A pilot study examined to what degree answers that students supply on basal reader workbook pages are integrated with understanding the words in the story or with understanding the story itself. The sample consisted of 27 workbook pages from 5 fourth-grade basal reading programs with a 1989 copyright date. Two simple content analyses were applied to the pool of stories drawn from the basal reading programs. Results indicated that (1) there was generally a lack of workbook integration at the "surface" level for the majority of publishers; (2) there was generally a lack of workbook integration at the "deep" level for all publishers; and (3) 44% of all the workbook pages reviewed (12 out of 27) were not integrated with the story they accompanied at all. Findings suggest that the lack of workbook integration with reading books should be recognized and considered when adopting, purchasing, and planning to use basal reading materials. (Contains 2 tables of data.) (RS)
Integration of Workbook Activities and Basal Reader Stories:
A Pilot Study

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Introduction

Recent statistics tell us that roughly 90 percent of all elementary classrooms in the U.S. use basal reading programs to teach reading (Reading Today, 1989). Further, regardless of classroom organization, students spend as much or more time working independently in their workbooks as they do working with their teachers (Osborn, 1984). These findings indicate that a large percentage of elementary students in the U.S. spend a large percentage of their time learning to read by working in workbooks.

But, how does practice compare to research?

Reading research supports use of an interactive approach to teach reading. Interactive theory explains that to get meaning from printed text, the reader makes use of prior knowledge and the printed text. Hypotheses are formed using semantic, syntactic, and graphophonemic information (Vacca, Vacca, & Gove, 1987). Simply put, readers bring new learning to knowledge they already have by using reading skills interactively. It makes sense then that workbooks be integrated with the story in the reading lesson.

Workbook pages, however, can be related or unrelated to the story. In addition, when workbook pages are related to the story, they can be related in different ways. Previously, workbook pages have often been unrelated to the story. They focused on decoding skills and comprehension skills rather than the story they accompanied. The workbook pages that were related to the story often focused on skills to comprehend words in the story rather than understanding the story itself.

Today the increased popularity of "Whole Language" approaches and "Literature Based" instruction, coupled with studies sponsored by federal agencies
urging educators to evaluate and select workbooks based on their integration with text (Dole & Osborn, 1989; Osborn, 1984), may be having an effect on publishers.

This study seeks to describe two ways that current workbook pages are integrated with the reading book. The research questions are:

1. To what degree are answers that students supply on a workbook page integrated with understanding the words in the story?
2. To what degree are answers students supply on a workbook page integrated with understanding the story itself?

Publishers claim that their newest programs are highly integrated. Therefore, the hypothesis is:

Answers students supply on workbook pages are highly integrated with understanding the words in the accompanying story or highly integrated with understanding the accompanying story itself for a majority of the publishers.

Methods

Sample

The sample for this pilot study included 27 workbook pages from five fourth grade basal reading programs with a 1989 copyright date. To be certain that a fair and accurate comparison was made several variables were controlled prior to making the random selection of the story from the reading book: A content analysis approach was used. This approach is a quantitative strategy for looking at textual material. Content analysis (Berelson, 1952) identifies specific categories objectively and uses systematic,
unbiased selections of material. Content analysis is may be replicated and draws valid references from data to their content (Krippendorf, 1980).

1. Only books from one grade level were selected. Fourth grade was selected because of the changed emphasis from "learning to read" at the primary level to "reading to learn" at the intermediate level.

2. Only narrative texts of five pages or more were selected because text type or selection length could influence workbook page content.

3. Selections in the first and last units in each book were not included because they tend to focus on review and/or preparation for testing.

4. Only the selections that were accompanied by four or more workbook pages were included to allow a range to emerge for each publisher.

Once a pool of stories had been developed for each book, they were consecutively numbered. Numbers were then drawn from a hat one at a time to determine the selection to be used for each publisher. The number was returned to the hat after each drawing.

**Technique**

To determine if the workbook activities were integrated with the accompanying pages from the reading book, two simple content analyses were applied to the sample defined above. One analysis was at the "surface" level and one analysis was at the "deep" or meaning level (Smith, 1975). Smith defines "surface" structure as "the physical characteristics of language" (p. 84), while "deep" structure refers to the meaning
that lies beyond the sounds of language and involves the "underlying thought processes of the language user" (p. 84)

After reading the selection in the reading book, the researcher wrote down the gist of the story. Next the researcher read each workbook page and reviewed each suggested answer. The researcher then rated each workbook page on two 1 to 5 Likert scales. The first rating was for the degree to which the workbook page was integrated with the story at the "surface" level and the second rating was for the degree to which the workbook page was integrated with the story at the "deep" level (1 being not integrated and 5 being highly integrated).

The rating for degree of "surface" integration was based on the percentage of answers per page that the students were expected to supply that helped them decode or understand words in the accompanying story. The story was reviewed for each significant word in each answer for validation of this rating. An example of words considered significant were: despondent, airborne, and gouged. An example of words considered insignificant were: of, in, and that.

The rating for degree of "deep" integration was determined by the percentage of answers per page that the students were expected to supply that helped them understand the story. First, each answer was compared to the written gist. If little or no integration was found, the story in the reading book was reviewed again with the knowledge of the content of the workbook page to determine if there was a previously unnoticed integration.
Results

A mean rating was used to determine the degree of workbook integration at the "surface" level and at the "deep" level. These mean ratings are shown for each publisher in Table 1. Two of five publishers received mean ratings above 3 for "surface" level integration and zero out of five publishers received mean ratings above 3 for "deep" level integration. The hypothesis, therefore, was not supported as a majority of publishers did not evidence high degrees of integration at either level.

The standard deviation for each mean shows wide variation because the integration rating on both the "surface" level and the "deep" level ranged from 1 to 5 for each publisher. Since the distributions do not approximate the normal curve, frequency distributions of the ratings are shown in Table 2.

Conclusions

There are three major findings from the information presented above. The first is that there is generally a lack of workbook integration at the "surface" level for the majority of publishers. The second major finding is that there is generally a lack of workbook integration at the "deep" level for all publishers. The third major finding is that 44% of all
the workbook pages reviewed (12 out of 27) are not integrated with the story they accompany at all.

When workbook pages are integrated, they are more likely to be integrated on the "surface" level than on the "deep" level. All publishers, however, make some effort to integrate their workbooks on both "surface" and "deep" levels. This is evidenced by each publisher having at least one rating of 5 at each level. Some workbook pages are highly integrated on both "surface" and "deep" levels as evidenced by three pages with 5-5 ratings as shown in Table 2.

The evident lack of integration of workbook pages with the stories they accompany in basal reading programs may have many explanations. The lack of integration may be the only way to develop skills in a sequential manner or it may be the only way to keep reading books a manageable size or a reasonable price. Whatever the reasoning, there are two implications.

The first implication is for publishers of basal reading programs. Current reading theory suggests that purposefully applying skills to natural texts in a way that is meaningful for the learner results in increased understanding. The integration of workbook pages with the reading book at both the "surface" level and particularly the "deep" level is a good place to begin. The fact that every publisher reviewed was able to do this in at least one instance for each level points to this possibility.

The second implication is for elementary teachers of reading. The lack of workbook integration with reading books should be recognized and considered when adopting, purchasing, and planning to use basal reading materials. This does not mean that basal programs should be discarded. Basal programs have generally improved the quality of literature they include and, as evidenced in this study, some workbook pages
are highly integrated at more than one level. Teachers, however, must exercise their professional judgment when using these materials rather than just following the program.

Limitations

This study is limited in several ways. First, the sample was limited to materials of five publishers currently available in an Instructional Resources Center. Second, the sample was limited to one grade level. Third, the sample was limited to workbook pages that accompanied one type of text of a minimum length. Fourth, the size of the sample was small. Further research is therefore warranted at various grade levels for all reading programs by other researchers.

Due to these limitations, the researcher does not presuppose that the findings are generalizeable to all workbooks of all basal reading programs. Instead, suggestions are offered to elementary educators to find out about their own basal reading programs themselves. A challenge is also offered to publishers of basal reading programs to improve the quality of their products.
References


Bibliography


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Note: The higher the rating, the greater the integration. (5 = high; 1 = low); n = number of workbook pages analyzed.
Table 2

Frequency Distribution by Publisher of Rating for Word and Item Integration

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Note: In the column labeled Rating, "S" denotes rating for surface structure integration and "D" denotes rating for deep structure integration. N = number of workbook pages analyzed. Likert scale numbers are listed only for those levels which are significant.
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