

TEACHERS' PERCEPTIONS OF GENDER
BIAS IN THE CLASSROOM

by

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ABSTRACT

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The term gender inequality encompasses many areas, however for many years gender equity in education has been a much-debated topic. Much research has been conducted on student perceptions of gender bias in the classroom, however research regarding teachers' perceptions of gender bias is scant. It is important to know how prepared and educated teachers are to notice, prevent, reduce, and respond to gender bias. Thus, this research project concerns a review of the literature regarding biological and social learning theories of gender role development. The literature review will turn its focus to stereotypical characteristics of male and female students and then focus on gender bias issues in instructional materials. This information will then be brought together with research specific to teacher interactions with students and research specifically regarding teacher educational training germane to gender bias in the classroom. The results of past research indicate that teachers are unaware of many biases that occur in the classroom. Further, research indicates that teachers are not receiving proper educational training regarding gender bias. The purpose of this study is to describe the perceptions of teachers and their educational training backgrounds regarding gender bias in the classroom.

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CHAPTER I

Introduction

When an infant is born, one of the first things we do is look to see its sex. Then we hear “it’s a boy!” or “it’s a girl!” This is the most influential statement about one’s development as a human being that is announced at birth. Whether male or female, one’s gender marks one’s entire life from within and without (Weiss, 2001).

The term gender equity has been used for a long time, however this debated issue has not been resolved. Society is still dealing with gender discrimination issues such as salary gaps, occupations, athletics, media, literature, college admissions, medicine, etc. For many years gender equity in education has been a much-debated topic.

How our gender shapes the way we learn has been studied from two main perspectives. One is the examination of sex differences in biology and the cognitive processing approach used in current brain research. The other perspective is one taken by sociologists, psychologists, educators, and feminists. Many of them feel that although biology and hormones play a definite part in one’s sense of gender identity, it’s the way we are programmed culturally that matters the most (Weiss, 2001). The question becomes, does the way we learn and the way we are taught come in pink and blue?

Twenty-nine years after the passage of Title IX, girls and boys are still not on equal footing in our nation’s classrooms (McGee Bailey, 1996). Reviews of curricular materials, data on achievement and persistence in science, research on teacher-to-student and student-to-student interaction patterns all point to school experiences that create significant barriers in education, especially in girl’s education (McGee Bailey, 1996).

It's debated whether single-sex math and science classes are a solution to gaining the interest and confidence levels in girls. There is very little research completed on single-sex classes, however there is something of a consensus that girls in single-sex schools tend to perceive subjects such as math and physics as less "masculine" and thus may have stronger preferences for them than their co-educated peers (AAUW, 1998). Vockell and Lobonc (1981) found that "non-coed girls," as a group, rated physical sciences as less masculine than the coed girls" (AAUW, 1998). Some studies report diminished achievement for girls, as a group, in single-sex classrooms. Girls' documented preferences for single-sex classes have not yet translated into corresponding gains in achievement (AAUW, 1998). When suggesting single-sex classes and/or schooling to girls we have to wonder what kind of messages are being sent to them, as well as the boys.

In the last twenty years it has become clear that parents and peers are not the entire story in gender role socialization (Beal, 1994). When children begin school their teachers are a major source of influence on them. According to David and Myra Sadker "sitting in the same classroom, reading the same textbooks, and listening to the same teacher, boys and girls receive very different educations" (Weiss, 2001). Their research shows that teachers interact with males more frequently, ask them better questions, ask follow-up questions, and give them more precise and helpful feedback. Girls suffer the cumulative effect of their teachers' uneven distribution of energy, talent, and attention (Weiss, 2001).

One area where girls tend to be recognized more than boys is appearance. Teachers compliment their outfits and hairstyles. When teachers talk with boys about

appearance, the exchanges are brief-quick recognition and then on to something else.

When teachers talk to girls about their appearance, the conversations are usually longer, and the focus stays on how pretty the girl looks. Sometimes the emphasis moves from personal appearance to papers and work. When boys, as a group, are praised, it is most often for the intellectual quality of their ideas. Girls, as a group, are twice as likely to be praised for following the rules of form (Sadker & Sadker, 1994).

Subtle gender bias is often present in classrooms, but teachers and preservice teachers may not notice it, at least on a conscious level. Caught up in the many daily decisions regarding the curriculum and classroom management, teachers have little time to reflect on and analyze their interactions with girls and boys in their classrooms. Studies show that the teacher's personal communication with and informal instruction of students have a major impact on the achievement and future success of both girls and boys (Marshall & Reinhartz, 1997). Crawford and Macleod (1990) found that biased classroom interaction decreases women's confidence in their intellectual abilities. Many observational studies demonstrate that male students participate more in class than do female students and that teacher behaviors contribute to this pattern (Lundeburg, 1997). Male students tend to receive more attention and more specific feedback from teachers; they are more likely to receive praise or correction for the intellectual content of their answers than females. Teachers rarely wait more than 5 seconds for a response and rarely call on student non-volunteers; both behaviors tend to create classroom inequities by favoring aggressive male students (Lundeburg, 1997). An intervention study by Sadker and Sadker (1986) provides evidence that teachers can alter discriminatory classroom behaviors. Many teachers are unaware of their own discriminatory behaviors until

someone calls it to their attention (Bailey, 1988). Yet training in gender equity is rarely a component of teacher education (Lundeberg, 1997).

There is little research completed on teachers' perceptions of gender bias in the classroom. Therefore this study will focus on the current perceptions of teachers regarding gender bias. As students continue to receive different educations, it's important to know how prepared and educated teachers are to notice, prevent, reduce, and respond to gender bias.

Statement of the Problem

The purpose of this study is to describe the perceptions of teachers and their educational background regarding gender bias as measured by a questionnaire. This study will focus on the following objectives:

- 1) To assess teachers' perceptions about gender bias.
- 2) To assess teachers' educational training regarding gender bias.
- 3) To assess teachers' experiences with gender bias.
- 4) To determine teachers' suggestions to alleviate gender bias.

Definition of Terms

Curriculum

Courses of study provided by the school for students.

Gender

Male and female expectations and limitations.

Gender Bias

Conscious or unconscious differential treatment of females and males based on their sex.

Gender Identity

An individual's own feelings of whether he or she is a woman or a man, a girl or a boy.

Pre-service Teacher

A person who is training to become a teacher.

Sex

Biological components making up males and females.

Title IX

A part of the Education Amendment Act passed into law in 1972 at a time when various groups demanded greater participation and recognition for themselves in American society and for their children in the schools and when substantial numbers of women and men recognized gender discrimination and bias as equal rights issues. Title IX forbids any discrimination or segregation by gender of students in school programs, courses, or activities.

CHAPTER II

Literature Review

There is much literature regarding gender bias. Because the literature is so broad, this review of literature begins by examining theories of gender role development biological and social learning theories of gender role development. Next, gender role expectations and the stereotypical male and female student will be examined. This information will then be brought together with research specific to the classroom experience involving students and teacher interactions and research specific to teacher training.

Theories of Gender Role Development

Through research many theories of gender role development have been suggested, however there has not been any clear evidence shown that one theory over another is the contributing source. Although this paper's focus regards teacher and gender bias, it is important to note how gender role development occurs before children even enter school. Sources of gender role development that will be discussed in this section of the literature review include the biological influence, the social influence, parental influence, peer influence, and finally teacher influence will be discussed later during this paper.

Biology and Gender

Differences in the understandings of girls and boys about gender behaviors and roles do not occur all at once, but begin very early in life and develop over time (Marshall & Reinhartz, 1997). When an infant is born we hear "it's a boy" or "it's a girl." This is the most influential statement about one's development as a human being. The interest in

an infant's sex reflects the fact that gender is one of the main ways to determine where an individual belongs in the culture (Beal, 1994). Children learn to be boys and girls during development. Different behaviors are expected of them when boys and girls are growing up. Focusing on the socialization process does not exclude the possibility that differences in male and female behavior might also reflect biology (Beal, 1994). Children are born with a complex biological heritage that may well be expressed somewhat differently for the two sexes, but they always develop within a social environment. Thus we can never know precisely how much biology determines our behavior, since it never works independently of a social developmental context (Beal, 1994).

Social Structure and Gender

In our society gender roles play a large part in how we as individuals come to identify ourselves and how society judges us (Streitmatter, 1994). Ideas about what boys and girls should do seem to be learned quickly at particular times, often during transitional points in development when new abilities first emerge (Beal, 1994). Much of the learning about gender roles occurs much earlier in the life span than previously realized. Children form most of their ideas about what the sexes are like during the toddler period, from about one and a half to three years old. Few parents have to tell their little boys not to wear pink pants to first grade (Beal, 1994).

The amount, timing, and intensity of socialization processes are not necessarily the same amount for the sexes. According to Beal (1994), boys, as a group, tend to receive earlier and more intense socialization than girls. Many female role models are available because many children are cared for by their mothers or other female

caregivers. Mothers, fathers, peers, and teachers all expect similar sort of behavior from girls, giving them a constant message. Also, girls are able to cross gender role boundaries with relative freedom (Beal, 1994).

The socialization of boys into the male role tends to begin early, and the social costs of deviating from the expected roles are higher for boys, as a group, in terms of peer rejection and parental disapproval. Boys also tend to face a more difficult developmental task in learning the masculine gender role, because male role models are less accessible to young children (Beal, 1994). Beal (1994) noted that mothers and teachers would like boys to behave one way, well mannered and considerate, while fathers and male peers encourage other types of behavior, including rough physical play and independence.

Parents Creating Differences

New parents are faced with a dilemma: On the one hand, the baby's gender is its most important social characteristic, but on the other hand, male and female babies are so similar that their sex cannot be easily distinguished (Beal, 1994). Gender distinctions are made even with the first step of naming the baby. First names are highly sex-typed. Girls as a group tend to have a wider selection of first names and they are more likely to be named for television characters or to be given unusual names (Beal, 1994). Parents are usually careful to dress the baby so that its gender is distinguishable to others.

Many infant clothes are highly sex-typed. A study by Shakin et al. (1985) observed infants in shopping malls and other public areas. The study revealed that girls as a group are often dressed in pink and yellow, while boys tended to be dressed in blue and red. Gender distinctions are indicated in other ways in this study as well; female babies

tended to wear jewelry, girls tended to be given pink pacifiers while boys received blue ones, and infant researchers found that parents will even sometimes bring their new born daughters into the laboratory with ribbon bows taped to their bare scalps (Beal, 1994).

Parents also create different physical environments for boys and girls. Studies of babies' rooms have found that pink, yellow, flowers, ruffles, and lace are used exclusively in girls' rooms, while boys' rooms tended to be blue or red, with transportation themes (Beal, 1994).

Parents also tend to provide different types of toys and play objects to boys and girls. This is an indicator of learned gender roles (Streitmatter, 1994). According to Bradbard (1985) and Pomerleau et al. (1990), mothers tend to buy a wider variety of toys for boys, including more trucks and cars, tools, sports equipment, balls, and construction toys. Girls as a group tended to have more dolls, toy kitchen appliances and utensils, toy furniture, jewelry, and musical toys (Beal, 1994).

The process of constructing a gender-typed environment can now begin even before birth. Parents who know the sex of the fetus through prenatal tests refer to the fetus as "he" or "she," select the baby's name, and choose toys and nursery decorations in advance according to the baby's gender. Thus, gender distinctions are now even more likely to be emphasized than in the past, when parents did not know until the birth whether they would have a son or daughter (Beal, 1994).

The Influence of Peers

For many children, other children are an important source of information about gender roles. During the toddler and preschool period children's play is that boys like to

play with other boys, while girls generally prefer other girls (Beal, 1994). According to Hartup (1983), gender is one of the most salient characteristics in children's decisions about a potential playmate (Beal, 1994). According to Beal (1994), children's preference for their own sex does not seem to be due to adult influence. If a parent or teacher is present, boys and girls, as groups, are often quite willing to play or work with one another. Beal (1994) also noted that an adult's presence apparently frees children from the social consequences of appearing to have chosen freely to interact with the other sex.

Toddlers and preschoolers.

Beal (1994) suggests two reasons why there is gender segregation in children's play. First, children tend to prefer playmates of the same sex because of compatible styles and, second, their need to establish a gender identity tends to motivate them to want to be with others who are like them.

Beal (1994) notes several reasons why children prefer their own sex. One reason children tend to prefer their own sex is that they simply get along better, with similar styles of interaction and similar interests. It is further noted that girls, as a group, begin to avoid boys because they discover that boys, as a group, are often not very cooperative playmates. According to Beal (1994), although girls tend to be the first to seek same-sex play partners, boys tend to show an even stronger preference for their own sex than girls as a group do. A second reason that Beal (1994) suggests why girls tend to play with the same sex is due to rough-and-tumble play, which tends to occur between boys. Beal (1994) reported that boys as a whole group do not initiate this type of play with girls, and girls tend to seem not to enjoy it very much, which again increases the division of the

sexes into separate play groups. A third reason why girls and boys as groups separate into playgroups is because of the need to establish a gender identity (Beal, 1994).

Beal (1994) further notes that once children get the idea that they are members of one group they are motivated to stick to that group. Beal (1994) suggests that in their respective play groups, boys and girls tend to socialize one another into traditional gender role behavior by punishing those who deviate from gender role-appropriate activities through making critical remarks, abandoning play with the playmate, or trying to get the friend to do something else. According to Beal (1994), expressions of approval and disapproval of peer play according to gender appropriateness begins by the age of three.

Middle childhood.

Beal (1994) noted that avoidance of the other sex becomes quite pointed in the elementary school years. Children become less sympathetic to the other sex and less willing to help them in the classroom, and they often invent rules that prohibit contact with the other sex during this stage. When contact between the two groups does occur, it is often tinged with romantic or sexual overtones (Beal, 1994). By acting as though contact with the other sex is forbidden and dangerous, children emphasize that there are clear boundaries between the two groups. The excitement connected with the crossing into the forbidden territory also suggests that children are highly aware of the other sex (Beal, 1994). Thorne suggests that this "border work" serves as a sort of rehearsal for romantic activity while minimizing any extended contact or emotional involvement between the sexes that would be premature before adolescence (Beal, 1994).

Boys' and Girls' Friendships

To understand further how peers influence gender roles, it is important to examine how boys and girls play and interact within their friendship groups. Within boys' and girls' peer groups, qualitative differences tend to emerge in the nature of their friendships and their preferred activities. Boys tend to become concerned with establishing status within a group of buddies, while girls, as a group, are likely to create and maintain intimate relationships with one or two close friends (Beal, 1994).

Boys.

According to Beal (1994), boys, as a group, tend to have larger friendship networks than girls so as a group and play in groups rather than pairs. There will generally be an acknowledged leader, several of his close friends, and several peripheral members who are associated with the group through connections with one or two of the central group members, otherwise known as a dominance hierarchy (Beal, 1994). Because boys need to establish and maintain status within their peer group, their style of interaction tends to be "restrictive," meaning that their behavior shortens or interrupts a play episode rather than prolonging it (Beal, 1994). As a result, pairs of boys tend not to play together (Beal, 1994).

Girls.

According to Eder & Hamilton (1978), girls tend to play with one or two "best friends," and tend to try to maintain a relationship in which both parties have equal status (Beal, 1994). Because girls as a group tend to not want status differences between friends, they try to avoid conflicts that create a clear winner or loser. When overt conflict does

occur, girls tend to try to defuse the problem by suggesting a compromise, changing the topic, giving in, or trying to clarify what the other child wants, rather than by standing their ground and forcing the issue, as noted by Beal (1994). Beal (1994) further noted that girls as a group tend to avoid confrontations with friends because their priority is to maintain a relationship in which both partners are equally valued and of similar status.

Gender Role Expectations

Whether biological or parental influences, children have to figure out what it means to be a boy or girl within a particular society. No human culture that we know of has raised boys and girls identically. Some of the distinctions between male and female gender roles probably originate in biological differences between the sexes, yet the particular divisions that are made between male and female roles vary considerably over time and across culture, indicating that gender distinctions are at least in part social constructions (Beal, 1994). Although there are exceptions to gender role stereotypes, our gender role expectations for children are still strong: We expect boys, as a group, to dress in pants and shirts, play outdoors, ride bikes, get dirty, find their way when they get lost, and hold back their tears when they fall off their bikes. We expect girls, as a group, to dress in skirts, play close to home, stay neat and tidy, be nice to other children, and to be pretty (Beal, 1994). These shared assumptions about the sexes become stereotypes that influence how we perceive others, leading us to assume they will behave in the ways that they expect and unconsciously overlooking their unique characteristics as individuals (Beal, 1994).

Out of all our personal characteristics, gender stands out as most important and most prevalent. Others notice first if we are male or female before they see whether we

are young or old (Beal, 1994). According to Beal (1994), gender stereotypes have several functions. First, they guide our behavior so that we fit into the expected roles. Second, gender stereotypes help shape children's development, leading children to master the skills that will be required as adults.

Stereotypic expectations about males and females have drawbacks as well as advantages. First, gender distinctions tend to become exaggerated; we think of being male or female as an either-or proposition. A second drawback to gender roles is that the developmental options for children of each sex become restricted, restrictions that come in both explicit and subtle forms (Beal, 1994).

The Stereotypical Male and Female Student

Throughout the literature review gender role stereotypes have been discussed in general terms, however there are also specific gender role stereotypes occurring in the classroom that deserve attention. (It is important to note that the stereotypes discussed below are not implied towards every student. Every student, male or female, does not fit into the stereotypical "mold" which is discussed below.

Gender-role expectations and the associated stereotypes affect male and female students differently in school. A common stereotypic description of male students, as a group, include: smart, a bit overactive, creative and tends to excel in math and science, has a passion of team sports, a leader, and tends to display traits of toughness, competitiveness, independence, and assertiveness or aggressiveness. Demonstration of emotion, particularly of fear or sadness, tends not to be part of his personality. Males success, as a group, will be judged by the ability to achieve in terms of money and status. According to Sadker & Sadker (1982), the two primary means of instilling these

characteristics in male students in our schools are pressure to achieve in the classroom and sports (Streitmatter, 1994).

The stereotypic female student tends to be the polar opposite of boys. Female students as a group tend to be described as a good student, such as staying on task and demonstrating obedience. Feminine curricular areas tend to be considered language arts, social sciences and home arts. The girl may be a leader within a traditionally feminine arena, but generally not a leader of the entire group of students. According to Sadker & Sadker (1982) many female students tend to go throughout the grades and increasingly defers to male students in the classroom academically (Streitmatter, 1994).

Instructional Materials

One important issue regarding the connection between school curriculum and gender are instructional materials. One of the primary means of implementing a curriculum is through the use of instructional materials. Scott & Schau (1985) found that students spend at least 90 percent of their learning time in the classroom using some sort of instructional material (Streitmatter, 1994). What role do these materials play in the consideration of gender issues in the classroom? The illustrations and stories that provide the setting for instructional content send powerful, often subtle messages that the students incorporate into their understanding of life around them (Streitmatter, 1994). Gender is an obvious, easily categorized characteristic. The ability to classify facilitates children's development of conceptions of gender roles. This influence may be so powerful that it overrides the direct experience of the child (Streitmatter, 1994). Gender-specific images in instructional materials can have a cumulative effect on students by providing students' gender role expectations. When materials portray inaccurate or stereotypic situations or

do not include groups of people in the learning material, students may often unconsciously develop distorted perceptions of their own capabilities or the capabilities of others (Streitmatter, 1994).

Invisibility

Females tend to be portrayed in instructional materials at a far lower rate than males. This generalization is true in materials for younger children as well as books for older students. History books tend to rarely mention significant women and never spoke of the lives and contributions of ordinary women (Streitmatter, 1994).

Many materials contain illustrations or text that showed males and females in situations only according to traditional gender roles. Children's reading books frequently show girls in situations where they are afraid, concerned about dirt and their appearance, passive, and unimaginative. Boys tend to be depicted in situations where they took on active, leadership roles and were heroic and strong, never afraid, and creative. Adult women tend to be assigned roles as mother and wife almost exclusively, while men tend to be found occupied in a wide variety of jobs and activities, but rarely in parenting roles (Streitmatter, 1994).

Unreality

Issues of social significance are often treated briefly and superficially, if at all. Children reading about the "typical" American family (father as the breadwinner, mother as homemaker, and two children, usually a brother and a younger sister) as the prototype are placed in the position of questioning the value of their own situation if theirs differed from the families widely depicted in earlier readers (Streitmatter, 1994).

Fragmentation/Isolation

In response to initial demands of women's rights groups to better represent females in instructional materials, publishers often retain the original text, adding information on females at the end of a section or chapter (Streitmatter, 1994). The message to the reader is that this information is supplementary to the major points.

Curriculum

An additional important issue regarding the connection between school curriculum and gender are academic subjects. There is substantial evidence that gender differentiation exists throughout the delivery of curriculum (Streitmatter, 1994). During the elementary years, schools tend to structure the curriculum in a fashion that appears to be gender neutral; that is, all content is taught to all learners. However, research that measures aspects of students' participation in schooling demonstrates that a significant gap in some subject areas of curriculum exists between the genders (Streitmatter, 1994). By the end of elementary school, boys and girls tend to perceive certain content areas as either "masculine" or "feminine."

Reading has long been regarded as something in which girls as a group are likely to surpass boys in ability and interest. Maccoby and Jacklin (1974) reviewed numerous studies that examined this issue and found that females as a group tend to do better than males in reading after the ages of ten or eleven (Streitmatter, 1994). However, it is unclear whether one gender group actually outperforms the other in reading skills across age and grade, there is some evidence that attitudes toward various reading material may be gender specific (Streitmatter, 1994).

Most people tend to perceive math as an area in which males tend to be more likely succeed than females. Much research, particularly that was done prior to the mid-1970's, reported that males as a group outperformed females in math almost from the beginning of schooling. Other studies reported that by early adolescence boys as a group excelled over girls in math (Streitmatter, 1994). Recent research shows that girls as a group tend to receive higher grades from their math teachers. This discrepancy seems to have implications for teachers as they consider their stereotypic beliefs about which gender is more capable in the classroom (Streitmatter, 1994). According to Fennema (1985), socialization, attitudinal, and affective factors all appear to play a role in explaining why females tend to participate less in upper level math courses than their male peers. However, none of the factors can be established as the primary cause of the problem, and certain factors may affect individual students more than other factors. Female students as a group tend to perceive the math curriculum differently than males and are less likely to pursue a career that calls for advanced training in math (Streitmatter, 1994).

Research tends to support the assumption that males as a group do better in science than females. The AAUW Report (1992) suggests that girls tend to be more influenced by encouragement from teachers in their pursuit of science courses and an eventual career in science (Streitmatter, 1994). Females as a group are more likely to attribute any success to external causes and failure to their own lack of ability. In general, females tend to express much less confidence in their ability to perform in the science classroom than males. Another factor affecting females' attitudes toward science may be societal expectations of females in general (Streitmatter, 1994).

Performance Data

Although it appears that there are gaps between male and female interests regarding subject areas in school, the Council of Chief State School Officers and the 1994 High School Transcript Study has found that the gap is diminishing in particular areas, such as in math and science, as noted by the performance data gathered below.

Mathematics.

The gap between girls and boys regarding mathematics is a much-discussed topic, however the gap between the sexes and mathematics appears to be diminishing (AAUW, 1998). More girls are enrolling in algebra, geometry, precalculus, trigonometry, and calculus than in 1990 (AAUW, 1998). However, girls are more likely than boys to end their high school math careers with Algebra II (AAUW, 1998). In 1994, the most recent year for which data is available, both male and females averaged nearly 3.5 credits of math courses (AAUW, 1998). The data from this study found that a significantly larger proportion of male than female high school graduates took the lowest level high school mathematics courses (basic mathematics and general mathematics). Girls outnumber boys in algebra and geometry and roughly equal proportions of girls and boys take precalculus or calculus prior to leaving high school (AAUW, 1998).

Science.

According to this study, a greater percentage of female high school graduates took science courses in 1994 than in 1990. Girls are more likely than their male counterparts to take both biology and chemistry. Roughly equal proportions of girls and boys enroll in engineering and geology. Physics, however, remains a largely male domain (AAUW, 1998).

Computer-related studies.

Data from this study suggests that enrollments in higher-skill computer courses show a puzzling drop for both boys and girls, although boys clearly outnumber girls. In comparison, girls tend to cluster in lower-end data entry and word processing classes that lead to less stimulating jobs (AAUW, 1998).

English.

Data from this study suggests that girls outnumber boys in all English classes except remedial English, earning more credits than boys (AAUW, 1998). Girls as a group earned more than four credits of English in 1994, a slight rise from 1990. Boys as a population also score lower than girls on verbal skills on most standardized tests (AAUW, 1998).

Social studies.

Enrollment differences for males and females in social studies courses are not statistically significant, however according to the study more girls than boys tend to enroll in sociology and psychology (AAUW, 1998). The pattern continues in higher education, where females are more likely to pursue college majors in certain social sciences (AAUW, 1998).

Foreign languages.

Data suggests that female high school graduates were significantly more likely than male high school graduates to have taken French or Spanish courses in both 1990 and 1994 (AAUW, 1998).

Fine arts.

In both 1990 and 1994, female high school graduates were significantly more likely than males to have taken courses in music, drama, and dance (AAUW, 1998). There is some evidence that girls' higher enrollments in fine arts and music may enhance their performance in other subject areas. The National Education Association noted in 1997 that students who took four years of high school art or music classes scored an average of 32 points higher on the verbal section of the SAT and an average of 23 points higher in math (AAUW, 1998).

Health and physical education.

Research links physical activity for girls to higher self-esteem, positive body image, and lifelong health. Young females are twice as likely to be inactive as young males. Male high school graduates were more likely than females to have taken at least one year of physical education (AAUW, 1998).

Advanced placement, gifted, and honors programs.

Educators and administrators generally identify girls as a group for gifted programs at equal or greater numbers than boys, yet students are identified for different kinds of programs, according to gender expectations (AAUW, 1998). Despite the early identification of special talent in girls, Carolyn Read found that there is an abrupt reversal of this pattern around the tenth grade (AAUW, 1998). Something leads many girls, as a group, not to enroll or to drop out of gifted and talented programs early in high school; others are not identified for these programs

Girls' advanced placement (AP) and honors courses enrollments are comparable to or greater than those of boys, except in physics. In AP and honors calculus and chemistry, girls' course enrollments improved relative to boys' (AAUW, 1998).

ACT, SAT, and PSAT.

The study further notes that girls score slightly higher than boys in English and lower in math. While girls as a group earn slightly higher grades than boys in high school English courses, they earn about the same grades in math (AAUW, 1992). Boys tend to score higher than girls in math even when both have taken four years of high school math. Once analysis found that female high school students had a much higher correlation between their Scholastic Assessment Test (SAT) and the American College Testing Program (ACT) scores than do males. The SAT-math score of girls with an ACT math score of 20 is predicted to be 470, while the SAT-Math score of a boy with an ACT score of 20 is predicted to be 540 (AAUW, 1992).

On the Preliminary Scholastic Assessment Test (PSAT), girls scored an average of 49.8 points on the writing section, 0.8 points higher than boys (AAUW, 1998). Although a gap in math scores persists, a "dramatic" change has occurred in the overall scores: Girls' overall score is just 2.7 points lower than that of boys according to the Council of Chief State School Officers and the 1994 High School Transcript study (AAUW, 1998).

Single-Sex Education for Girls

The discrepancy between boys and girls in the various subject areas in school leads to the question; do boys and girls learn better in schools and classes that separate them by sexes? There is no evidence that single-sex education in general "works" or is

“better” than coeducation (AAUW, 1998). The research on single-sex education at the elementary and secondary level has sought to measure the impact of single-sex classes and schools on student outcomes including academic performance, self-esteem, and attitudes toward academic subject matter, as well students' preferences for single sex or mixed-sex education (AAUW, 1998). We would do better to describe U.S. public elementary and secondary education as mixed-sex education rather than coeducation. Girls and boys are mixed together in our schools, but they are not receiving the same quality or quantity of education (McGee Bailey, 1996).

Few published studies have tested the idea that girls in single-sex schools have a higher self-concept (AAUW, 1998). In a study by Cairns (1990) it was found that single-sex schools are associated with benefits in terms of self-esteem. However, Foom (1988) found no significant differences in self-esteem between girls from mixed and single-sex schools (AAUW, 1998).

There is something of a consensus that girls, as a group, in single-sex schools tend to perceive subjects such as math and physics as less “masculine” and may have stronger preferences for them than their coeducated peers. Foom (1988) notes that students attending single-sex schools “seem to be less rigidly attached to traditional views about the appropriateness of subject areas by sex” (AAUW, 1998). A study by Mallam (1993) found that students in all-girls Nigerian schools favored math more than girls in coed Nigerian public boarding schools. Colley et al. (1994) found that girls from single-sex schools showed much stronger preferences than their coed peers for such stereotypically “masculine” subjects such as mathematics and science (AAUW, 1998).

There is very little research regarding single-sex classes. Girls' documented preferences for single-sex classes have not yet translated into corresponding gains in achievement (AAUW, 1998). Studies that attempt to assess the effects of single-sex schools and classes on achievement have so far found few correlations between the two (AAUW, 1998). Harvey (1985) found that there was no advantage to teaching students in a single-sex science groups, that girls in coed schools perform better in science than girls in single-sex schools, and that no difference was apparent between boys in coed and boys in single-sex schools (AAUW, 1998). Hildebrand (1996) argues that single-sex classes often give the appearance that a school system is "doing something" about gender equity "without [changing] any of the ways that gender is socially constructed in schools" (AAUW, 1998).

The "success" or "failure" of any K-12 single-sex education initiative is relative to a particular group of students in a particular setting and a given set of academic or social objectives. Claims that single-sex education is inherently "better" or "worse" than coeducation beg the questions: What constitutes a "good" education? And for whom? (AAUW, 1998).

In a world where being labeled a "girl" tends to be the classic insult for boys as a group, single-sex environments for girls can provide a refuge from put-downs and stereotypes (McGee Bailey, 1996). But these environments may also send messages that can perpetuate rather than eliminate negative gender stereotyping. Removing girls from classes in order to provide better learning opportunities for them may imply that girls and boys, as groups, are so different that they must be taught in radically different ways. When all girl classes are set up specifically in science or math, an underlying, if

unintended, message can be that girls are less capable in these subjects. Separating boys from girls in order to better control boys' behavior may indicate that boys as a group are "too wild" to control (McGee Bailey, 1996).

Teacher Interactions

Throughout this chapter many theories of gender role development have been discussed, such as parental and peer influences. Because the teacher has been the central and dominating figure of classroom research, teacher influence on gender role development deserves attention

Sitting in the same classroom, reading the same textbook, listening to the same teacher, boys and girls, as whole groups, tend to receive very different educations. Studies show that the teacher's personal communication with and informal instruction of students have a major impact on the achievement and future successes of girls and boys (Marshall & Reinhartz, 1997).

In general, most teachers do not intentionally differentiate learning opportunities for their students by gender. Much of what constitutes gender inequity in classroom practices and interactions is subconscious and subtle. Teachers tend to interact differently with their students based on students' gender. One of the most powerful and subtle influences teachers exert with students is through the quality and quantity of interactions (Streitmatter, 1994). Several decades of research have documented that boys and girls have very different experiences within the same classroom (Beal, 1994). Much research has been directed towards the costs of being a female student in the classroom, however research has shown that there are also costs to being a male student in the classroom.

The Miseducation of Girls

From grade school to graduate school female students as a group are more likely to be invisible members of the classroom (Sadker & Sadker, 1994). Studies show that the relative neglect of attention given to female students, as a group, constitutes to a loss of confidence by the end of high school and there is growing evidence that the increasing sense of discouragement for girls, as a group, may be due to the fact that a school serves as a setting in which boys, as a group, learn to feel superior to their female classmates (Beal, 1994).

Teachers' patterns of attention to girls are different to that of boys. Teachers' patterns of attention to girls tend to encourage girls, as a group, to be compliant and dependent. Carpenter & Huston-Stein (1980) found teachers are most likely to pay attention to girls, as a group, when they play quietly indoors, which encourages girls to adopt quieter, more sedentary, and structured activities (Beal, 1994). According to Beal (1994), teachers tend to notice when a girl does something wrong more often than when a boy does something wrong.

Many observational studies demonstrate that female students, as a group, tend not to participate as much as boys do as a group and that teacher behaviors contribute to this pattern (Lundeberg, 1997). Studies show that when a girl is asked a question and she does not know the answer to a problem, teachers tend to move on, on the assumption that she must really not know the information and imply that perhaps she is not quite up to the work (Beal, 1994). Research suggests that teachers, as a group, often fail to give girls direct feedback or criticism because they don't want to hurt their feelings or discourage them (AAUW, 1998). Girls tend to be asked for simple facts or questions that can be

answered with a "yes" or "no" (Beal, 1994). Girls, as a group, are more likely to receive an "accepted" response from teachers such as "okay" or "uh-huh" (Wellhousen, 1996). Sadker & Sadker found that "when girls call out, there is a fascinating occurrence: Suddely the teacher remembers the rule about raising your hand before you talk. And then the girl, who is usually not as assertive as the male students, is deftly and swiftly put back in her place" (Weiss, 2001, Wellhousen, 1996).

Eynon Lark (1996) reported that girls as a group receive more attention for their appearance (Parent, 1996; Wellhousen, 1996) and according to Sadker & Sadker (1994), girls as a group receive compliments more often than boys on their clothing, hairstyle, and overall appearance (Wellhousen, 1996). This emphasis on appearance may also influence how females schoolwork tends to be evaluated. Girls, as a group, tend to receive praise for neatness while boys tend to receive recognition for academic achievements (Wellhousen, 1996). Wellhousen (1996) noted that with such different kinds of praise, teachers send implicit messages to students about what is important, valued and recognized.

When compared to boys, teachers as a group tend to rarely criticize girls, and their few negative comments tend to be focused almost exclusively on girls' schoolwork. The criticism of girls as a group seems more pointed and forceful (Beal, 1994). Teachers, as a group, tend to assume that girls have already concentrated and done their best work, letting girls infer that their failures are due to lack of ability and that their performance probably could not be improved (Beal, 1994).

The Miseducation of Boys

Cultural messages.

Concepts of masculinity, which provide beliefs about how men ought to behave, are constructed at many different levels both in society and in the minds of individuals. A masculine ideology generated by news media, artists, teachers, historians, parents, priests, and public figures dominates how men think about themselves. Because men in any country tend to share cultural histories, they may receive similar notions about how to behave. These common understandings of masculinity constitute dominant cultural norms (Harris, 1995). Children who internalize social norms become cultural natives as members of particular social clans with traditions that define right and wrong. From these perspectives they construct complex gender identities full of idiosyncratic interpretations of masculinity that contain common threads derived from dominant cultural norms. These identities contain complicated notions about male behavior (Harris, 1995).

Harris (1995) noted that gender-role messages men receive from their surroundings are like scripts an actor follows in a play, except here the drama is a man's life. Male messages set standards. By age 9 or 10, young boys develop identities that include goals they hope to accomplish (Harris, 1995).

Message sources.

According to Harris (1995) men learn male messages in many different ways. In constructing their gender identities, boys adopt messages that appeal to them and conform to cultural norms they think they should emulate. Some messages are directly taught and others are learned by example (Harris, 1995).

The fathers' role.

For most boys their most powerful teacher about masculinity is their father, who plays an enormously important role in their development, modeling how men behave (Harris, 1995). Many commentators about male behavior assume that men get their standards about how they ought to behave from the media and from their home environments which gets passed on to sons (Harris, 1995).

Boys who admire their fathers internalize their standards. Boys earn their fathers' approval for gender appropriate behavior. Sons learn masculine behavior from their dads because father's constant presence provides a dominant image for masculinity. In some cases, boys are severely punished for not behaving in ways that meet father's approval. Boys often rebel against their father's stern injunctions to behave in a particular way (Harris, 1995).

When fathers aren't around.

Harris (1995) noted that with a rapid increase in the divorce rate today over one third of first marriages end in divorce. As a result, sons are likely to spend less time with their fathers. Some experts have estimated that as many as 12 million children in the United States do not live with their fathers (Harris, 1995).

According to Harris (1995), a father's absence can have a profound effect upon a son who feels rejected because his father does not choose to spend time with him. Harris (1995) also suggested that boys need a sense that it is okay to be a man and when they do not get that from their fathers, they tend to be confused about their masculine identity.

The mother's role.

According to Harris (1995), women influence the formation of a man's gender identity. Mothers teach their sons about masculinity by telling their sons how to behave, modeling certain behaviors, and rewarding sons for their actions. Harris (1995) also noted that women reinforce messages through the approval, love, and friendship they share with men. Boys are likely to take their cues about how they ought to behave from the mother who is often the only nurturing parent. Since most elementary teachers are female, women play extremely important roles in helping young boys adopt appropriate standards for their behavior (Harris, 1995).

The teacher's role

Defining gender differences in research often occurs in groupings of males or females, however research tends to not indicate individual variation among gender groups. What may be true for an individual may not apply to a whole group and what is beneficial to one student may be another student's burden. Particularly research seems to demonstrate a negative bias towards males and seems to blame males for their behaviors.

Many studies suggest that there are many benefits to being a male student.

Research has shown that boys as a group tend to absorb the bulk of the attention and instruction from teachers (Beal, 1994). Teachers' patterns of attention to boys may tend to enhance boys' assertiveness. Males as a group also tend to receive more specific feedback from teachers; they are more likely to receive praise or correction for the intellectual content of their answers and (Lundeberg, 1997; Sadker & Sadker, 1994; AAUW, 1998) boys as a group are more often addressed by name (Peltz, 1990). Studies also suggest that

boys as a group are often asked higher-order questions and are given more "wait-time" in answering questions (Shmurak & Ratliff, 1994). Also, boys as a group tend to receive more help than girls when they have trouble with a question. Teachers tend to give boys more hints and second tries if a male answers incorrectly (Beal, 1994). Research suggests that some teachers tend to analyze boys' failures in terms of controllable factors, such as not paying attention or not following instructions, and emphasize that if the boy tried harder, he would do better next time (Beal, 1994).

Although it may appear that being a male student has many benefits, research shows that there are also downfalls. Sadker and Sadker (1994) noted that few would consider boys "miseducated," but gender bias is a two-edged sword. Girls are shortchanged, but males pay a price as well (Sadker & Sadker, 1994).

Sadker and Sadker suggest that boys are often labeled as problems in need of special control or assistance, boys are more likely to fail a course, miss promotion, or drop out of school. They further (1994) suggest that because boys tend to be prone to taking risks, they jeopardize not only their academic future but also their lives as they dominate accidents, suicides, and homicide statistics (Sadker & Sadker, 1994). Sadker and Sadker (1994) suggest that teachers tend to remember boys as their worst students – the discipline problems, the ones most likely to create a classroom disturbance or to flunk out of school (Sadker & Sadker, 1994).

Beal (1994) suggests that teachers as a group tend to always be watching boys, even if they are across the room, in anticipation of some misbehavior that could result in someone getting hurt, and they respond quickly to any hints of impending mischief in boys. An observational study by Matthews et al. (1997-1998) found that boys names

were often on the behavioral chart and some teachers' tended to refer to all students as "guys."

By adolescence the pressure of conforming to the male role has become relentless (Sadker and Sadker, 1994). It appears to be much more acceptable for girls as a group to cross gender boundaries, however this is not the case for boys. Sadker and Sadker (1994) suggest that there is nothing more devastating to a boy than being called a "girl," "woman," "sissy," "fag," or "queer." So boys tend to work hard to purge themselves of any hint of femininity. Parents, teachers, and other adults also draw gender lines, training boys to avoid toys, games, or behavior associated with girls (Sadker & Sadker, 1994). Studies show that adults worry about cross-sex behavior for both boys and girls, but parents and teachers believe girls will grow out of male behavior while boys will carry female traits into adulthood (Sadker & Sadker, 1994).

Boys' feelings of misogyny, if allowed to develop unchecked, can bear bitter fruit in adulthood, noted by the Sadkers' (1994). Men who view women as worthless or as objects of scorn and submission may act on those beliefs (Sadker & Sadker, 1994).

Sadker and Sadker (1994) noted that chaotic play is gradually organized into athletic games complete with rules and goals. As they compete, boys tend to rank one another. By middle school boys' sports becomes the most salient and prestigious of all school-sponsored activities. In a study, a group of researchers observed and interviewed children in two elementary schools for three years. In both schools the most popular boy in each grade was also the best athlete. Those who were clumsy and awkward were picked on, ridiculed, and called "fag" and other names suggesting they were like girls (Sadker & Sadker, 1994).

Statistics. (Sadker & Sadker, 1994)

Academic:

- From elementary school through high school, boys tend to receive lower report card grades. By middle school they are far more likely to be grade repeaters and dropouts.
- Boys tend to experience more difficulty adjusting to school. They are nine times more likely to suffer from hyperactivity and higher levels of academic stress.
- The majority of students identified for special education programs tend to be boys. They represent 58 percent of those in classes for the cognitively disabled, 71 percent of the learning disabled, and 80 percent of those in programs for the emotionally disturbed.
- In school, boys' misbehavior tends to result in more frequent penalties, including corporal punishment. Boys comprise 71 percent of all school suspensions.

Psychosocial and physical: (Sadker & Sadker, 1989)

- Society tends to socialize boys into active, independent and aggressive roles. Such behavior is incongruent with school norms and rituals that stress quiet behavior and impulse control. This results in a pattern of role conflict for boys as a group, particularly during elementary years.
- Hyperactivity is estimated to be nine times more prevalent in boys as a group than in girls. Boys are more likely to be identified as having school and social adjustment problems.

- Boys tend to be taught stereotyped behaviors earlier and more harshly than girls; there is a 20 percent greater probability that such stereotyped behavior will stay with them for life.
- Until recently, programs focusing on adolescent sexuality and teen pregnancy were directed almost exclusively at females. Lack of emphasis on the male role placed undue responsibility on females while seemingly condoning males' irresponsibility.
- In 1993, one-third of all 18-25 year-old fathers lived away from at least one of their children.

Psychological:

- Boys are three times more likely to become alcohol dependent and 50 percent more likely to use illicit drugs. Men account for more than 90 percent of alcohol- and drug-related arrests.
- Risk-taking behavior goes beyond drug and alcohol abuse. The leading cause of death among fifteen- to twenty-four-year-old white males is accidents. Teenage boys are more likely to die from gunshot wounds than from all natural causes combined.
- Many boys tend to be encouraged to pursue unrealistically high career goals. When these are not attained, males often feel like failures, and a lifelong sense of frustration may follow.
- Both at school and at home, boys as a group are taught to hide or suppress their emotions; as men, they may find it difficult or impossible to show feelings toward their family and friends (Sadker & Sadker, 1989).

- Males commit suicide two to three times more frequently than females.

Teacher Education

Teachers enter the field prepared, for the most part, to accomplish tasks such as classroom management, developing a pedagogical style, and compiling the core of a teacher's classroom strategies. However, they do not enter the field prepared to teach in an equitable manner (AAUW, 1998; Beal, 1994). Therefore, they are not prepared to make changes in school curriculum, interaction patterns, pedagogical strategies, or uses of resources such as technology that would advance equitable learning (AAUW, 1998).

Campbell and Sander conducted a national survey of teacher educators in methods in 1993 and 1994 and found that while 72 percent of professors reported doing some gender equity in their methods courses, and another 15 percent said they would like to do so, the largest amount of time spent on gender equity was two hours per semester (AAUW, 1998). Two-thirds (68%) spent two hours or less per semester, and a third spent one hour or less. Coverage centered on stereotypes, followed by teacher/student interaction patterns favoring boys, the under representation of girls in mathematics, science, and technology courses and activities, and the under representation of women in mathematics, science, and technological careers. Of those professors who spent time on gender equity, more than half (55 percent) reported being satisfied with the one or two hours they were including (AAUW, 1998).

Identical data was found between 1994 and 1996 from the Marymount Institute for the Education of Women and Girls. In a survey of fifty colleges across the nation, the Marymount Institute found that not one offered a course in gender equity as part of its teach training program; more than 90 percent of those questioned stated that gender

equity was merely mentioned in their curricula, and that gender equity was the subject of a “one-hour lecture” during the semester in some programs (AAUW, 1998).

Research has shown that teachers are both eager and able to change their teaching styles to advance classroom equity when given the change and training. In 1997 Sherril Pryor found that after several viewings of videotapes of classrooms, teachers identified subtle habits. She reported that before any training, “fewer than 60 percent of the preservice teachers were aware of subtler forms of bias, such as the disparity in the number of reprimands of males and females, and the disparity of classroom task assignments between males and females (AAUW, 1998).

Bautz (1993) conducted a survey of 125 “master teachers” (experienced teachers who supervise and train student teachers) and found that while they agreed it was important for boys and girls to receive equal treatment, overcoming gender biases in instructions was only sixth on their list of objectives, suggesting that many teachers still do not recognize the extent of differential treatment of students (Beal, 1994).

In 1998 the movement to incorporate equity into teacher education is growing. Sanders, Campbell, and Steinbrueck reported successful results from the Teacher Education Equity Project (TEEP). A program designed to “promote gender equity in mathematics, science, and technology education at the source,” TEEP worked with 61 professors in colleges of education across the U.S. As a result, 85 percent of the participants adopted more equitable practices, and professors dramatically increased the specific gender equity activities they reported doing with their classes (AAUW, 1998).

Scantlebury et al. (1996) report that the cooperating teacher is the key, that cooperating teachers educated in equitable teaching strategies influence their student teacher's teaching to be more equitable. After examining interaction patterns of cooperating teachers and student teacher's with high school students, they found that student teachers whose cooperating teachers had participated in seminars on gender equity and teaching interacted more equitably with their high school students in terms of quantity and quality of interactions than those whose cooperating teachers had not participated in equity-based education (Bailey et al., 1997).

CHAPTER III

Methodology

This chapter will introduced the proposed study by describing the participants, questionnaire instrument, procedure, and data analysis. Next, the chapter will discuss the anticipated findings. Finally, the potential limitations of this research will be introduced.

Proposed Future Study

Participants.

All teachers, kindergarten through twelfth grade, from the Eau Claire School District in Eau Claire, Wisconsin, will be asked to participate in the study during the fall of 2001. Receiving permission from the participants will be obtained by an informed consent sent with the questionnaire via email. Informed Consent signatures are not required. Reading the informed consent and completing the questionnaire informs the examiner that the participants have given their permission. This will be noted in the informed consent

Questionnaire instrument.

There is no known specific instrumentation available at this time to measure teachers' perceptions of gender bias, however I plan to develop a questionnaire to send via email to teachers in the Eau Claire School District.

** Please see Appendix A for questionnaire

Procedure.

A questionnaire sent via email is the method that will be used to conduct this study. Although it is known to whom I will be sending the questionnaires, a confidential

coding system will be established for when participants return the questionnaire making it impossible for the examiner to identify the participants.

However, the server will tell me if a participant does not reply to the questionnaire given. If the sample does not respond within 10 days, a follow up questionnaire will be emailed using the confidential coding system mentioned above.

Data analysis.

Descriptive statistics should be used in analyzing the results of the future research. For example, frequency counts, percentages, means, and standard deviations should be used to describe the subject's responses to each of the questions. Further, correlative relationships between teachers' perceptions, experiences, and training should also be explored.

Anticipated Findings

The intent of the proposed study is to improve upon little research that has been done in the past regarding teachers' perceptions and educational training of gender bias. It is hypothesized that even if teachers do not report that they themselves have been involved in gender issues in their own classrooms, they will report that they have witnessed or heard of gender bias issues in their schools and/or district. It is also hypothesized that teachers' will report that they have received little or no educational training regarding gender bias. Finally, it is hypothesized that teachers' will report that they wish that they had received some or more educational training regarding gender bias.

Potential Limitations

There are three possible limitations of the proposed study. First, teachers' would be asked to report on their perceptions of how large of a problem gender bias issues are in their schools and classrooms. Responses would be based on teachers' opinions, as they would not be required to consult official documents verifying past gender issues. Second, teachers' would be asked to report on gender issues not necessarily related to themselves. This presents a limitation as teachers would not be self-reporting and they may not be completely honest in their responses. Lastly, social desirability is a limitation. Participants may respond to the questionnaire the way they think the examiner would like them to.

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APPENDIX A

Questionnaire Instrument

1. What grade level do you teach?

- 1-2
- 3-4
- 5-6
- 7-8
- 9-10
- 11-12

2. What is your gender?

- Male
- Female

3. What is your age?

- 20-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61+

4. Please select the box(s) that would explain the extent of your educational training background regarding issues of gender sensitivity. Please check all that apply.

- Undergraduate level courses
 - Mentioned in a course
 - 1 full course
 - 2 full courses
 - 3+ full courses
- Master's level courses
 - Mentioned in a course
 - 1 full course
 - 2 full courses
 - 3+ full courses
- Doctorate level courses
 - Mentioned in a course
 - 1 full course
 - 2 full courses

- 3+ full courses
- Lectures
 - Mentioned in a lecture
 - 1 full lecture
 - 2 full lectures
 - 3 full lectures
- Seminars
 - Mentioned in a seminar
 - 1 full seminar
 - 2 full seminars
 - 3+ full seminars
- Workshops
 - Mentioned at a workshop
 - 1 full workshop
 - 2 full workshops
 - 3 +full workshops
- Other

5. If you selected "Other" as one of your answers to question number 4, please explain further.

6. Please indicate how strongly you agree or disagree with to the following question by selecting the box that with the appropriate number following the question. Do you wish that you had received more educational training regarding gender sensitivity than the training you have received?

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

7. Please explain your answer to questions 6.

8. Please indicate how strongly you agree or disagree with to the following question by circling the appropriate number following the question. Do you feel that there should be a mandatory course for teacher certification regarding gender sensitivity?

- 1 - Strongly Disagree
- 2 - Disagree
- 3 - Neutral
- 4 - Agree
- 5 - Strongly Agree

9. Please explain your answer to question 8.

10. Please describe typical patterns that you see in your male students behaviors, attitudes, and performance.
11. Please describe typical patterns that you see in you female students behaviors, attitudes, and performance.
12. Do you see any areas where boys tend to do better than girls do?
 - Yes
 - No
13. If you answered yes to number 12, please explain further.
14. Do you see any areas where boys tend to do worse than girls do?.
 - Yes
 - No
15. If you answered yes to number 14, please explain further.
16. Have you seen or witnessed gender insensitivity in your school or in classrooms?
 - Yes
 - No
17. If you answered yes to question 16, please explain further.
18. In what ways are your school and/or district insensitive to **girls** needs?
19. In what ways are your school and/or district insensitive to **boys** needs?
20. Please list all measures that you, your colleagues, and/or school takes to reduce gender bias in the classroom and/or school.
21. Please add any additional comments related to gender issues in the classroom that you wish to add.