

DOCUMENT RESUME

ED 380 800

CS 214 762

AUTHOR Kelly, Judith Ann
 TITLE Exploring Attitudes toward Gender in the Language Arts Classroom.
 PUB DATE Apr 95
 NOTE 55p.; M.A. Project, Kean College of New Jersey. For a parallel study, see CS 214 762.
 PUB TYPE Reports - Research/Technical (143) --
 Dissertations/Theses - Undetermined (040)

EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS Attitude Measures; Grade 7; Junior High Schools; Junior High School Students; *Language Arts; *Literary Criticism; Literature; Middle Schools; Reading; *Sex Bias; *Sex Fairness; *Sex Role; *Student Attitudes

IDENTIFIERS Middle School Students; New Jersey; Trade Books

ABSTRACT

Gender attitudes are usually viewed as products of the socialization process and therefore may be viewed as modifiable behaviors. Of great practical importance is the discovery of how they are formed, how they are organized in the mind, and how they may be changed. A study attempted to determine if exposing middle school students to non-stereotypical protagonists through reading, discussion groups, and writing would have a significant effect on the degree of gender biased attitudes expressed by the students. Subjects, 26 seventh grade females and males attending a suburban middle school in New Jersey, completed a pretest to determine gender stereotyped attitudes. Following the pretest, the students were exposed to sex-equitable literature for a period of 6 weeks. Discussion groups and related writings were integrated with the literature. Upon completion of the lessons, the students were administered a posttest. Analysis of the results revealed that although females scored higher on both the pre- and posttests, males made a slight increase in positive responses. However, no significant difference was indicated. (Contains three tables of data, 54 references, and three appendixes.) (Author/TB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

Exploring Attitudes Toward Gender
in the Language Arts Classroom

by

Judith Ann Kelly

*Accepted
3/27/95
Robert J. Gagliardi*

In partial fulfillment of the requirements
for the Master of Arts
Kean College of New Jersey
April, 1995

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it

Minor changes have been made to
improve reproduction quality

• Points of view or opinions stated in this
document do not necessarily represent
official OEI position or policy

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

J. Kelly

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

CS214762

ABSTRACT

The aim of this study was to determine if exposing middle school students to non stereotypical protagonists through reading, discussion groups, and writing would have a significant effect on the degree of gender biased attitudes expressed by the students. Twenty-six seventh grade females and males attending a suburban middle school in New Jersey completed a Pre Test to determine gender stereotyped attitudes. Following the Pre Test, the students were exposed to sex-equitable literature for a period of six weeks. Discussion groups and related writings were integrated with the literature. Upon completion of the lessons, the students were administered a Post Test. Analysis of the results revealed that although females scored higher on both the Pre and Post Tests, males made a slight increase in positive responses. However, no significant difference was indicated.

ACKNOWLEDGMENTS

I wish to express my sincere thanks to my colleagues at Thompson Middle School, Joanna Neuenhaus, Steve Mamchak, Andrew Neufeld, and Kevin Graham for their reassurance and support. Dr. Mazurkiewicz, Dr. Kastner, Dr. Carmichael, and Dr. Young should be acknowledged for their fine personal as well as professional qualities. To my dear friend and comrade, Carole DiSalvo, I express my gratitude for her fortitude, comfort, and enlivening attitude. Joanne Woodward I acknowledge as a role model who inadvertently helped me to decide to pursue a Master's Degree.

Words cannot express the appreciation I have for my husband, Jim, for the innumerable ways he supported my endeavors in graduate school. He encouraged me to begin, had confidence in my abilities, motivated me to strive for success, and praised my efforts. My thanks go to our children, Krista and Jimmy, for their patience, faith, and assurance. For their love and support, I would like to recognize my Father, Charles M. Daly and my mother-in-law, Alice Kelly. Last, I would like to thank Debra and Bob Harmann for their staunch friendship.

TABLE OF CONTENTS

	Page Number
I. Abstract	ii
II. Acknowledgments	iii
III. List of Tables	v
IV. Exploring Attitudes Towards Gender in the Language Arts Classroom	
Introduction	1
Hypothesis	4
Procedures	5
Results	6
Conclusions	8
V. Gender Bias: Related Literature	12
VI. References	37
VII. Appendices	43
Appendix A Pre Experiment Raw Scores	44
Appendix B Post Experiment Raw Scores	45
Appendix C SIQ-R Adaptation Survey	46

BEST COPY AVAILABLE

LIST OF TABLES

- | | | |
|------|---|---|
| I. | Means, Standard Deviation, and t Test Results
Between the Total Samples on the Pre and Post
Experiment Tests | 6 |
| II. | Means, Standard Deviation, and t Test Results
Between the Female and Male Responses on the Pre
Experiment Test | 7 |
| III. | Means, Standard Deviation, and t Test Results
Between the Female and Male Responses on the Post
Experiment Test | 7 |

v

BEST COPY AVAILABLE

Attitudes have generally been regarded as learned predispositions that exert influences on our responses toward things, people, or specific groups. Gender attitudes are usually viewed as products of the socialization process and therefore may be viewed as modifiable behaviors (Gumpert, 1993). Of great practical importance is the discovery of how they are formed, how they are organized in the mind, and how they may be changed. People desire to retain a consistency in their environments and perceptions of themselves. Influences from society, cultures, or religion affect individual attitudes toward gender. Sometimes, through an interaction, people examine these attitudes and take steps to significantly change their behavior.

For many, early exposures to the "Dick and Jane" reading series of the fifties and sixties developed specific gender attitudes toward these literary characters and their family. The male characters often played ball with "Spot" while the female characters cooked, cleaned, and waited for Father to return from work. Just as Dick and Jane have been forced to grow up and change with the times, so are gender attitudes in literature changing. An updated version of the primer (Gallant, 1986) portrays Dick as married, while Jane,

a divorcee, works full time supporting her two daughters in her neat, clean home. Authors of basal readers today have been trying to address past criticisms. Selections used to be focused toward middle-class suburban white children from two-parent families; stereotyped male and female characters; and little representation of disabled, senior citizens, and minorities (Burns, Roe, Ross, 1992). Graebner (1972) found males were the main character in 75% of stories examined. Quality literature, which includes unaltered stories and folk tales, is presented in texts such as Prentice Hall Literature. However, literature, especially stories, poems, essays, and plays written before the 1960's, contains many stereotypes both in illustrations and content. Hitchcock and Thompkins (1987) found that recent basal series, compared with earlier versions, have reduced the degree of sexism in stories. Female characters were portrayed in many occupations previously attributed solely to males.

Although the exploration of attitudes toward gender equity in the language arts classroom is not new, research from 1988 through 1993 produced only five articles from "The Reading Teacher," the "Journal of Reading," and the "Reading

BEST COPY AVAILABLE

Research Quarterly" that dealt with general issues related to literature (Fox, 1993; Holbrook, 1988; Hidley, 1992; McAuliffe, 1993; Miller, 1993). However, researchers have given a great deal of attention to the report by the American Association of University Women, "How Schools Shortchange Girls" (Wellesly College Center for Research on Women, 1992). This report concludes that: girls get less attention and praise; boys' calling out is tolerated while girls' is not; sexual harassment in schools is increasing; SAT scores under-predict college grades for girls; and girls and women who appear in textbooks are generally sex-role stereotyped (McDaniel, 1994).

Schools have a responsibility to do their part to eradicate unacceptable talk and actions according to Mentell (1993). It is assumed that they also have the responsibility to provide sex-equitable literature to help develop flexible gender attitudes.

The language arts classroom is an important place for both teachers and students to begin to learn about students' perceptions of males and females. Teachers might begin by making an honest assessment of individual attitudes and practices in the classroom to see if these work against

the education of students (McDaniel, 1994). The language arts classroom is a place where literature may be examined, everyday activities may be viewed and discussed, and students' writings may be studied to learn about stereotyping. Through the components of the language arts program, listening, speaking, reading, and writing, harmful effects of gender bias and alternative solutions may be explored. Current research does not indicate that gender bias attitudes are changed through reading alone. A reader's schema influences the meaning brought to the text and the meaning taken from it. Rovano (1991) points out that once we teach our students to recognize sexist language, its use and abuse, they may be motivated not to return to it. It is important to utilize a variety of gender equitable literature to determine if stereotypical gender attitudes may be altered.

HYPOTHESIS:

To provide some evidence on this topic, the following study was undertaken. It was hypothesized that children who have been exposed to sex-equitable literature will show no significant attitude changes toward gender stereotyping.

BEST COPY AVAILABLE

PROCEDURES:

One seventh grade class, consisting of twenty-six students, was studied at Thompson Middle School, Middletown, New Jersey. These students were administered the SIQ-R Test adaptation to determine the seventh graders' knowledge regarding gender issues and their influences on literacy education. The students were asked to reply yes or no to questions that dealt with gender issues and their result on the reading process. Questions about sex stereotyped attitudes in literature were also asked in this survey.

For the purpose of scoring, each correct answer was given a 1 while an incorrect reply received a 0. In this SIQ-R test adaptation, a higher score by a subject should reflect a better understanding of sex-biased attitudes in literature.

A series of lessons was presented for a six week period to the seventh graders. These lessons consisted of reading a story with nonsexist characters followed by two forty minute discussion periods. Each lesson was presented over a week long period. At the completion of these lessons, each student took the SIQ-R Test adaptation again. This was used to determine any significant difference in the students' understanding of gender bias in literature in which the

protagonist is portrayed in a nonsexist manner. Discussion groups followed the readings.

RESULTS:

As indicated in Table I, there was only a modest mean

Table I

Means, Standard Deviation as t of the Pre and Post

Experiment total sample results

	Mean	S.D.	t	Sig
Pre Experiment	10.35	1.92	.3	NS
Post Experiment	10.15	2.59		

difference of .20 between the Pre Experiment Test survey and the Post Experiment Test survey responses following instruction and discussion. The difference as shown by a t of .3 was not considered significant.

To determine whether there were gender differences marked by the above data, a further analysis was undertaken. Table II displays a mean difference between females and males on the Pre Experiment. The mean difference of 1.71 in favor of the female sample was found to be non significant.

Table II

	Mean	S.D.	t	Sig
Pre Exper. Females	10.4	2.23	1.4	NS
Pre Exper. Males	8.69	4.09		

Analysis of the responses from the Post Experiment

Table III

	Mean	S.D.	t	Sig
Post Exper. Females	9.93	2.49	.78	NS
Post Exper. Males	8.85	4.69		

survey shown in Table III comparing gender responses shows a t of .78 which is not considered consequential. The mean difference between the samples has narrowed (1.08) somewhat and suggests an attitude change among females.

These statistics indicate that although females scored higher than males in both the Pre and Post Experiment Tests, males scored imperceptibly better on the Post Experiment Test than on the Pre Experiment Test.

A parallel study conducted by Carole DiSalvo with one sixth grade class at Thompson Middle School indicated that

male students showed more improvement than their female counterparts following instruction and discussion. However, that difference was considered insignificant as indicated by a t of 1.17.

CONCLUSIONS:

To provide evidence on the topic of gender bias and related literature, it was hypothesized that children who have been exposed to sex-equitable literature through reading, discussion groups, and writing show no significant attitude changes toward gender stereotyping. The t analysis indicated a value of .3 denoting that no meaningful difference was found between the Pre and Post Experiment Test scores. The hypothesis was accepted. However, if the study had been extended over a longer time, the results may have been more significant as mean changes among the female sample from pre to post instruction occurred.

The results of this study support the findings of researchers who have concluded that it is difficult to predict the effect of sex equitable literature on a group as well as individual readers (Tibbetts, 1978). In our multicultural society, predispositions of gendered roles are considered key in developing readers' attitudes as they interact with non-stereotypical protagonists. In addition,

research into gender and literacy supports the findings that gender issues cannot be considered in isolation. However, many efforts to change attitudes are affected by cultural and ethnic experiences outside the classroom (Purcell-Gates, 1993).

Subsequent analysis of the data indicates that females chose a greater number of non gendered responses on both the Pre and Post Experiment Tests (Tables II and III). This suggests that females started the experiment with fewer gender biased attitudes than their male counterparts. They maintained these attitudes throughout the experiment as indicated on the Post Test survey. This may be an indication that in today's society middle school females are dealing more with gender role perceptions. However, it is interesting to note that females' positive scores decreased from the Pre to Post Experiment Test. It may be inferred that the females were affected by either the discussions, readings, or writings, and changed or adjusted their attitudes, although insignificantly, in a search for the more correct gender responses.

Following the literature read during the experiment, discussion groups indicated many predisposed ideas regarding gender roles. The students comprehended the themes then discussed religion, cultural life, and personal schemas.

Heated discussions of related issues prompted students to examine personal beliefs through journal writing. It was inferred that the discussion groups combined with related writing had an effect on students. However, at the seventh grade age of twelve or thirteen, the inference is that many students may have been affected by peer responses, either negatively or positively, when replying to test questions. Therefore, whether students' positive attitudes expanded following the Post Test is difficult to measure. There is further need for a testing criterion by which individual attitude changes can be measured.

Gender attitudes may be viewed as modifiable behaviors; however, the issue is complex. Changing gender biased attitudes to gender-free attitudes involves the home, social, cultural, religious, and school communities. As educators we share a responsibility to mold individuals who will lead our society into the twenty-first century with bias-free thinking and actions. The results of this experiment imply that in order to effect significant change, students must be exposed to reading sex-equitable literature, listening, speaking through discussion groups, and writing about gender related topics for long periods of time. Perhaps, these issues must first be addressed at home as literacy emerges. Further research needs to be conducted

to determine how gender biased attitudes may be modified. Researchers need to consider how integration of social consciousness could be used as a theme in most subject areas. Continued research should include teacher training and retraining studies modeling non-stereotypical behaviors. For all girls and women, boys and men, the challenge to effect positive change must continue.

GENDER BIAS: RELATED LITERATURE

BEST COPY AVAILABLE

"Ladies and gentlemen, please take your seats. Jennifer, would you take time out from your note writing and socializing to pass out the papers. Adam, use those big muscles to open the windows, then tell everyone about the big game. Today we will be examining stereotyping in literature."

From grade school to graduate school, from the work place to the home environment "one's gender identification has a major influence on behavior, perceptions, and effectiveness" (Shakeshaft, 1989). Sex stereotyping-present in most traditional literature as well as current literature-is an issue that has been brought to a level of consciousness because of research conducted to determine its effect on the lives and choices of students. Sex stereotypes may often be subtly presented and not easily recognized. The educators, as well as the educational materials, which claim to be objective, may be fostering preconceived gender bias.

Sadker and Sadker(1986) collected data from more than 100 fourth, sixth, and eighth grade classrooms in four states in their first study of classroom interaction. They used a wide sample including urban, suburban, and rural classes that were predominately white, black, and integrated. They discovered that while their sample reflected diversity of students and teachers, there was a pervasiveness of sex bias. Male students were found to be

involved in more frequent interaction at all three grade levels. Male students received more praise from teachers while females were advised to be less assertive. Girls became passive learners. However, educators are usually unaware of this type of bias. Sadler and Sadler (1986) contend that the teacher's attention is the most valuable asset in a classroom. They conclude that teachers need to be trained to eliminate bias and therefore become more effective.

As schools pursued excellence, as called for in 1983 in A Nation at Risk, some people, such as President Reagan, claimed that the failure of schools was the result of too much attention being focused on handicapped students, minorities, and females (Shakeshaft, 1986). Equity and excellence are dependent on each other. Shakeshaft (1986) found that developmental patterns of males were the basis for grade level decisions about when to teach certain concepts or read novels such as Huckleberry Finn.

The Excellence in Education movement neglected females and tended to close the educational opportunities for women concluded Sadker & Sadker (1988). Their research examined 138 educational reform articles published in nine professional journals between 1983 and January 1987. The report recommends that: more minority and female students

should interact with teachers; academic problem areas of math and science, historically troublesome content areas for females, must be addressed by curriculum; more research is required to find out why minorities score lower than white counterparts; career counseling reform is needed to avoid course stereotyping; and females should be recruited for educational leadership positions (Sadker & Sadker, 1988).

Boys and girls continue to experience different classroom environments that result in gender differences. In early elementary grades, girls' scores on standardized tests are generally equal to or better than boys' scores; however, by the end of high school, boys score higher on such measures as the NAEP and the SAT (Rose & Dunne, 1989). Sex role expectations are important in influencing beliefs and prejudices. These may develop as early as two years old (Kuhn, Nash, & Brucken, 1978) and increase with age. High self esteem in the American society requires both masculinity and femininity, with a greater emphasis on masculinity, for both sexes (Lerner et al., 1981). Robison-Awana, Kehle, and Jenson (1986) found that self-esteem rose commensurately with a rise in academic achievement for both sexes. However, boys reported higher levels of self-esteem than did girls.

BEST COPY AVAILABLE

Sex stereotyping appears very early in the school environment; that leads researchers to investigate the socialization process that begins at home. Olivares & Rosenthal (1992) reviewed research that demonstrates how inequity is learned and accepted. They contend that gender inequity is reinforced at home and in school. They examined research in three areas: teacher-student interactions, classroom activities related to gender, and perceptions of gender roles through teachers' modeling of sex stereotypes. They concluded that instructional materials that are gender-bias free are lacking and children have gender schema that influences their interactions. They also stated that nonsexist curricula have been shown to make a positive difference. Shakeshaft (1986) supports the belief that school should be a psychological or physically safe environment for females and minority groups. However, she states that females are forced to obtain education in systems that are indifferent and sometimes hostile.

Teachers are unaware of treating genders different. Until several were video-taped for research purposes, the teachers denied giving negative feedback to girls and positive to boys (Brodkin, 1991). To prepare students for the many roles they will assume as adults, Brodkin, in her interview with child psychologist, Carol Nagy Jacklin,

states that teachers must raise their expectations for all students. In that way students may look forward to choosing any vocation, attain academic achievements, and become equally nurturing parents (Brodkin, 1991). That females and males are treated differently in classroom settings is cause for concern. Still, girls are not treated differently across all educational contexts (LaFrance, 1991). Factors depend on grade level, subject, school philosophy, as well as the teachers' attributes.

The A.A.U.W. Report: "How Schools Shortchange Girls" (1992), supports the research that teachers inadvertently treat females differently. The study challenges the assumption that females and males are treated equally in our educational systems. Girls are discouraged from taking higher level academic courses, especially in math and science (A.A.U.W. Report, 1992). When children enter school there are very few gender differences. However, as the school years progress, academic differences broaden. The report recommended that teacher certification standards include work related to gender issues, professional development of teachers and administrators, and provide for a gender-fair multicultural curriculum (A.A.U.W. Report, 1992).

BEST COPY AVAILABLE

Since the days of Dick, Jane, and Spot, basal readers have been the mainstay of reading programs. Yet, until the 1970's, little research examined gender stereotypes. With the advent of the women's movement, roles of women in literature began to be examined. Hitchcock and Tompkins (1987) examined six basal series and compared them to basals previously studied to determine if female characters were portrayed differently than in the past decades. Before the 1980's, female characters were portrayed as teachers, nurses, secretaries, stewardesses, clerks, and cooks. Males were writers, ministers, science teachers, doctors, and mayors (Hitchcock & Tompkins, 1987). In their research, Hitchcock and Tompkins examined recent basal series for the number of female verses male characters and for the range and frequency of occupations of main characters. Significant changes were noted. The percentage of male main characters dropped from 61% to 18%, while female main characters remained the same. Yet, females were portrayed as children in 54% of the stories. A major change was seen in the number of occupations for females. In the 1961-63 basals, females had only five occupations. This rose to twenty-three by the 1970's. Basal readers up to 1986 listed thirty-seven occupations. Results indicate that publishers had been making an effort to reduce sexism presented in

basal stories since the last study of basals in 1981 (Rupley et al., 1981). At that time, Rupley, Garcia, and Longnion analyzed reading materials published between 1976-78 to find out whether publishers had followed gender bias guidelines. They found a trend toward equality in basal texts but not in supplemental materials. Because of the four to six year time it takes to develop a text series, the stories may actually reflect the gender values of the times before publication (Rupley et al., 1981).

Through the creation of neutral characters, publishers seem to be avoiding questions of sexism. The roles of females are shared main roles or authors avoid the issue by using nonsexual animals or talking trees (Hitchcock & Tompkins, 1987). Ultimately, Hitchcock and Tompkins see the teacher as the one who must assume responsibility for helping students gain knowledge and attitudes from basal reading stories. They contend that teachers make the difference.

Throughout the 1980's and 1990's school districts have continued to use basal series. However, many districts have moved toward a more whole language philosophy through trade books, literature based reading series, and award winning books. As children are emerged in literature and language, one of their first interactions is with visual literacy in

the form of picture books. Kortenhaus & Demarest (1993) studied sex bias portrayed in twenty-five picture books published between 1940 and 1980. Fifty years ago females were expected to be passive, and so, even though they are portrayed with equal frequency, they are dependent characters. McDonald's (1989) research supports the dependency stereotype. Through examination of content in picture books, he found significant differences in representation. Male characters outnumbered female characters and appeared as stronger helping characters. On the other hand, females were recipients of help from the male characters. Male characters assisted other males more frequently than females. Helping behaviors were also examined by Barnett (1986) when he and eighteen female undergraduates scanned 1,537 picture books. He found that helping acts of female nonhuman characters tended to be rated more expressive than instrumental, although helping acts were generally rated as more instrumental. As both recipients of help and as child helpers, results show that males were more frequently represented. It may be concluded that from the earliest interactions with text, males and females are portrayed in very different ways.

Kortenhaus and Demarest (1993) took a more current look at characterization in picture books and how they had

changed over the past fifty years. Their findings conclude that roles have changed in subtle ways. Girls are pictured as main characters more frequently than during the past decades. Boys are shown in roles of passive dependency.

Caldecott and Newbery Medal books have long been recommended reading in homes and classrooms. However, many winning books have been found to contain language and illustrations that contain stereotypes. Kinman and Henderson (1985) analyzed Newbery Medal Award books from 1977 to 1984 for sexism. They examined the overall image that the complete book presented as opposed to individual characters. Their results suggest that authors are considering the social schemas of children but continue to present stereotypical situations in context. They conclude that authors are fitting text to present day situations even though they may be biased. The need for award committees to examine literature for sexism is apparent. Through choosing nonsexist literature children may identify new goals and "not be limited by their sex" (Kinman & Henderson, 1985).

One of the most powerful ways to transmit knowledge and ideas is through reading quality literature. Dougherty and Engel (1989) examined Caldecott winners and Honor Books of the 1980's. They concluded that the books, like those of the past decade, "are rich in artistic and literary

qualities." However, their findings do not support a major shift toward sex equality in winning books, but do provide a look at changing roles and sex characteristics. It is suggested that supplemental literature support a program that should provide a balance of reality and freedom of opportunity (Dougherty & Engel, 1989).

Charles Temple (1993) relates that in twenty books given the Caldecott Award in the last forty years, the majority shows females as caretakers, mothers, princesses, helpers, teachers, and nurses. The male counterparts are depicted as fighters, explorers, and adventurers. Interestingly, Collins, Ingoldsby, and Dellman (1984) found that female authors were responsible for writing more sexist books than male authors. Through 1980 the stereotypical pattern did not change much (Hall, 1992). Joseph Campbell's book The Hero With 1,000 Faces (1986) points out the similarities among myths throughout the world in depicting heroes. However, all the heroes are males. He theorizes that characters in stories represent traits that may apply to either sex. Temple (1992) points out that Campbell has not closely examined the lives of females. Therefore, only half the human species has been examined. Collins, Ingoldsby, and Dellman (1984) state that women's increased involvement in the work force is reflected in current

BEST COPY AVAILABLE

literature through their portrayal in central roles. They exhibit characteristics previously assigned to males. Temple (1993) suggests that children must be taught higher level comprehension skills to be more analytical and discerning during reading. Children must be assisted to become active readers who question, predict, and clarify ideas. He suggests that children be taught to interact with the text while reading and to argue about what they see and hear through other media such as television. He concludes that "teaching children to read against the grain offers alternatives to banning books" (Temple, 1993).

While much of the literature portrays females as passive or domestic, male stereotyping has been largely ignored. Barton (1984) examined over fifty children's books searching for males portrayed in a sensitive manner. He found that although these books do exist, but not in large quantities, they stop short of making any statement on the issue of male stereotyping. He discovered that the books either carried a message in favor of not stereotyping or portrayed the main character as sensitive and emotional. Some authors negate what they are trying to do by actually using stereotypical statements in the story. Fathers are principal role models for young boys and have been portrayed in books such as Daddy and Ben Together by Miriam Steacher

and Daddy's New Baby by Judith Vigna as sensitive, positive role models. Barton (1993) states that sometimes the unspoken message is the more effective one.

Some researchers believe that sex stereotyping is part of the normal cognitive process. Martin and Halverson (1981) devised a model in which stereotypes are assumed to function as schemata that organize and structure information. They proposed that children categorize behavior as in-group or out-group regarding masculinity and femininity. Fuch (1987) presented a research paper where he asked his students to assume another point of view. He borrowed the idea to look at feminine beauty through time and space from Kenneth Clark's book, Feminine Beauty. The students were asked to assume the identity of a woman in an art work and discuss her life and background. The results were improved research and writing, together with a better understanding of the actual role of the woman in her society as they identified with her. It may be inferred from this report that changing points of view about gender should include reading and writing as thinking, as well as role reversal.

It was not until 1975 that textbook publishers, including McGraw-Hill, Scott, Foresman and Company, and Mac Millan began to require their writers and editors to use

BEST COPY AVAILABLE

nonsexist language (Rovano, 1991). Textbooks older than ten years probably contain uses of masculine words and pronouns. Rovano (1991) suggests that teachers use outdated texts, if forced to by districts, for editing exercises or to analyze writing styles of the times. Terms such as businessman, policeman, fireman, and doctor/his tend to dismiss the females who are in those fields. Rovano points out that the attempt to eliminate gender biased language has been going on for centuries. She gives the example of William Cullen Bryant, 1855 editor of "The New York Times," who banished the use of feminine markings for English nouns like "lady doctor, chairwoman, authoress, or poetess." Fournier and Russell (1992) researched the software developed for the creation of the electronic Oxford English Dictionary to analyze systemic sex-role stereotyping of words. They discovered that gender-specific pronouns and possessive adjectives are found most frequently in quotation text and to a lesser degree in definitions. It may be inferred that spoken language is a powerful statement of an individual's gender schema.

The study of gender bias in children's educational materials extends beyond text books, picture books, novels, and content area books. With the advent of television, advertising and children's programming became significant.

BEST COPY AVAILABLE

Sex role portrayal in mass media was examined as far back as 1975. Content areas covered in research by Busby (1975) include TV ads, children's programming, daytime and prime time programming, magazine advertising, magazine fiction, newspapers, child oriented print media, children's instructional films, comic books, literature, and films. It was found that sex-roles were traditional for the times. The conclusions drawn from the study were that jobs were portrayed stereotypically while expansions of job roles would increase the idea children would feel more assured that women could have nonstereotypical jobs. However, the study concluded that males were responsible for making most of the decisions about changing or retaining stereotypes in the various media studied. Ten years later, another study conducted by Durkin (1985) found that sex-role portrayal in TV material intended for adults and children showed evidence that some changes were taking place. However, the general pattern, whether for adults or children; is to present the male as dominant and the female as nurturing and complementary. The study suggests that public pressure may produce changes in children's programming by reducing violence and promoting prosocial themes. Adult TV provides modest evidence that sex-role stereotyping is moving away from the traditional roles. Another study analyzed sixty-

BEST COPY AVAILABLE

four TV commercials directed toward children focusing on sex-role stereotyping (Macklin & Kolbe, 1984). The results indicate that little change had occurred in ten years since the last study. Over 60% of the ads were neutral in orientation; however, 63.9% of the dominant characters within all ads were male. The implication is that children's attitudes toward gender develop through many various avenues.

The importance of integrating the reading process with the writing process is evident in most emergent literacy classrooms. Tuck, Bayliss, and Bell (1985) developed an analysis of character traits to determine if sex-role stereotyping was present in stories written by children. They concluded that male and female authors almost exclusively tended to create both stereotypical and nonstereotyped characters of their own sex. They also found that stereotyping occurred in characters created by both sexes.

Kamler (1993) used the freewriting process to research gender stereotyping in two children's writing. She concluded that free choice writing is not problem free. Teachers need to consider how to guide children's choices to ensure they gain a wide range of meanings. She suggests that conferencing with young writers may be the instrument

through which the child may find new meaning to challenge the gendered world.

Opalenik (1993) recognized the importance of audience in writing with female students whose cultural backgrounds expect them to remain humble and nonassertive. She discovered that they often labeled their work "private" and felt that their writing was unimportant. The students did not want their work read to boys because they would be insensitive. They often wrote about emotional issues, powerlessness, and relationships. Opalenik concluded that if teachers expect students to develop voices of personal conviction in their writing, the teachers must view the students by considering their social, emotional, and cultural backgrounds. Females, she concludes, need affirmation of themselves and personal relationships in the world around them. As our society becomes more aware of multicultural factors affecting writing and reading, there may be a need to further examine cultural stereotypes in literature.

Mem Fox (1993), an author of many popular children's books, contends that: "Both genders have to be allowed to be as real in literature as they are in life." She believes that children's literature may be partly to blame for keeping male stereotypes alive. Gender stereotypes in

literature deprive girls from choosing role models from a range of strong, assertive, independent, and daring ones. The authors of books and teachers of literature need to assume the power to change gender biased to gender appropriate behavior and attitudes (p.84). Children bring meaning to a text but they also obtain meaning from it. Authors need to make sure that they are constructing gender equity within their stories. Fox finds that roles in life are portrayed as male or female occupations with restrictive emotional models for males. She gives an example of her cousin who was an excellent ballet dancer. He gave it up when the other children discovered his dance apparel and displayed it in a tree. This true life story inspired her to write about him in The Straight Line Wonder. Fox concludes that literature is only a part of cultural media available to children. Teachers, parents, and writers must talk, question, and discuss the world around children. We must be the models upon whom children rely.

In support of Fox's (1993) position of responsibility of authors to depict women as positive characters, an annotated bibliography created by Pat Rigg (1985) demonstrates that authors have been creating "spunky gals" in literature for years. Rigg analyzed past and present children's literature for strong female characters. She

recommends every school library obtain Joan Newman's bibliography, Girls are People Too! It contains age, grade, and ethnic groups' categorizations. Spunky gals are smart, problem solvers, gritty, courageous, and ingenious. They also possess moral strength that shines through all their actions (p. 154). Rigg reminds us that some "classic" spunky gals, such as Alice in Wonderland (1865), use common sense to deal with unnerving situations. Birdie Boyer is the Strawberry Girl by Lois Lensky who plows, plants, and nurtures fruits and vegetables and runs for help when needed. Charlotte the spider in Charlotte's Web by E. B. White is intelligent, wise, beautiful, and bloodthirsty, common for a spider she tells Wilber the pig. Spunky gals take the initiative and often do so without princes or fairy godmothers. Spunky gals are present in literature as strong female protagonists who take charge of their lives. These are characters with whom boys and girls may identify.

Recent research into gender and literacy supports the opinion that gender issues cannot be considered in isolation. They must be considered within the social and cultural context of the students. The connection between gender and literacy is a complex subject requiring teachers and curriculum planners to seek better understanding of the topic "to insure that our goals of social justice for all,

BEST COPY AVAILABLE

regardless of race, social class, or gender, are achieved and not abandoned out of frustration" (Purcell-Gates, 1993). The National SEED (Seeking Educational Equity and Diversity) Project on Inclusive Curriculum was researched by Nelson (1991). It provides an opportunity for K-12 teachers to examine what multicultural and gender inclusive curriculums include. In seven day summer workshops, teachers prepare to bring issues of gender, race, class, and ethnicity into their classrooms. At the same time, even though such a program promotes better understanding, are enough districts ready to train teachers and empower them to improve education?

Efforts to eliminate discriminatory gender policies and practices in education were devised by federal and state governments of the past twenty years. Although Title IX and other antidiscrimination laws have been successful in encouraging girls and boys to seek nontraditional course offerings, participate in academic and athletic pursuits, and attain nontraditional careers, they have not eliminated gender bias.

One of the most important elements that can make a difference is the teacher educators (Rose & Dunne, 1989). However, many educators are skeptical that the educational system can do much to eradicate bias and stereotyping that

BEST COPY AVAILABLE

is so intensely ingrained in our multicultural society. Still, most educators are supportive of nonsexist teaching. Rose and Dunne (1989) suggest ways in which teachers can prepare their students to accept and deal with gender differences. They recommend: (1) Teacher education programs should provide prospective teachers an opportunity to investigate their biases to make changes. (2) Texts, which often contain sex-biased language and stereotyping of gender roles, should be examined by students of teaching so they may become aware of the messages. (3) Research on biasing effects of teaching should be included in method courses. (4) Curriculum courses should contain resources that will assist preservice teachers in selecting fields of achievement in their profession. (5) Teacher educators should be familiar with the Handbook for Achieving Sex Equity Through Education (Klein, 1985). (6) Teacher educators must model what they teach. Rose and Dunne's (1989) recommendations imply that future teachers must be prepared with appropriate instruction in sex-fair teaching. Yet, further research is needed on how to execute these recommendations with future teachers and present educators as well.

The language arts classroom is an opportune place to investigate students' perceptions of girls and boys. The

varied everyday activities provide a place where students may learn about gender bias. Jett-Simpson and Masland (1993) researched children's storytelling and interpretation by teachers for gender stereotyping. They concluded that storytelling and other facets of language arts classes reveal children's attitudes about gender and about themselves. Reading, listening, speaking and writing, provide opportunities to dispel myths, discuss harmful effects of stereotyping, and provide possible alternatives. Jett-Simpson and Masland suggest that language arts teachers use their classrooms to work toward gender fairness. They propose alternatives to basals be used, such as literature study groups, collaborative learning settings, and modeling appropriate behavior. Choice of novels that provides characters who are well developed is as important as students' response journals. Teachers' conferences with students provide opportunities to integrate the issues of gender fair attitudes. It is concluded that children send messages about themselves and their attitudes. These messages provide a means for the teacher to plan ongoing experiences in which students are encouraged to explore alternatives to existing gender ideas.

Although several states have developed nonsexist teaching resources for integration into state curricula

(Morgan, 1990), the most recent one noted in Morgan's research was from 1986. Most current research is found in journal articles. The lack of interest in developing curricula since the eighties implies that what we have is sufficient to meet state requirements. As a result, interest and funding have been neglected.

In spite of research that indicates gender bias portrayed in children's literature has declined, it is important to note the complexity of the issues. Some researchers continue to document changes in achievement and academics across various grade levels, while others are striving to understand these differences (Purcell-Gates, 1993). Gender identity is constructed within the social and cultural contexts in which it exists.

Literature often portrays gender in an uneven fashion. Peoples from cultures, such as African-American or Latin-American, form their gender identities different from Caucasian females and males. Social class influences gender-roles also. Classroom researchers are beginning to explore the complexities of gender construction as evidenced in the resurgence of journal articles regarding gender issues. "Social consciousness should be a theme in social studies, literature, and science" (Nodding, 1992).

Everything we read, from sexist advertisements and magazines strictly for men or women to romance novels and biographies about sports figures to children's books, makes us what we are and who we are. Literature presents images of ourselves as girls and women, as boys and men. Teachers and writers have the power to change "gender appropriate" behavior and attitudes, yet many of us seem blind to the opportunities (Fox, 1993). The final statement used on the SIQ-R Test, an attitude assessment test, states: "Sex and its influence on reading are relatively unimportant" (Cassidy, 1994). The test states the answer as: "True or false, you decide." Recently, many researchers have decided that it is important.

In the past, educators may have been convinced that all that was needed to make changes in gender inequality seen in literature and academic achievement was to make the conscious efforts. Vocabulary, quality literature, class discussions, materials selected for curriculum, and teacher awareness may help; however, educators must begin from a solid base of knowledge. Very few studies have addressed the issues related to middle or high school students' reading in school and at home or work. Continued research that seeks to explore gender bias in the home and school, as well as the social community, may effect positive changes of

attitude within the language arts classroom. It is a challenge that must be met to better understand who we are, girls and women, boys and men.

REFERENCES

- American Association of University Women (1992). The AAUW report: How schools shortchange girls. New York: AAUW Educational Foundation.
- Barnett, Mark A. (1986). Sex bias in the helping behavior presented in children's picture books. Journal of Genetic Psychology, 147(3), 343-351.
- Barton, Lee (1993). What are boys like in books these days? Learning, 13(2), 130-136.
- Brodkin, Adele M. (1991). Who's smarter, boys or girls? Instructor, 100(7), 14-15.
- Burns, P., Roe, B., & Ross, E. (1992). Teaching reading in today's elementary schools. Houghton Mifflin Company, Princeton, NJ.
- Busby, Linda J. (1975). Sex-role research on the mass media. Journal of Communication, 25(4), 107-131.
- Campbell, J. (1968). The hero with 1,000 faces. Princeton, NJ: Princeton University Press.
- Cassidy, J., Smith, N., Winkeljohann, R., Ball R., & Blouch, K. (1994). The SIQ-R Test: Assessing knowledge of gender issues in literacy education. Journal of Reading, 38(2), 104-108.
- Collins, L.J.H., Ingoldsby, B.B., Dellman, M.M. (1984). Sex-role stereotyping in children's literature: A change from the past. Childhood Education, 60, 278-285.
- Dougherty, Wilma H. & Engel, Rosalind E. (1987). An 80's look for sex equality in Caldecott winners and honor books. The Reading Teacher, (Jan. 1987), 394-398.
- Durkin, Kevin (1985). Television and sex-role acquisition: I. content. British Journal of Social Psychology, 24(2), 101-113.

- Fox, Mem (1993). Men who weep, boys who dance: The gender agenda between the lines in children's literature. Language Arts, 70(2). 84-88.
- Fuchs, Gaynell M. (1987). Mona Lisa writes a letter: An alternative to the research paper. Paper presented at the Spring Conference of the National Council of Teachers of English, Louisville, KY, March 26-28.
- Fournier, Hannah S. & Russell, Delbert W. (1992). A study of sex-role stereotyping in the Oxford English Dictionary. Computers and the Humanities, 26(1), 13-20.
- Gallant, M.G.(1986). More fun with Dick and Jane (New York, Viking Penguin).
- Gumpert, Peter (1993). Social psychology. Microsoft Corporation, Encarta: Funk & Wagnall's Corporation.
- Harvey, Glen (1986). Finding reality among the myths: Why what you thought about sex equity in education isn't so. Phi Delta Kappan, (March), 509-515.
- Higginson, Nan M. (1993). Addressing sexual harassment in the classroom. Educational Leadership, 51(3), 93-97.
- Hitchcock, Mary E. & Tompkins, Gail E. (1987). Basal readers: Are they still sexist? The Reading Teacher, 41, 288-292.
- Holbrook, H.T. (1992). Sex differences in reading: Nature or nurture? Journal of Reading, 31, 574-576.
- Hudley, C.A. (1992). Using role models to improve the reading attitudes of ethnic minority high school girls. Journal of Reading, 36, 182-188.
- Jett-Simpson, Mary & Masland, Susan (1993). Girls are not dodo birds! Exploring gender equity issues in the language arts classroom. Language Arts, 70, 104-108.

- Kamler, Barbara (1993). Constructing gender in the process writing classroom. Language Arts, 70(2), 95-102.
- Kinman, Judith R. & Henderson, Darwin L. (1985). An analysis of sexism in Newbery Medal Award books from 1977 to 1984. The Reading Teacher, (May), 885-889.
- Klein, S.S. (1985). Handbook for achieving sex equity through education. Baltimore, MD: The Johns Hopkins University Press.
- Kortenhaus, Carole M. & Demarest, Jack (1993). Gender role stereotyping in children's literature: An update. Sex Roles, A Journal of Research, 28 (3-4), 219-232.
- Kuhn, D., Nash, S.C., Brucken, L. (1978). Sex role concepts of two- and three-year-olds. Child Development, 49, 445-451.
- LaFrance, Marianne (1991). School for scandal: different educational experiences for females and males. Gender and Education, 3(1), 3-13.
- Lerner, R.; Sorell, G.; & Brackney, B. (1981). Sex differences in self-concept and self-esteem of late adolescents: A time-lag analysis. Sex Roles, 7, 709-722.
- Licht, B., Stader, S.R., Swenson, C.C. (1989). Children's achievement-related beliefs: Effects of academic area, sex, and achievement level. Journal of Educational Research, 82(5), 253-260.
- Macklin, M. Carole & Kolbe, Richard H. (1984). Sex role stereotyping in children's advertising: Current and past trends. Journal of Advertising, 13(2), 34-42.
- Martin, Carol L. & Halverson, Charles F. (1981). A schematic processing model of sex typing and stereotyping in children. Child Development, 52(4), 1119-1134.

- McAuliffe, S. (1993). Toward understanding one another: Second graders' use of gendered language and story styles. The Reading Teacher, 47, 302-310.
- McDonald, Scott M. (1989). Sex bias in the representation of male and female characters in children's picture books. Journal of Genetic Psychology, 150(4), 389-401.
- Miller, D.E. (1993). The literature project: Using literature to improve self-concept of at-risk adolescent females. Journal of Reading, 36, 442-448.
- Morgan, Mary. (1990). Confronting sex stereotypes in the classroom. Journal of Reading, 33(4), 306-307.
- Nelson, Nancy (1991). The national SEED project. Educational Leadership, 49(4), 66-67
- Newman, Joan (1982). Girls are People Too! Scarecrow Press, Metuchen, NJ.
- Noddings, Nel (1992). The gender issue. Educational Leadership, 49, (4), 65-70.
- Olivares, Refael A. & Rosenthal, Nancy (1992). Gender equity and classroom experiences: A review of research. 21.
- Opalenik, Mary (1993). Recognizing and providing an audience for female voices. English Journal, 82(7), 61-62.
- Purcell-Gates, Victoria (1993). Focus on research: Complexity and gender. Language Arts, 70(2), 124-127.
- Rigg, Pat (1985). Those spunky gals: An annotated bibliography. The Reading Teacher, (Nov. '85), 154-160.
- Robison-Awana, P., Kehle, T.J., & Jenson, W.R. (1986). But what about smart girls? Adolescent self-esteem and sex-role perceptions as a function of academic achievement. Journal of Educational Psychology, 78(3), 179-183.

- Rose, Toby & Dunne, Faith (1989). Gender equity for a new generation: Teacher educators can make a difference. Contemporary Education, 61(1), 29-31
- Rovano, Marcelaine Wininger (1991). Preparing for a firefighter's world: How to teach nonsexist language. English Journal, 80(8), 59-63.
- Rupley, Williams H., Garcia, Jesus & Longnion, Bonnie (1987). Sex role portrayals in reading materials: Implications for the 1980's. The Reading Teacher, 34, 786-791.
- Sadker, Myra & Sadker, David (1986). Sexism in the classroom: From grade school to graduate school. Phi Delta Kappan, (March), 512-515.
- Sadker, Myra & Sadker, David (1988). Equity and excellence in education reform: An unfinished agenda. Research report.
- Shakeshaft, Charol (1986). A gender at risk. Phi Delta Kappan, (March), 499-503.
- Shakeshaft, Charol, Nowell, Irene, & Perry, Andy (1991). Gender and supervision. Theory into Practice, XXX(2), 134-139.
- Temple, Charles (1993). "What if Beauty has been ugly?" Reading against the grain of gender bias in children's books. Language Arts, 70(2), 89-93.
- Tibbetts, Silvia-Lee, (1993). Wanted: Data to prove that sexist reading material has an impact on the reader. The Reading Teacher, 32, 165-169.
- Tuck, Dorothy L.; Bayliss, V, Andree; Bell, Michael I. (1985). Analysis of sex stereotyping in characters by young authors. Journal of Educational Research, 78(4), 248-252.

APPENDICES

February 1995

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	F	M	T	
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	11	26	
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	7	19	
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	10	24	
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	8	
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	17	
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	10	23	
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	4	
13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	6	15	
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	5	15	
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	5	15	
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	5	
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	9	20	
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	9	23	
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	9	23	
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	9	
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	5	
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	9	
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	9	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	9
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	9
0	12	11	10	19	6	9	6	13	7	7	12	14	12	10	11	12	11	11	6	15	9	13	6	10	9	13	14	11	26	

RESULTS OF ~~EXPERIMENT~~ EXPERIMENT TEST. Female Male



Students will answer yes or no to the following questions.

- _____ 1. Teachers are more likely to give higher scores to the written compositions of boys than to the written compositions of girls.
- _____ 2. Female students at the middle school level tend to have higher grade point averages than their male counterparts.
- _____ 3. Boys in primary grades are more likely than girls to receive assistance through remedial reading classes.
- _____ 4. Children perceive certain occupations as appropriate only for males and certain occupations as appropriate only for females.
- _____ 5. Younger children are more likely than older students to perceive certain activities sex stereotypically.
- _____ 6. Books that teachers read aloud to elementary students tend to be dominated by male protagonists.
- _____ 7. One of the reasons boys seem to have more reading problems in elementary school is the number of female teachers at the elementary level.
- _____ 8. Teachers pay more classroom attention to boys and give them more encouragement than they do girls.
- _____ 9. Girls read better than boys in both English and non-English speaking countries, which suggests that the difference in reading ability between girls and boys is biological rather than cultural.
- _____ 10. Female authors of children's literature tend to portray more sex-stereotypical behaviors in their characters than do male authors.
- _____ 11. Women's increased involvement in the work force is reflected in the current children's literature.
- _____ 12. The topics primary boys and girls choose to write about are very much the same.
- _____ 13. Girls in elementary grades have more positive attitudes towards reading than boys do.
- _____ 14. Words such as " mailman, fireman, businessman, and he" include both men and women.
- _____ 15. Boys do not like stories in which there is a female as main character.

_____ 16. Publishers have reduced the sexism in basal reader stories by creating main characters that are neutral (talking animals).

_____ 17. When asked to imagine and describe life as the opposite sex, both males and females perceive this situation negatively.

_____ 18. In basal readers published before 1980, female characters were stereotyped and portrayed most often as teachers and nurses, while males were characterized most often as doctors and science teachers.

_____ 19. Girls have consistently outscored boys on the verbal selections of the Scholastic Aptitude Test, while boys have consistently outscored girls on the mathematical sections.

_____ 20. Sex and its influence on reading is relatively unimportant.