Interest and Learning from Text
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Interest and Learning From Text

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Dewey (1913) suggested some time ago that trying to find out what is of interest to students is an important part of schooling; on the other hand, "making things interesting" is artificial and often unsuccessful. Two studies investigating the placement of interesting detail in a text about a physicist and his scientific work are reported here. In both studies, undergraduate students were asked to read the science text under a variety of conditions and then to recall important information on a set of measures. Results indicated that attention of students was diverted from important generalizations in text to interesting, sometimes irrelevant, detail. Placement of the detail did not affect recall, but overall interestingness of the text did, particularly if students knew little about the topic of the text. Implications for instruction are discussed.

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Dewey (1913) pointed out many years ago that interest is a critical factor in school learning. He noted that no students totally lack interest and no students have impartially distributed interest. When students are interested in a topic or an activity, they are engaged “in a whole-hearted way” (p. 65). Dewey urged teachers to discover what students’ interests are.

An appeal to discover interests as a means of enhancing learning is supported by recent text comprehension research with children and adults. For instance, Asher and his colleagues (see Asher, 1980, for a summary) found that when children were asked to rate pictorial representations of topics as interesting or uninteresting, the same children performed better on text comprehension tasks when texts presented information on topics of high, rather than low, personal interest.

In another study with children, Renninger (1989) found that when they were presented with passages of high and low interest, children were much more successful in recalling information on an identified interest. They were also less likely to make comprehension errors on passage content of interest.

In a related study with adults, Schiefele (in press) found that undergraduates with high interest in a topic did not differ from peers with low interest in their ability to answer questions about individual facts stated explicitly in the texts. However, high-interest and low-interest students did differ in their ability to answer questions about multiple facts stated explicitly in the texts and, particularly, in their ability to answer questions that required recombination, comparison, or application of text information to novel situations. Schiefele claimed that interest exerts greater influence on deeper levels of comprehension.

Shirey and Reynolds (1988) designed a recall task for sentences of varying interest to adults. In their study, sentences rated as “very interesting” (7) to “not at all interesting” (1) were presented to undergraduates who were asked to read and recall them. Highly interesting sentences were recalled much better than less interesting sentences.

Taken together, these studies indicate that both children and adults understand and remember information better when asked to read about a topic of high interest, rather than about a topic of low interest. It seems unarguable, then, that teachers should present students with texts of high personal interest whenever possible.

Though Dewey (1913) argued persuasively for attention to interest in schooling, he also cautioned against “fictitious inducements to attention” (p. 7). He suggested that when things have to be made interesting for students, the things are, in fact, no more interesting than before. Interest is not a quality waiting around to be excited from outside.

This caution is very important as we consider what has come to be labeled the seductive detail effect in learning from text. That effect is the result of “punching up” school texts with highly interesting, but usually unimportant (and thus seductive), detail. The effect can be summarized

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briefly: Interesting detail is recalled, but important generalizations are not.

Garner, Gillingham, and White (1989) designed two of the earliest studies of the seductive detail effect. In these studies, children and adults were asked to read a three-paragraph text on the topic of differences among insects. Information in the text had been rated for importance and interest. Raters had found generalizations about insect differences to be very important, but not even moderately interesting. On the other hand, they had found detail about clicking beetles, buzzing flies, and ravenous snakes to be very interesting, but not even moderately important. The divergence in importance and interest can be seen in the first paragraph of the Garner et al. (1989) text, where an important generalization appears in the first sentence and interesting detail about clicking beetles appears in the middle of the paragraph:

Some insects live alone, and some live in large families. WaspS that live alone are called solitary wasps. A Mud Dauber Wasp is a solitary wasp. Click Beetles live alone. When a click beetle is on its back, it flips itself into the air and lands right side up while it makes a clicking noise. Ants live in large families. There are many kinds of ants. Some ants live in trees. Black Ants live in the ground. (p. 46)

At each age level, half of the readers read the entire text with interesting detail and half read it without interesting detail.

Recall of important information in text differed dramatically by condition for both children and adults. For instance, whereas adults who read the text without the interesting detail recalled an average of 93% of the ideas rated as most important, adults given interesting detail recalled an average of only 43%. Interesting-detail readers recalled a combination of important and interesting information. In no case did they recall all ideas rated as most important.

Similar results emerged from a study conducted by Wade and Adams (1989). They asked college students to rate sentences for interest and importance in a text about Horatio Nelson. Rated as high interest/low importance were interesting-detail statements such as “During the battle, Nelson’s right arm was badly mangled up to the elbow” and “She fell in love with the battered, one-eyed, one-armed naval hero and became his mistress.” These statements can be contrasted with generalizations rated as being of high importance: “It was his knowledge of navigation and his talent for getting along with his men that helped him to rise so rapidly in the service” and “The Battle of Trafalgar was the greatest naval victory in British history, and it won the war for Great Britain.”

A similar group of college students then read the Nelson text and completed a free-recall task. Interest was a better predictor of recall than importance. In fact, the category of information best recalled was high interest/low importance (i.e., the interesting detail).
Taken together, these studies support Dewey's admonition not to try to make texts interesting for students who would otherwise be uninterested in them. It seems that "punching up" a text does not increase the memorability of important information. It may be detrimental to that goal in that the students' attention is diverted to interesting detail (Hidi & Baird, 1988; Wade, in press).

The research reported here continued investigation of the seductive detail effect in learning from text. Two studies with adults are reported. In the first study, we manipulated both general interestingness of text and placement of highly interesting details. In the second study, we again manipulated text interestingness and placement of detail; in addition, we pretested study participants for domain knowledge related to the target text.

Our rationale for manipulating general interestingness of text was that interesting detail may be interesting simply by virtue of its standing out in generally uninteresting text. Early work done by Hidi and her colleagues (see, e.g., Hidi, Baird, & Hildyard, 1982) suggested that, whereas narratives in school textbooks were usually rated as having a number of interesting ideas, expositions in school textbooks (similar to the text used in the present study) were usually rated as having very few interesting ideas. Though interest in topic and text varies by individual reader (Wigfield & Asher, 1984), it is common for both teachers and students to describe expositions in textbooks as dull. We wanted to investigate the seductive detail effect for texts at different levels of general interestingness.

Our rationale for manipulating placement of interesting detail was that we expected that students might be less vulnerable to the seductive detail effect with texts that isolated interesting detail as an informational aside, rather than embedding it in paragraphs presenting important generalizations. The use of asides would signal a distinction in importance of information (Hare, Rabinowitz, & Schieble, 1989; van Dijk & Kintsch, 1983). Such signaling is generally considered to be essential for less experienced or less skilled readers, who encounter difficulty in constructing generalized meaning from generalizations, relevant detail, and irrelevant detail in text (Kintsch, 1990).

Domain knowledge became a consideration when we speculated that interest in a text might be determined, at least in part, by how much a reader knows about the topic of that text. With Kintsch (1980), we expected that interest might be low with little or no knowledge and higher with more knowledge.

**Experiment 1**

**Method**

*Participants.* Forty-eight undergraduate students participated in the study. Students were randomly assigned, in equal numbers, to one of four

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treatment combinations. Each group received a different form of text. In Experiment 1, no attempt was made to select or assign participants on the basis of domain knowledge related to the target text.

**Materials.** Four forms of a text about Stephen Hawking, the noted physicist, were prepared: (a) interesting detail presented as an aside (in a separate paragraph, rather than embedded in paragraphs presenting important generalizations) in generally interesting text (form A); (b) interesting detail presented as an aside in generally uninteresting text (form B); (c) interesting detail embedded in a paragraph in generally interesting text (form C); and (d) interesting detail embedded in a paragraph in generally uninteresting text (form D).

The text was based on an article that had appeared in *Newsweek* (Adler, Lubenow, & Malone, 1988). Forms A and C began with a paragraph intended to be personally involving, in that the topic is one that Schank (1979) claims is nearly universally interesting: death at an early age. The paragraph was as follows:

Stephen Hawking is a theoretical physicist who holds Newton’s chair at Cambridge University. Though it is difficult to assess the career of a still young and still active scientist, Hawking is widely regarded as the most brilliant theoretical physicist since Einstein. Stephen Hawking is dying. Unable to speak, he is paralyzed by a progressive, incurable disease, amyotrophic lateral sclerosis, better known as Lou Gehrig’s Disease. It is not clear whether or not, within the time left to him, Hawking will be able to unlock the essential secrets of the universe. He works from morning to night on Grand Unification Theory.

Forms A and C were intended to be generally interesting text, in that information about Hawking’s scientific work was preceded by this information about his illness. In forms B and D of the text (generally uninteresting text), this information did not appear.

Paragraph topics, across forms, for the rest of the text, were the following:

1. Hawking’s Grand Unification Theory, an attempt to link theories of relativity and quantum mechanics, with a goal of understanding the origins of the universe;
2. The role black holes might have played in the origins of the universe;
3. Potentially seductive detail information about a wager Hawking has with Kip Thorne at Caltech about black holes, involving the possibility of winning a subscription to *Private Eye*; and

The only other distinction among forms was the placement of the potentially seductive detail. Though it appeared in all four forms, it was
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Figure 1. Different forms of text used in the study (Note: Lower-case letters label paragraphs as a, generally interesting paragraph, d, interesting detail, or c, interesting detail embedded.)

As Aside

Embedded

Form A

Form B

Form C

Form D

Placement of Interesting Detail

Stephen Hawking is a theoretical physicist who holds Newton's chair at the University of Cambridge. He has渐染的 been a research student of John Stewart at the University of Oxford. Stephen Hawking is dying. Unable to speak, he is paralyzed by a progressive, hereditary disease, amyotrophic lateral sclerosis. He is able to speak through a voice synthesizer, and he recently published a book called "The Grand Unification Theory." He has been working on ideas about the universe for many years.

Figure c

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presented as a separate paragraph in forms A and B and embedded in the paragraph about black holes in forms C and D. Figure 1 summarizes treatment combinations.

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Eight doctoral students enrolled in a seminar on text comprehension rated the information in the Hawking text for importance (high, moderate, or low) and interest (also high, moderate, or low). All eight rated the following ideas as being of high importance: (a) Grand Unification Theory links theories of relativity and quantum mechanics; (b) Stephen Hawking is working on Grand Unification Theory; and (c) the goal of Grand Unification Theory is to explain the origins of the universe. All eight rated the information about the wager with Thorne and the possibility of winning a subscription to *Private Eye* as being of low importance.

Interest ratings reversed this pattern. The wager was rated as high interest by all students, whereas Grand Unification information was rated as low interest by all. This means that the Hawking text mirrored a number of other texts used in previous research in that rated importance and rated interest diverged.

Rated as being of moderate importance *and* of moderate interest was information about black holes. This information might be characterized as interesting detail, though *not* as seductive (i.e., it supported important generalizations).

Though the information in the paragraph about Hawking's illness was not rated formally (it only appeared in forms A and C), all eight students discussed this information using some combination of the following words: "fascinating," "intriguing," and "sad."

**Procedure.** Undergraduate students were directed to read one of the text forms and to try to remember the important information in the text. There was no time limit for reading.

When they finished reading, they exchanged their text copies for a packet of three recall measures. The students completed each measure without being able to reinspect either the text or previously completed measures. In order, they responded to requests for recall of "really important information that you read" (a measure comparable to those used in most previous studies), for provision of a title that "might give a reader of a science textbook a good idea of what the text is about," and for short-answer responses to five questions (three eliciting information that the doctoral students had previously rated most important, one asking about black holes, and one asking about the wager with Thorne.)

Use of multiple measures of recall was a novel element in the present study. Most previous research in the area had utilized only unstructured recall. More powerful conclusions about what is memorable in text can be drawn if the same information is recalled in unstructured recall, structured recall (question responses), and a passage title.

There was no time limit for completion of recall measures. Most students took about 20 minutes.

**Scoring.** All recall responses were scored by an investigator "blind" to the form of the text that the student had read. First, she read unstruc-
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tured recall responses and awarded scores of 0–3, giving 1 point for each of the 3 ideas that the eight doctoral students had rated as most important in the text. Scoring was at gist level (i.e., information was scored as present in recall responses if ideas roughly faithful to the original text appeared). Partial scores were not given. The investigator also noted if detail about the wager appeared in the recall protocol (yes or no) and if detail about black holes appeared (yes or no). Observed scores for unstructured recall of rated important information in text ranged from 0–3.

Second, the same investigator read the title given by each student and noted the topic (e.g., Grand Unification, black holes, the wager). At this point, there was no attempt to categorize titles as referring to important generalizations or interesting detail.

Third, the same investigator read responses to the five questions and awarded 1 point for each correct answer. Observed scores for the first three questions that asked about important information ranged from 0–3. All students answered both the black hole and wager questions correctly.

Ten of the students' recall responses were randomly selected. For these 10 students, a second rater, a doctoral student familiar with the study, independently awarded scores for each measure. This rater was also “blind” to the form of the text that each student had read. The two raters reached .97 total agreement on scores for the 10 students.

Results

Descriptive data. Data from a variety of sources indicate that, in general, interesting detail was highly memorable, and important generalizations were not. First, 35% of the students included interesting detail about the wager with Thorne in their unstructured recall protocols, and 96% included moderately interesting detail about black holes. In contrast, recall of the three important generalizations was not particularly high (44%), especially given that only this information (“really important information that you read”) was elicited in the unstructured recall measure.

Second, in titles for the text, 8 out of 48 students (17%) focused exclusively on the wager, with titles such as “The Big Wager” or “A Wager about Black Holes.” (Six of the 8 had also included the wager information in recall protocols.) An additional 8 students titled the text “Black Holes.”

Third, as stated earlier, all students answered the questions about black holes and the wager correctly. In contrast, scores for responses to the first three questions that asked about important information were not particularly high (52% correct).

There is some indication in the data that the personally involving information about Stephen Hawking (presented as the first paragraph in forms A and C) was also highly memorable. Of the 24 students who read this paragraph, 22 (92%) included information about Hawking's illness in their unstructured recall protocols. In addition, 8 of these 24 students (33%)
focused exclusively on Hawking in their titles, either titling the text simply “Stephen Hawking” or combining the name with a reference to Hawking’s illness (e.g., “Hawking’s Battle with Lou Gehrig’s Disease”).

Statistical analyses. Though evidence is convergent and strong that what was memorable in the Hawking text is interesting detail rather than important generalizations, evidence of effects for study manipulations is less strong. A 2 × 2 MANOVA test was run with both quantitative dependent measures (i.e., unstructured recall and responses to questions 1–3) considered simultaneously.

For the placement factor, the Wilks’s lambda $F$-statistic was not significant, and no univariate $F$ ratios were examined. For the general interestingness factor, the Wilks’s lambda $F$-statistic reached significance ($F(2, 43) = 5.70, p < .001$), and univariate $F$ ratios for each of the dependent measures were examined. The interaction of placement and general interestingness was not significant.

One of the two $F$ tests for general interestingness yielded significant results. Students who read generally interesting text (forms A and C; $M = 1.58$, $SD = 0.93$) differed from students who read generally uninteresting text (forms B and D; $M = 1.04$, $SD = 0.81$) in number of important generalizations (of 3) included in unstructured recall protocols ($F(1, 44) = 4.75, p < .05$).

Discussion

Results of Experiment 1 are quite consistent with results from earlier studies of the seductive detail effect (e.g., Garner et al., 1989; Wade & Adams, 1989). Interesting detail about a wager and black holes was recalled better than important generalizations about Grand Unification Theory.

An interesting finding in Experiment 1 was the high recall, across measures, of black hole information. Black hole information could be characterized as interesting in much the same way as wager information was. However, in the case of black holes, the information supported generalizations about Hawking’s scientific work on Grand Unification, whereas wager information did not.

Another way of stating the results of Experiment 1 is that ideas rated as high interest/low importance (the wager) and as moderate interest/moderate importance (black holes) were frequently recalled, whereas ideas rated as low interest/high importance (Grand Unification) were less frequently recalled. Interest was a better predictor of recall than importance, and this pattern held whether or not interesting ideas supported important ideas in text.

Placement of interesting detail in text made no difference whatsoever in Experiment 1. On the other hand, there was some evidence that general interestingness of text mattered. As we had predicted, students who read generally interesting text (forms A and C) recalled more important generaliza-
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tions in unstructured recall than students who read generally uninteresting text (forms B and D). Perhaps the initial paragraph about Hawking's illness in forms A and C focused students' attention on Hawking, making subsequent information about his scientific work more prominent. It seemed to us that additional investigation of general interestingness of text was warranted.

We also decided that domain knowledge related to a target text might be an important consideration in future investigations of the seductive detail effect. In general, structures of knowledge and cognitive processes interact (Garner, 1990), and Kintsch (1980), among others, has suggested that, everything else being equal, interest in a text is determined by how much a reader knows about the topic of that text. If Kintsch is correct, students who are experts in astrophysics would differ from students who have never heard of Hawking's work in their interest, attention, and recall for the text used in Experiment 1. As we suggested earlier, we expected that interest in a text would be higher for readers who knew something, rather than little or nothing, about the topic of the text.

We designed a second experiment to replicate Experiment 1, with the single modification that we pretested participants for physics knowledge. The questions that stimulated Experiment 2, were the following:

1. Will interesting detail again be recalled better than important generalizations in the Hawking text?
2. Will important generalizations be recalled better for generally interesting text forms than for generally uninteresting forms?
3. What is the effect of domain knowledge on recall of detail and generalizations?

Experiment 2

Method

Participants. Participants were 228 undergraduate students. Students were randomly assigned, in equal numbers, to one of the four treatment combinations from Experiment 1 (see Figure 1). Because we were interested in the effects of domain knowledge on text recall, we needed to measure knowledge of the 228 students. We rejected self-report (Graesser & Riha, 1984) and academic major/occupational category (Afflerbach, 1990) as insufficiently precise measures of domain knowledge. Instead, we pretested the students using materials described below.

Materials. With the single exception of the domain-knowledge measure, the materials were exactly the same as those used in Experiment 1. The domain-knowledge measure was a 25-item multiple-choice test on physics content.

To develop the domain-knowledge test, we followed a procedure used in previous research (see, e.g., Alexander, Pate, Kulikowich, Farrell, &
Wright, 1989). First, a corpus of terms and definitions was generated from five introductory texts on general physics and from Hawking’s (1988) book, *A Brief History of Time*.

Using this corpus, we constructed 30 multiple-choice items. Several of the questions assessed knowledge of information mentioned in the Hawking text (e.g., Grand Unification, quantum mechanics, black holes). For each item, there were four response alternatives: (a) correct answer, physics; (b) incorrect answer, physics; (c) incorrect answer, physical science; and (d) incorrect answer, general science.

Five experts, all university-level instructors or majors in physics, then identified the correct answer and labeled the domain (i.e., physics, physical science, general science) for each of the distractors. For both identification and labeling, agreement among experts was .92. Five items on which there were disagreements were eliminated, resulting in the 25-item test. The Kuder-Richardson (KR-20) reliability for the final 25-item test was .77. A sample item, for which (c) is the correct response, follows:

Brownian motion is:
(a) the exchange of gases within the respiratory system (general science).
(b) a consistent rotation of a planet (physics).
(c) the irregular movement of small particles (physics).
(d) turbulence in the stratosphere (physical science).

Procedure. The only procedural modification of Experiment 1 was that the domain-knowledge test was administered. This test was given to students by course instructors one week prior to the reading of the Hawking text.

Scoring. Scoring procedures described for Experiment 1 were followed for Experiment 2. Two investigators, “blind” to the form of the text that each student had read, independently scored 48 sets of unstructured recall, title, and question responses. Agreement was .97. All remaining responses were scored by one of the investigators.

Results

*Descriptive data.* Many of the findings from Experiment 1 were confirmed in Experiment 2. For instance, it was determined that, in unstructured recall protocols, reporting of the three important generalizations was again fairly low (45%), and the proportion of students including detail about black holes (80%) and about the wager with Thorne (17%) was again higher than one might expect given that only “really important information that you read” was elicited.

Topics most frequently mentioned in students’ titles were Grand Unification Theory (59% of titles), Stephen Hawking (32%), and black holes (28%). Black holes had been a particularly popular topic in Experiment 1 titles as well.
Table 1
Means and Standard Deviations for Text Conditions (Placement and Interestingness) by Knowledge Group for Unstructured Recalls and Question Responses

<table>
<thead>
<tr>
<th>Text condition</th>
<th>Placement</th>
<th>Interestingsness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aside</td>
<td>Embedded</td>
</tr>
<tr>
<td>Group</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>High-Knowledge Unstructured recall</td>
<td>1.63</td>
<td>1.02</td>
</tr>
<tr>
<td>Low-Knowledge Unstructured recall</td>
<td>1.11</td>
<td>0.89</td>
</tr>
<tr>
<td>High-Knowledge Question responses (structured recall)</td>
<td>2.46</td>
<td>0.72</td>
</tr>
<tr>
<td>Low-Knowledge Question responses (structured recall)</td>
<td>1.71</td>
<td>0.96</td>
</tr>
</tbody>
</table>

Finally, question-response patterns followed those of Experiment 1. That is, 97% of all students answered the question about black holes correctly, and 97% answered the question about the wager correctly. In contrast, scores for responses to the first three questions that asked about important information were not as high (65% correct).

Statistical analyses. To determine the effects of domain knowledge, placement, and general interestingness on unstructured and structured recall, we performed a 2 (group: high/low domain knowledge) × 2 (placement: as aside/embedded) × 2 (interestingness: interesting/uninteresting) MANOVA, with scores on unstructured and structured recall measures as the dependent variables. High- and low-knowledge groups were created by dividing the domain-knowledge test score distribution (M = 13.13, SSD = 3.70) into two classifications. Those scoring 1/2 SD or more above the mean were labeled as the high-knowledge group (n = 79). Those scoring 1/2 SD or more below the mean were classified as the low-knowledge group (n = 79).

Results of the factorial MANOVA revealed a significant group by interestingness interaction (F (2, 149) = 3.16, p < .05). The main effect for group was also significant (F (2, 149) = 13.59, p < .0001). The means and standard deviations for unstructured and structured recall measurers are presented in Table 1. All other main effects and interactions were nonsignificant (F < 3, p > .10).
To examine the significant effects more closely, the multivariate analysis was followed by two univariate analyses with unstructured and structured recall scores as the dependent variables, respectively. For the $2 \times 2 \times 2$ ANOVA on unstructured responses, results indicated significant main effects for group, $(F(1, 150) = 11.09, p < .002)$ and for interestingness $(F(1, 150) = 3.98, p < .05)$. Participants with greater domain knowledge recalled more important ideas than those with less knowledge. Additionally, those who read interesting passages recalled more important ideas than those who read uninteresting text. No other effects were significant.

For the second univariate analysis with structured recall responses, the group by interestingness interaction was significant $(F(1, 150) = 6.10, p < .02)$. The main effect for group was also significant $(F(1, 150) = 29.23, p < .0001)$. In addition, the placement by interestingness interaction approached significance $(F(1, 150) = 3.84, p < .06)$.

The significant group by interestingness interaction is depicted in Figure 2. As seen in this figure, although the high-knowledge group consistently answered more questions correctly than the low-knowledge group, this difference was lessened when subjects read generally interesting, rather than uninteresting, text. Furthermore, the means for structured recall (i.e., responses to questions 1–3) for the high-knowledge group were slightly higher when they read the generally uninteresting, rather than generally interesting, text.

A final chi-square test was run to compare the frequency of high- and low-knowledge students’ inclusion of interesting detail (supportive of important generalizations or otherwise) in unstructured recalls. Although the high-knowledge group was less likely than the low-knowledge group to include interesting detail about black holes and the wager (77% vs. 87%), that difference was not statistically significant.

Discussion

Experiment 2 results are quite consistent with results from Experiment 1, in that interesting detail in the Hawking text was again recalled better than important generalizations. This pattern was particularly evident in unstructured recall and question-response measures. The finding that placement of interesting detail in text had no effect whatsoever on eventual recall of detail and generalizations also supported results obtained in Experiment 1.

In Experiment 1, there had been some evidence that more important generalizations were recalled in generally interesting text, as opposed to generally uninteresting text, particularly when recall was measured with an unstructured recall measure. In Experiment 2, general interestingness of text again played a role in recall. While there was no significant overall effect for general interestingness, the interestingness by group interaction approached significance for one recall measure and reached significance for another. More important generalizations were recalled when low-

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knowledge students read generally interesting, rather than generally uninteresting, text.

The novel feature of Experiment 2 was attention to domain knowledge related to the target text. It turned out to be an important factor in recall.

High-knowledge and low-knowledge students differed in both amount of important information provided in unstructured recall protocols and accuracy of responses to questions 1–3. Both results favored high-knowledge students.
General Discussion

The two studies reported here provide additional evidence of the power of the seductive detail effect in learning from text. Interesting detail is highly memorable to readers; important generalizations are less memorable.

We know now that interesting detail is recalled when it is truly seductive (i.e., when it does not support the important generalizations of the text) and also when it is at least somewhat supporting. We also know that interesting detail is recalled when it is separated from paragraphs presenting important information as well as when it is embedded in those paragraphs.

The seductive detail effect is a concern to teachers, who consider textbooks, along with teacher talk, to be a primary source of new information for students. Teachers undoubtedly intend that students acquire general, abstract ideas. The present study and the others that precede it in the same line of inquiry suggest that students are unlikely to remember these ideas when they are presented in text. Instead, the students remember interesting detail. They switch attention on to interesting detail and off of important generalizations.

What can teachers possibly do to assist students in learning important generalizations presented in text? We suggest confronting the interest factor head-on. When we return to Dewey (1913), we are reminded that his admonition to teachers to avoid trying to make something interesting does not mean that they should avoid trying to find out what is of interest. One reason why interesting detail is so seductive is that it typically appears in text that is, overall, of very low personal interest to most students.

In both of the studies reported here, texts of higher rated interest produced better recall than texts of lower interest on some measures, particularly for students with low domain knowledge related to the target text. These results support Dewey's point for instructional text. After all, with texts from which students are expected to learn, low domain knowledge is often the case.

We close with still another comment from Dewey (1913) on interest and schooling. To us, it captures the distinction between finding out what is of interest and making something interesting. Dewey wrote,

I know of no more demoralizing doctrine—when taken literally—than the assertion of some of the opponents of interest that after subject-matter has been selected, then the teacher should make it interesting. This combines in itself two thoroughgoing errors. On one side, it makes the selection of subject-matter a matter quite independent of the question of interest—that is to say of the child's native urgencies and needs; and, further, it reduces method in instruction to more or less external and artificial devices for dressing up the unrelated materials, so that they will get some hold upon attention. (p. 23)
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Note

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