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# Sexism in Single-Sex and Coeducational Independent Secondary School Classrooms

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*This study investigated how engenderment (socialization to gender) operates in three types of independent secondary schools—boys' schools, girls' schools, and coeducational schools. Observational data were collected in 86 classrooms in 21 schools in specific curricular areas. The study found that teachers initiated most of the incidents in six categories of sexism. Furthermore, although the frequency of incidents was similar in the three types of schools, the forms of sexism were different. Chemistry classes were the major locus of sexism in coeducational schools, and the severest form of sexism was found in boys' schools. Although girls' schools exhibited the most gender-equity events, they also perpetuated a pernicious form of sexism: academic dependence and nonrigorous instruction. Schools with policies that actively promoted gender equity in enrollment, in the hiring of faculty, and in personal relations were the least likely sites of sexism.*

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Sexism, which entered the lexicon in 1970 as an analogue to racism, connotes a fundamental and pervasive institutionalized bias on the basis of sex, with discrimination usually directed against women (Frazier and Sadker 1973). The rationale for sexism is the biological difference between males and females that dictates differential social roles, status, and norms (Sleeter and Grant 1988).

To understand the sociocultural construction of nonbiological sex distinctions, feminists now prefer the term *gender*, rather than *sex* (Scott 1986). Because of their sociocultural embeddedness, sexist, or gender, distinctions historically were considered to be naturally perpetuated. Just as other socializing institutions, including the family and the church, have inevitably transmitted sociocultural sexism, so, too, have the schools. Classrooms, where the process of schooling largely occurs, are primary sites for sexist socialization. The study

presented here investigated the prevalence and forms of sexism found in independent (private) secondary school classrooms.

In the United States, research on sexism in classrooms has developed primarily in two domains. In the policy arena, it has repeatedly documented the incidence of gender-discriminatory behavior (see, for example, American Association of University Women, AAUW, 1992; Klein 1985; Sadker and Sadker 1986). In the domain of educational psychology, it has identified gender-differentiated patterns of school experiences related to teacher-student interactions and to students' learning (see, for instance, Wilkinson and Marrett 1985). More generally, in addition to developing bases of domain-specific knowledge (such as a focus on sexism in mathematics and science), classroom-based research has also contributed useful observational approaches, measures, and methodologies (Anderson and Burns

1989; Evertson and Green 1986). We incorporated several of these approaches into the study described here.

Research on classroom-based sexism in this country has typically been descriptive, rather than grounded in theory, and when it has been grounded in theory, the grounding has been narrow. Theory-driven research on this topic has been more common abroad and has usually developed in the context of the social reproduction or social production theories that dominate the British school of sociology of education (Arnot 1982, 1984; Kessler, Ashenden, Connell, and Dowsett 1985; Weiler 1988). According to social reproduction theory, schools replicate the gender and social-class relationships inherent in the functioning of a capitalist economy. Social production theory attempts to overcome that mechanistic view and its assumption of human passivity by positing that students and teachers are active agents of accommodation, resistance, or alternative choices (Anyon 1984; Kessler et al. 1985; Weiler 1988). Placing our research on sexism in classrooms in a sociocultural context, we found some conceptual affinity with the macrosocietal perspective of the British school, particularly the social production model.

The two strains of the emergent scholarship on gender are germane here. This scholarship typically focuses on feminist sociological theory (see Chafetz 1989, 1990; Epstein 1988) or is lodged within a historiographic and institutional analysis of educational policy related to single-sex and coeducational schooling (Hansot and Tyack 1988; Tyack and Hansot 1990). Both strains attempt to account for social stability and social change by analyzing interactive structural forces at several levels—societal, institutional, and interpersonal (Chafetz 1990). Institutions are particularly influential in this regard: “Individuals make choices, but institutional patterns shape the alternatives and make one choice more likely than another” (Epstein 1988:99).

Our investigation involved a comparative analysis of sexism in single-sex and coeducational classrooms. Drawing on the theoretical domains just mentioned, we assumed that systemic sexism would be

manifest in schools but not necessarily permeate them. That is, through the administrators, teachers, and students within them, schools have some power both to resist sexism and to promote gender equity (Phelps 1987; Weiler 1988), but as institutions with a defined membership, their actions (especially those of private schools) are constrained to reflect the values of the clients they serve. Therefore, we hypothesized variability among schools (and classrooms within schools) in the degree to which they embrace or resist institutional sexism.

Our focus was on whether, and how, the single-sex or coeducational gender grouping of schools affects the occurrence, form, and severity of sexism in the classroom. Reflecting the values of a gender-stratified society in their organization, curriculum, policies, and practices, schools—even schools for girls—have expressed the male experience as superordinate and normative (Geile, 1978; McIntosh 1984; Spender 1981; Tetreault 1987). The institutional conduct of private schools, whose membership is voluntary, is also directed to meet the needs and values of their individual “societies.” Because single-sex education bypasses much of the daily patterning of sexist relationships, however, is this organizational form more likely or less likely to promote positive and equitable gender attitudes? Particularly for teenage girls, do single-sex classrooms function as opportunity structures—empowering environments that facilitate them to take advantage of options for full social, and academic participation and eventual participation in the labor force? Are boys’ schools (and all-male classes), because of the absence of the “civilizing” effect often attributed to females, particularly likely sites for sexism? Classrooms organized by gender, such as those in single-sex schools, offer unique opportunities for comparative research on sexism in educational environments that are primary sites of socialization for adolescents.

## BACKGROUND

### Gender and Schooling

Schools and schooling are contradictory forces in the socialization of stu-

dents to gender, as well as to social and racial relations. As agents of society, schools necessarily reinforce gender social definitions, whereas as socializing agents, they are also primary locations for the development of new standards, roles, and attitudes toward gender. Reflecting the duality of serving as both conservative and liberating forces in society—"schools link the families from which young children come and the sex-segregated occupational worlds to which they are sent" (Wrigley 1992:vii).

Feminist sociological theory generally takes a social structural approach, seeing the gendered division of labor and economic power as the foundation for the unequal treatment of women (Chafetz 1989, 1990; Epstein 1988; Geile, 1978). This approach holds to a functionalist interpretation of the family, emphasizing that gender arrangements and roles are fundamental for the maintenance of the social order (Stacey and Thorne 1985).

Integrating the macro-, mezzo-, and microstructural levels into the theoretical analysis of gender, Chafetz (1990) proposed a new theory of socialization: the process of *engenderment*. It follows that schools, as social institutions, are active agents of engenderment. From a macrolevel institutional perspective, a school's gender system may reflect the society in which it operates. At the micro level, however, individuals in a school—administrators, teachers, and students—may choose to participate in or to resist this gender system. Although Chafetz (1989) stated that gender inequality is maintained through the gendered division of labor that reinforces male power, she proposed a theoretical approach in which mechanisms may be identified for changing gender stratification by transforming the adult division of labor. However, other theorists (such as Cahill 1983; Lever 1976; Thorne 1992) have contended that childhood is the key because it is during childhood that boys and girls internalize gender social definitions. Poised between the family and the adult society, then, schools and classrooms may be viewed as what Chafetz (1989) called "pivotal change targets."

Hansot and Tyack (1988) suggested that schools differ markedly in how they socialize students to gender—varying across time, culture, and institution—according to the salience they attach to gender. For example, gender may serve as a principle of organization, in the case of single-sex and coeducational schools, or as a principle of equity in schools of all types. In considering private schools, we expected some additional variability among schools, given the different types of clientele served by various private schools, in the degree to which they promote or inhibit sexism. This variability, we thought, should be especially evident in comparing single-sex schools with coeducational schools.

### Combating Sexism in Schools

In the early 1970s, when the injustice of sexism emerged as a social issue, two corrective approaches were taken. The first involved liberal reform through policy initiatives, most notably Title IX of the Educational Amendments Act of 1972 (P.L. 92-318), which prohibits sexual discrimination in educational programs that receive federal funds. Although legislation may remove obvious institutional barriers to women's progress and promote further affirmative action programs in educational and professional arenas, stereotypical attitudes and practices remain a root problem in education, with severe consequences for individuals and society (AAUW 1992; McIntosh 1984; National Research Council 1989; U.S. Congress 1988).

The second, more fundamental and far-reaching approach was the burgeoning of feminist critiques and reconstructive scholarship in the academic disciplines. Attempting to identify male bias where it existed, feminist scholars began to correct distortions and to reconstruct the disciplines taking the experience of women into account. Because the male experience was regarded as normative, girls and women were ignored as subjects for research, and their experience was devalued and treated stereotypically (DuBois, Kelly, Kennedy, Korsmeyer, and Robinson 1985; Gilligan 1982). The response of feminist scholarship to sex-

ism represents a move beyond the "male-centered paradigm," to make the issues of women and gender central to what has been termed "the new scholarship on women" (Tetreault 1987).

Taking an institutional view, educational sociologists have examined facets of school organization—curriculum, students' course-taking patterns (particularly in science and mathematics), gender-grouping practices, and access to educational resources—to account for male-female differences in academic achievement, career choice, educational aspirations and attainment, and social attitudes (Kahle 1985; Lee and Bryk 1986; Oakes 1990). Curricular reviews addressed the absence of women in history and English textbooks (Showalter 1974; Trecker 1974). Linguists have pointed out the structural biases in the English language and established criteria for nonsexist usage (Nilsen, Bosmajian, Gershuny, and Stanley 1977; Thorne and Henley 1975).

The sheer volume of gender-related scholarship in education notwithstanding, issues of gender did not figure significantly in the school-reform literature of the 1980s (Tetreault 1987). Compared with its impact in such fields as nursing or law, feminist theory has had little impact on education, except perhaps in the domain of moral education or ethics (Noddings 1990).<sup>1</sup> After more than a decade of supposed educational reform in the 1980s, advocates of gender equity revived the issue of sexism in the schools and, in the process, indicted coeducation for perpetrating what Tyack and Hansot (1990) termed its "hidden injuries."

### Gender Grouping in Schools

*Critique of coeducation.* With coeducation now virtually the norm in U.S.

elementary and secondary schools, a critical perspective is emerging that depicts coeducational schools as environments that socialize young men and women into a society stratified by gender (Epstein 1988; Hansot and Tyack 1988; Martin 1990; Rossi 1987; Tyack and Hansot 1990). Although the norm of coeducation in U.S. public schools evolved for reasons of efficiency, rather than substance, early feminists regarded coeducation as an equalizing structure for young women (Lasser 1987). With social and economic segregation of the genders the rule in the home and workplace, however, coeducation has functioned to acculturate the young into existing unequal social and economic roles (Tyack and Hansot 1990). Coeducation has recently come under scrutiny and criticism for its gender discriminatory policies and practices (AAUW 1992; Hall and Sandler 1982; Krupnick 1985; Sadker and Sadker 1986, 1990).

Although single-sex education traditionally supported an unequal social arrangement between the sexes, in its contemporary form it may also offer special opportunity structures for young women (Epstein 1988; Lee and Marks 1992). Rather than providing second-class education (as Title IX would suggest), single-sex schooling may actually help young women surmount discrimination and stratification in the larger social arena (Keohane 1990; Lockheed and Klein 1985). In fact, U.S. single-sex Catholic secondary schooling has been shown to produce benefits, especially for young women, on a range of outcomes, including academic achievement, academic attitudes and aspirations, less stereotypical views of sex roles in family and professional life, and political activism (Lee and Bryk 1986; Lee and Marks 1990; Riordan 1990).

*Who chooses single-sex schools?* Because schools that are organized by gender are available only in the private sector and charge tuition, such traditional stratifying factors as race, ethnicity, and social class are less likely to differentiate the clientele of single-sex and coeducational schools. Although some researchers have shown small but significant social-class advantages for

<sup>1</sup> Noddings contrasted an *individualist* and a *relational* approach to feminist theory. The individualist view aims to extend to women the rights and privileges held by men. The relational view extols the female perspective and resists females' assimilation into a world dominated by males. Although the individualist approach seeks to make females more like males, the relational approach glorifies the value of being different.

students who choose single-sex schools (Lee and Bryk 1986; Lee and Lockheed 1990), a recent study of elite (independent) secondary schools (Lee and Marks 1992) found no social-class or racial differences between boys or girls who chose single-sex or coeducational schools. However, other differentiating factors led those researchers to conclude that families and students who chose either boys' or girls' schools generally were seeking a traditional structure, rather than an opportunity structure, because of the students' higher religiosity and the greater likelihood that their parents attended private (especially single-sex schools) themselves.

*Traditional and opportunity structures.* Until the movement toward coeducation began in the 1960s, most private schools were single-sex schools. Elite private schools have traditionally offered upper- or upper middle-class families education that was simultaneously exclusive, cultured, privileged, and demanding. Historically, two models characterized the development of girls' schools: female seminaries, which functioned primarily as college-preparatory institutions and were modeled on prestigious boys' schools, and a model that "stressed the cultivation of 'feminine' womanly virtues" (Kraushaar 1972:73). For both genders, the purpose of a private school education has been to provide the children of the elite with a shared class culture, meant to assure their right to belong within the circle of the wealthy and powerful and to serve as society's leaders (Lewis and Wanner 1979).

The distinction between the two models of girls' schools has blurred, since virtually all independent schools now purport to offer demanding academic curricula, yet the duality of mission for girls' schools has not disappeared. In part, these two models undergird the distinction Lee and Marks (1992) made between traditional and opportunity structures. Although coeducational schools have been indicted as settings in which sexism is learned and reinforced (Rossi 1987; Tyack and Hansot 1990) and girls' schools may offer particular opportunity structures for young women's gender devel-

opment, all private schools (which rely largely on tuition-paying clients) cater, to some degree, to the values of their affluent students and families. If families choose single-sex education because of their desire for a traditional structure (as Lee and Marks suggested) and traditional educational settings also foster unequal socialization by gender (Kraushaar 1972), it is possible that single-sex schools (at least some of them) may continue to support unequal social arrangements between the genders. Although research comparing the experiences of students in coeducational and single-sex schools has heretofore focused on schools, not classrooms, the findings of this research *imply* that there are differences among classrooms.

### Research on Sexism in the Classroom

"A sex-equitable classroom environment is one in which both the overt and the hidden curriculum treat boys and girls equitably, so that they receive equal benefits from the instruction" (Lockheed and Klein 1985:190). Such environments should be free of gender social definitions—those ideologies, norms, and stereotypes that impose limits on students. Teachers, as "vital link(s) in promoting non-sexist attitudes" (Guttentag and Bray 1977:406), have the major responsibility for creating equitable conditions in their classrooms; in their procedures; and, what is most important, in their interactions with students. Ideally, individual teachers who do so would not be unique to or in any school. Colleagues and administrators could also attempt to resist the "engendered" social definitions that abound in the larger society.

*Common findings.* Although it spans all educational levels, research on sexism in the classroom shares some commonalities. Generally taking a hierarchical view, it focuses on how teachers instruct students (Tyack and Hansot 1990). Whether in elementary, secondary, or college-level coeducational classrooms, males receive more attention from teachers and generally dominate classroom activities (AAUW 1992; Good, Sikes, and Brophy 1973; "Girls Talk" 1991; Sadker and Sadker 1982; Sadker,

Sadker, and Klein 1991; Sandler 1987). Methodologically, the category systems or rating scales used by most researchers of classrooms suggest that researchers entered the classroom research environment having already decided on the behaviors they intended to observe (Etaugh and Harlow 1975; Good and Brophy 1972). The few studies that have examined students interacting with one another have been conducted in elementary-level classrooms using ethnographic methods (D'Amico 1975; Eisenhart and Holland 1983; Thorne 1992).

Although in the 1960s investigations often centered on why boys encountered more problems than girls in learning to read, in the 1970s, attention shifted to the treatment, often stereotyped, that girls encountered in the classroom (Tyack and Hansot 1990). Two decades later, the pattern is still centered on documenting and describing differential treatment by gender.

*Secondary schools and classrooms.* Research on sexism in high school classrooms frequently focuses on comparing the experiences of young men and women in particular curricular areas, most often mathematics and science. Although girls usually start school with positive attitudes toward the sciences, their interest diminishes. A major reason for their loss of interest is that they do not experience science activities and skills in the classroom to the extent that boys do (Kahle and Lake 1983). The sources of disadvantage for girls in the sciences are numerous and insidious—including male-focused examples and illustrations in textbooks, differential expectations of teachers, disapproval of peers, and the lack of role models (Hardin and Dede 1973). In both mathematics and science, girls are less likely than are boys to receive advice, counseling, and encouragement to take advanced courses or to prepare for careers that require those skills (Oakes 1990).

Clearly, the research just cited was conducted in coeducational settings. In terms of gender grouping in secondary schools, single-sex schooling, especially in the sciences, seems to be more favorable for girls (Lee and Bryk 1986; Rioridan 1990). For example, ninth-grade

girls who attended English single-sex schools surpassed ninth-grade boys in either single-sex or coeducational schools in biology and chemistry, an achievement not repeated by girls in coeducational schools (Finn 1980). Furthermore, the difference between the attitudes of ninth-grade girls and boys toward science, as well as their competence in physics and practical science, was greater in coeducational schools (Finn).

In terms of role identification, girls in single-sex schools are less likely than are girls in coeducational schools to perceive the physical sciences as stereotypically masculine (Vockell and Lobonc 1981) and are more likely both to have female science teachers as role models and to be expected to achieve in the sciences (Blin-Stoyle 1983). For instance, Nigerian girls in single-sex schools surpassed their coeducational counterparts in mathematics achievement and held less stereotypical view toward mathematics (Lee and Lockheed 1990). The Nigerian boys, however, achieved more favorable outcomes in the coeducational schools than in the single-sex schools.

*Postsecondary classrooms.* At the college level, research has focused mainly on two topics: (1) the relative amount of time male and female students speak up in college classrooms and (2) the proportionate amounts of classroom time spent by men and women in cross-gender interactions, particularly whether the teacher's gender affects the interactions he or she has with same-sex or opposite-sex students (Gabriel and Smithson 1990). The findings have been consistent with regard to the first topic: Men talk more in class (Hall and Sandler 1982), whether they are in the majority and have a male instructor (Krupnick 1985) or whether they are in the minority, regardless of the gender of the instructor (Fiske, 1990; Karp and Yoels 1981).

In regard to the second topic, the results have been mixed. Whereas Krupnick (1985) found that in the presence of a same-sex instructor, females talked three times as much as they did in the presence of a male instructor, Boersma, Gay, Jones, Morrison, and Remick (1981) found that women talked more with a male instructor and men talked more

with a female instructor. Krupnick observed other differences in the classroom behavior of college women and men: Men reacted more impulsively to questions posed by teachers, whereas women wanted to think about a question before answering and were more likely to enlarge on ideas than to challenge them (see also Fiske 1990). The speed of response and the ability to challenge were usually rewarded in these situations.

### Conceptual Framework

The theoretical approach to this study borrowed from Chafetz's (1989) identification of particular targets of change in the gender system. Because institutions, such as schools, and their agents—principally administrators and faculty—are in a propitious position to structure the process of engenderment, schools are natural “targets” in this regard. The voluntary nature of the association between private schools and the families who choose to educate their children in them suggests that the link that these schools serve between families and the gender-differentiated society (Wrigley 1992) is particularly critical. Moreover, the social location of independent schools, whose high tuitions and selective admissions policies result in affluent clienteles, may dictate the socialization function that such schools perform (Cookson and Persell 1985). The engenderment function is likely to be especially salient in schools that are organized by gender, which suggests that single-sex schools could be especially important agents of change.

In our study, we differentiated two forms of engenderment in secondary classrooms. *Negative engenderment*, or sexism, is manifested in gender reinforcement, embedded gender discrimination, sex-role stereotyping, gender domination, active gender discrimination, and explicit sexuality. *Positive engenderment* in this context is a conscious effort to provide equitable education for both sexes, including attempts to counter sexism and its residual effects. We also differentiated various forms of proactive gender equity: the amelioration of ineq-

uitable practices; resistance to sex-role stereotypes; compensatory recognition of females' achievement; sensitization to gender issues; affirmation of girls' skills, abilities, and performance; and positive instructional strategies.

This study differed from other research on the topic in the following ways. First, unlike other work that has focused only on negative engenderment, or sexism, this study also examined positive engenderment (gender equity). Second, our observations encompassed a large number of classes in a substantial number of schools, allowing generalization to the U.S. independent secondary school sector. Third, besides systematic observations in classes in four subject areas (calculus, chemistry, English, and history), we directed our attention not only to coeducational schools and classes (where virtually all classroom research has taken place), but to substantial numbers of classes in schools that are organized by gender. Because Title IX effectively eliminated the single-sex option in the public sector, we turned to the private sector to draw our sample. Two fundamental questions that Tyack and Hansot (1990:2) used to describe their work were equally applicable to ours: “How do schools [and classrooms] look when viewed through the lens of gender? And how does gender look when seen in an institutional context?” To these questions, we added several that were specific to our inquiry:

- Compared to a single-sex environment, does the presence of both genders in any classroom promote or inhibit the occurrence of negative engenderment (sexism)?
- Do same-gender teacher-student interactions facilitate more positive engenderment than do cross-gender interactions? Does this phenomenon vary across single-sex and coeducational environments?
- Does the single-sex environment for males differ from that for females in terms of the occurrence, frequency, and form of sexism?
- Are girls' schools, which are more likely to evidence a relational organizational environment, relatively free of sexism compared to coeducational schools, where an individualist focus is more common?



- Is sexism more likely to occur in particular curricular areas? Do these areas change according to the gender composition of the classroom?
- Are some schools less likely sites for sexism than are others? If so, what characterizes such contexts?
- Is the absence of sexism synonymous with positive engenderment?

Our initial approach to this inquiry was both broad and focused. It was broad in that we sought to identify almost any "gendered" occurrence, interchange, or nonverbal activity. It was narrow, however, in that we entered the research environment (the classroom) with most of our questions in hand (with a structured protocol on which to record our observations), rather than with the aim of generating research questions. In short, we had some idea of what we were looking for and where we might find it.

## METHOD

### Sample

The data for this study were collected as part of the National Study of Gender Grouping in Independent Secondary Schools, a broad-based investigation of single-sex and coeducational schooling in American non-Catholic private high schools.<sup>2</sup> Using a stratified two-stage probability sample, we selected schools from the 1988–89 roster of the secondary school membership of the National Association of Independent Schools (NAIS 1987:3), "a non-profit, tax-exempt, voluntary membership organization . . . which serves more than 900 independent elementary and secondary schools in the United States and abroad."

Sixty schools were originally selected—20 each from the list of boys' schools, girls' schools, and coeducational schools. The probability of selec-

tion differed considerably, depending on the type of school; it was the highest for boys' schools (.27), lower for girls' schools (.19), and the lowest for coeducational schools (.04) (for full details of the selection and description of the sample, see Lee and Marks 1992). Both quantitative and qualitative data were collected.

The sample for the quantitative data consisted of the entire 1989 senior class in each sampled school ( $n = 3,183$  students) and all secondary-level mathematics and English teachers in each school ( $n = 629$ ). Although the schools range widely in size, with the senior classes varying from a low of 6 (a girls' school) to a high of 141 (a coeducational school), all schools would be considered small by public school standards (averaging fewer than 250 students at the secondary level).

The schools are organized in different ways. Some enroll only secondary students (about 25 percent consist of grades 9–12), others are K–12 institutions (35 percent), and the remainder group the secondary grades with the middle grades; 25 percent are boarding schools. Tuition is high (an average of \$13,560 for boarding schools and \$7,225 for day schools in 1989).<sup>3</sup> Girls' schools are generally the smallest, although one had 96 seniors, and there are 18 percent fewer girls than boys in coeducational schools.

The sample sizes of students and schools on which we collected quantitative data are presented in Table 1. Given our sampling strategy, the samples are

<sup>2</sup> Given that our early work on single-sex schooling focused on U.S. Catholic secondary schools (Lee and Bryk 1986; Lee and Marks 1990), we wanted to make the present sample independent of the first. These two groups of private schools represent the only venue for studying single-sex education at this level in the United States.

<sup>3</sup> Although students were not a focus of the study, a few descriptive characteristics are instructive (see Lee and Marks 1992). In 1988, family income averaged over \$130,000. About 7 percent of the students were minorities, about 25 percent came from single-parent families, and close to 60 percent of their mothers were employed. Of the students in single-sex schools, a much larger proportion of girls (23 percent) than of boys (9 percent) attended single-sex elementary schools, and 40 percent had siblings who were also attending these schools. Girls in all-girls schools scored higher on entrance tests than girls in coeducational schools in verbal skills and lower in mathematics. Boys in coeducational schools outscored boys in all-boys' schools in both areas.

Table 1. Definition of Analytic Sample of Independent Secondary Schools

Type of School	Number
<i>Student Sample</i>	
Coeducational schools	
Girls	522
Boys	649
Single-sex schools	
Girls	858
Boys	1,154
Total	3,183
<i>School Sample</i>	
Boys' schools	20
Coeducational schools	20
Girls' schools	20
Total	60

representative of NAIS's single-sex and coeducational secondary schools and students. Thus, the results are generalizable to the American independent secondary school population.

### Sources of Data

The data were collected from several sources—survey questionnaires (from students, teachers, and heads of schools), school records (for scores on entrance tests and the Scholastic Achievement test), interviews (with students, teachers, and heads), classroom observations, field notes, and documents supplied by the schools. General-purpose survey data (the major source of the quantitative data) were collected in all 60 schools, with high response rates (over 90 percent for students, teachers, and heads).

A random subsample of 21 of the 60 schools (7 girls' schools, 7 boys' schools, and 7 coeducational schools) received 2–3-day visits from one of two female researchers (both researchers visited the first school together).<sup>4</sup> The purposes of the field visits, during which qualitative data were collected, were to interview

the teachers, students, and heads; to keep extensive field notes on all impressions of the schools and informal conversations with faculty and students; and to conduct observations in classrooms. In short, we wanted more information on how these schools “work” than survey data could provide. Our aim was to cross-validate information collected from any one source with that from other sources. The classroom observations were the major source of the data for the study described here, although we have drawn on other data for clarification.

*Classroom observations.* Before the field visits, each school to be visited was asked to schedule us to observe, for a full-class period, one class in calculus, chemistry, English, U.S. history, and one other subject that was considered particularly strong in that school. We selected calculus because of the focus on gender differences favoring male adolescents in mathematics achievement and attainment. We chose chemistry because (1) we believed that virtually all independent school students would take chemistry (compared to, say, physics), so the groups of students would be representative of the school population and (2) chemistry, as a physical rather than a life science, represented an area in which women are seriously underrepresented in both college majors and professions (Kahle 1985; Kahle and Lakes 1983). We selected U.S. history and English because they are “required” subjects and because these classes presented opportunities to maximize our ability to observe class discussions.

Eighty-six classes were observed. Data from each class were collected by a single observer, seated at the back or side of the room, on a structured observation protocol form, developed by the researchers before they entered the field;<sup>5</sup>

<sup>4</sup> Given the nature of the schools and the research questions for the study, we were anxious to have some gender balance in the observational staff. However, we found it difficult to recruit male observers for the study. We hope the fact that both observers were women introduced no more bias into this study than occurs in studies by the all-male research staffs that are much more common in social science research.

<sup>5</sup> The purpose of the protocol, which was open ended and not meant to limit the information collected in each classroom, was simply to organize observations consistently. Focusing particularly on aspects of the classroom that conveyed or reinforced gender or that indicated differential expectations, valuation, or treatment of students according to their gender, the protocol included the fol-

in notes; and (in some cases) in continuous narratives. The distribution of observations in the 21 field-site schools, displayed in Table 2, is well balanced by type of school. In general, the gender balance of teachers in observed classes reflected the gender composition of the schools. The gender ratios in coeducational schools were not well balanced, however, for either teachers (29 percent female) or students (41 percent female). Although the primary observational unit was the class, it is important to note that classes are nested in schools, which, in turn, are nested in the three types of schools.

### Analytic Framework

*Rationale.* Given our broad definition of sexism, our goal was to identify how issues of gender were addressed, either explicitly or implicitly, in the classrooms. We aimed for *breadth and representativeness* (86 classrooms in 21 schools), rather than *depth* (no multiple observations in the same classroom, no videotaped records, and a single observer). We followed the general guidelines for interpretive research laid out by Erickson (1986) and for classroom observational research described by Evertson and Green (1986). Two of Erickson's rationales for qualitative research in education fit this study well: "specific understanding through documentation of concrete details of practice" (p. 121) and "comparative understanding beyond the immediate circumstances of the local setting" (p. 122). Our observation protocol was developed according to the "descriptive" and "narrative" classifications laid out by Evertson and Green. The narrative systems incorporated "critical incidents" or "specimen descriptions." On the continuum that Evertson and Green (p. 64) developed to

describe types of observations (less formal to highly formal), our observations would fall in the middle, as either "situation-specific" or "question-specific" types.

All qualitative data from the study, including those from the classroom observations (protocols and field notes), were entered and coded using the computer program Ethnograph, which was useful in the initial organization of a large volume of data (Seidel, Kjolseth, and Seymour, 1988). Relevant information from interviews with the heads of the schools and from documents and field notes was also retrieved using Ethnograph, but the bulk of our analysis was done using the original observation protocols and field notes.

In an effort to broaden our perspective and to limit potential bias, we introduced a researcher into the coding and analysis process who was not part of the observational data collection team. All researchers involved with the study were thoroughly familiar with its theoretical and practical aims and consulted with one another often.

*Measures.* Since the nature of engenderment in single-sex and coeducational classrooms was likely to be different, we specified a wide range of variables to capture these differences. In general, the unit of analysis was the gender-related *incident*, which could involve either negative or positive engenderment. The five sets of variables, displayed in Figure 1, are of two types: those recorded directly by observers, requiring relatively low inference (the two left-hand boxes of Figure 1) and those identified after we coded the observational data, requiring a higher level of inference (in the remaining boxes). Gender-related incidents of either sexism or equity are listed in the right-hand boxes, with the context, content, and modifiers related to each incident captured by the variables in those constructs.

*Context* variables describe important characteristics of the school, classroom, teachers, and students that were in place before the actual observation took place and remained after its completion. They include the gender ratio in coeducational classrooms, the gender of the

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lowing categories: classroom organization, tone, and physical features; teachers' behavior; teacher-student or student-student interactions; and the content of lessons (presentation, methods, and discussion). Given our interest in gender grouping, it also included a section on characteristics that are likely to be specific to single-sex or coeducational classes.

Table 2. Definition of Classroom Observation Sample

Type of School	Number of Schools (N=21)	Number of Classrooms (N=86)	Percentage of Female Teachers	Percentage of Female Students
Boys' schools	7	29	17	0
Coeducational schools	7	28	29	41
Girls' schools	7	29	66	100

teacher, and the curriculum area. Also relevant was the gender history of each school, since most coeducational independent schools were once single-sex institutions. Because some of these schools are selective in the students they enroll, it seemed important to consider the ability level of students in each school, as well as the relative ability of the sexes in coeducational schools.

*Content* variables—the gendered incidents recorded by the observers—were nested in the contexts just described. They were classroom interactions, teachers' activities (including allocation of time and attention, instructional methods, and examples), students' activities (including classroom conduct, verbal and visual presentations, approach to assignments), subject matter, language, pictures, and displays. *Evaluative modifiers* came into play during the interpretive phase of the analysis. In this phase, the engendered content, situated in its

context, was evaluated according to such modifiers as the initiator, recipient, duration, timing, and effect of the incident. Together, these interpreted components constituted either the *sexism* construct (negative engenderment) or the *equity* construct (positive engenderment). In the final analytic phase, the components, or forms, of the general constructs of sexism and equity were classified according to their consistency as particular forms of sexism or equity.

We differentiated six forms of sexism that constitute a rough continuum from less to more severe: (1) gender reinforcement—the perpetuation of gender-differentiated “social definitions” (conventional behaviors or styles typically associated with being male or female); (2) embedded discrimination—the residual sexism of a gender-stratified society that persists in such forms as linguistic usages, historical records, literary texts, or visual displays; (3) sex-role stereotyp-

Components of Gender-Related Incidents

Forms of Engenderment

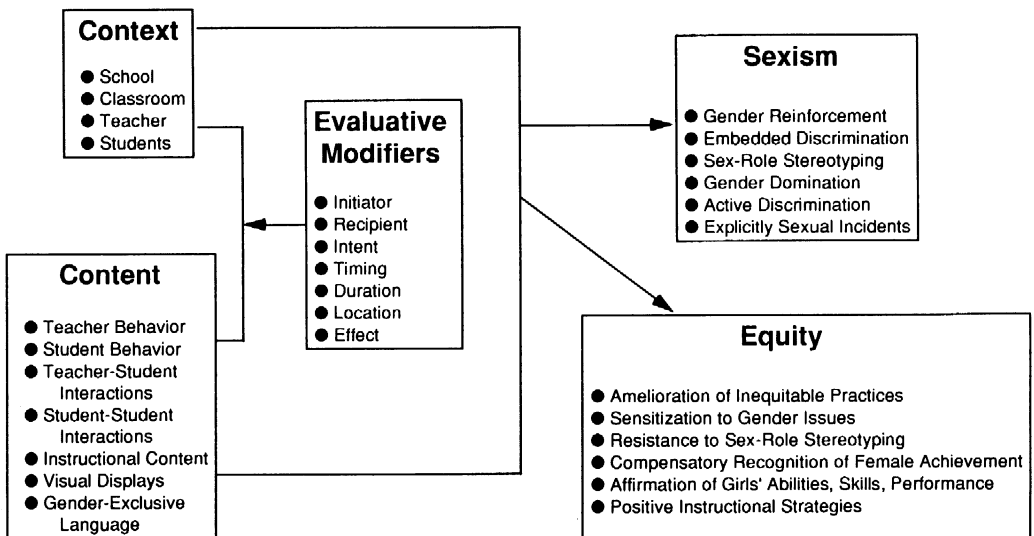


Figure 1. Analytic Model for Investigating Sexism and Equity in Classrooms

ing—the characterization of individuals or their behavior according to social roles or definitions that reflect a gender-stratified society where females are systematically disadvantaged; (4) gender domination—prerogatives (corresponding to the gender hierarchy) that are typically accorded to males or are exercised by them in relation to females; (5) active discrimination—devaluing of females or the denial of opportunities to females that are available to males; and (6) explicit sexuality—the treatment of males or females as sexual objects.

We also identified six forms of gender equity: (1) the amelioration of inequitable practices, such as counseling girls to take calculus as a corrective to limited access in the past; (2) resistance to sex-role stereotyping, such as promoting classroom displays that portray females in nontraditional professions; (3) compensatory recognition of the achievement of females, such as monitoring the English curriculum for its inclusion of female authors; (4) sensitization to gender issues—treating such issues as gender stratification, sexism, or the feminization of poverty in the classroom context; (5) the affirmation of girls' skills, abilities, and performance, particularly in coeducational contexts where boys have typically been the beneficiaries of such recognition; and (6) the use of positive instructional strategies, such as the holistic development of historical eras, so that events are inclusive of the contributions of females.

### Organization of Results

In observational research, it is difficult to describe the character of the study without providing substantial details, since the nature and validity of the findings really lie in the details. Unlike quantitative research, in which summary results are the findings, the bones of this study (the aggregate results) tell little without some flesh on them (the details). Accordingly, our approach in this article is as follows. First, we present findings in aggregate form, displaying frequencies of occurrences of sexism in coeducational and single-sex schools for both genders. Second, we

disaggregate our findings on such important variables as subject matter, the gender of teachers, and the type of school. Third, we describe some critical incidents of sexism in the classrooms we observed, what Erickson (1986) called "narrative vignettes," to illustrate the variation in sexism in the three types of schools. Fourth, we present findings on gender equity in these classrooms, together with examples of equity events. Fifth, we single out a few schools that are engenderment "standouts" (in terms of either sexism or equity) compared to other schools of their type in the sample. Finally, we give several examples of each form of sexism in the appendix.

## RESULTS

### Aggregate Findings

We observed many instances of fine teaching in these classes, most of which were small (under 20 students), and noted that probing discussions were more common than were lectures or recitations. However, the quality of teaching is not the issue here.

Fifty-five percent of the observed classes evidenced no incidents of sexism, and in close to half we found instances of equity. However, we found some troubling forms of gender differentiation in 45 percent of the classrooms and equity events in about the same proportion. None of the 21 schools that we visited was completely free of sexism. In the boys' schools, problematic events, almost all of which were initiated by the teachers, occurred in 37 percent of the 29 classrooms. In coeducational schools, instances of sexism were observed in 54 percent of the classes, with about two-thirds of the events initiated by the teachers. And in the girls' schools, incidents of sexism were seen in 45 percent of the 29 classes—initiated mainly by the teachers.

The distribution of sexism in the three types of schools is displayed in Table 3. Although the *number* of incidents of sexism observed in the three types of schools was roughly equal, the *forms* that were most characteristic in each

Table 3. Distribution of Different Forms of Sexist Incidents in the Three Types of Schools

<i>Form of Sexism</i>	Boys' Schools	Coeducational Schools	Girls' Schools
Gender reinforcement	10	5	12
Embedded discrimination	9	5	7
Sex-role stereotyping	5	0	6
Gender domination	0	17	0
Active discrimination	0	5	0
Explicitly sexual incidents	5	0	0
Total	29	32	25

type of school were not. Two forms of sexism were evident in all three types of schools—gender reinforcement and embedded discrimination—but both were more common in the single-sex than in the coeducational schools.

On the other hand, two forms—gender domination and active discrimination against females—which can occur only in environments in which both sexes are present—were common in the coeducational schools. In fact, the major form of classroom sexism treated in the literature—gender domination (either boys dominating discussions or teachers recognizing boys more often than girls)—was by far the most prevalent form of sexism in the coeducational schools. The few instances of explicit sexuality, which in theory could occur in any type of school, were found only in the boys' schools and were directed against women. One form of sex-role stereotyping, in which females are treated in a childlike or domesticated manner, was observed only in the girls' schools.

### Sexism by Subject Area

*Chemistry.* One of the most important findings in this study was that 66 percent of all the sexist incidents in the coeducational classrooms occurred in chemistry classes (see Table 4), although these classes constituted only 20 percent of our observations. These incidents were distributed across the seven coeducational schools and were not confined to a single (or even a few) schools or teachers.

Moreover, it was in these coeducational chemistry classes that we observed the most blatant examples of male domination of discussions, of teach-

ers favoring boys, and of the humiliation of girls. Given the persistently low representation of females in the physical sciences, the pervasiveness of these findings seems to be especially serious. Since there were considerably more boys than girls in these classes (with ratios of boys to girls of 14:5, 10:2, 9:5, 7:5, 7:4, and 7:2 in the seven schools), our assumption that all students in these schools enrolled in chemistry was not accurate because the gender imbalances in the schools were not this extreme.

In contrast, chemistry classes in the single-sex schools did not show the same problematic character. However, in the chemistry labs in the girls' schools, undue attention was paid to neatness and cleanliness, as well as to drawing parallels between domesticity and chemistry activities (for example, using graduated cylinders as measuring cups and comparing a chemical formula to a recipe). In academically strong girls' schools, the chemistry classes were the sole locus of observed sexism. On the other hand, the chemistry classes in the boys' schools were well taught. The boys appeared to be comfortable, interested, and involved in them, and the environments seemed to be especially "clubby" or "good ol' boy" (words repeatedly

Table 4. Distribution of Sexist Incidents, by Curriculum Area, in the Three Types of Schools

<i>Curriculum Area</i>	Boys' Schools	Coeducational Schools	Girls' Schools
Calculus	1	5	5
Chemistry	1	21	8
English	17	1	2
History	9	2	8
Other	1	3	2
Total	29	32	25

used by the observers); furthermore, these classes were not a locus for explicit sexism.

*English.* Sexism in the boys' schools, particularly the forms of sexism involving explicit sexuality, was most likely to occur in the English classes. Fifty-nine percent of all the sexist incidents in these schools occurred in these classes, although they represented 20 percent of the observed all-boys' classes. In two male-taught classes, the interpretation of literary references to sexuality developed into discussions and essays (read aloud and uncensored) that described men degrading women either through the sex act or through lascivious preoccupation with the female body. In one English class, the male teacher gave his students suggestions for specificity in their descriptive writing by offering "her looks, her measurements" as "things you want to know" to describe female characters. In contrast, sexism was unlikely to occur in the English classes in the girls' or coeducational schools.

*Calculus.* Although the proportions of students who took calculus varied widely among the schools, in all three types of schools, the frequency of sexist incidents was much lower in these classes than in the chemistry or English classes and was especially unlikely in the boys' schools. Moreover, in the coeducational calculus classes, unlike the chemistry classes, there was no gender imbalance—a finding that surprised us. Although we found little sexism initiated by teachers in these classes, we did observe some gender-differentiated student behaviors. In two of these classes, girls preferred group work with other girls to engaging the teachers, whereas boys tended to work independently and used the teachers as a resource when needed.

In the calculus class of one girls' school, on the other hand, we found what seemed to be an attempt to make calculus palatable by trivializing formulas, mathematical language, and procedures. We considered this situation to be a serious example of sex-role stereotyping—talking down to girls and setting expectations that calculus was accept-

able to females only if it was wrapped in a nontechnical package.

*History.* About a third of the sexist incidents in single-sex schools occurred in U.S. history classes. This subject area was a distant second, behind English, as the locus of sexism in boys' schools. In the girls' schools, history and chemistry were equally likely sites (32 percent for each) of sexism. Two coeducational history classes represented the only cases of gender domination in discussions outside the chemistry classes.

### Gender Imbalance in Coeducational Schools

In general, the enrollment in NAIS coeducational secondary schools is not balanced by gender; 41 percent of the students are female, and 59 percent are male. Of the seven such schools where we observed classes, only two had an equal number of boys and girls or slightly more girls than boys. Some of the coeducational schools we visited had low proportions of female students; for example, one school's student body was only 32 percent female.

The achievement of equity in the treatment of male and female students seems difficult when female students are consistently underrepresented, and the very definition of *coeducation* may be questioned in such unbalanced environments. As was noted, the gender imbalance was most consistent in chemistry classes. In fact, the problematic nature of coeducational chemistry classes is confounded by their gender composition, which makes it difficult to isolate the major cause of the problems (subject matter or gender imbalance). In coeducational classes in other subjects, however, the incidence of sexism dropped dramatically if there were equal numbers of boys and girls and virtually disappeared for the few classes in which girls outnumbered boys. In these instances, the sex of the teacher made no difference.

### Gender of Teachers

By design, the gender of teachers in single-sex schools most often matches the gender of the students. This pattern

is especially notable in the boys' schools in the sample, where only 17 percent of the teachers are female. In general, NAIS secondary schools employ considerably more male than female teachers (see Table 2; confirmed in Lee and Smith 1990). Although the same pattern of matching the teachers' gender to the students' gender in single-sex schools was found in the Catholic sector (Lee and Bryk 1986), the faculties of coeducational Catholic schools are 57 percent female, compared to 29 percent female in the NAIS schools in this study.

Despite the merits of the obvious arguments in favor of the matching of students and teachers by gender, such as empathic relationships with students, we also noted circumstances that were conducive to sexism when everyone in the classroom was of one gender. Although we saw more sexism emanating from male than from female teachers, this situation was expected, given that we also observed more classes taught by male teachers. Once that fact was taken into account, the *frequency* of sexist incidents did not seem to be much greater in male-taught classes. However, the *forms* of sexist incidents that were initiated by male teachers were different and more serious.

### Teachers as Initiators of Sexist Incidents

The types of behaviors by teachers who initiated sexist incidents differed markedly by both the type of school and the gender of the teacher. In single-sex schools, when the teacher's sex matched the school's gender, teachers had multiple contexts available—student-teacher relationships, visual displays, and the general environment—to send sexist messages. Although only some teachers actually engaged in these behaviors, the increased "comfort level" of same-gender relationships seemed to magnify these gendered messages and to render them acceptable.

*Girls' schools.* Female teacher-initiated sexism in girls' schools was sometimes intensified by students responding in gender-stereotypical ways. We saw instances in which female teachers encouraged girls to engage in dependent or

childlike behaviors (in one class, students looked to the female teacher to confirm most of their statements and decisions). In such cases, girls might respond with overly dependent behaviors, asking for (and receiving) more help and reassurance than seemed appropriate to the task. We never observed this type of behavior by teachers (or students) in the boys' schools and seldom saw it in the coeducational schools. Some girls' school teachers (of both genders) accepted a nonrigorous approach to subject matter. Older male teachers in some girls' schools were prone to another type of behavior: treating the female students like little girls.

*Boys' schools.* We found only 5 female teachers in 29 boys' school classrooms we observed. In these classes, we observed no instances of sexism initiated by teachers; thus, all teacher-initiated incidents of sexism in the boys' schools emanated from the male teachers. Although gender reinforcement and embedded discrimination were the most common forms, sex-role stereotyping was not uncommon. The most serious form occurred in the five incidents that were explicitly sexual in nature. In these instances, male students were learning to value women as sex objects and were sometimes socialized to maintain control and power over women in sexual interactions. In addition to classroom discussions, examples of sex-role stereotyping were also found in classroom decorations; for instance, a French class displayed a large picture of a woman's lips (sans face), and the wall of a calculus class in another boys' school was decorated with a woman wearing a bikini swimsuit, with her arms raised.

The sort of relationships described earlier in some girls' school classes with women teachers is also applicable in describing some boys' school classes. Only in boys' school classes taught by men did the observers use such terms as "good old boy" or "clubby atmosphere" and see teachers encourage aggressiveness with other boys. One teacher addressed his students as "studs," and another encouraged students to "give 'em hell." Although it was not unusual to find male teachers in these schools



pushing boys hard intellectually (in itself, a potentially positive approach), in two boys' schools that enrolled less-able students, this strategy seemed more like bullying and resulted in situations in which students were demeaned.

*Coeducational schools.* Certain forms of sexism (gender domination and active discrimination) are possible only in coeducational classes, which rendered the total number of incidents slightly higher in these schools (see Table 3). On the other hand, the special type of sexism that occurs when everyone in the classroom is of the same sex is impossible in coeducational schools. Thus, gender reinforcement, embedded discrimination, and sex-role stereotyping were less common in the coeducational than in the single-sex schools. The proportion of sexist incidents initiated by teachers was also somewhat lower in coeducational than in single-sex classrooms, probably because of the presence of the opposite sex, which may inhibit the development of magnified sexism (sexism that emanates from the teacher, but is increased in importance by stereotypical responses from the students). As was noted, the large majority of sexist incidents in the coeducational schools were observed in the chemistry classes. For example, in a chemistry class taught by a woman that had 14 boys and 5 girls, the teacher responded positively to boys talking out without raising their hands and paid special attention to and recognized the contributions of what appeared to be a few "star" male students. When girls offered responses without raising their hands, the teacher reprimanded them for behaviors that she had accepted from the boys.

*Students' active involvement in sexism.* Although students were involved in almost every type of classroom sexism we observed, in some instances, these behaviors were more likely to occur in classes where there were considerably more boys than girls. One type of student-involved sexism—students choosing gender-differentiated roles—arose independently from anything the teacher said or did. For example, we saw some instances of boys engaging in aggressive and overly familiar (for the classroom)

behavior toward girls, with teachers not intervening to limit such behaviors. We saw a couple of instances of girls rationalizing their perceived failure by stating, "I'm just dumb!" (although in one of these occurrences, we observed an instance of equity, when a male classmate countered with, "That's no excuse!"). In a coeducational chemistry class, although the female teacher assigned laboratory partners randomly (usually resulting in cross-sex groupings), the girls tended to do the experiments while the boys recorded the results. Although this was opposite from the usual stereotypical behavior patterns, the point here is that the students chose to differentiate their roles by gender, even when the teacher made an effort to avoid that possibility.

In the single-sex schools, student-involved sexism appeared to be generated consistently by suggestions from the teachers. That is, although each such incident came from the students, it was almost always a response to a specific cue from the teacher or to a context set up by the teacher. In the girls' schools (but not in the boys' schools), we saw some examples of students responding in a stereotypical manner to a nonsexist comment from a teacher. For example, a male teacher in an all-girls' history class was discussing the power of the emperor in Roman times. When he asked a student, "How would you respond if you were given absolute power?" the girl responded, "I'd faint!"

### Critical Incidents of Classroom Sexism

Although we have included brief descriptions of a few incidents of sexism in classrooms as clarifying examples, most of our comments so far have been generalizations. Here we present more details on observations that may serve as examples of "critical incidents." Recall that an outside observer (female) was in each classroom and that the particular class had been selected by the school to be visited. This fact suggests that such occurrences are not terribly unusual in these independent school classrooms and may serve as lower bounds for what actually takes place.

*A coeducational chemistry class.* In this class of 9 boys and 5 girls, the male teacher was describing an experiment (to be done by students) involving measuring liquids. His discussion was directed to the boys. A girl in the front row asked for clarification of the use of the graduated cylinder. Since the teacher ignored her inquiry, she repeated her question. The teacher, clearly exasperated with the student, tossed the water in the graduated cylinder onto the girl and her desk. The entire class laughed, and the teacher did nothing to control them. An after-class conversation with this teacher revealed that he believed that girls are not suited to “do” science.

*A girls’ school history class.* The female teacher, an avowed feminist, made the class comfortable by joking with the students and removing her shoes. During a high-level discussion about the American Revolution, the teacher kidded a student that she had “fallen in love with Patrick Henry.” “She’s found a picture of him and fallen in love,” she quipped to the other students. In the course of the same class, the teacher stated that “most men need to be guided” and engaged the students in an interactive session of denigrating males (“male bashing”). This was the only such incident we observed of sexism against males.

*An English class at a boys’ school.* Within a unit on Shakespeare, the male teacher had selected a particular sonnet for homework, which he read aloud the following day. Then, while clarifying the meaning of the sonnet to the students, he characterized it as “Lust, animal lust, nothing but pure mechanistic lovemaking.” Students had written essays on the sonnet. Identifying himself with the persona in the poem, one student read his essay, which included, “He wanted sex with this chick, this ‘shanky’ chick, and he didn’t even like her.” Although the teacher was clearly embarrassed (seemingly because of the observer’s presence), he made few comments other than to speak wryly of the “edification” this student was providing for the observer. The classroom walls were decorated with photos of male

groups and drawings, including one cartoon of a bare-breasted woman.

*A history class in a selective girls’ school.* The classroom was painted fleshy pink, with at least 10 reproductions of paintings by Mary Cassatt on the walls.<sup>6</sup> Interactions between the female teacher and students were described by the observer as “very relational.” The teacher offered to be “available for major hand-holding for term-paper stuff,” reassuring students about their term-paper assignment before any assistance was requested.<sup>7</sup>

### Gender Equity in the Classrooms

Gender equity could be defined as the fair treatment of both genders. In that case, we observed “equity” in all the classrooms where we did not document sexist incidents—slightly over half the classrooms we visited. In this article, however, we have used a more selective criterion, identifying incidents of gender equity that involved proactive efforts to remediate the residual effects of systemic sexism in these schools. Rather than the absence of sexism, here we discuss instances of overtly or actively equitable behavior by teachers or students. As we noted earlier, these incidents took several forms: the amelioration of inequitable practices; resistance to sex-role stereotyping; compensatory recognition of the achievement of fe-

<sup>6</sup> Although we recognize that the display of a prominent female artist, such as Mary Cassatt, could also be seen as compensatory recognition of women’s achievement, the combination of the color scheme, multiple pictures of women and children (characteristic of Cassatt), and the teacher’s behavior suggested an “overfeminized” environment. Our standard of comparison was whether a parallel “overly male” classroom environment would be seen as sexist; we concluded that it would be.

<sup>7</sup> Another interpretation of this type of environment is, of course, that these schools are trying to create “relational” environments, in which the unique characteristics of females are extolled (Gilligan 1982; Noddings 1990). This interpretation represents what we referred to as the “second-generation” feminist perspective.

males; sensitization to gender issues; affirmation of girls' skills, abilities, and performance; and positive instructional strategies. Unlike the forms of sexism, these forms are not amenable to rating for severity or importance. Rather, the same event took on more salience or less salience, depending on the type of school in which it occurred.

Equity incidents were most likely to occur in the girls' schools, and their frequency in the coeducational classes was slightly less than half that in the girls' schools. Incidents of equity were rare in the boys' schools. Equity was pervasive in at least one coeducational school and in many coeducational classrooms. Observers sometimes noted equity above and beyond those contexts where sexism was noted, especially in instructional method and content.

Unfortunately, some instances of equity occurred simultaneously in classrooms where teacher-initiated sexism was observed. These "mixed messages" were especially common in boys' schools, where well over half the occurrences of equity were canceled out, in a sense, by coexistent sexism. The least likely location for such mixed messages was in coeducational classrooms, where they took on special meaning because they took place in the presence of both sexes. In general, although equity was more common in the girls' schools, each occurrence seemed less powerful in these schools.

*Sources of equity.* Equity emanated from both teachers and students in both coeducational and boys-only classrooms, whereas in the girls' school classes we visited, the source was always the teachers. In general, female teachers were responsible for more than their share of equity incidents, especially in the boys' schools, where male teachers were particularly unlikely to generate equity events.

*Coeducational schools.* Student-involved equity took place mainly in interactive events involving both genders. We consider this finding important, since equity events in the presence of students of only one gender, although important, are abstract (almost academic) and therefore less powerful than

are equity events that occur in the presence of (and in interaction with) students of the opposite gender.<sup>8</sup> This characteristic is also true of sexism; that is, gender-specific events, either positive or negative, take on special importance in coeducational settings because they address both genders simultaneously.

*Girls' schools.* Equity was pervasive in these schools, where we observed equity events in 62 percent of the classes. However, in general, the impact of each event was less than in the coeducational classrooms we observed. Two explanations seem likely. First, in girls' schools, special attention is given to the small details of equity. Second, had the same event occurred in a coeducational school, it would have been more meaningful. For example, in both a coeducational and an all-girls classroom, our observers noted that the teachers called attention to the special clarity and perceptiveness of a girl's contributions to the discussions. In the coeducational classroom, this act seemed to have more of an impact because it was delivered to both boys and girls. A related point has to do with equity messages delivered by male teachers in girls' schools. The men who contributed to gender equity in this setting seemed to deliver powerful messages (perhaps because the messages were not so common). It is important to note that equity in the context of the instructional method and content occurred much more often in girls' schools than in coeducational or boys' schools (where it was rare).

*Boys' schools.* Frankly, we observed little effort to foster overt equity here. Two of the five female teachers whose classes we visited engaged in powerful equity events. Although a small proportion of male teachers engaged in equity events, the events themselves were not powerful; for example, one history teacher hung a "Firsts for Women"

<sup>8</sup> We recognize that equity in single-sex schools could confront the larger issue of societal sexism, rather than the microevents on which we have chosen to focus here. In that case, equity could involve *empowerment* in girls' schools and *mutuality* in boys' schools.

poster on his classroom wall, and another included gender, as well as racial, equity in a history discussion).

*Examples of equity events.* As was the case for sexism, this section describes a few critical incidents to illustrate this concept. For example, in a boys' school English class, a female teacher selected readings with the aim of uncovering the unequal treatment of women in literature, and the ensuing discussion of these readings was particularly insightful. In addition, a male teacher in an all-girls history class made a point of selecting a primary text that was both written by a woman and written with a moral approach to historical analysis. Each chapter presented suggestions for further reading on the gender-related issues that were treated in it. In the observed discussion, the teacher focused on when and how women are depicted in history. Wall decorations, including a poster portraying women's role in history, amplified the message.

Another event occurred in a coeducational calculus class, consisting of six boys and four girls, in which the male teacher had formulated and executed a plan to encourage girls in mathematics. The teacher intended these actions to counter what he perceived as the school's push (through the counselor) to discourage girls from taking advanced mathematics beyond the required courses. He consciously supported the girls in class discussions, giving them ample opportunities to participate (without ignoring the boys). However, the same classroom's wall display featured male sports figures, and the teacher engaged in particularly animated discussions only with a group of boys after class. Nevertheless, the teacher saw himself as contributing to equity by countering what he perceived as inequity in the larger school environment.

### Some "Standout" Schools

Recall that each of the 21 schools received a 2–3-day visit, in which 4 to 6 classes were observed. Generalizations about "standout" schools are based on the results of these observations, together with the demographic data col-

lected from records and information gained from interviews with the heads of the schools. We have singled out 6 schools (2 of each type) for special mention, based on the patterns we gleaned from observations in the 21 schools. The purpose of describing these schools is to suggest the power of schools as change agents and to indicate institutional effects on sexism and equity in these patterns. The descriptions of these schools are summarized in Table 5. Note that for both boys' and coeducational schools, the 2 schools selected for "recognition" displayed less sexism than did the other 5. However, of the 7 girls' schools we visited, we have singled out the 2 schools in which we observed *more* sexism, in contrast to the lesser sexism manifested in the other 5 schools.

*Coeducational schools.* We found less sexism and more equity in two of the seven coeducational schools we visited. One of these schools (School A), a large metropolitan day school in the Midwest, was formed from a merger of a boys' and a girls' school about 20 years ago. Although the school has more male than female students and faculty, it has closely attended to gender issues, through its active gender-equity committee, since it became coeducational.

School B, which also evidenced low levels of sexism, is a day school in a large eastern city, the only visited coeducational school headed by a woman.<sup>9</sup> This religiously affiliated school (Quaker) has been coeducational since its founding over two centuries ago. The school's philosophy includes attention to social equity of all sorts (not just gender), which suffuses virtually every aspect of school life. One of the few coeducational schools with a gender-balanced enrollment, the school nevertheless has a preponderance of male faculty.

<sup>9</sup> In the larger study, only 2 of the coeducational schools, none of the boys' schools, and 12 of the girls' schools were headed by women. The women heads in the sample had considerably less tenure than did the male heads; in fact, two had been in their positions fewer than two months at the time of the interviews.

Table 5. Special Characteristics of “Standout” Schools

*Coeducational Schools*

Two schools exhibited considerably less sexism than did the other five. Both were K–12 day schools, located in cities.

*School A*

- Resulted from the merger of two single-sex schools about 20 years ago.
- Has more males than females (both students and teachers).
- Pays close attention to gender issues.
- Has an gender equity committee.

*School B*

- Has been coeducational since its founding over 200 years ago.
- Pays serious attention to ethics and equity in all areas of the school (not just gender).
- Has religious sponsorship (Quaker).
- Has a 50:50 gender balance for students (by design).
- Has more male than female faculty.
- Has a female head.

*Boys’ Schools*

One boys’ school (School C) exhibited almost no sexism, in sharp contrast to the other six, and one school (School D) exhibited somewhat less sexism.

The major problem in all boys’ schools was that there were few female faculty.

*School C*

- Is an extremely selective day school located in a large eastern city.
- Consists of grades K–12.
- Over half the upper school faculty is female.
- Its policy, strongly stated by its male head, is to recruit and retain well-qualified female faculty (especially in male-dominated curriculum areas).

*School D*

- Is not as outstanding as School C in terms of sexism, but it is exemplary compared to the other five boys’ schools.
- Is one of the least selective boys’ schools in the sample.
- Has religious sponsorship (Episcopal).
- Is a secondary boarding school in a rural area of the East.
- Its existing sexism is of a less blatant variety.
- Has one female teacher exemplary for infusing equity into her classes.

*Girls’ Schools*

- Some sexism, lots of equity
- Two types of schools:
  1. Academically strong; pay serious attention to gender issues.
  2. Finishing schools; pay more attention to social support than to academic issues.

Two schools are different from the other five:

- Both are suburban schools.
- Most of the sexism in the girls’ schools occurs in them.
- Academic support is less common than social support.
- Are not particularly selective in academic terms.
- There is stronger tension between feminism and traditional values than in other girls’ schools.

*School E*

- Is a K–12 day school in the mid-Atlantic area.
- Is a “sister” school to a sampled boys’ school with serious incidents of sexism.
- Has a finishing school atmosphere.
- Sees its competition in the same metropolitan area as very strong girls’ schools.
- Considers certain subjects (such as science) to be not particularly appropriate for girls.
- Students have unrealistic views about the viability of having both a career and a family.

*School F*

- Is a secondary day-boarding school.
- Is the only girls’ school in the area (West Coast).
- Its catalog, *A Biography of the School*, prominently features a photo of a wedding in the school chapel as “the reverent setting for [students] to vow their strength—as well as their love and commitment—to a husband.”
- Presents a mixed message: Strident feminism exists shoulder to shoulder with serious sex-role reinforcement (often in the same class).
- Some overt examples of denigrating males were observed.
- The calculus teacher “translated” technical language.

*Boys' schools.* Female teachers provided strong examples of nonsexist classes in these schools, but the proportions of female faculty were low. One boys' school (School C) stands out as an institution where sexist incidents were rare. One characteristic of this school, a highly selective day institution in a large city on the East Coast, may explain its exemplary status. That is, slightly over half its high school teachers are female (compared to an average of 14 percent in the other five boys' schools). This gender balance in the faculty is no accident; the head described a longstanding and active policy of seeking highly qualified female teachers.

Another boys' school, although not as exemplary as School C, deserves mention. In this boarding school (School D), with a nonselective academic clientele located in a rural corner of New England, a particular female teacher suffused her classes with serious attention to equity. The point here is that it is possible to do so, even in an environment where over 80 percent of the faculty (and all the students) are male.

*Girls' schools.* Girls' schools, in addition to generating slightly less sexism than boys' or coeducational schools, were much more likely sites of equity. Several of these schools paid especially serious attention to gender issues, and these tended to be the stronger girls' schools in academic terms. However, two schools (Schools E and F) were somewhat different from their counterparts. Both metropolitan schools with nonselective clienteles (one a mid-Atlantic day school, the other a boarding school in the West), they demonstrated more than their share of sexism. Certain aspects of these schools had a "finishing" feel to them,<sup>10</sup> in that their

academic push was somewhat less and their attention to social support somewhat greater than the more academic schools. Although isolated incidents of overt feminism were observed in both schools (sometimes in inappropriate settings), sex-role stereotyping was also common. In School F, what started out as a feminist discussion deteriorated into one in which males were overtly denigrated. Feminism and sexism were sometimes evident simultaneously in the same class in these two schools, delivering a confusing message to students. In an effort to help young women take their rightful places in a coeducational world, it appeared that a few girls' schools engaged in what could be seen as the oversensitization of reluctant adolescent girls to discrimination against females.

## DISCUSSION

### Theoretical Considerations

*Schools as targets of change.* The results of this study lend empirical support to the notion of schools as potential targets of change in the gender system, introduced by Chafetz (1989). They led us to conclude that schools—particularly independent secondary schools—are active agents of socialization to gender. Engenderment in schools, as suggested by Hansot and Tyack (1988) and Chafetz (1990), varies both across and within institutions. The classroom processes through which students take on "gender social definitions" in the course of everyday activity may be altered. Thus, the results support the claim that schools can (and do) define norms and policies on gender equity, should monitor the implementation of these norms and policies, and may be held responsible for their enforcement.

The very "independence" that private schools hold dear further supports the

<sup>10</sup> Lee and Marks (1992) described "finishing schools" as those whose students reportedly chose them because of their social reputation, location (close to home), facilities (athletics and pretty campus), and attendance by friends. Finishing school students were more likely than those in other types of schools to consider the nonprofessional aspects of their futures (such as leisure activities, marriage, and children) to be important

and to hold more stereotypical views of women's roles. All types of schools, not just girls' schools, were high on the finishing-school measure, but the two schools described here were higher than the other five we visited.

“active agent” theory. The clientele that schools of this type serve—elite and affluent—however, may support traditional and stereotypical views of women that the mainstream U.S. population has “outgrown.” Since such schools are especially beholden to the families they serve, because of the voluntary (and tuition-dependent) nature of that association, their policies and practices may be driven by conservative views on sex roles. As such, independent schools (at least some of them) may be serving as active agents of an inequitable status for women.

Since the frequency of sexism was roughly equivalent across the three types of schools, neither coeducation nor single-sex schooling may be exonerated. The fact that sexism is evident in schools that are organized by gender—including schools that enroll only girls and whose faculties are largely female—suggests that it is not just males (students or teachers) who engage in such practices. However, the different forms that sexism takes in single-sex and coeducational schools (as well as the different forms it takes in boys’ schools and in girls’ schools) points to the importance of gender organization in both the prevalence and characteristics of classroom engenderment.

The sexism in these classrooms is, by and large, pervasive and subtle enough to elude correction by either enforcing national policies and standards (such as Title IX) or adopting the school organizational features that have engaged educational sociologists (for example, changing the curriculum, increasing course requirements, and creating smaller schools). No school in this study was totally free of sexism, nor should every participating school be implicated as sexist. Rather, we hold that the patterns of negative and positive engenderment that we observed illuminate conditions that could facilitate the identification and rectification of sexism in classrooms.

*Single-sex versus coeducational schools and classes.* The variation in the nature and severity of incidents in the different types of schools suggests some conclusions about gender grouping. Earlier find-

ings that families are motivated to choose single-sex education for both their sons and their daughters more for traditional than for opportunity-structure reasons (Lee and Marks 1992) suggest that sexism would be more common in single-sex than in coeducational settings. However, “frequency” may be less salient here than “form” or “severity.” Indeed, we found that the “gender” of the particular single-sex setting introduced considerable variation in this regard. Therefore, we discuss boys’ and girls’ schools separately.

*Boys’ schools.* The very nature of all-male schools has been the standard for independent schooling for centuries. In boys’ schools, aggressive teaching, usually by men, encourages boys to state and defend their views and to expect their interpretations and opinions to be subjected to intense intellectual scrutiny by teachers and peers. Only rarely did this type of teaching occur in all-girls’ and coeducational classes. The antithesis of the “relational” view expounded by Noddings (1990) and Gilligan (1982), aggressive teaching represents a classic “male-centered paradigm” (Tetreault, 1987). An “individualist” view would, however, support extending this sort of academic experience to girls, either in single-sex or in coeducational environments. Modifying this type of teaching so it would be vigorous enough to draw students into intellectual interchanges with one another and with the teacher yet less confrontational and more amenable to an all-female setting is not impossible. Our observations led us to conclude, however, that compromise between the individualist and relational views around the adoption of this teaching style would be difficult to achieve. We saw little of this style outside the boys’ schools.

More germane are the forms of sexism that flourish in all-male classrooms, particularly in those with male teachers. The elimination of boys’ schools (a trend, in fact), although an obvious solution, is not advocated. More promising approaches, such as increasing the proportion of female teachers, are suggested by the characteristics of exemplary schools. The fact that female-taught boys’ school classes were free of

sexism and that a boys' school with an explicit policy about female faculty was exemplary supports the value of this change in policy for reducing the more flagrant forms of sexism in all-male classrooms. More generally, school policies and committees that attend to gender equity make a difference. Some incidents (for example, visual displays of women's bodies, teachers' encouragement and engagement in active stereotyping, and the use of offensive and uncensored sexist language) that occurred in the presence of a female "guest" suggest that attitudes of rampant sexism are unmonitored in some all-boys schools.

*Girls' schools.* Girls' schools with strong academic orientations were more likely to approach the ideal philosophical dialogue between the individualist and relationist positions advocated by Noddings (1990). Although no aggressive intellectual dialogues between teachers and students (or among students) were observed in these schools, the discussions were at a high level, and the encouragement of dependence was rare. Unlike girls' schools as a group, such schools appear to come close to providing the opportunity structures described by Epstein (1988) and Lee and Marks (1992). Much of the gender equity we observed in girls' schools occurred in academically strong institutions.

A latent and troubling behavior in some girls' schools detracted from the rigor of the educational experience by catering to stereotypical conceptions of females—talking down to girls, making academic activities more palatable by "wrapping calculus in a nontechnical package," setting up expectations that students would have difficulty with assignments by offering help before it was required or requested, or promulgating an attitude that "trying hard is as important as succeeding" with difficult undertakings. We sensed a clear tension in even the most academically demanding girls' schools (often voiced by the schools' heads) between trying to provide educational environments that are relational and, at the same time, to hold to demanding intellectual standards that develop independence. Studies by Bryk,

Lee, and Holland (1993) and Lee and Marks (1992) have found that families and students who choose all-girls' schools are likely to be seeking *either* safe and traditional environments for "young ladies" or academically demanding educational environments in which girls are free to flourish—not both.

*Coeducational schools.* Although single-sex education presents a context for sexism, the coeducational environment has not brought about the equal treatment of males and females that was trumpeted by its early advocates. Gender domination, the form of sexism most often reported in the literature, was common in the coeducational classrooms we visited. However, the most problematic forms of sexism in single-sex environments—explicit sexuality in boys' schools and encouragement of dependence in girls' schools—were rarer in mixed-sex classrooms. Sexism in coeducational schools commonly took the form of either gender domination or active discrimination and was most common in one curricular area (chemistry). Although the presence of two sexes does not eliminate sexism, and mixed-gender relations in schools may replicate entrenched societal patterns, the presence of both boys and girls seems to moderate the most flagrant forms of sexism.

### Practical Considerations

*Subject matter.* The localization of sexism in coeducational schools to physical science classes (especially chemistry) is striking, particularly since classes in this subject were less problematic in girls' schools and were especially strong in boys' schools. Most young women who may consider a career in the physical sciences take coeducational chemistry classes in high school. Whether this troubling finding is restricted to independent schools<sup>11</sup> or is generalizable to U.S. public high schools appears fertile ground for future research. Moreover, it is able young women, such as those attending

<sup>11</sup> Although the seven coeducational schools we visited were drawn from the NAIS roster, it is possible (but unlikely) that our strong findings were a result of the small sample size.



private schools, who are likely to be the female scientists of the future. The severe gender imbalance we observed in coeducational chemistry classes could be rectified through proactive policies from such schools that would encourage girls to study chemistry in high school and to study science in the elementary and middle grades. Our observations suggest that the forms of sexism that are localized in chemistry classes that enroll male and female students may be contributing factors to discouraging girls to persist in the physical sciences.

*Balanced numbers.* The more serious incidents of sexism in the coeducational schools occurred, in general, in classes where females were severely underrepresented. It is impossible to examine this relationship in the other direction (whether there is more equity in classes where girls are numerically superior), since we observed almost no such classes. Historically, most coeducational independent schools have had single-sex schools in their pasts and have been formed either from the merger of two opposite-sex schools or a single-sex school (usually a boys' school) "going coed."<sup>12</sup> In either case, the character of the former boys' school often remains normative, and the schools usually have more male than female students. The only school with an exact numerical balance between male and female students (by design) was also an exemplary school in regard to broad-based equity issues.

Although these observational data did not allow us to establish a statistical relationship from which we might infer a causal link, the consistent numerical imbalance in coeducational classes—the most severe in chemistry classes—suggests that the schools do not pay attention to the message that such unequal representation gives. Furthermore, the very meaning of coeducation was challenged in some classrooms in which we observed. This imbalance in overall

enrollment and within each classroom is something that schools have the ability to control.

*The power of policies.* Our results suggest that strong policies on the equitable treatment of male and female students make a difference. Such policies, if carefully enforced and periodically monitored by observations in classrooms, are translated into gender-equitable behaviors of teachers and students in classrooms and can profoundly affect students' experiences.<sup>13</sup> Although schools form a vital link between family and society, they may also point the way to a better society. Thus students who are sensitized to the issue of gender equity, even if it is not evident in the society beyond the school, may begin to detect it in their schools. And sensitized teachers may change their ways. For example, active policies favoring gender equity in many girls' schools have resulted in curricular changes, and the two exemplary coeducational schools and the one nonsexist boys' school paid attention to gender equity through explicit policies.

### Is Sexism in the Classroom Inevitable?

It is clear that the secondary school is not the only environment in which students experience and take part in negative engenderment. By the time students arrive in high school, they have already experienced at least eight years in classrooms that are likely to have manifested some degree of sexism. On the other hand, secondary schooling covers the period during which students pass through adolescence, when a large proportion of their gender sensitivity is either determined or developed. Schools cannot excuse themselves from confront-

<sup>12</sup> Of the coeducational schools in this study, 3 were formerly boys' schools that began to accept girls, 1 was formerly a girls' school that began to accept boys, 1 resulted from the merger of a boys' and a girls' school, and 2 were founded as coeducational schools.

<sup>13</sup> Although we were unable to test it empirically, we admit to an alternative interpretation of the "policy," or "school effects" argument—that schools whose philosophies are known to be equitable (such as School B, a Quaker school) may attract families and teachers who are predisposed to behave equitably. Although this argument is plausible, it does not undercut our contention that strong policies promote gender equity.

ing and rectifying the issue of gender discrimination, even if it is pervasive elsewhere in this society.

The theoretical perspective in which this study is embedded maintains that sexism in the classroom is not inevitable. In fact, schools and classrooms are exactly the locations from which change should spring. Aware of continuing societal sexism, the school community should recognize its responsibility to set a proactive tone on gender issues. In a wholesome institutional environment, where teachers meet their students with respect and high expectations, approach their work with energy and purpose, and strive to inculcate similar qualities in

their students, we would expect to find conditions of gender equity. Furthermore, it is likely that individual schools would monitor their effectiveness in addressing gender issues by giving them regular attention at faculty or departmental meetings, as well as during home-room discussions, as occasions arise in the classroom, at assemblies, during chapel, or at other appropriate times. Our theoretical perspective assumes that the school community shares moral values and a commitment to social change. Although we still believe that such change is possible, we are less sanguine about its occurrence without real efforts to make it happen.

Appendix  
Examples of Sexist Incidents, by Form and Type of School

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*Gender Reinforcement*

- Boys' schools: A wall display features all-male groups, especially teams from contact sports; several male teachers chide students for tentativeness.
- Coeducational schools: Girls take responsibility for or remind their classmates about cleaning up and picking up after themselves in the classroom; wall displays feature all-male groups, especially teams from contact sports.
- Girls' schools: A chemistry teacher uses her diamond engagement ring as an example of carbon; a display in an art studio features women's costumes and hats.

*Embedded Discrimination*

- Boys' schools: A wall display of authors includes photographs almost exclusively of men; there are no pictures of women in the wall display in a history class.
- Coeducational schools: A chemistry teacher refers to a mixed-sex class as "You guys"; A teacher refers to the names of fraternities (but not of sororities) as examples of Greek letters.
- Girls' schools: A male calculus teacher uses exclusionary language; a classroom display features quotations from male, but not from female authors.

*Sex-role Stereotyping*

- Boys' schools: A student-made wall poster of *The Inferno* depicts women in skimpy bikinis; females are the object of cartoon jokes.
- Coeducational schools: No incident of this form was observed.
- Girls' schools: A male French teacher addresses a student as "ma jolie"; a male chemistry teacher addresses students as "ladies."

*Gender Domination*

- Boys' schools: Not applicable in a single-sex classroom.
- Coeducational schools: A male chemistry teacher directs his attention almost exclusively to the boys; a male history teacher calls on the boys and ignores girls whose hands are raised; a female chemistry teacher reprimands girls for talking in class without raising their hands, but allows the same behavior from boys.
- Girls' schools: Not applicable in a single-sex classroom.

*Active Discrimination*

- Boys' schools: Not applicable in a single-sex classroom.
- Coeducational schools: A male history teacher ridicules a girl's answer; a male chemistry teacher responds to a girl's answer, "Kathy . . . wrong as usual!"; the class laughs at a girl as she is mocked by a male chemistry teacher.
- Girls' schools: Not applicable in a single-sex classroom.

*Explicitly Sexual Incidents*

- Boys' schools: During English class, students read aloud essays with sensuous descriptions of girls in bikinis; a classroom display features suggestive pictures of the female body; a male teacher addresses his students as "studs."
- Coeducational schools: No incidents of this form observed.
- Girls' schools: No incidents of this form observed.
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