



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

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

Extracted on Mar-28-2024 07:37:51

The Smithsonian Institution thanks all digital volunteers that transcribed and reviewed this material. Your work enriches Smithsonian collections, making them available to anyone with an interest in using them.

The Smithsonian Institution (the "Smithsonian") provides the content on this website (transcription.si.edu), other Smithsonian websites, and third-party sites on which it maintains a presence ("SI Websites") in support of its mission for the "increase and diffusion of knowledge." The Smithsonian invites visitors to use its online content for personal, educational and other non-commercial purposes. By using this website, you accept and agree to abide by the [following terms](#).

- If sharing the material in personal and educational contexts, please cite the Smithsonian National Air and Space Museum Archives as source of the content and the project title as provided at the top of the document. Include the accession number or collection name; when possible, link to the Smithsonian National Air and Space Museum Archives website.
- If you wish to use this material in a for-profit publication, exhibition, or online project, please contact Smithsonian National Air and Space Museum Archives or transcribe@si.edu

For more information on this project and related material, contact the Smithsonian National Air and Space Museum Archives. [See this project](#) and other collections in the Smithsonian Transcription Center.

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 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.

Sally K. Ride Papers - "Girls and Women in Science and Math Initiative,"
1995
Transcribed and Reviewed by Digital Volunteers
Extracted Mar-28-2024 07:37:51



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

The mission of the Smithsonian is the increase and diffusion of knowledge - shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world. Founded in 1846, the Smithsonian is the world's largest museum and research complex, consisting of 19 museums and galleries, the National Zoological Park, and nine research facilities. Become an active part of our mission through the Transcription Center. Together, we are discovering secrets hidden deep inside our collections that illuminate our history and our world.

Join us!

The Transcription Center: <https://transcription.si.edu>

On Facebook: <https://www.facebook.com/SmithsonianTranscriptionCenter>

On Twitter: [@TranscribeSI](https://twitter.com/TranscribeSI)

Connect with the Smithsonian

Smithsonian Institution: www.si.edu

On Facebook: <https://www.facebook.com/Smithsonian>

On Twitter: [@smithsonian](https://twitter.com/smithsonian)