Reaction to the 2008 Brown Center Report on American Education

The Misplaced Math Student

Lost in Eighth-Grade Algebra

From An Algebra Teacher's perspective

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Taking Algebra is not the same as learning Algebra.

Consequences for students

–Learning real algebra in ninth grade allowed me to succeed in subsequent advanced mathematics courses. Strong prior mathematics preparation was key to my successful completion of the course.

–Real equity should translate into an opportunity to learn, not to simply exist in an algebra classroom.

Consequences for students

- The opportunity to learn algebra is taken from students when they have not been taught the fundamental prerequisites leading to success in school algebra as outlined in the Final Report of the National Mathematics Panel.

- Both misplaced and prepared students are not given the opportunity to learn real algebra , especially in urban schools involving large numbers of minority students from poor families.

Offering Algebra is not the same as teaching Algebra

Consequences for Teachers

- Enrolling unprepared students in an algebra course poses a dilemma for their teacher. Either the teacher presents a "pretend" algebra course or risks a possible low evaluation if a number of her students do not succeed in a real course.

- Teachers are usually asked to change their instructional approach to accommodate these students.

Consequences for Teachers

- Teachers are sometimes instructed to teach smarter, using games, manipulatives, group work, and technology. This will never be enough to overcome as much as a seven year difference in mathematics preparation between students sitting in the same algebra classroom.

- Teachers are sometimes asked to accept a redefinition of Algebra.

- The Maryland State Algebra/ Data Analysis test illustrates one current redefinition of algebra.

Setting reasonable expectations for students and teachers will contribute to a formula for success.

- Students should be enrolled in an algebra course when they are sufficiently prepared to learn its content. For some students this may occur at seventh grade, for others it may occur at ninth grade.

- It is unreasonable to expect all students to learn a real algebra course in one year with as much as a seven year knowledge gap in the same classroom.

- Algebra teachers should not be given the impossible task of teaching a real algebra course to students who are mathematically many years behind their peers nor should they be expected to water down their course to a level which makes it algebra in name only.