This study assessed whether girls and boys write differently in their reader response journals for the classes of one sixth-grade teacher over 2 years. A literature-based reading program was used, and the students kept reader response journals. Journals from 9 girls and 11 boys from the first year and 8 girls and 8 boys from the second year were analyzed. Journals were also analyzed from the point of view of reading ability as judged by the teacher. Entries were analyzed in terms of writing features and stereotypic features that distinguish males and females in other research. The most interesting finding was that clear gender differences were apparent. Girls were more likely to initiate and provide scriptal information from their own lives than were boys. Boys in this study received more teacher directives than did girls and, in fact, wrote more questions to the teacher. Girls in this study did not yet quiet their classroom voices, and seemed on equal footing with boys. Students did not, however, differ in their entries about the male and female protagonists from the book. Further research is needed to clarify the extent to which males and females interpret literature differently. One figure illustrates the discussion. Contains 34 references. (SLD)
Gender and Ability Differences in Children's Writing

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An increasing number of teachers are applying Rosenblatt's (1938) reader response theory to their classrooms. The whole language movement, in particular, has encouraged teachers and concomitantly children in the elementary school to engage in reading and writing activities that are purposeful for them (Calkins, 1991). In response based classrooms, teachers foster subjective insights into literature by having children write expressively in response journals, share their personal responses with classmates through written dialogue and oral discussions, and respond creatively through art and drama (e.g., readers' theater). Of particular interest to us are the writings which take the form of reader response journaling of students' thoughts as they are reading a book (Routman, 1992). Having read the same novel, it is quite common for teachers and, to a lesser extent, classmates to respond to these entries of others.

There is evidence that males and females write qualitatively quite differently and prefer different modes of writing. Rubin and Green (1992) found differences in the composing of college students' expository and narrative writings: women used three times as many exclamation points as men, were twice as likely to acknowledge the value of an opposing view and wrote more quantitatively, although their sentence constructions were less complex. One of their most interesting findings was that expressive mode encouraged much more subjective and emotional writing than informational writing for both males and females. In terms of writing ability, there is some evidence that proficient and less proficient female writers in college use more first person insights in reflective personal narrative than expository writing, although the better writers were apt to be more impersonal in their use of pronoun
The writings of students at the elementary school level has been noticeably absent from the research regarding gender differences in composing. Kamler's (1993) case study, which followed two writers from kindergarten through grade two, revealed that the female produced more free writing pieces that included personal comment than did her male counterpart. It was suggested that these differences might reflect cultural differences, specifically that girls are encouraged to discuss feelings and personal perspectives, whereas boys are not. Thus, Kamler argues that strongly gendered positions are evident in young children's free-choice writing. While the case study nature of these data can not be generalized, they do suggest that even young children's writing may be gendered and this possibility certainly warrants further investigation. In recognizing that boys and girls tend to read very different books and/or be offered different books, Cherland (1992) strongly suggests that teachers must offer book choices that have many possibilities for both boys and girls and, further, that teachers should respond to individuals in ways that both encourage stretching toward more equity in gender and acknowledgement that gender beliefs influence the readers' interpretations. It is critical that teachers consciously and carefully select books with respect to gender because recent findings indicate that the prevalence of gender stereotypes in picture books continues (Peterson & Lach, 1990).

There has been a plethora of research which indicates the classroom climate is still a chilly one for girls (e.g., The AAUW Report: How Schools Shortchange Girls, (1992)). There is continued evidence that boys are called on more frequently, receive more eye contact and are more favorably reinforced in classrooms (Sadker,
gender and writing

Sadker & Klein, 1991). Not only are girls less likely to be called on in class, but the feedback from teachers is generally less substantive (Brophy & Good, 1974). Boys are favored in classroom discussions with their contributions accepted and praised more, while girls in the middle school years lose their collective and individual voices in the classroom (Sadker & Sadker, 1986). 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 and Sadker (1986) also explain that students' gender influences how teachers respond to them during classroom discussions. The role the school plays in reinforcing inequities among students as related to their gender as well as race and social class has been powerfully stated by Weis (1990).

Current educational research attests to the importance of gender and its effects on children's learning in the elementary school. One of the most frequently examined gender issues is classroom reading material, particularly the selection of books which appeal primarily to boys. Segel (1986), for example, explains that schools have historically used boys as their yardstick for book selection and, therefore, books with male protagonists and male points of view are typically preferred by schools over books with female protagonists and female points of view. Segel argues that schools take this stance because there is an assumption that boys will not read books with female protagonists. Consequently girls' personal interests earn far less consideration than boys' when schools select books for their
students. Bias is also seen in textbooks used in schools (Sleeter & Grant, 1991). Similarly a preference for boys is present in the publishing world where their interests are viewed 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 the pressure brought by his publisher to convince him to change his female protagonist to a male in his classic story, *Island of the Blue Dolphins.*

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 were presented in classroom reading materials, their personal characteristics reflected stereotypic female qualities such as the ability to nurture and maintain a house, and rarely did the stories portray women as breadwinners. Although some of this stereotypic gender portrayal has lessened 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 under-represented in classroom reading materials (Sadker, Sadker, & Klein, 1991). For example, the portrayal of single mothers in recent children's literature clearly suggests women have little choice in their single parent status and, moreover, lack intellectual and social independence from males (Gormley & McDermott, 1991).

Considered collectively, these studies reveal that elementary classrooms are biased in favor of boys, 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. It is easy to infer from these findings that boys have greater opportunity to learn than
In this study we examined whether boys and girls write differently in their reader response journals. 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 that 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 & Greene, 1992) argue that Lakoff's analyses reflect differences in social roles and status more than gender, researchers agree that 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 (i.e., narrative versus report). That is, girls use story form more frequently than boys, whereas the latter use more exposition. Tannen further argued that while girls tend to seek relationships and avoid conflict, boys' speaking style is more independent of others. Importantly, Tannen does not claim that male and female styles of communicating are entirely distinct from each other, but rather, male speakers more frequently use certain verbal and nonverbal markers than females, and females 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; McKeown, 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 is adversely affected. In our study we reasoned that children's schemata might vary by their gender; that is, we suspected that boys might perceive their world differently than girls and, further, we further wondered whether differences in children's schemata might be revealed in the ways they expressively respond to literature in writing.

This study of classroom writing generates from our professional interest in the
topic as faculty at a women's college as well as from our personal concerns about disparities in children's opportunities to learn in school. We are well aware that social differences attributed to children's race (Gilmore, 1991; 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 bias also impacts children's learning and can improve or impede their school achievement (Gilligan, 1982; Sadker, Sadker, & Klein, 1991). In this study we examined children's written responses to literature they 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 students' journal writings based on gender or reading proficiency.

**Method**

We followed one sixth grade teacher and her students' reader response journals over a two year period. The classroom was located in a large suburban school district near the capital district of New York State. Having served as a master cooperating teacher over a number of years, we knew this teacher skillfully used reader response journals throughout the year. She used a literature-based reading program and her first shared book in September was Katherine Paterson's *Bridge to Terabithia*, a chapter book which contained both male and female protagonists who heldly near equal importance in 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 written responses to literature. Our actual focus on gender and ability differences in children's writing was...
We analyzed thirty-six student journals (N = 36) for this study; twenty (N = 20) were from the first year and the remaining sixteen (N = 16) were from the second year of the study. Although the class actually consisted of twenty-four students the first year and twenty-six the second year, several journals became unavailable because students moved out of the district or lost their journals before we had the opportunity to analyze them at the end of the academic year. Journals from nine (N=9) girls and eleven (N=11) boys were used for our analysis from year one, whereas eight girls (N = 8) and eight boys (N = 8) were analyzed for the second year.

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 most likely the manner in which she interacted with them in class. Using teacher judgement as our measure, we analysed 13 journals written by poor readers, 10 journals from average readers, and 13 journals from the teacher's top reading groups.

We analyzed each of the student's journal entries in terms of frequency of particular writing features, or markers of language, that have previously revealed gender differences. We included stereotypic features, such as emotion, as well as language qualities which distinguish 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: These contained personal anecdotal and informational entries which were not 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 made 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 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 instructed 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 believe 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 qualified a written statement. 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. It pertains to the emotions of the student writer and is embodied in written statements like the following: "This book is GREEEEEEAT!" 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. This allowed examination of whether girls referred more to Leslie and boys referred 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..."

Two of us, separately analyzed each of the journal entries and students were given an identification number which did not reveal reading ability or gender. However, it was impossible to reduce all reference to gender since students often signed their names and the teacher frequently referred to the children by name in her written response. After we coded all students' journals 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 t-test for independent samples to investigate gender differences for each of the coded features.

Results

Gender was the main focus of concern in this study and gender groupings revealed several differences. Of the total number of students (i.e., N=36) twenty-six students wrote scriptal information; girls (N = 12) were significantly more likely
than boys (N = 14) to provide scriptal information in their reader responses (F = 8.64, p = .001). Moreover, when compared to boys (N = 8), girls (N = 8) were much more likely than boys to initiate the sharing of such information (F = 21.39, p = .001). Although the teacher posed significantly more questions to girls (N = 11) than boys (N = 13) in the students' journals (F = 6.16, p = .004), she was significantly more likely to give directives to boys (N = 12) than girls (N = 9) (F = 13.26, p = .001). While only 13 of the 36 students posed questions to the teacher, boys (N = 9) were significantly more likely to do this than were girls (N = 4) (F = 35.48, p = .014). There were no gender differentiations in children's use of hedges, intensifiers, tag questions or connectives. Moreover, sixth graders did not differ in their use of proper names or expressions of points of view or feelings. A major question was whether students' journal responses were differentiated on the basis of reading ability. Interestingly, reading ability groupings revealed no significant differences on any of the variables examined: scriptal (F = .524, p = .608); number of teacher questions (F = .353, p = .711). Students' hedges, intensifiers, tag questions and connectives were unable to be analyzed because at least one variable was a constant among the reading ability groups; similarly, "I knows" and points of views were unable to be analyzed due to a constant among the ability groups. Good, average and poor readers posed a similar number of questions (F = .093, p = .913). Proper name usage did not differentiate among these students (F = .915, p = .45). Simply stated, there were no differences on the basis of reading ability.

Discussion

The most interesting finding of the present study was that by grade six, when children are generally 11 or 12 years old, clear gender differences emerged. Girls
were much more likely to initiate and provide scriptal information from their own lives much more frequently than boys. It may be that by this young age girls' ways of knowing are beginning to emerge with their responses connected to their life experiences much in the way that Gilligan (1982) has described adolescent girls' connections. The teacher, who was female, posed more questions of girls than boys. These questions may very well support the girls' attempts to connect to the story. It may be that the teacher recognizes, albeit unconsciously, the girls' attempts to connect the story to their lives and uses her questions to pull them deeper into the story content. Stated another way, the teacher may use the questions as a way of furthering the connection for girls. Further study of teachers' written interactions is recommended.

Boys in this study received more teacher directives than girls. This may indicate, if our study is replicated in other classrooms, that in addition to dominating classrooms in terms of oral interactions with teachers, boys also obtain more written interactions from teachers than do girls. The receipt of more specific directives may, in practice, be a male strategy to gain attention from teachers. This suggestion needs to be further investigated. Boys also pose more questions to their teacher, which suggests that they expect the teacher to respond to their querying.

Girls have not yet learned to quiet their classroom voices. Although classroom climates are generally chilly for girls in junior high school and high school, it seems that this loss of voice is not reflected in the response writings of sixth graders in this study. This may be a consequence of the thoughtful interactions of a skilled teacher who is sensitive to the needs of all children, regardless of gender or ability. It may also be a general pattern which will be found in other classrooms; in sixth
gender and writing

grade, girls are on equal footing with boys relative to their voice.

Classroom interactions are socially constructed discourses (Gee, 1991, 1993). There is reason to believe that writing in response journals also reflects these classroom interactions. That is, girls connect through their own voices to world experiences and boys connect through interactions that give them highly specific feedback. Certainly, the boys pose more questions of the teacher and in a sense are requiring more information from the teacher than girls do.

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, sixth grade students do not differ in their entries about these characters.

Our study identifies two significant gender differences in sixth grade children's journal writing. Girls are more likely to encode personal life experiences into their journal entries than boys. Boys write more questions to their teacher than do girls. In addition, their teacher interacts differently according to the students' gender; the teacher uses writing to direct boys more frequently than she used writing to direct girls. We suspect, however, that other gender differences will emerge as we refine our method of analysis and as we examine more youngsters' writings. In future studies, for example, we plan to first separately analyze each year of the children's journal entries, and then collapse data as we have done for this study. We also want to examine in greater detail this classroom teacher's written comments to her children's journals. It is quite possible that the teacher changed in
her written response strategies to children's journals over the two years of this study.

We look forward to learning from other research that investigates children's gender and writing performance. Such studies can increase our understanding of how gender influences children's daily writing, teachers' perceptions of what children compose, and children's eventual achievement in school. We still suspect that boys and girls interpret literature differently, and these gender effects may have great impact on their literacy development in school.

References


The authors wish to thank Bev for allowing us to use her sixth grade students' reader response journals for analysis in this study.
Figure I
Composition of Study Sample by Gender & Ability

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