



II. GENDER DYNAMICS IN THE CLASSROOM

SECTIONS:

- Classroom Dynamics
 - Teacher and Student Behaviors
 - Differences in Linguistic Styles
 - Possible Effects on Female Students
- Teaching to Promote Gender Equity
 - General Principles
 - Specific Teaching Strategies

This chapter treats one element of diversity—gender—as a case study, to illustrate how unexamined behaviors and beliefs can perpetuate discrimination or create environments not conducive to learning. Because much research has been done on the effects of gender in the classroom, we include a separate chapter on this topic. We recognize that gender is but one of the various factors which influence your students' academic performance, but find the body of research on this subject to be broad enough to fill a chapter of its own.

Gender is one of the most fundamental ways we categorize people, whether consciously or unconsciously. Often, gender expectations or stereotypes shape our thoughts and interactions with others in subtle yet perceptible ways. As a result, gender dynamics in the college classroom paradoxically remain both obvious and often overlooked. Since the American Association of University Women (AAUW) published the landmark study *How Schools Shortchange Girls: A Study of the Major Findings on Girls and Education* (1992), the effect of gender on classroom dynamics has become an even more prominent topic of educational



research and discussion. Although this was not the first study, it was one of the first to garner widespread attention and to emphasize how gender influences not only what we teach, but also how we teach, and how our students learn. As more and more of our students have grown up in a time where gender equality is “both taken for granted and not yet a reality” (“Tips for Teachers” 1), classroom gender dynamics have become even more complicated to identify, much less address. Nonetheless, being aware of the patterns of behavior described below, as well as the teaching strategies that follow, will help you treat your students equitably and encourage wider participation in your classroom.

As you read the following chapter, please keep in mind that many of the research studies summarized below focus on gender differences in the aggregate. Though some of these generalizations can help us understand how gender affects classroom behavior of students and teachers, it is important to remember that differences in linguistic styles or learning preferences often associated with a particular gender are neither innate nor specific to every man or woman. Thus, many female students will not exhibit the behaviors or speech patterns described below and some male students will. As a good rule of thumb, be sensitive to the following patterns of behavior, but don't assume they will hold true for every male or female student.

Classroom Dynamics

Though once excluded from most institutions of higher education, female students have made significant gains in educational achievement within the last thirty years. So much so, that by the end of the twentieth century, women began outnumbering men at US colleges. Since 1993, women have accounted for roughly fifty-five percent of all students at four-year colleges and universities (“Report Sees”), and by the end of the 1990s, they earned the majority of both bachelor and master's degrees (Banks 251). No visible exclusion seems to remain. Though still up for debate, recent critics have even begun advocating more attention be paid to male students, noting that young men lag in verbal skills and college attendance while having a higher dropout rate and participation in crime (Banks 251).

Despite these changes, subtle obstacles to women's education may still be present in the curricular content (what is taught) and in what *How Schools Shortchange Girls* calls “the classroom as

curriculum” (how this content is taught). An important part of the hidden curriculum for women stems not just from their current environment, but also from their past classroom experiences. When students step into our classrooms, they bring their experiences with them, often acting in our classes in ways they learned in earlier courses. Our classrooms fit into a larger social and cultural context, where many factors, including gender, work together to influence the behaviors and learning styles mentioned below. Being aware of the potential gender dynamics described in this chapter can help you create true gender equity and promote the learning of all students, male and female.

Teacher and Student Behaviors

Studies of classrooms ranging from kindergarten through graduate school (Sadker, “Sexism in the Classroom” 513, Hall & Sandler 5-9, and Sandler *et al.* 10-14) have shown that teachers are more likely to

- call on male students, even when female students raise their hands or when no one does
- wait longer for male than for female students to respond to questions
- give male students more eye contact following questions (thus inviting response)
- remember and use the names of male students
- ask male students more questions that call for “higher order” critical thinking as opposed to “lower order” recounting of facts
- coach male students to develop their thoughts by giving them more extended and more specific feedback on the quality of their ideas
- give male students specific information on how to complete projects themselves, rather than doing it for them.

These patterns remain remarkably consistent despite the grade level of the course, the subject matter taught, the ethnicity of the teacher or students, the geographical location of the school, and the teacher’s gender (Sadker, “Sexism in the Classroom” 512). Even more surprising, teachers are usually unaware that they treat students in this way. They may even be unaware of the extent to which female and male students actually participate. In response to questioning, Sadker found that teachers will often say that their female students talk more often than their male students. Videotaping the class, however, and then counting who speaks, revealed instead that female students generally talked a third as much as male ones (Sadker, “Sexism in the Schoolroom” 54). Nor are such patterns limited to overtly sexist teachers. One female teacher, astounded to discover such patterns in her classroom, was a twenty-year member of the National Organization of Women (Sadker, “Sexism in the Classroom” 514).

Teachers are not the only ones who treat male and female students differently—so do other students in class. Perhaps in response to this, female students often respond differently to the teacher’s questions than do male students. For example, studies (Sadker, “Sexism in the Classroom” 515, Hall and Sandler 8, and Sandler, *et al* 12-14) show that female students may be

- less likely to raise their hands immediately in response to initial questions than their male counterparts
- less likely to call out and demand the teacher’s attention
- less likely to receive peers’ approval if they do “break rules” and speak out in class frequently without being called on
- less likely to receive feedback, whether praise, help, or criticism
- less likely to have their comments credited, developed, adopted, or even remembered by the group
- more likely to be interrupted when they speak or to have other students answer questions directed to them.

Such patterns continue past elementary, high school, and college classes to business meetings and boardrooms. Recognizing such patterns and working to counteract them can help make women and men more effective speakers and listeners.



Photo by Michael Palmer

Differences in Linguistic Styles

Differences in linguistic styles may be one reason male students receive more attention. Linguists Robin Lakoff and Deborah Tannen, among others (Lakoff 204, Tannen 239, Hall and Sandler 9-10, and Sandler, *et al.* 19-22), have found that female students in the US may be more likely than male students to exhibit the following speech patterns:

- make shorter and quieter statements
- present their statements in a more hesitant, indirect, or “polite” manner
- use “I” statements (“I guess . . .,” “I was wondering if . . .”)

- qualify their statements (“sort of,” “maybe,” “perhaps”)
- add “tag” questions (“... isn’t it?,” “... don’t you think?”)
- ask questions rather than give statements, even if they know an answer
- use intonations that turn a statement into a question, or accompany their statements with smiles or averted eyes rather than more assertive gestures, such as pointing
- apologize for their statements (“I may be wrong, but . . .”).

These mannerisms may stem from a preference for collaborative discussion, since most stress the individual nature of the speaker’s opinion, thus leaving room for other opinions and ideas. Such styles may also be more than individual, since they tend to be exhibited more frequently by members of underrepresented groups. Factors of race, class, culture, and personality are equally important “in determining who gets to speak and for how long and whose voice is taken seriously” (Brookfield 158) in the classroom and in our culture at large.

Recognizing the benefits of such a collaborative speaking style may contradict our assumptions about effective or authoritative speech and may even force us to examine our own, often unacknowledged, gender stereotypes. Though frequently perceived as hesitant or insecure, these speech characteristics are not negative ones—they are simply different from the standard style validated in most classrooms. Ideally, if a statement is intelligent and interesting, its quality should not be affected by how aggressively it is stated or whether it is phrased as a statement or a question; louder statements are not intrinsically better than quieter ones and longer statements are not necessarily more useful than condensed ones. Indeed, collaborative styles can have an important positive effect on social and academic conversation. Asking tag questions or using questions instead of statements can improve discussion by more readily inviting responses from other students. Such manners of speaking can also help prolong discussion; nodding, clarifying, listening, etc. are all behaviors that encourage others to speak and participate.

Deeply embedded gender stereotypes can also cause faculty to respond differently to male and female students exhibiting the same linguistic styles. For example, women who ask extensive questions are often seen as troublemakers, while men who do so may be considered bright or interested. Or women speaking in an assertive, confident manner, using clear and definitive speech may be labeled “rude,” “abrasive,” or worse by faculty or other students. Becoming more aware of our own stereotypes about gender and how they influence our perceptions and

reactions to individual students can help address these problems as we begin to shift our concern with the form or tone of a question to a concern with the content of student remarks.

Possible Effects on Female Students

The negative messages teachers imply can have several effects on female students. When combined with social influences, they can lead female students to expect less of their abilities. Although male and female children start school testing equally well in both content and self-esteem, this parity erodes as students advance through their education. Beginning in middle school, male students begin to show a higher self-confidence in their intellectual and career abilities, though female students may score as well on standardized tests and may in fact get better grades (*How Schools* 13). This lowered self-confidence may, in turn, lead to fewer female students in some fields. At the same time as their self-confidence about their mathematic and scientific abilities begins to drop, female students begin to show a waning interest in these subjects and go on to take fewer courses in these areas (Rosser 56). With fewer hands-on scientific or technical experiences outside the classroom, and lower expectations from parents, teachers, peers, and counselors, these students may shift their focus toward those courses and fields where society expects them to do well.

The trend of diminished self-confidence and expectations continues for many women in college. Although a student’s degree of self-confidence (as opposed to ability) may seem irrelevant on the college level, advisors and teachers may focus more attention on highly self-confident students or consider their ideas and potential more seriously than those of other students who do not exhibit the same potential as aggressively. Teachers may be less likely to notice less confident students and thus less likely to encourage them to pursue certain majors or graduate careers, to offer them recommendations or chances for research assistant positions, or to mentor them.

Such messages from teachers and peers may also lead some female students to participate less frequently in class discussion. As a group, women participate less frequently than men. One recent study of coed institutions even showed that the frequency of female students’ participation actually decreased throughout the semester (Sandler, *et al.* 7), at a rate inverse to an increase in participation at single-sex institutions. In particular, studies have found that male college students tend to dominate discussion in classrooms with a male instructor and a majority of male students (Krupnick 18-19), particularly in traditionally male-dominated fields such as science, mathematics, and engineering.

Another factor contributing to the smaller percentage of female student who major in math and science may be the competitive learning environments often favored in such disciplines. When studying male and female students in introductory science courses, Shelia Tobias found that many women—no matter how well they did in the course—responded that what they liked least about science was the intensely competitive, hierarchical, and isolated nature of the environment. She concluded that the women’s uneasiness with science’s perceived “chilly climate” may be connected to the higher attrition rate among women considering a science major (Tobias 70). In other words, female students sometimes drop out of science not because they cannot do as well as male students, but because they recognize that their preferred learning environment does not match the teaching style of their science instructors. To provide all students with equal opportunities to succeed, teachers in these fields may need to pay particular attention to the participation patterns of female students in their courses.

Teaching To Promote Gender Equity

Inequities in teacher attention and class participation begin long before a particular student walks into your classroom; however, these patterns can be changed. The studies mentioned previously, which showed male students receiving more classroom attention from both male and female teachers, also found teachers who observed these behaviors on videotape and participated in structured training changed their behaviors. Afterwards, the teachers called on male and female students in nearly equal proportions and gave more precise responses to all students’ comments, thus helping them further develop their thoughts (*How Schools* 69, Sadker, “Sexism in the Classroom” 515, Sandler 14). Students responded to these extra measures quite positively, which benefited the overall quality of class discussion. In particular, students’ behaviors changed in accordance with the instructors’, male and female students began to participate in the class in



Photo by Dorothe Bach

nearly equal proportions, and all the students responded more frequently and more accurately to the teacher’s comments (Sadker, “Confronting” 183 and “Sexism in the Classroom” 515).

Paying particular attention to classroom dynamics can profit all the students in the course and result in a higher level of intellectual performance. For example, the “chilly climate” reported in science or engineering courses can be ameliorated without weakening the quality of instruction. Courses similar to those Tobias studied can and are being reconfigured to meet a range of learning preferences, proving that the sciences are not isolated or impersonal disciplines, since outside of the classroom many projects are accomplished in teams. Further, placing knowledge in a social context helps to show students how their learning connects to the world around them and how such ideas are actually practiced in the outside world.

Promoting equity in the classroom does not necessarily mean treating all students equally. That is, though it does mean giving all students equal opportunities to succeed, it may also mean giving some students more encouragement to perform in class or structuring your class in ways that promote greater participation from a wider number of students. Explicitly encouraging quieter students by calling on them or by placing them in group settings where participation seems easier or less threatening is one example of how ensuring equity sometimes calls for additional measures. Paying closer attention to gender dynamics in the classroom leads both to better teaching and to better learning for male *and* female students.

General Principles

- Give all students equal attention in advising and mentoring.
- Don’t overlook capable but quiet students.
- Revise curricula if necessary to include female experiences and to include them in more than just stereotypical ways.
- Give each student equal attention and equally specific feedback.
- Monitor classroom dynamics to ensure that discussion does not become dominated by verbally aggressive students.
- Vary the structure of the classroom to include more than just competitive modes of learning.

Specific Teaching Strategies

Syllabus:

Discuss your expectations for participation at the beginning of the course. Include them in the syllabus, and consider making participation count toward the final grade.

1. You might announce that you do not expect every student to participate in every class, but that you do expect everyone to participate at some time and that students who find this difficult should speak to you privately (Krupnick).
2. To help ensure that more assertive students do not dominate, you might also announce that you expect all students to listen carefully to one another and periodically encourage such listening during the course.
3. Be explicit about how and when students may respond (i.e., if they should raise their hands before speaking, reframe each others' statements before replying, or even if it is permissible to speak before they have the final answers). Stress that it is as important to ask a question as to make a statement.

Discussion and Lecture:

Establish class norms or ground rules for discourse

(e.g., Critical analysis must be of ideas not persons, etc.) **early in the semester.** Enlisting the students in creating and enforcing these rules helps create an environment in which students feel safe enough to take intellectual risks, even if they make mistakes in the process.

Call all students by name and attribute students' contributions to class discussion by name.

Use examples that include men and women in other than merely stereotypical ways.

Avoid making any student a spokesperson for his/her gender.

Don't single out female students as if you expect them to have difficulty (as in consistently asking one woman in the class, "Do you understand, Sharon?") This is especially problematic in courses with predominantly male enrollments.

After you ask questions, look around the room to make eye contact with both male and female students. Use this eye contact as nonverbal encouragement for student participation. Check yourself to see that you do not look primarily at those students closest to you.

Watch students for nonverbal clues that may signal interest or disagreement, and call on them in addition to those who raise their hands.

Be aware of the nonverbal clues you may be giving to students as they speak. Your nonverbal messages (i.e., leaning forward, which suggests interest, or

flipping through papers and looking at your watch, which may be seen as signs of disinterest) may have an important effect on which students speak again.

If you find that you consistently lecture or sit next to certain students, move to new locations, or move around the room as you speak. If you move from group to group of students during laboratory projects, check to make sure you spend as much time among groups containing female students as among predominately male groups.

Increase your wait time for responses. Average teacher wait time is one second, but a wait time of three to five seconds produces significantly more, higher quality responses among a wider variety of students.

If necessary, ask your question, and then count off the seconds to yourself before you call on students. Other ways to increase wait time include having all the students prepare brief written responses to the question, and then picking someone who might normally be hesitant to speak to report to the class what he/she has written. Or, you can form students into pairs, and have them briefly share responses with each other before you call on individual students to report their ideas to the class (a.k.a. "Think-Pair-Share"; see "Introductory Focused Discussion Pairs," Johnson *et al.* 5:13).

Don't always call on the student who raises his/her hand the fastest or who solves the problem first. You can tell students that you will not call on anyone for several seconds so they can think through their answers. This prepares them for the pause that follows, encourages everyone to think, and allows everyone to formulate a fully developed response.

Return to the remarks of students who start to speak but are interrupted or who drop their point before finishing. Give such students space in the discussion to finish their thoughts ("That's an interesting point, and we will get back to it, but I think Phil still has something he wants to say"). Alternatively, you can credit the student's remarks and tie them into the current discussion ("As Atalya said earlier, . . ." or "That sounds similar to the comment that Kamila brought up earlier. Would you like to comment on X, Kamila?"). This technique is also helpful if some students' comments tend to be ignored.

When appropriate, emphasize students' comments by putting them on the board.

Respond specifically to students' comments. Ask them to develop and extend their thoughts. If a student gives you a brief "yes/no" response to a question, you can ask them for greater development by asking "Why is X true?" or "How does X work?" or "Can you explain that process further?" Studies have shown that teachers react

to students' comments more than 50% by affirming them verbally or nonverbally (Sadker, "Sexism in the Classroom" 513). Such acceptance, while important, helps the student much less than directed and specific feedback. In the video, *The Art of Discussion Leading: A Class with Chris Christensen*, Christenson, a legendary professor at Harvard's Business School, models effective feedback techniques. (Video available for viewing at TRC)

Reply to the quality and content of students' remarks, not to how confidently these remarks may be stated.

Let your students know it is as important to follow up on and extend others' comments and arguments as to criticize them. Make classroom discussion more than purely a debate, where one side "wins" or "loses."

Use discussion activities in which everyone participates. For instance, you might ask students to raise their hands in response to an issue ("How many people think X?"), and then use the poll results to open discussion. Alternatively, each student could write briefly in response to your initial question. To start class discussion, you can then call on certain students to read their responses aloud, or students can discuss these possible responses in small groups (for further information, see Johnson and Davidson).

Classroom Dynamics:

When students view laboratory demonstrations as a group, make sure smaller and shorter students do not become shouldered to the side or hindered from full view (Hall and Sandler 16).

Be aware that women from an underrepresented group may feel the effects of gender, ethnicity and race in different ways. Don't assume that all the female students in your classroom have similar thoughts, attitudes or experiences or that "concerns about gender will be more pressing for your women students than those of race, class, religion, or national origin" (*Tips for Teachers: Gender* 3).

Assessment:

Use frequent brief feedback techniques to gauge students' understanding. For instance, you can assign a one-minute paper by taking the last few minutes of class to have students write their anonymous answers to a question such as "What was the main point you learned today?" or "What is your main question about today's material?" Read these responses and respond to them in the next class (Light 36; Angelo).

Ask for comments about the course at midterm or add questions to the standard final evaluation to elicit students' perceptions about class participation (e.g., "Do you feel comfortable participating in the class? Why or why not? What would make you more comfortable?"). For final evaluations you may wish to consult with your department concerning ways to add additional questions to the standard or on-line forms while following departmental guidelines. As one easy way of obtaining information, you can have a consultant from the Teaching Resource Center come to your class to conduct a Teaching Analysis Poll (TAP), a thirty-minute procedure that collects majority student opinion about the course.

Early in the semester set up a system that will help you see how much attention you pay to students and that will highlight which students speak, and for how long. You might make notes during or immediately after a class or a series of classes about who contributed to class discussion: in what order, in what depth, whether he/she was interrupted, whether he/she spoke again. Look over your notes for patterns of unequal participation. More easily, you can have a colleague sit in and observe, or you can have a TRC consultant discuss with you an observed or videotaped class. (For further information on TAPs or videotaping, see "Consultations" on the TRC website <http://trc.virginia.edu>.)



Photo by John Baughman

Classroom Structure:

In the first week or two of the course, arrange to have every student talk briefly in class or in small groups. Students can introduce themselves to the class or to each other or report group solutions of problems. Whatever you do, set up a structure that helps everyone say something out loud, if not to the entire class then to a small

group. Studies have shown that a student who does not talk in the first two weeks of class is much less likely to speak up later.

Give students sufficient instructions about how to complete assignments or solve problems on their own rather than taking over and completing the project for them.

Give students sufficient opportunity to practice the hands-on skills necessary for your course. Some women in science and engineering courses, for instance, may be less experienced with course procedures or equipment than other students. Female students tend to take fewer mathematics or science courses in high school, and they may be less likely to choose hobbies that introduce them to technical or mechanical equipment. Providing sufficient time for observing experiments allows all students to feel comfortable with the required instruments (Rosser 59).



Photo by Tom Cogill