A study examined what children write when responding to literature they have read in school. The study investigated whether girls' writing differed from that of boys in the same classroom, as well as whether a classroom teacher responded differently to her children's journal writing based on gender or reading proficiency. One sixth grade class, involved in a literature-based reading program, and currently reading Katherine Patterson's "Bridge to Terabithia," participated in the study. Twenty student journals were analyzed in terms of frequency of particular writing features that have previously been proved or suspected to identify gender differences. Results showed that girls were much more apt to write their internal responses as they read a novel than boys, and when the book had two strong main characters, one male and one female, girls made more entries about these characters than did boys, and that girls used more overall proper names than boys (suggesting perhaps a stronger sense of inclusion for their readers). Results further showed that boys received more teacher directives than girls, and that poorer readers were less likely to include scriptal information or to use characters' names than were their peers. (One figure and two tables of data are included; 22 references are attached.) (SR)
Gender Differences in Classroom Writing: An Analysis of Sixth Grade Students' Reader Response Entries

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In a biographical sketch about a young girl’s growing up on the Caribbean island of Antigua, Jamaica Kincaid describes the school experiences of Annie John. Of particular interest to this study are Annie John’s reflections about her classroom writing, which are very different from those of her classmates. She describes her thoughts about one classroom writing assignment in the following way:

...each girl stood up and read her composition. One girl told of a much revered and loved aunt who now lives in England and of how much she looked forward to one day moving to England to live with her aunt; one girl told of her brother studying medicine in Canada and the life she imagined he lived there...I began to wonder about what I had written, for it was the opposite of playful and it was the opposite of imaginative. What I had written was heartfelt, and except for the very end, it was all too true...

(Kincaid, 1983, pp.40-41)

We find Annie John’s recollections of her school writing especially interesting not only because of what she says, but also about what she omits. Specifically, we wondered whether any of the boys in Annie John’s school felt the same emotional intensity about writing as Annie John.

In this study we examined what children write when responding to literature they have read in school. We investigated whether girls’ writing differed from that of boys in the same classroom as well as whether a classroom teacher responded differently to her
children's journal writing based on gender or reading proficiency.

This study of classroom writing generates from our professional interest in the topic as faculty at a women's college and from our personal concerns about disparities in children's opportunities to learn in school. We are well aware of how social differences attributed to children's race (Ogbu, 1990), class (Coleman et al., 1966; Shannon, 1985), and language (Flores, Tefft, & Estaban, 1991; Hiebert, 1991) are used by many to legitimize inequities in children's learning opportunities. Although gender bias is much more subtle than bias due to race or language, gender biases also impact children's learning and can improve or impede their school achievement (Gilligan, 1982; Sadker, Sadker, and Klein, 1991).

Current educational research attests to the importance of gender and its effects on children's learning in the elementary school. The most frequently examined gender issue is classroom reading material, particularly how schools select books to appeal primarily to boys. Segel (1986), for example, explains that schools have historically used boys as their yardstick for book selection. Books with male protagonists and male points of view are typically preferred by schools over books with female protagonists. Segel argues that schools take this stance because they assume girls are more adaptable and flexible in their reading than boys. Consequently, girls' personal interests earn far less consideration than boys' when schools select books for their students.
A similar preference for boys is present in the publishing world. Simply put, book publishers view boys' interests as more profitable than those of girls'. One example of this preference is provided by Segel (1986) who recounts the now well known anecdote about Scott O'Dell, and how his publisher tried to convince him to change his female protagonist to a boy in his classic story, Island of the Blue Dolphin.

Gender bias is also revealed in the ways males and females are portrayed in children's books. Women are typically presented in ancillary and subordinate roles to those of men. Historically, when women are presented in classroom reading materials, their personal characteristics reflected stereotypic female qualities such as the ability to nurture and care for domestic chores, and rarely did the stories portray women as breadwinners. Although some of this stereotypic gender portrayal has ended because of the changing roles of women in our everyday world and the efforts of contemporary feminists, women in non-traditional social and vocational roles are still underrepresented in classroom reading materials (Sadker, Sadker, and Klein, 1991). For example, the portrayal of single mothers in recent children's literature clearly suggests women, having little choice in their single parent status, lack intellectual and social independence from males (Gormley and McDermott, 1991).

The classroom climate is a chilly one for girls. Many studies, Brophy and Good (1974) among others, report that girls receive far fewer opportunities to speak in classroom discussions
than boys. Recently, Sadker, Sadker, and Klein (1991) summarized this research by arguing, "...a preponderance of study findings at all educational levels indicates that males are both given, and through their behaviors, attract a high number of teacher interactions..." (pg. 298). Sadker & Sadker (1986) also explain that students' gender influences how teachers respond to them during classroom discussions. Boys are favored in classroom discussions, and their contributions will be accepted and praised more often by their teachers than those of girls.

Considered collectively, these studies reveal that elementary classrooms are biased to favor boys over girls, and this bias is clearly evidenced in the reasons schools use to select their reading materials, the stereotypic image of females contained in school reading materials, and in teachers' classroom interaction with children. Only one small inference from these findings needs to be made to suggest that boys have greater opportunity to learn than girls.

In this study we examined whether boys and girls write differently. Our question stemmed from research on how oral language is used differently by men and women, and how conversational style varies according to gender of the speaker/listener. Additionally, we know that schemata influence reading comprehension, and that the most progressive practices of teachers using literature based reading programs are those that elicit personal and expressive responses from children.

Sociolinguists have frequently studied gender differences and
have found particular speaking patterns to distinguish male speech from female. The best known of these studies is the watershed research conducted by Lakoff (1973) in which she found that females use more tags, hedges, and qualifiers than males in their oral language. Women's ways of speaking are more likely to suggest a concern for their listeners and invite a conversational relationship, whereas male speech is more likely to be indifferent toward their listeners, demonstrative and directive. Although some researchers (Rubin and Greene, 1992) argue that Lakoff's analyses reflect differences in social roles and status more than gender, researchers agree women and men differ in speaking style.

More recent discourse analyses identify other gender differences in the ways conversation is used and interpreted by speakers and listeners. Tannen (1990) examined the conversational style of elementary children and explained, "...Comparing the conversations of these boys and girls in sixth grade, one can see the root of women's and men's complaints about communication in their relationships with one another" (pg. 265). She explained that sixth grade boys and girls differ in their body language, eye contact, topics of talk, and form in which their talk is organized (narrative versus report). That is, girls use story form more frequently than boys, who use more exposition. Tannen further argued that girls tend to seek relationships and avoid conflict, whereas boys' speaking style is more independent of others. Importantly, Tannen doesn't claim that male and female styles of communicating are entirely distinct from each other, but more often
than not, males speakers will use certain verbal and nonverbal markers more frequently than females, and females will use some features more often than men.

Schema theory also informs our investigation about whether boys and girls write differently. Schema theory suggests that readers comprehend texts according to their life experiences, and we expected that readers' life experiences would be strongly influenced by their gender. Although specific gender differences in reading comprehension have not previously been established in research, other factors associated with schemata, such as differences due to readers' socio-cultural backgrounds, are well known influences on students' comprehension of texts (Anderson, 1984; Gormley and Marr, 1983; McKneown, Beck, Sinatra, & Loxterman, 1992). When readers have rich prior knowledge, new information is easily understood and encoded into long term memory. If readers mistakenly activate irrelevant prior knowledge, comprehension does not occur. In our study we reasoned that children's schemata might vary by their gender and boys, we suspected, might perceive their world differently than girls. We further wondered whether differences in children's schemata might be revealed in the ways they expressively respond to literature in writing.

We also used reader response theory (Rosenblatt, 1938; Probst, 1987) to help understand whether boys and girls write differently. We suspected gender would affect children's writing about literature because teachers who use response-based instruction
gender and writing

elicit personal and subjective reactions from their children. In response based classrooms (Calkins, 1991), teachers foster subjective insights to literature by offering activities in which children write expressively in response journals, share their personal responses with classmates through dialogue journals and oral discussion, and respond creatively through illustration and drama. Given the subjective nature of classrooms using response-based theory, it is probable that if gender differences do exist they would emerge in these social contexts.

Although there have been previous inquiries into gender and writing, their findings are mixed and, moreover, are not derived from elementary children's writing. Gabriels (1990) asked college writers to respond in writing to a short story in which two young adults have their first sexual experience. Gabriels found that male and female students responded quite differently to the story. Males, she explained, characteristically discussed the incident as a rite of manhood, but the females typically viewed the sexual encounter as the beginning of a meaningful social relationship. Rubin and Greene (1992) also examined gender differences in college students' writing and they found small but significant differences in the ways young adults compose. Using expository and expressive writing samples from their subjects Rubin and Greene found that women used three times as many exclamation points as did men, women were twice as likely to acknowledged the value of opposing side of an argument than men, and women wrote more but less complex sentences than men. However, despite the many observed gender
differences, Rubin and Green's findings do not confirm specific stylistic features, such as hedges and tags, found in previous research. One of their most important findings, particularly as it relates to our study, is that discourse mode, expressive versus expository, had the greatest impact on the students writing; the expressive mode encouraged subjective and emotional writing.

To summarize, we have explained that studies of elementary school classrooms have reported a consistent bias in schools where boys are favored over girls in the kinds of materials that are read and in the ways teachers interact with children in their classrooms. We wondered whether differences observed in oral language between men and women would appear in children's writing. We then shared our suspicion that reading comprehension might be influenced by gender. We further explained that reader response theory and the instructional activities that flow from it encourage personal and honest responses from readers, and we again wondered whether gender differences would emerge in these classroom contexts. Lastly we reviewed pertinent studies in gender and writing which reveal some differences between men and women, but these studies have few implications for our study because of the college age of their subjects and the expository mode of discourse that was analyzed.

We investigated two questions in this research study:

1. Do boys and girls write differently in their reader response journals?
2. Does a classroom teacher respond differently to children's journal writing when the writers are male or female, and good or poor readers?

Method

One sixth grade class, located in a large suburban school, participated in this study. We selected this particular classroom because the teacher used a literature-based reading program, and one of her shared books was Katherine Patterson's *Bridge To Terebithia*. We realized this chapter book contained a male and a female protagonist who heldly near equal importance to the narrative structure.

We did not inform the classroom teacher of the specific purposes of our study, but we did explain that we were interested in children's responses to literature in writing. Our actual focus on gender and ability differences children's writing were not shared with her. We knew this teacher skillfully used reader response journals throughout the year and that she began every September with *Bridge to Terebithia*.

We analyzed twenty student journals (N=20) for this study. Although the class actually consisted of twenty-four students, several journals became unavailable because students moved out of the district or students lost their journals before we had the opportunity to analyze them. Journals from nine (N=9) girls and eleven (N=11) boys were used for our analysis.
We also analyzed students' journal writing by their reading ability. We used the teacher's report of how she perceived each student's reading ability for the purpose of this study. We believed teacher judgement would be the best measure of children's reading abilities because it represented her perceptions and the ways she likely interacted with them in class. Using teacher judgement as our measure, the bottom group contained eight poor readers, the middle group contained six readers, and the top reading group also contained six. Figure I illustrates the ability and gender divisions for the entire class of students used in this study.

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Insert Figure I about here
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We analyzed each of the student's journal entries in terms of frequency of particular writing features, or markers of language, that have previously been proved or suspected to identify gender differences. We included stereotypic features, such as emotion, as well as language qualities which distinguishing male and female speech in other research. Our analysis system consisted of the following items:

Total number of scriptal entries: This provides a count of the number of times the student writer referred to experiences from his/her own life when responding to the book.

Student initiated scriptal entries: We thought there is a difference between a student initiated entry containing personal anecdote and entries which contain personal experience but were prompted by the teacher.
Teacher initiated scriptal entries: This item identifies the number of times the student writer included personal life experience that the teacher elicited or prompted. These kinds of student entries are preceded by a written teacher statement such as, "Did you ever have a friend like this?" "What would you do if your were Leslie?"

Teacher comments on content: This category represents the total number of times the teacher wrote a written response about the content of a student journal entry. This category is distinguished from other categories because it refers to those times the teacher responded to a student ideas about the book.

Teacher questions: This summarizes the total number of times the teacher asked the student writer a question about the book.

Teacher directives: This item identifies the number of times the teacher instructs the student to record their journal entry into a specific form. Most often the teacher reminded students to record page number or the date of the entry into their journal. We believed this to be an important category because it represents procedural issues and not responses to the book.

Hedges: This category identifies the number of times the student qualifies a statement they have written. We viewed the category as a qualifier about what they had written. Examples of hedges are, I think, sort of, kind of, etc.

Intensifiers: This category identifies the total number of times the student writer used strong feelings or emotion in their journal entries. This category pertains to the emotions of the student writer and is embodies in written statements like the following: "This book is GREEEEEAAAAAT!" or "He likes Leslie and Mrs. Edmonds ALOT!!"

Tags: This pertains to the classic characteristics of women's language use where demonstrative statements are weakened with a closing question or comment. Examples of tags are the following: "I would recommend it to anyone, wouldn't you? I believe...What do you think?"

Student questions: This item identifies the number of times that the student writes a question to the teacher. These questions were real and required a response from the teacher. Examples of student questions are the following: "Isn't it weird that Jess likes Leslie?" "I want to know what Terebithia is? Or is it just a fancy title for the book?"
Total proper names: We thought this item would be particularly revealing because it identifies the number of times a journal writer referred to one of the characters in the book. We suspected that girls might refer more to Leslie, and boys might refer more to Jess.

Point of view: This category represented the count in which the student writer assumed the perspective of Jess or Leslie. It was exemplified by direct statements like, "If I were Jess...," or "If I were Leslie..."

Feeling statements: This item refers to the number of times the student writer included his or her own feelings in what was written. These items were encoded with simple markers like, "I feel..."

Words per day: This is a simple count of the number of words written in each journal entry about Bridge to Terebithia.

Sentences per day: This is a straightforward count of the number of sentences a student writer composed each day. We identified sentences by simply counting end punctuation as given by the writer.

Two of us, separately analyzed each of the journal entries. After we coded each student's journal we compared results. In every case where we obtained different coding, we reanalyzed the journal entries. If differences still occurred, then we averaged our feature counts. We used the Mann-Whitney U to test for significance difference by gender for each of the coded features. When testing for significant difference by reading ability of three groups, we used the Kruskal-Wallis One Way ANOVA. Although less robust than their statistical counterparts of a T-test or F-test, the Mann-Whitney and Kruskal-Wallis are statistically valid and reliable measures for ordinal or interval data.
Results

Gender was the main focus of concern in this study. Boys and girls differed in their use of proper names ($Z = -2.3242, p = .0291$) with boys ($X = 7.73$) using fewer characters' names than girls ($X = 13.84$). These data were then examined in terms of the two main character's names (i.e., Jess and Leslie). Again, the gender differences indicated that girls were significantly more likely to refer to Jess and Leslie by name than were the boys ($Z = -2.4431, p = .0146$ and $Z = -2.7461, p = .006$).

<table>
<thead>
<tr>
<th>Characters</th>
<th>Males (N)</th>
<th>Females (N)</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jess</td>
<td>7.59 (N=11)</td>
<td>14.06 (N=9)</td>
<td>N = 20</td>
</tr>
<tr>
<td>Leslie</td>
<td>6.65 (N=10)</td>
<td>13.72 (N=9)</td>
<td>N = 19</td>
</tr>
</tbody>
</table>

As Table 1 indicates, all students referred to Jess, whereas 19 out of 20 referred to Leslie in their journal entries. Although all students made general reference to main characters, girls used both names significantly more than the boys.

The expression of feelings were significantly different for male and female sixth graders. Fourteen of the twenty students used expressions such as "I feel" or "I felt"; these were equally divided such that seven boys and seven girls included statements about feelings. The Mann Whitney U ($Z = -3.2545, p = .0011$) indicated that girls included significantly more "feelings" in their entries than boys (Mean Rank = 11 and 4 respectively).
A major question was whether students' journal responses differed by ability. In terms of prior knowledge, good, average and poorer readers were significantly different (Kruskal-Wallis Anova $X^2 = 6.0098$, $p = .0495$). The mean ranks, which are presented in Table 2, suggest that poorer readers were significantly less likely to include information which related to their background knowledge.

Table 2

<table>
<thead>
<tr>
<th>Reading Ability</th>
<th>Number</th>
<th>Mean Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>6</td>
<td>12.08</td>
</tr>
<tr>
<td>Medium</td>
<td>5</td>
<td>11.70</td>
</tr>
<tr>
<td>Low</td>
<td>7</td>
<td>5.71</td>
</tr>
</tbody>
</table>

Students also differed on their use of proper names from the characters in the novel (Kruskal-Wallis $X^2 = 6.0373$, $p = .0296$) with good (Mean Rank = 14.25) and average (Mean Rank = 12.33) readers much more likely to incorporate characters' names than poorer readers (Mean Rank = 6.31). Background knowledge and usage of proper names were the only two areas where students differed significantly based on reading ability.

All twenty students used qualifying hedges such as "I think". When these were examined by ability (Kruskal-Wallis $X^2 = 4.6878$, $p = .0960$), no significant differences emerged although there was somewhat of a tendency for students designated as low in ability (Mean Rank = 7.00) to make fewer hedges than their peers (Mean Rank = 12.88 for both average and high ability groups).
Less than half the students (i.e., 9 out of 20) posed questions. While not statistically significant (Kruskal-Wallis $x^2 = 4.8048$, $p = .0905$), there seemed to be a tendency for poorer readers (Mean Rank = 6.07, $N = 5$) to generate more questions than either average (Mean Rank = 2.67, $N = 3$) or high readers (Mean Rank = 3.50, $N = 1$).

The teacher responded differently to students according to their gender. Of the twenty students in this study, the teacher made directive comments to 13. Specifically, the teacher more frequently directed (Mann Whitney U, $Z = -2.9321$, $p = .0034$) boys (Mean Rank = 9.44) than girls (Mean Rank = 3.10) to re-read, number the pages and the like.

While not statistically significant, there was a trend for girls to ask more questions than boys ($Z = -1.8396$, $p = .0558$). The rank means of 5.21 for boys ($N = 7$) and 9.08 ($N = 6$) for girls may indicate that with larger group sizes these differences may more clearly emerge.

Discussion

The most interesting of the findings of the present study was that even by grade six, when children are generally 11 or 12 years old, there were clear gender differentiations. Specifically, girls were much more apt to write their internal responses as they read a novel. It is not unusual for girls to make comments such as "I felt sorry for ..." or "I feel that Jess and Leslie..." in their writing and, yet, boys were less apt to include feelings in their responses. It may be that boys have learned not to share their
feelings with the teacher, whereas girls have learned that it is acceptable for them to discuss feelings towards characters and their actions. To whether these differences are the result of sex role expectations that have been transmitted or reflected in the teacher's expectations based on gender, the end result is that even at these young ages, girls and boys differed in the content they included in written responses to the journals.

Because much has been written regarding the gender of main characters in book selection, we had thought it was possible that boys might make more entries about Jess whereas girls might write more frequently about Leslie. The results of this study suggest that when the book has two strong main characters, one male and one female, girls made more entries about these characters than did boys. Similarly, girls used more overall proper names (e.g., teachers' and classmates' names of the main characters) than boys. We wonder whether girls include these names to clarify their thoughts for the reader, suggesting that girls have a stronger sense of inclusion than boys for their readers.

Boys received more teacher directives than girls. This may indicate that in addition to dominating the classroom in terms of oral interactions and feedback with teachers, boys also receive more specific written directive interactions from their teacher than do girls. The receipt of more specific directives may, in practice, allow them to gain more attention from the teacher. This suggestion needs to be further investigated.

Sixth graders journal responses to literature differed
according to reading ability. Specifically, poorer readers were less likely to include scriptal information or to use characters' names than were their peers. Because poor readers often find writing difficult (Hillocks, 1986), it may be that the lack of appearance of prior knowledge and characters' names may reflect a less developed sense of audience. That is, they may restrict what they write to text information and, moreover, may assume that the audience (i.e., their teacher) already knows whom and what they are writing about. This lack of risk taking was also somewhat supported by the trend toward fewer hedges and questions in poorer readers' journal entries. Simply stated, it may be that poorer readers say as little as possible in their journal entries. Certainly the findings from length on entries indicate that poorer readers tend to make fewer and shorter entries than their counterparts.

We began this paper by sharing an anecdote from Kincaid about writing in the elementary school. We used this as an entry into our study of gender differences in classroom writing. At this point our study only suggests significant gender differences with a few features of written language. However, we suspect other differences will emerge as we refine our method of analysis and as we examine more youngsters writings. It is important to increase our understanding of how gender may influence children's writing and teachers' perceptions of what children compose.
References


Figure I
Composition of Study Sample by Gender & Ability

<table>
<thead>
<tr>
<th>Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>high reading group</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>30.0%</td>
</tr>
<tr>
<td>middle reading group</td>
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<td>4</td>
<td>6</td>
<td>30.0%</td>
</tr>
<tr>
<td>low reading group</td>
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<td>2</td>
<td>8</td>
<td>40.0%</td>
</tr>
<tr>
<td>Column Total</td>
<td>11</td>
<td>9</td>
<td>20</td>
<td>100.0%</td>
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</tbody>
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