students whose scores increased. In the average and above average groups, many more students' scores decreased significantly than those of students whose scores increased.

**Table 2**

***t*-tests for Difference between Groups Whose Scores Increased, Decreased, or Remained the Same**

| Group | Reading Mean | Reading SD | Reading & Listening Mean | Reading & Listening SD | n | *t* |
|---|---|---|---|---|---|---|
| | | | Below Average Reader | | | |
| Increased | 28.44 | 8.22 | 33.56 | 6.27 | 9 | -4.16* |
| Decreased | 34.22 | 4.76 | 29.22 | 5.47 | 9 | 12.25* |
| No Change | 26.50 | 9.19 | 26.50 | 9.19 | 2 | - |
| | | | Average Reader | | | |
| Increased | 31.67 | 8.80 | 36.83 | 6.27 | 6 | -5.60** |
| Decreased | 37.58 | 3.37 | 32.58 | 3.78 | 12 | 6.27* |
| No Change | 38.00 | 2.83 | 38.00 | 2.83 | 2 | - |
| | | | Above Average Readers | | | |
| Increased | 36.00 | 4.32 | 38.25 | 4.11 | 4 | -4.70** |
| Decreased | 40.31 | 4.23 | 36.92 | 4.15 | 13 | 6.44* |
| No Change | 45.33 | .58 | 45.33 | .58 | 3 | - |

*$p<.001$

**$p<.05$

It is important that the below average readers did have a higher percentage of students gaining in comprehension when reading and listening when compared to average and above average readers. Conversely, the average and above average readers had more students declining in achievement when reading and listening as compared to those just reading.

Another important finding was that the people who benefited the most in each group from listening were the ones who scored the lowest in reading. According to Table 2, the students in each group whose score increased while listening were students with lower initial mean scores.

One other interesting finding was that both increases and decreases in students' score while listening were more substantial with below average and average readers. Notice in Table 2 that the scores of students in the above average group did not change much either way. However, the mean gain or loss for the below average or average readers was five points.

Table 3 shows that the 19 students in all 3 groups whose scores increased while reading and listening did so significantly. However, the 34 students in all 3 groups whose scores decreased while reading and listening did so significantly as well. Almost twice as many students' scores decreased as those whose score increased while reading and listening. Table 3 also reveals that the initial mean score for reading was lower for the 19 students whose scores increased when listening was added. Note that the 34 students whose scores decreased when listening was added to reading had a higher initial mean score for reading. Could it be that the benefits of auditory input decrease as reading competency improves?

**Table 3**

***t*-tests for Mean Differences**

| Group | Reading | | Reading & Listening | | n | *t* |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | |
| Increased | 31.05 | 7.98 | 35.58 | 5.76 | 19 | -5.51* |
| Decreased | 37.74 | 4.67 | 33.35 | 5.31 | 34 | 11.60* |
| No Change | 37.86 | 9.36 | 37.86 | 9.36 | 7 | - |

*$p$=<.001

## Discussion

The finding that a substantial number of students' scores declined in comprehension when reading and listening simultaneously to audiocassettes raises questions as to the appropriateness of using this strategy with all students in classes who are heterogeneous in reading achievement levels. The findings lead us to suggest that listening while reading strategies, although inappropriate perhaps for use with an entire class, might hold significant benefit for a particular group of students within the class. The findings also lead us to suggest that the students who might benefit the most are those who are less competent in reading. Score decreases when listening is added become increasingly likely as the level of reading achievement climbs.

An important finding was that although comprehension enhancement while reading and listening is more likely to be found in below average and average readers, there is a substantial risk of comprehension decline. This enhancement or decline may be more significant for the less able readers. Assessments of individual strengths and weaknesses will probably be required if this listening while reading strategy is to be used with maximum benefit. There are individual students within all three achievement levels who have the potential to improve reading comprehension by utilizing listening while reading strategies.

This study raised several more questions. For example, what differences might be found when students are observed in recreational reading situations as compared to testing situations? What differences might be found if students were tested through think-alouds or retellings rather than the traditional testing such as the Gates-MacGinitie? Are the differences observed in these groups of students explained by modality preferences, cognitive levels, attitudes toward the task, or other factors?

## References

Bowman, J. E., & Davey, B. (1986). Effects of presentation mode on the comprehension-monitoring behaviors of LD adolescents. *Learning Disability Quarterly, 9*, 250-257.

Carbo, M. (1978). Teaching reading with talking books. *The Reading Teacher, 32*(3), 267-273.

Devine, T. G. (1978). Listening: What do we know after fifty years of research and theorizing? *Journal of Reading, 21*(4), 296-304.

Durrell, D. (1969). Listening comprehension versus reading comprehension. *Journal of Reading, 12*(6), 455-460.

Edwards, R. P. (1970). A comparison between standardized and listening-reading administrations of the Iowa Tests of Basic Skills. (Doctoral dissertation, University of Iowa, 1970). *Dissertation Abstracts International, 31*, 4542A.

Holmes, B. C., & Allison, R. W. (1985). The effect of four modes of reading on children's comprehension. *Reading Research and Instruction, 25*(1), 9-20.

Homan, S. P., Hall, B., & Topping, M. (1986). Does teacher oral reading of test items affect the performance of students of varying reading ability? *Journal of Educational Research, 79*(6), 363-365.

Klein, H. A. (1989). The effect of three testing modes—reading while listening, listening, and silent reading—have on sixth grade boys and girls. *Reading Improvement, 26*(4), 298-304.

MacGinitie, W. H., & MacGinitie, R. K. (1989). *Gates-MacGinitie Reading Tests* (3rd ed.), Chicago, IL: Riverside Publishing.

Miller, S. D., & Smith, D. E. (1990). Relations among oral reading, silent reading, and listening comprehension of students at differing competency levels. *Reading Research and Instruction, 29*(1), 73-84.

*Stanford achievement test* (8th ed.). (1988). New York: Harcourt Brace Jovanovich.

Sticht, T. G. & James, J. H. (1984). Listening and reading. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 293-317). New York: Longman.