A study was conducted (1) to determine if children select some strategies more frequently than others to comprehend story categories, and (2) to find out if children are able to talk about what they are thinking and doing as they read stories from a basal reader. Subjects, 30 second grade students reading at grade level, were randomly assigned to read one of two narratives, responding orally at predetermined points. Children's retellings were transcribed and scored. Results indicated that the children were competent in reporting what they were thinking and doing as they read the basal. Specifically, when students read statements from either the initiating event category or the setting category, they reported using elaborative strategies (inference, personal identification, and image); by contrast, a significantly greater number of nonelaborative strategies (literal/paraphrase, self-interrogation, and no response) was reported for attempt, internal response, and reaction story categories. No significant differences in the use of the two kinds of strategies were found for the consequence strategy. (JL)
Background and Purpose

Evidence has accumulated which suggests that certain story constituents, or categories, are recalled better than others. Stein and Glenn (1979), for instance, found that with few exceptions children tend to remember settings, initiating events, and consequences better than the internal responses, attempts, and reactions of story protagonists. This preference for certain story categories over others is so strong, in fact, that during free recall primary school youngsters have been shown to reword information originally presented in the internal response and reaction categories in order to make it fit into one of the three favored categories (Nezworski, Stein, and Trabasso, 1982).

Attempts to develop a processing theory of importance that will account for the observed salience of certain story constituents over others continue to dominate the story grammar literature (e.g., Omanson, 1982; Weaver and Dickinson, 1982) along with critiques of these attempts (Handler, 1982; Stein, 1982). Largely missing from this literature, however, is a description of the strategies children employ while reading text contained within the various categories.

Aside from some preliminary findings reported by Alvermann and Phelps (Note 1), it is not known whether children's recall preferences for certain story constituents extend to their strategic preferences as well. That is, do they select some strategies more frequently than others to comprehend specific story categories? This is one of the questions addressed in the present study.

The second question is related to Olson's (1977) theory on the development of literacy in young children. According to this theory, "comprehension...may be represented by a set of procedures that involves selectively applying one's personal experiences or knowledge of the world to the surface structure of sentences to yield a meaning. In so doing, one elaborates, assimilates, or perhaps 'imagines' the sentence (p. 272)." While this implies that young children do employ strategic knowledge to comprehend text, no empirical data exist to suggest that they are aware of this knowledge, much less that they are capable of reporting its use in conjunction with specific story categories. In fact, the literature (cf. Brown, Bransford, Ferrara, and Campione, 1982) suggests that children's ability to think about thinking is a function of age-related differences and reading proficiency.

However, as Hare and Smith (1992) have pointed out, much of the metacognitive research involving young children has been limited to a study of their reactions to hypothetical reading situations (e.g., Myers and Paris, 1978) or to deliberately altered text (e.g., Markman, 1979; Winograd and Johnston, 1980). Under more naturalistic conditions, would these same findings apply? That is, can we expect young children to talk about what they are thinking and doing as they read stories from a basal? Although posed lastly, it is obvious that this question forms the basis for asking the first.
Method

Subjects. Thirty second graders (11 girls and 19 boys), randomly selected from four classes within a small Midwestern city district, comprised the sample. All were reading on grade level as determined by their standardized reading achievement scores and their placement in Level 6 of Ginn 720.

Stories. Two narratives from Daisy Days (Level 2-1, Scott, Foresman basal reader) were slightly modified to meet Stein and Glenn's criteria for well-formed stories. Each story was read in its entirety, but only 12 target statements per story were analyzed. These included 2 statements in each of the following ordered categories: setting, initiating event, internal response, consequence, and reaction.

Procedure. Students were randomly assigned to read one of the two narratives. Two trained research assistants provided each child with a 30-minute individual practice session in "thinking aloud" prior to introducing the experimental passage. Scripted directions read at both the practice and experimental sessions required students to read orally until they reached a red dot (the end of a sentence). At that point, individuals were told to stop and talk about what they were doing or thinking as they read. At the close of the experimental session each child was asked to tell a friend, who was not a participant in the study, what he or she remembered most about the story. Finally, tape recordings of each child's oral reading, "think aloud," and retelling were transcribed. All retellings were scored for the total number of target statements accurately recalled, using gist criteria. Two independent judges achieved 94 percent agreement in their classification of students' recall of statements within the various story categories. Disparities in classification were resolved through conference.

Results

Since preliminary data analyses revealed no reliable differences for story or gender, scores were collapsed across these variables in all further analyses. The previous pattern of recall was replicated; that is, the mean proportions of category statements recalled for settings (.68), initiating events (.70) and consequences (.75) did not vary appreciably from one another but they did exceed attempts (.32), internal responses (.28), and reactions (.08).

Once this pattern had been established, it was feasible to analyze strategies named in a child's think-aloud to determine if they differed as a function of the story constituent. Subjects' introspectively reported strategies were classified by two independent raters (with 93 percent agreement) who used strategy types identified in previous research (see Alvermann and Phelps, Note 1). Definitions of those strategy types and examples of children's responses from the present study that qualified for inclusion are listed below. The same target statement is used for comparative purposes.
Target Statement (Setting):
Little Hippo lived in the city zoo with his mother.

<table>
<thead>
<tr>
<th>Strategy Type</th>
<th>Definition</th>
<th>Example of Student's Response</th>
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<tbody>
<tr>
<td>1. Inference</td>
<td>An interpretation of story resulting from having pieced together information stated in the text but not necessarily free of one's prior knowledge.</td>
<td>&quot;To me that means he didn't--that they caught him and he didn't want to go but he went because his mother went.&quot;</td>
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<tr>
<td>2. Personal</td>
<td>A personal reference in relation to the story.</td>
<td>&quot;I'm thinking that I'm the hippo, and I live with my mother.&quot;</td>
</tr>
<tr>
<td>Identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Image</td>
<td>A concrete visual, auditory, tactile, taste, or olfactory reference.</td>
<td>&quot;I see--um--him living in his little cage and laying down.&quot;</td>
</tr>
<tr>
<td>4. Literal/Paraphrase</td>
<td>A verbatim or slightly changed reference that does not add anything new to the original text.</td>
<td>&quot;To me it just says that they lived at the zoo.&quot;</td>
</tr>
<tr>
<td>5. Self-Interrogation</td>
<td>A questioning comment about &quot;Yeah?&quot; the story that does not add anything new to it.</td>
<td></td>
</tr>
<tr>
<td>6. No Response</td>
<td>Student makes no comment but moves on to the next sentence in the story.</td>
<td>---</td>
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</table>

Strategy types 1, 2, and 3 were classified as elaborative in nature, whereas types 4, 5, and 6 were termed non-elaborative. The proportion of elaborative and non-elaborative strategies reported per story constituent for each child served as the unit of analysis.

Differences between the proportion of elaborative and non-elaborative strategies reported for each story constituent (constituents ordered by recall preference) are shown in Table 1. These differences were tested statistically for each story category using Yates' corrected chi-square analyses. As indicated in the table, when students read statements from either the initiating event category or the setting category, they reported using elaborative strategies significantly more often, $X^2 (1) = 9.63, p < .01$ and $X^2 (1) = 5.63, p < .05$, respectively.

By contrast, a significantly greater number of non-elaborative strategies were reported for the following story categories: attempt, $X^2 (1) = 5.63, p < .05$; internal response, $X^2 (1) = 4.03, p < .05$; and reaction, $X^2 (1) = 9.63, p < .01$. No significant difference was found between the use of elaborative and non-elaborative strategies for the consequence category.
Discussion

The major purpose of this study was to investigate whether young children report using certain types of reading strategies more frequently than others to comprehend preferred story categories, namely, settings, initiating events, and consequences. Basic to accomplishing this purpose, of course, was the question "Would children as young as second graders be metacognitively aware of their strategic behavior and given that, would they be able to report it?"

The results clearly indicate that the children in this study were competent in reporting what they were thinking and doing as they read stories from a basal. The fact that students were asked to stop and report their thoughts after each sentence was no doubt intrusive, but as Garner and Alexander (1982) have noted, probably unavoidable, for "without such stop-points, intratask reader verbalization about strategic behavior would be lost" (p. 147).

In addition to the problem of intrusiveness is the difficulty encountered when one attempts to draw implications from what readers say they have done versus what they may actually have done. Findings from the verbal self-report literature involving both adults (e.g., Hare and Pulliam, 1980) and children (Forrest and Waller, Note 2) are tentative at best. Still, evidence of image making such as in the following partial transcription of Subject #14's think-aloud lends some credence to the presumed parallelism between verbalized and actual strategy behavior.

Target Statement #3 (Initiating Event): "But one day some workers came."

Subject #14: "Okay, well...I could almost see the, uh, hippo's face, uh, wondering what was hap...happening, um... Like what in the world was going on here (laugh)."

Target Statement #4 (Initiating Event): "They took Little Hippo's mother away."

Subject #14: "Well I could almost see him...okay, him or her, whatever! Kind of cryin' or weepin'...whatever hippopotamuses do!"

Although the types of strategic activity reported appear more limited among second graders than among fourth graders involved in a similar study (cf. Alvermann and Phelps, Note 1), the relative frequency of the various strategies per story constituent is somewhat consistent. As in the earlier fourth grade study, inferencing was reported more frequently during the setting and initiating event portions of the story than in the other story categories. Likewise, personal identification was reportedly used more frequently during the setting. This preference for inference and personal identification during the setting and initiating event seems reasonable given that readers may feel the need to "fill in" missing information (using both textual and prior knowledge clues) more so during the early stages of a story's development than during the later stages.

It is unclear why children in the present study recalled story consequences equally as well as settings and initiating events, yet failed to report more elaborative than non-elaborative strategies as they read the consequence statements. This break in what appeared to be a pattern (i.e., the tendency to report..."
a greater number of elaborative than non-elaborative strategies when processing the more salient story constituents) may have been due in part to the particular stories read. For example, both "The Little Hippo" and "Gustav Green" contained plentiful redundancies and strong inferences unique to the story consequence. As a result, perhaps children felt no need to elaborate further on this constituent (cf. Whaley, 1981).
Reference Notes


References


