Sally K. Ride Papers - "Girls and Women in Science and Math Initiative," 1995

3. Detailed studies of same-sex classes/schools have not been done; these could shed some light on the issues. At present, single-sex classes appear to present opportunities, but not solutions.

4. There are ways in which we habitually disfavor some groups of students (even with the best of intentions). For example, by having students volunteer to answer questions, we tend to favor boys: they raise their hands more, hence talk more in class, get to "participate", and "say the words" of science and math. Studies are needed to determine the characteristics of teaching practices that disfavor certain students such as females minorities, and the disabled.

5. Boys and girls are different; but our culture amplifies the differences.

Any sorting in co-ed classrooms that's done by sex can exacerbate the problem(by creating "in" groups and "out" groups)

6. A possible intervention might be to look at and encourage different (effective) "learning styles"; not categorizing them as gender specific, or categorizing some as "male" and some as "females"

7. It is important to look at how to improve the "discourse" in math/science. This benefits everyone in the classroom, as these areas would not longer encourage "survival of the fittest".

B. PARTICIPATION

1. Math:about the same percentages of boys and girls take math through geometry; a slightly higher percentage of boys take trig. By calculus, the ratio of boys to girls is about *** to 1. By the end of high school, about 60% of the students who have taken at least 4 years of math are male.

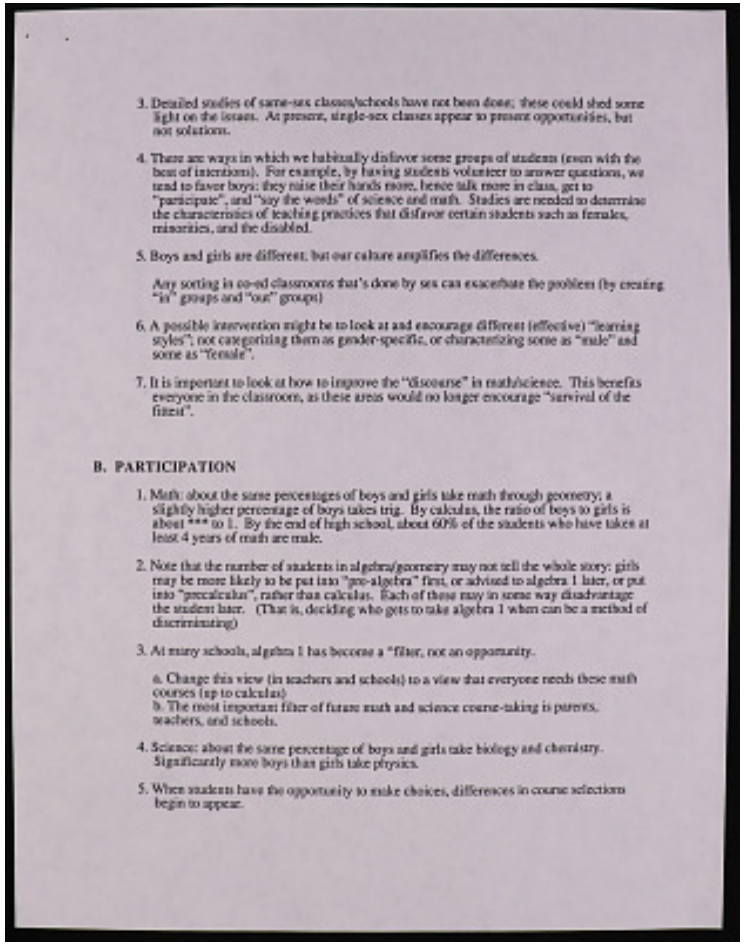
2. Note that the number of students in algebra/geometry may not tell the whole story; girls may be more likely to be put into "pre-algebra" first, or advised to algebra I later, or put into "precalculus", rather than calculus. Each of these may in some way disadvantage the student later. (That is, deciding who gets to take algebra I when can be a method of discriminating)

3. At many schools, Algebra I has become a "filter, not an opportunity.

a. Change this view (in teachers and schools) to a view that everyone needs these math courses (up to calculus)
b. The most important filter of future math and science course-taking is parents, teachers, and schools.

4. Science: about the same percentage of boys and girls take biology and chemistry. Significantly more boys than girls take physics.

5. When students have the opportunity to make choices, differences in course selections begin to appear.


3. Detailed studies of same-sex classes/schools have not been done; these could shed some light on the issues. At present, single-sex classes appear to present opportunities, but not solutions.

4. There are ways in which we habitually disfavor some groups of students (even with the best of intentions). For example, by having students volunteer to answer questions, we tend to favor boys: they raise their hands more, hence talk more in class, get to "participate", and "say the words" of science and math. Studies are needed to determine the characteristics of teaching practices that disfavor certain students such as females, minorities, and the disabled.

5. Boys and girls are different; but our culture amplifies the differences.

Any sorting in co-ed classrooms that's done by sex can exacerbate the problem (by creating "in" groups and "out" groups)

6. A possible intervention might be to look at and encourage different (effective) "learning styles"; not categorizing them as gender-specific, or characterizing some as "male" and some as "female".

7. It is important to look at how to improve the "discourse" in math/science. This benefits everyone in the classroom, as these areas would no longer encourage "survival of the fittest".

B. PARTICIPATION

1. Math: about the same percentages of boys and girls take math through geometry; a slightly higher percentage of boys takes trig. By calculus, the ratio of boys to girls is about *** to 1. By the end of high school, about 60% of the students who have taken at least 4 years of math are male.

2. Note that the number of students in algebra/geometry may not tell the whole story: girls may be more likely to be put into "pre-algebra" first, or advised to algebra 1 later, or put into "precalculus", rather than calculus. Each of these may in some way disadvantage the student later. (That is, deciding who gets to take algebra 1 when can be a method of discriminating)

3. At many schools, algebra 1 has become a "filter, not an opportunity.

a. Change this view (in teachers and schools) to a view that everyone needs these math courses (up to calculus)
b. The most important filter of future math and science course-taking is parents, teachers, and schools.

4. Science: about the same percentage of boys and girls take biology and chemistry. Significantly more boys than girls take physics.

5. When students have the opportunity to make choices, differences in course selections begin to appear.