

My name is Johannah Maynor. I'm an American Indian, of the Lumbee Tribe from Robeson County, North Carolina. I have a B.S. in Mathematics and a masters degree in Curriculum and Instruction. I have been fortunate enough to teach mathematics to students and teachers in different parts of the country, most of which were minority areas. Being minority, the "Achievement Gap" is of great concern to me. Out of this growing concern, I've spent the past five years studying how students learn mathematics, and implementing two different mathematics curricula. The first of which is the traditional curriculum, which has been and is being used in classrooms across America. The second is a Standards Based Curricula, which was developed and written based on the national standards as outlined by NCTM, and focuses on the understanding and applying of mathematics rather than memorizing it.

Let's face it, the way mathematics is being taught in this nation has served a few of us well, but all students do not learn the same way. Those of us in this room have been some of the lucky ones, we were great memorizers, and hopefully most of us developed some sort of conceptual understanding or made connections with the mathematics we were learning. However, think about those who were less fortunate, they were not good memorizers, and therefore failed miserably. Math is still being taught this way in classrooms all over the nation, which is one of the many reasons we don't and won't measure up mathematically as a nation. Our people can't compete! If it didn't work then, what makes us as a nation think it will work now? We have to change how we teach mathematics in order to reach every learner, not just a select few.

The school where I teach in Durham North Carolina has implemented both curricula for eight years, which presented the opportunity for me to gather the necessary data and compare the achievement of students from both curricula. What I found was:

- In the 2000-2001 school year, 153 minority students enrolled in courses beyond Algebra II. This year, minority enrollment rose to 234 students, which is an overwhelming 53% percent increase.

- Not only has minority enrollment increased, but total enrollment has as well. In the 2000-2001 school year 391 students at Jordan took upper level math classes; this year total enrollment is 631, a 61 percent increase.
- When Algebra I EOC scores were compared, the 39% of the traditional student scored 3's and 4's, but 19% scored 1's. With the Standards-Based Curriculum students, 76.6% scored 3's and 4's, while only .98% scored 1's.
- Before any students completed the four-course cycle of the Standards Based Curricula, 74 percent of the students taking the AP exam received college credit. Since, we have continued to increase that percent and this year, 91.5 percent earned college credit.

The quality of mathematics education in America is of greatest concern, and I realize, as stated yesterday, that the way mathematics is being taught is only one variable in mathematics education, but a very big one. I also realize that the work I've done is specific to one school, which is predominately minority. However, also as stated yesterday, if we find something that levels the playing field on a small scale, shouldn't that be compelling enough for Mathematics educators to really examine how and what mathematics is being taught in our country today.

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