



Toward A New Non-Traditional High School Curriculum

As I am sure many of you are aware, the National Governor's Association and the Council of Chief State Officers have completed a final draft of the Common Core Standards for English Language Arts (ELA) and Mathematics for K-12 education. The idea is to have a set of 'common core' ideas that all states will agree to work with as they assess student progress. Forty-eight states have agreed to review these Standards. This initiative has received a strong push forward by the U.S. Department of Education. In fact, the Department of Education is holding \$4.3 billion in Race to the Top stimulus grants to States for improving school education; however, in order to qualify for this money states will have to agree to adopt the aforementioned Common Core Standards in both ELA and Mathematics.

Whether or not they received Race To The Top (RTT) money in the first round, most states still appear to be on track to implement the Common Core Mathematic Standards as part of their continuing effort to win RTT money. Within each state, each of the three school levels, elementary, middle, and high will have implementation issues with which to contend. However, while at least 85% of the content in each grade from Kindergarten to eighth grade is established by the Common Core Standards, the sequence of content is much less determined in grades nine to twelve and therefore may be individually determined by the states.

This situation provides opportunity to structure a high school mathematics curriculum that is more coherent and connected than is present in the preponderance of U. S. schools. The Common Core Initiative has provided examples of different sequences through the Common Core high school content and suggests that there might be other such paths. However, while the offered examples of non-traditional paths provide a mixture of mathematical topics at each grade level, the suggested paths do not enlighten states or districts as to how (or if) these topics can form a cohesive whole. This is especially important as one of the stated goals of the new Standards is to be internationally benchmarked and we remain the only major industrial country with a layer cake approach to high school mathematics.

In the U. S. we do have the expertise and talent to attack this issue. If we do not utilize it quickly, the result may be a return by states to a curricular path that has not worked well in the past. Therefore, we have decided to gather a small group of experts who have worked on the issue to provide at least one model of a rigorous forward-looking, non-traditional (research-based) high school mathematics program incorporating the content guidance of the Common Core Standards.

We feel that it is critical that people with strong content knowledge and extensive materials development experience be involved in the creation of secondary school pathways. We also recognize the centrality of NCTM in these researches and discussions. As a consequence, our meeting to be held in mid-June with NSF support, will bring together people with demonstrated expertise in secondary school curriculum design including mathematicians, teachers, and mathematics educators with the intent to provide guidance to states and districts on how to present their high school students with a range of possible experiences compatible with the Common Core Standards and best practices as shown by evidence-based research. NCTM and Math is More will widely disseminate the results of these discussions so as to promote thoughtful reform – stay tuned.