

Encouraging Female Participation in Mathematics

Mathematics is a “critical filter” in the educational process. Avoidance of math prerequisites may prevent or inhibit students from entering careers with better salaries and advancement opportunities. Current studies indicate that in schools, sex bias inhibits girls from reaching their full potential in mathematics. The myth that these disciplines are male domains still persists. Schools can help negate the myth by creating a climate in which both males and females learn math skills effectively. (Source: *Gender Bias in Mathematics, Science and Technology Report Card #3*, developed by Mary Jo Strauss.)

Criteria for Equitable Mathematics Activities

1. Teacher is enthusiastic and has equal expectations for all students.
2. Written materials and verbal instructions use gender-free language.
3. Activities relevant to all students’ lives are stressed.
4. “Hands-on” experience is required from all students.
5. Problems do not always demand one “right” answer.
6. Career information relevant to the activity is presented. Examples of female role models are included.

What Teachers Can Do

1. Use the same standards for math performance regardless of a student’s gender.
2. Have the students do activities, like making bread, to learn math, rather than just reading problems or doing worksheets.
3. Develop inservice programs to introduce new math concepts and teaching techniques.
4. De-emphasize the “rare bird” phenomena for females who do well in math and males who do not. Assume that there will be females in advanced math classes.
5. Make short biographies of women and men mathematicians available in the classroom.
6. Invite women and men to visit your class to talk about their math-related jobs and the kind of preparation necessary for those jobs.
7. Work with your school counselor to see that good, non-biased vocational information about math-related careers is available.
8. Examine your classroom, textbooks and lesson plans for stereotypic attitudes, opinions and activities.

Sources: “*Sex Stereotyping in Math Doesn’t Add Up*”; Michigan Center for Career and Technical Education, Michigan State University