# Story Grammar: An Approach for Promoting At-Risk Secondary Students' Comprehension of Literature

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## Abstract

This study compared 2 methods of teaching low-performing ninth-grade students to comprehend short stories. One method was an interactive comprehension strategy based on schema theory and story grammar. This method focused on identifying the important story grammar elements such as problem/conflict, main character, attempts, resolution, twist, character information, reactions, and theme. The comparison condition, traditional basal instruction, lasted 4 weeks. 32 students, including 6 special education students who met the screening criteria, served as subjects. Students were paired according to pretest scores and handicapping conditions and randomly assigned to 1 of the 2 treatments. Students' performance was analyzed on 4 measures (story grammar questions, basal questions, written retells, and theme questions) drawn from curriculum-referenced tests. The results indicated that students who had story grammar instruction performed significantly better on basal, story grammar, and theme questions, and on written retells, than students who had traditional instruction. Maintenance tests indicated that the effects of the intervention lasted for 2 weeks in all areas.

It is unfair to deprive low-track students of the potentially rich and stimulating experiences of analyzing and discussing works by authors such as Nathaniel Hawthorne, Dorothy Parker, Toni Morrison, or Guy de Maupassant simply because their reading ability is not as high as their peers (Goodlad & Oakes, 1988). However, pleas for literature instruction for at-risk students will go unheard unless we provide teachers with specific instructional strategies for teaching literary analysis to these students. Scaffolded instruction (Palincsar, 1986; Vygotsky, 1978) is a promising approach.

Scaffolding is a process that enables students to solve a problem or achieve a goal

that they could not accomplish on their own. Teachers work on skills and abilities that are emerging in the students' repertoires but are immature or undeveloped. In scaffolded instruction teachers often "think aloud," explaining to students explicitly how they reached a conclusion (Duffy et al., 1987). A major goal of scaffolded instruction is to create a shared language between students and teachers (Gersten & Carnine, 1986).

In order for teachers to "think aloud" and break down the process of making complex inferences into small steps, they must use some consistent framework or structure. One framework that has been used successfully in reading instruction is called *story grammar*.

## Research on Story Grammar

### Definition

Story grammar evolved from analyses of folktales conducted by anthropologists in the early 1900s. They found that, regardless of age or culture, when individuals retell stories they have read or heard, the retells follow a pattern. This pattern is referred to as story grammar (Mandler & Johnson, 1977; Stein & Trabasso, 1982; Thorndyke, 1977). Story grammar involves articulation of the character's problem or conflict, a description of attempts to solve the problem, and an analysis of the chain of events that lead to resolution. Story grammar also involves analysis of how characters react to the events in the story.

Mandler and Johnson (1977) found that children of all ages use their knowledge of how stories are structured to help them remember important details. This led researchers to investigate whether explicit story grammar instruction would improve comprehension.

### Instructional Research

In 1982, Singer and Donlan conducted a study to determine whether instruction in the elements of story grammar would improve high school students' comprehension of complex short stories. Students in the experimental group were taught five key story grammar elements (character, goal, obstacles, outcome, and theme). The students were also taught to generate both content-general and content-specific questions from these five elements. One story element was taught each day.

Results indicated significant differences favoring the experimental group in all aspects of comprehension except for theme. Though no formal aptitude-treatment interaction analysis was performed, a review of the descriptive statistics indicates that the treatment was more effective for the above-average-ability students than the lower-ability students.

The next group of story grammar researchers (Carnine & Kinder, 1985; Idol, 1987; Ryan & Short, 1984) worked with low-achieving elementary students. Their instructional approach was much more interactive than Singer and Donlan's. All derived teaching procedures from research on effective teaching (Brophy & Good, 1986; Rosenshine, 1986).

Ryan and Short's story grammar instruction was conducted in three 30–35-minute training sessions. They worked with 42 sixth graders with below-average reading scores on the Stanford Achievement Test. Students were taught to ask themselves five generic story grammar questions as they read and to underline the answers to these questions in the text. Feedback on the number of questions answered correctly was given to each student. Two measures were administered. During free recall, the students related the story to the teacher without prompts. Posttest measures revealed that less skilled fourth-grade readers trained in story grammar strategies did not significantly differ from highly skilled fourth graders.

Carnine and Kinder (1985) utilized four story grammar questions that were similar to Ryan and Short's. However, their instructional methodology was much more interactive. In addition to answering the story

grammar questions, students ended each lesson by creating a retell of important points in the story using the story grammar questions as a base.

The study included 14 fourth, fifth, and sixth graders in Chapter I and special education programs. The intervention led to a significant improvement in scores on short-answer comprehension tests and to a gain of over one standard deviation on students' free retell scores. Performance was maintained over a 2-week period.

Idol (1987) used visual story maps to teach the story grammar elements. The purpose of this study was to demonstrate that a story-mapping technique could improve the reading comprehension of students of all ability levels taught in heterogeneous groups. Twenty-two students from a combination third/fourth-grade class were randomly assigned to one of two groups. A multiple-baseline design was used.

During the first phase of the intervention, each group of students completed a story grammar map with the teacher. The teacher solicited information for the first component, setting. Then the students completed that section on their individual story maps by copying the response as the teacher filled it in on a transparency. This procedure was followed until all elements (characters, setting, problem, goal, action, and outcome) were addressed. After completing the maps, the students returned them to the teacher and independently wrote the answers to 10 comprehension questions.

During the second phase, students completed story maps independently as they read. They then assembled as a group. With the transparency, the teacher completed the story map based on individual responses. The students then made corrections on their maps and proceeded to answer the comprehension questions. The results indicated that comprehension continued to improve after modeling was discontinued, when story maps were completed independently,

and even when the teacher did not require story maps (maintenance).

These studies are important because they demonstrated that story grammar could be combined with research-based teaching techniques to develop a coherent instructional strategy for improving the comprehension of low-performing students.

In 1987, Gurney investigated whether these techniques could be adapted to teach comprehension of literature to low-performing ninth-grade students. The curriculum consisted of short stories from literature anthologies. Five students were taught the comprehension strategy using the modeling, guided practice, and independent practice paradigm of Idol (1987). The results of this small-scale study suggested that the intervention did improve student comprehension. No improvement was noted in student performance on retelling the significant elements of each passage, however.

## Purpose of the Study

The purpose of this study was to investigate the effects of explicit reading comprehension instruction on low-performing ninth-grade students' ability to comprehend short stories. An interactive instructional method was used to teach students a strategy (based on story grammar) for comprehending and analyzing complex short stories. This strategy assisted the students in identifying the main character, the problem or conflict that is facing the main character, character information, attempts, and resolution. The students were taught to detect and record these story grammar elements in an effort to build a foundation for answering literal and inferential questions based on the story.

The intervention was extended to afford the subjects an opportunity to learn and internalize the strategy. We hypothesized that students receiving story grammar instruction would perform significantly higher on posttest measures of reading comprehen-

sion than students receiving traditional literature instruction.

## Method

### Subjects

*Students.* Thirty-two ninth-grade students enrolled in two sections of basic English served as the subject pool. Basic English is a course for students who, in the teachers' opinions, cannot deal with the demands of the typical English course. Of the 32 students who participated in the study, six were identified as learning disabled (special education) and two were Chapter I program participants. All students scored at least 1 year below grade level as measured by the Advanced 1 Level of the reading (comprehension) subtest of the Metropolitan Achievement Test (Farr, Prescott, Balow, & Hogan, 1978). The means and standard deviations of the scaled scores on the Metropolitan Achievement Test were 746 (SD = 37) for the story grammar group and 737 (SD = 45) for the traditional group. These were not significantly different.

Students in each of the two sections were paired according to scores on the story grammar pretest (see the measures section below). One member of each pair was then randomly assigned to one of the two instructional conditions. During period 2, the 21 qualifying students were paired and randomly assigned. Similarly, during period 3, the 11 qualifying students were paired and randomly assigned. The six students with learning disabilities and the two Chapter I students were handled separately. They were placed into pairs and then randomly assigned to each of the two conditions, so that there were three special education students and one Chapter I student in each condition.

Mean raw scores on the story grammar pretest were virtually identical. Mean performance for the story grammar group was 9.07 (corresponding to 50.9% appropriate responses); mean performance for the comparison group was 8.81, or 49.7% appropriate.

*Teachers.* Two experienced teachers were involved in this study. To control for teacher effects, each teacher taught one story grammar section daily and one traditional section each day during the 19-day intervention period.

### Materials

The instructional materials included 15 short stories in which the main character experiences a conflict or a problem. The stories were taken from literature textbooks, basal readers, and student magazines. None of the stories was modified or rewritten. To provide the students with a variety of literary works, stories ranged from renowned classics (e.g., de Maupassant's [1979] "The Necklace" and Hawthorne's [1985] "The Birthmark") to contemporary selections that presented accounts of the dilemmas encountered by adolescents (e.g., "The Big Shot" and "Win or Lose"). The readability levels, as measured by the Dale-Chall Readability Formula, ranged from fifth to eighth grade.

### Measures

To evaluate the effects of the intervention, a pretest, posttest, and maintenance test were administered. The posttest was administered 2 days after the intervention ended, and the maintenance test was administered 2 weeks after the posttest. Each measure contained two stories; each was administered over a 2-day period. The purpose of these measures was to determine the extent to which the instructional methods improved the students' ability to answer a wide range of comprehension questions independently. The assessment passages were three to five pages long; they were of the same level of complexity as the instructional stories. See Appendix A for a sample assessment.

Each measure contained between five and seven story grammar questions (refer to questions 2–7 in App. A). The story grammar questions were derived from the set of general story grammar elements that

was taught during instruction. These questions were similar to the schema-general questions developed by Singer and Donlan (1982). Story grammar questions addressed critical information regarding the main character, the major problem/conflict, attempts, resolution, character information, reactions and theme (e.g., Who is the main character? Use the character information to tell what the main character is like. What is the author trying to say?).

All tests contained six basal questions (refer to questions 8–13 in App. A). Basal questions were taken from the literature anthologies from which the assessment passages were taken. These questions primarily required students to recall minor details of the story.

Finally, each assessment also contained a focused retell in which the students were asked to write what the story was about in five or fewer sentences. The intent was to assess whether students could provide a summary that included most of the important aspects of the story.

*Scoring.* Only the basal questions, which dealt with relatively minor details, had clear-cut right or wrong answers. Because the answers to many story grammar questions were not explicitly stated in the text, there was usually a range of appropriate answers for these questions. Therefore, to determine a range of correct answers, the measures were administered to 18 ninth-grade English students of average ability. Based on their responses, a set of acceptable answers for each question was compiled and point values were assigned.

*Reliability.* One of the researchers and an associate independently scored the subjects' responses on each of the tests. Differences in scoring were examined and reconciled. Interscorer reliabilities for the story grammar questions and focused retells ranged from .74 to .91, with a median of .77. Internal consistency reliabilities were computed for each test. The coefficient alpha reliability for the tests ranged from .78 to .84, with a median of .82.

Procedures

*Story grammar instruction.* The story grammar strategy was designed to improve reading comprehension through an interactive process that evolves between students and teachers. To that end, the comprehension strategy instruction consisted of a teacher-directed and a teacher-assisted phase. The instructional methodology was similar to the direct-explanation model used by Duffy et al. (1987), in which the teacher demonstrated the cognitive and metacognitive acts required to learn a skill. The components of the comprehension strategy were divided into four major categories: (*a*) conflict/problem, (*b*) character information, (*c*) attempts/resolution/twist, and (*d*) reaction/theme.

Before modeling the components of the comprehension strategy, the teachers told the students the purpose of the story grammar instruction—that they would be learning a strategy that would assist them in understanding stories and answering questions. Then, the teachers explained each story grammar component and provided examples of each story grammar element.

*Teacher-directed phase.* During the first phase (lasting 6 days), teachers demonstrated the elements of story grammar strategy in a systematic manner. Throughout this phase, the teachers recorded the story grammar elements on an overhead transparency of a note sheet. Appendix B presents excerpts from an actual note sheet completed by the teacher and students for "The Necklace" during this phase.

The teachers began with the four easiest, most literal story grammar elements: articulation of conflict/problem, main character, attempts, and resolution. With the second story, they introduced two more subtle elements—character information and reactions.

The students were told that character information can be used to determine what the characters are like and how they react to events in the story. It includes what the

characters look like, what they wear, how they talk, act, and so on. The teachers explained that there are occasions when authors do not specifically state characters' reactions; then the reader can use the character information to determine the reactions. The teachers gave several examples from the second and third stories.

For example, to determine the characters' reaction to losing the "diamond" necklace in de Maupassant's "The Necklace," the teachers said, "Based on this character information, I can decide how the characters reacted to (or felt about) losing the necklace. Let's review the character information to see how I decided on that reaction." The teachers recorded character information such as, "she turned toward him despairingly; they hunted everywhere; they looked at each other aghast; her husband got back into his street clothes and retraced their steps; he returned home his face pale and lined." Then the teacher said, "Based on this character information, I decided that the characters were very upset, alarmed, or panicked by the loss of the necklace."

During the third story, the six previous elements were reviewed and the teachers explained how they used these elements to determine a theme. The students were told that there may be more than one appropriate interpretation of the theme, but that themes must be related to the story grammar elements. For example, in determining a theme for "The Necklace," the teachers said,

> I am going to show you how I found a theme. Remember, the theme is what the author is trying to say. To find a theme, review the problem; use the character information—and the character's reactions to the problem; and review how the problem was solved. If there is a twist or complication in the story, you need to review that too.
> Let's review the notes that were written in these areas. [The teachers reviewed the information recorded on the note sheet.] The author might be telling us not to "put on airs" to make people think we

are something that we are not. In this story, Mathilde's husband was a clerk who made very little money. She used the money that he had been saving for several months and bought herself an expensive dress. She also borrowed the "diamond" necklace that ruined her good looks and her life for 10 years. She did these things only to make the others at the party think she was as wealthy as they were.

Finally, the students were taught a procedure for formulating a focused retell of each story.

*Teacher-assisted phase.* This phase lasted 6 days. The goals were (a) gradually to enable the students to use the comprehension strategy independently and (b) to increase discussion among the students and between the students and teachers. The teacher-assisted phase was divided into two segments, each covering three stories.

During this phase each student was given a note sheet (see App. B) for each story. As in the earlier phase, the story was read aloud to a designated point, and then the teachers asked a pertinent story grammar question. After each student responded, the teachers provided individualized feedback. If a student's response was unclear or too general, the teacher asked a more specific, follow-up question. At times, the teachers reminded the students of the appropriate step in the story grammar strategy. The goal here was to provide a scaffold for the students, to assist them only in those areas where assistance was needed (Palincsar, 1986).

After the group reached a consensus about the story grammar elements, the teachers recorded the information on a transparency. Students completed their own individual note sheets. For the first three stories, although students were told that they could copy what the teacher recorded, they were encouraged to use their own words. For the last three stories, no transparency was used. The group discussed each story grammar element, but

only after all students had recorded a response on their note sheets.

Every student was asked to write a retell after each story was read. Students were encouraged to use their note sheets as the basis for their brief essays. The students were monitored and given assistance as they wrote.

Determining themes continued to be difficult for the students. They tended to look for an overly contextualized moral. For example, a story was read in which the father, a frustrated runner, subjected his son to overly vigorous training to insure that he would qualify for the Olympics. The son's resentment toward his father increased over the years. Finally, at the age of 17, he quit running. A typical theme that the students stated in the earlier phases of instruction was as follows: "Parents shouldn't make their kids run." The students had difficulty assimilating the events and formulating a general statement that reflected the underlying meaning of the story. An acceptable theme that captures the deeper message would be: "People should not force their values, ideas, or interests on others."

Three techniques were used to ameliorate this difficulty. First, before asking the students to determine the theme, the teachers reviewed themes from previous stories to illustrate how the events in a story can be used to develop a general statement indicating what the author is trying to say. Second, a few examples of themes that would *not* be appropriate were offered for the story that was being discussed. Third, for each theme the teachers gave prompts that directed the students to a more general level (e.g., one of the themes for this story is about solving problems). If there was more than one theme for a story, a theme based on one prompt would be determined before a subsequent prompt was given.

*Traditional literature instruction.* The procedures outlined in the teachers' guides that accompanied all the stories provided the foundation for the traditional literature instruction. The teachers followed an effective instruction model (Brophy & Good, 1986) by apprising the students of the goals of the lesson, providing clear explanations, soliciting responses from all students, and providing relevant feedback. Each story was introduced by (a) defining pertinent vocabulary, as noted in the teacher's guide of the text, and (b) discussing background information to promote interest. The teachers and students took turns reading aloud, as was done in the story grammar condition. When students encountered a word they could not decode, the teachers pronounced the word and, when appropriate, provided the definition. The teachers also defined words that they thought the students might not comprehend.

After reading, the students responded orally to the discussion questions in the teachers' guides. Although most of the questions required the students to recall details and events, occasionally questions would require the students to express an opinion, make an inference, or discuss literary techniques.

To provide feedback to students who failed to make an inference, the teachers directed the students to the portion of the text that contained information that would help them formulate an answer. If the students continued to have difficulty answering the question, the teachers chose a volunteer to provide the answer and to explain how she or he formulated it. If the volunteer's answer was incorrect, the teachers provided the correct answer. A few short writing assignments were given throughout the study to add variety to the instruction. During the final portion of each lesson, the students were administered the multiple-choice or true-false comprehension tests provided by the publisher.

*Teacher training.* Two weeks prior to the study, the first author conducted the teacher training by explaining the instructional methods. He stressed the importance of becoming familiar with the stories, the steps of the story grammar study, and the teaching procedures for each condition. A

complete story grammar lesson was modeled (to students in a pilot study) to illustrate the procedures.

*Fidelity of treatment and classroom observations.* During the study, the teachers' strategy lessons were audiotaped daily. The researcher provided daily feedback based on these tapes. Once a week, a research assistant observed all story grammar and traditional groups. The purpose of these observations was to assess fidelity of treatment and to measure the students' on-task behavior. Every 5 minutes two visual sweeps of the class were made to determine the number of students who were on-task and off-task.

## Results

Three 2 × 2 analyses of variance (ANOVAS) were performed, one each on scores for (*a*) the story grammar questions, (*b*) basal questions, and (*c*) retell scores. To answer theme questions correctly, the student had to assimilate all of the story grammar elements. Therefore, a secondary analysis of theme questions was conducted to determine the effect of comprehension instruction on this process. In each analysis, the between-subjects factor was the instructional method (strategy vs. basal); the within-subjects (repeated) factor was time of the test (posttest and maintenance test). Table 1 presents the descriptive statistics for each measure.

The 2 × 2 ANOVA performed on the story grammar measure revealed a significant main effect for treatment, $F(1,30) = 5.05, p = .03$, indicating that the students receiving comprehension strategy instruction performed significantly better on both testing occasions than the students receiving traditional instruction. There was also a significant main effect for the time of test, $F(1,30) = 8.85, p = .006$. This was due to the decrease in scores from posttest to maintenance test for both story grammar and traditional groups (1.43 points and 1.94 points, respectively). No significant interaction was found.

A similar 2 × 2 ANOVA was used to compare the groups' performance on the basal questions. As mentioned earlier, these items, from basal anthologies, required the students to recall details of the story. Again, the students receiving strategy instruction performed significantly better on both occasions than the students receiving basal instruction, $F(1,30) = 4.72, p = .038$. No significant interaction was found. In addition, there was a significant main effect for the time of test, $F(1,30) = 14.54, p = .001$, reflecting a drop for both groups.

The 2 × 2 ANOVA used to compare performance of the students on the focused retell measure showed a significant interaction, $F(1,30) = 5.35, p = .025$. Because of the interaction, tests for simple main effects were performed. Treatment effects favoring the story grammar group were significant at both post and maintenance, $t(30) = 3.43, p = .001$ on the posttest, and $t(30) = 2.40, p = .01$ on the maintenance test. Though the effect was significant on both testing occasions, the magnitude of the treatment effect was higher on the immediate posttest than on the maintenance test.

A 2 × 2 ANOVA was used to compare the performance on the two theme questions on each testing occasion. The students receiving story grammar instruction performed significantly better than the students receiving basal instruction, $F(1,30) = 6.14, p = .019$. Again, no significant interaction was found, and the decrease in scores from posttest to maintenance test for both groups accounted for the significant main effect for the time of test: $F(1,30) = 7.77, p = .009$.

### Aptitude-Treatment Interaction

Multiple regression techniques were used to test for the presence of an interaction between pretest performance and treatment on posttest performance on the story grammar measure. We predicted that students who scored low on this part of the pretest would benefit more from the story grammar strategy instruction than from the

TABLE 1. Mean Scores and Standard Deviations for Story Grammar Questions, Basal Questions, Retell, and Theme Questions on Posttest and Maintenance Test

| Instructional Method | | Posttest | | Maintenance Test | |
|---|---|---|---|---|---|
| | N | M | SD | M | SD |
| Story grammar questions (20 points maximum): | | | | | |
| Story grammar | 14 | 13.43 | 2.24 | 12.00 | 3.10 |
| Traditional | 18 | 11.39 | 3.36 | 9.45 | 3.90 |
| Basal questions (10 points maximum): | | | | | |
| Story grammar | 14 | 9.35 | .97 | 9.03 | 1.18 |
| Traditional | 18 | 8.48 | 2.02 | 7.83 | 1.88 |
| Retell (8 points maximum): | | | | | |
| Story grammar | 14 | 5.79 | 1.37 | 4.21 | 1.25 |
| Traditional | 18 | 3.50 | 2.17 | 3.16 | 1.20 |
| Theme question (4 points maximum): | | | | | |
| Story grammar | 14 | 2.14 | .87 | 1.18 | 1.27 |
| Traditional | 18 | 1.06 | .94 | .86 | .85 |

traditional basal instruction and that students who scored high on this part of the pretest would do about as well in either treatment. Subsequent analyses indicated the presence of this type of ordinal interaction, as shown in Figure 1.

In the story grammar treatment, pretest performance was not significantly corre-lated with posttest performance on the story grammar measure ($r = .08$, not significant). In the traditional basal treatment, pretest performance was significantly correlated with posttest performance on the story grammar measure ($r = .60$, $p < .01$).

Story grammar instruction had a significant positive effect on students who ini-
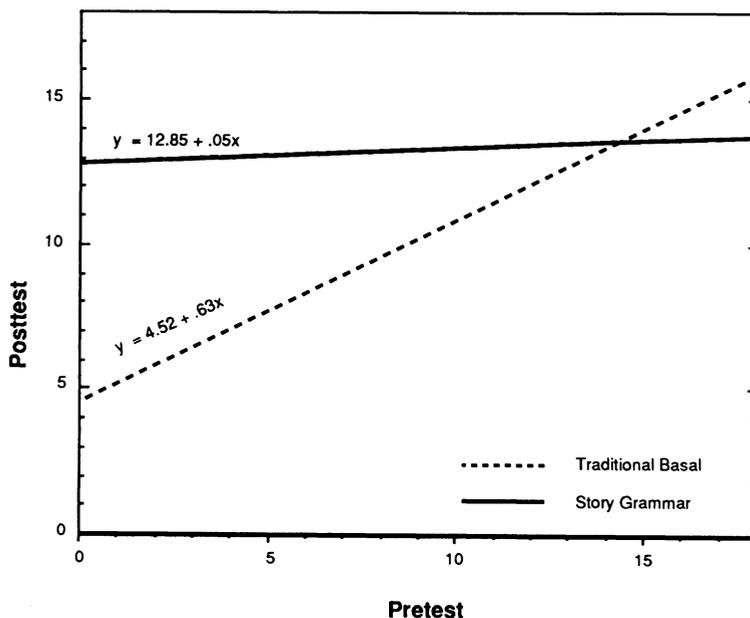


FIG. 1.—Interaction between performance on pretest and treatment with performance on posttest

tially performed poorly on story grammar items and no effect on those who initially performed well. The Johnson-Neyman technique (Pedhazur, 1982) was used to estimate the pretest score, below which the mean posttest scores differed significantly for the two groups. The critical value was 11.2; students who scored less than 11.2 on the story grammar part of the pretest did significantly better on the story grammar part of the posttest in the strategy treatment than in the traditional treatment. Fifteen students (47%) scored below this value on the pretest. In the upper end of the range, the differences between posttest scores for the two groups were not significant.

### Student Engagement

Each treatment group was observed four times during the intervention to measure the students' on-task behavior and to ensure fidelity of treatment. The results of the observations indicated that the students in the story grammar group were on-task 79% of the time, whereas students in the traditional group were on-task 65% of the time.

### Fidelity of Treatment

As previously mentioned, there were two sections of each treatment condition. Instruction was counterbalanced so that each of the two teachers taught a section of both treatment groups. Thus, there were a total of four instructional groups. A research assistant observed each of the four groups once a week using a rating form to assess fidelity of implementation. No significant deviations were noted over the 4 weeks.

In order to explore further the issue of differential teacher effects, we examined the relative performance of all four instructional groups. As shown in Table 2, all four groups were comparable on the pretest. On the posttest, no significant differences were found between the two sections within each of the two treatment conditions. This indicates that implementation was relatively consistent between the two teachers.

### Student Perceptions

The story grammar group felt that the strategy was explained well. They also liked the amount of assistance provided by the teachers. The traditional group also reported that they liked the stories and the way in which they were explained. When asked to name the two stories they liked the most, the majority of students in both groups chose the same stories—"The Big Shot," by Margaret Weymouth Jackson (1979), a realistic, exciting story about a teenage boy, and "My Father and the Hippopotamus," by Leon Hugo (1979), a humorous story about a British family living in Africa.

The students in the story grammar group were asked if the note sheets helped them to learn. Seventy-nine percent of the students stated that the note sheets did assist them in learning; 21% did not believe that the note sheets were of any help. When the students in the traditional group were asked about the difficulty of the true-false, multiple-choice, and vocabulary quizzes that served as the culminating activity for each story, 56% thought they were too easy.

## Discussion

The results of this study indicate that story grammar instruction significantly improved low-performing students' responses to basal, story grammar, and theme questions based on short stories and their written focused retells of them. Maintenance tests indicated that the effects of the intervention were maintained over a 2-week period. Story grammar instruction provided a framework that assisted students in assimilating and retaining story information. In all likelihood, the effects of the treatment resulted from the combination of scaffolded instruction and empirically derived effective teaching techniques.

The students were taught to build a foundation from which inferences could be drawn and themes determined. This was accomplished by first teaching them to detect the easier, overt story elements (i.e.,

TABLE 2. Student Performance by Percent on Measures Compared by
Treatment and Class Period

| Group | N | Pretest | | Posttest | |
|---|---|---|---|---|---|
| | | M% | SD | M% | SD |
| Story grammar: | | | | | |
| Period 2 | 10 | 56.8 | 12.8 | 73.8 | 6.7 |
| Period 3 | 4 | 56.4 | 8.9 | 80.0 | 6.9 |
| Traditional basal: | | | | | |
| Period 2 | 11 | 57.4 | 18.3 | 61.8 | 18.7 |
| Period 3 | 7 | 58.1 | 8.9 | 62.3 | 11.0 |

problem/conflict, main character, attempts, resolution, and twist). Then, during subsequent lessons, the students were taught to use this foundation to draw inferences (determine reactions based on character clues) and determine theme.

The interactive nature of the strategy was a critical aspect of the instruction. When the reading was stopped at designated points in the story, the students were given the opportunity to clarify and discuss the important elements of the story *as* they read. Eventually, student talk increased, and the students began to use information from the story and the responses of their classmates to motivate and assist them in formulating responses. The discussions became richer as the students began to emulate the thinking process that the teachers had modeled consistently.

An example of this interaction and the quality of the responses occurred when themes for de Maupassant's "The Necklace" were discussed. The teacher stated that "the author is trying to tell us that we should not show off or try to lead people to believe we are rich." After this theme was given, a student stated that he disagreed with that theme. He offered his theme and justified it with information from the story that was recorded on the note sheet. He felt that the author was telling the reader that it is better to tell the truth. He justified his response with the following rationale: if Mathilde had told the truth to the woman

who lent her the "diamond" necklace, she would not have ruined her life trying to pay for it.

Students at all levels of ability contributed to discussions about the stories. As the aptitude-treatment interaction analysis indicates, students who were initially low achieving performed at levels comparable to their higher-achieving peers after receiving story grammar instruction.

In the present study, the students received 19 days of story grammar instruction, which was significantly longer than in previous studies (Carnine & Kinder, 1985; Singer & Donlan, 1982). The extended intervention of this study appears to have provided the students with adequate guided practice to assimilate the strategy.

There was also a positive effect on the relatively difficult written retells. Gordon (1981) found that schema-derived instruction resulted in dramatic increases in the quality of retells. The story grammar scaffold seems to provide students with a vehicle for retrieving relevant information and discriminating relevant from unimportant information. However, there was a significant decrease in the story grammar group's scores for written retells from posttest to maintenance test. One reason for this outcome may be the effort involved in formulating an appropriate retell. That is, the students had to identify the important information (i.e., main character, attempts, resolution, and twist). Then they needed to

incorporate this information into a coherent retell consisting of five or fewer sentences. This was a demanding task for many of these students. The significant interaction on this subscale may also be attributed to the lack of practice in writing retells between the posttest and the maintenance test. Many students may have forgotten the procedure for composing retells. If the length of the intervention had been extended, the students may have been able to retain the procedure for formulating retells.

There was also a substantial decrease in the quality of the themes generated by students on the maintenance test. One hypothesis explaining limited utilization of the procedure for determining themes on the maintenance test is interference effects of students' prior learning. In the early grades, students learned that a theme was the "moral of the story." When confronted with complex literature, students often searched for a moral or message. When they could not find one, they resorted to well-worn platitudes, often of dubious relevance to the story at hand.

Instruction in the story grammar condition was based on "effective teaching" techniques (Rosenshine, 1986). As expected, student engagement was high. Both teachers reported that students' involvement in story grammar groups was high throughout the intervention, while that of the traditional groups deteriorated as the study progressed. This is substantiated by the decline in the traditional group's engagement rate during the latter half of the intervention, with no comparable decline for the story grammar group. The appropriate behavior of the experimental group was attributed to the modeling and teacher-assisted phases, the explicit comprehension instruction, and the interactive nature of the strategy.

The instruction required the students to become increasingly responsible for utilizing the comprehension strategy. The story grammar students were informed that, as the instruction progressed, the teacher's role would diminish while students' responsibility for recording and discussing information would increase. This technique instilled a sense of accountability that contributed to the active participation of the students, evidenced by the number and quality of the discussions that transpired.

Conversely, as basal instruction progressed, the students became bored. They appeared to be following along as others read; however, many students did not know where to begin when they were asked to read. Consequently, the increasing off-task behavior was reflected in the deteriorating quality of the discussion and in students' performance on the comprehension tests that followed each story.

It must be borne in mind that the students participating in this study had not been successful in comprehending literature in the past. Though story grammar instruction was systematic, it did not utilize a "skills" approach. The strategy taught in this study provided students with a foundation on which deeper understanding could be built. Explicit story grammar instruction clarifies, expands, and helps students organize ideas they intuitively have.

Teachers conducting story grammar instruction must be receptive to the interactive nature of the approach. They also must realize that, in order to improve reading comprehension, it will be necessary to teach literature using an unconventional method, a method that requires them to explain how they think and to model the metacognitive process in comprehension. It was evident from the discussions that took place during the intervention that students were beginning to realize that the study of literature could be an exciting endeavor. They began to read with an investigative and analytic sense that led to an understanding of the importance of the relationship between the characters and events. Story grammar instruction provided them with the framework they needed to decipher systematically and logically the intricacies of complex short stories.

These impressions of the utility of story grammar were validated in the interviews that were conducted with the students after the study was completed. One student commented that what he liked best about the instruction was that "the teacher separated the categories of how they wrote the story." Other students stated, "The teacher went over things so that you understood them; the note sheet's got everything you need to understand the story; it was easier to understand and learn; I learned a lot more in this class—I didn't used to read the whole story but now I do; and it helps you understand how to read and understand stories better." Another student said, "I liked it because it was in a group, not individual. Even shy kids came out and talked."

## Appendix A
### Sample Assessment for "Take Over, Bos'n" by Oscar Schisgall

*Name* _____ *Date* _____

1. Tell what the story is about in 5 sentences or less. _____
2. Who is the main character? _____
3. Use character clues to tell what the main character is like. _____
4. What is the main character's problem? ___
5. How does the main character try to solve the problem? _____
6. How does the problem get solved? _____
7. What do you think the author is trying to say?
8. As the story opens, how long had the men been drifting in the lifeboat? _____
9. As Snyder fell asleep, what words did he whisper to Barrett? _____
10. When Snyder wakes up,
    a. all of the water is gone.
    b. they have been rescued.
    c. Barrett is offering Snyder some water.
    d. Barrett points a gun at him.
11. Jeff Barrett
    a. threatened to throw Snyder overboard.
    b. taunted Snyder about falling asleep.
    c. drank an entire canteen of water.
    d. jumped Snyder when he started to doze.

12. Snyder promised to ration the rest of the water when
    a. they sighted land.
    b. evening came.
    c. the bos'n fell asleep.
    d. the men stopped quarreling among themselves.
13. The crew members were rescued by the tramp
    a. Groton.
    b. Ascension.
    c. Montala.
    d. Lugerton.

## Appendix B
### Sample Note Sheet from Lesson on "The Necklace"

*Name* _____ *Date* _____
*Story* _____

1. Main Character or Protagonist _____
   Mathilde

2. Character Clues     She turned toward him despairingly     They hunted everywhere     They looked at each other aghast     Her husband got back into his street clothes and retraced their steps, he returned home his face pale and lined

3. Reactions: How do the main characters REACT or FEEL about important events in the story?     They were upset, alarmed or panicked by the loss of the necklace

4. Name the problems or conflicts. Circle the main problem or conflict.     Invitation to a dance and Mathilde has nothing to wear
   No jewelry for new dress
   Mathilde lost the necklace (circled)

5. How do the characters TRY to solve the problem?     They looked through the folds in the dress to find necklace     He went to the police     They retraced their route home     They found a similar necklace in a jewelry store

6a. Tell how the problem GETS SOLVED or DOES NOT GET SOLVED.     They borrow money to buy a new necklace and work for 10 years to pay it off.

b.  Is there an ADDED TWIST or COMPLICATION at the end of the story? Tell what happens at the end of the story if it is different than what you said in part 6a. The necklace was made out of plastic

7.  Theme: What is the author trying to say? The author may be telling the reader not to "put on airs," to make people think we are something we are not.

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