

The Equity Connection: Instruction and Achievement

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Where We Stand

- Significant progress has been made:
 - boys and girls are taking a broader range of courses
 - more girls are going into law and medical school
 - boys' and girls' SAT scores are roughly even
 - Title IX has greatly increased girls' participation in sports
 - Latino and African American students' attitudes about math and science improve as they progress through elementary school

Where We Stand

- Disparities and Inequities still exist:
 - Boys take fewer English, sociology, psychology, foreign language, and fine arts courses than girls
 - Very few girls take Computer Science courses, even though 65% of jobs in 2010 will require those skills
 - By 8th grade, across all racial and ethnic groups, twice as many boys as girls are interested in quantitative disciplines and science careers
- This leads to gendered career choices

Nontraditional Careers

- Any occupation where one gender comprises 25% or less of total employed. (US Department of Labor)
- Examples:
 - building trades,
 - nursing,
 - STEM careers,
 - early childhood and elementary education

Expectations and Interactions

- Picture an intelligent child...the first one that comes to mind. Describe the child:
 - What does the child look like? What is the child wearing? What is the child doing? What kind of expressions does the child have? How does the child move? What is the child's gender? What is the child's ethnicity?
- Typical response: 57% of women and 71% of men visualize male children. (Sadker & Sadker)

Expectations and Interactions

- Social construction of gender
- Teacher to student interactions
 - Teachers are not the cause, or the sole person responsible for classroom interactions--but they do play an important role.
- Create a list of interaction behaviors which are affected by gender
 - Question & Answer
 - Praise & Criticism
 - Physical Movements
 - Others?

Question and Answer

- Calling on boys more than girls
- Accepting boys' called out answers more than girls'
- Waiting longer for boys' answers than girls'
- Giving girls more neutral responses "okay" and boys more complex responses (both positive and negative)
- Allowing boys more talking time than girls
- Frowning more during girls' answers than boys
- Allowing themselves to be interrupted more easily by boys than girls
- Looking at their watches or clocks more frequently when girls speak than when boys do.

Praise Criticism and Feedback

- Praising girls for the form or appearance of their work, and boys for their content
- Telling boys how to solve the problem, but solving the problems for girls
- Disciplining boys more than girls, even when girls misbehave equally
- Giving boys more criticism and corrective feedback than girls

Physical Movement

- Positioning their bodies towards boys more than girls
- Circulating more to boys' seats than to girls', or to boys' "area" of the room when children are allowed to segregate their seating pattern by gender

Other

- Permitting gender-biased behaviors or comments from students
- Allowing students to self-segregate by gender
- Giving girls fewer experiences with science instrument, classroom equipment, and technology
- Allowing boys more time with scarce classroom resources, such as computers or science equipment
- Differentiating task assignments on the basis of gender

Expectations and Interactions

- Student Initiated Interactions
 - In general, students initiate more interactions with teachers than vice versa
 - Boys are more likely to initiate interactions with teachers than girls are
 - Interactions with males seem to dominate teachers' behavior (+ &-) because they are responding to the boys' higher level of activity

Student-Student Interactions

- Peer interactions encompass approx. 29% of student
- Students tend to segregate themselves along gender lines (classroom seating, friendship choices, unstructured play, work-partner preferences)
- As students aged, male-dominance in group work and patterns of segregation increase

Equitable Interactions

- Teachers can restructure their classrooms to change interactions patterns among students, and between yourselves and students.
- But first, you must become aware of these unseen patterns
 - Using a Teacher-to-student observation report can be most helpful in this.

Testing Your Expectations

- Who are the last 3 students you praised in class?
- Who are the last 3 students you disciplined?
- Who are the last three students you complimented for their ideas?
- What are the last 3 students you talked to after class to tell them you were disappointed in them?
- Who are the three highest achieving students in your class?
- Who are the three students with whom you have had the least interaction in the past month?

Equitable Teaching Strategies

- Key themes to increasing achievement
 - Although students might have different levels of previous knowledge and different conditions under which they learn best, all students--regardless of gender--are capable of learning, understanding, and applying concepts and skills in all subjects.
 - Regardless of differences in learning styles, cultural backgrounds, or level of English proficiency, all students must be given the same access to opportunities, held accountable to the same high level of standards, and provided with the necessary support to achieve those standards.
 - Students of both genders will gain a better appreciation for, understanding of, and ability to grow in subjects areas when they engage in the construction of that knowledge through exploration, critical thinking, decision making, questioning, and problem solving.

Equitable Teaching Strategies

- Successful equitable classrooms have the following three qualities in common:
 - The classroom environment is respectful of students and teachers.
 - All students participate in class.
 - The classroom incorporates multiple modes of learning.

Gender Dynamics in Cooperative learning Groups

- In mixed-gender groups, research shows that boys often assume the dominating role:
 - making decisions without consulting the girls
 - ignoring or criticizing any comments girls offer in the limited time allotted to them
 - grabbing materials or taking over the computer
- Girls often take (are relegated to) to the more passive observer roles, like recorder; leading to loss of interest.

Cooperative Learning Group Tips

- Be clear about the responsibilities of each group member and the group as a whole; provide opportunities for students to learn and practice expected behaviors to fulfill these responsibilities.
- When assigning roles, ensure that both roles and the corresponding responsibilities are understood and rotated among all the students.

Cooperative Learning Group Tips

- Have students practice asking questions that elicit the knowledge they each already have. (This is especially important for students who are more quiet, who are learning English as a new language, or who have a disability that makes it difficult to express themselves orally.)

Equitable Teacher-Student Interactions

- Try to call on or talk to each student at least once during every period.
- Provide “wait time.”
- Actively seek participation from students who contribute infrequently. Try to build some out-of-class time with one or two different students each day just to chat and break through barriers.
- Provide some out-of-class question time. Try instructing kids to write their questions or comments on index cards to share only with you.

Equitable Teacher-Student Interactions

- Arrange students in cooperative groups, and try single-gender groups for some situations (especially computers).
- Be sure to circulate to girls' seats or area when they are arranged in single-gender groups.
- Praise and reprimand anyone who deserves it, every time such a response is called for, without exceptions.
- Praise both girls and boys for the content of their work, and not just for its appearance.

Equitable Teacher-Student Interactions

- Follow up on student comments as often as you possibly can.
- In follow up comments, give girls and boys the same level of prodding and continual questioning to push their thinking further.
- If you can't get a good mix of responses by gender when students call out, establish a code for taking turns to speak, and explain why you are enforcing it.
- Explore with your students where incorrect solutions are coming from.

Equitable Teacher-Student Interactions

- Actively solicit alternative methods that students have used to solve problems and encourage them to share and discuss.
- Reward your students for finding and pointing out your mistakes--it keeps them attentive. This strategy is also useful for students with disabilities, such as Attention Deficit Disorder (ADD).
- Choose girls as lab or computer assistants, and boys as readers or class recorders.

The Equity Trap

- Avoid reinforcing sex-role stereotypes when encouraging girls' or boys' interests.
- Avoid teaching styles that strictly match students' preferred learning styles.
- Address the Equity Trap by using a variety of instructional approaches that incrementally stretch students' interests into broader areas and challenge them to practice new ways of learning.

Resources to Infuse Equity

- Center for Women and Work
 - <http://www.rci.rutgers.edu/~cww>
- GESA (Generating Expectations for Student Achievement), GrayMill
- American Association of University Women
- *Infusing Equity by Gender Into the Classroom*
 - <http://www.ricw.state.ri.us/geh.htm>
- Gender and Diversities Institute
 - houses former WEEA Resource Center Materials