

1163-97-1397      **Daniel J Teague\*** (teague@ncssm.edu), 105 Gallagher Ct, Morrisville, NC 27560-7762. *Moving from Remembering to Thinking: Mathematical Modeling in High School.*

The mathematics program at the North Carolina School of Science and Mathematics has a modeling focus, and we offer an elective course in Mathematical Modeling. The goal of the modeling course isn't to learn new mathematics (although they do), or to study the classic models that others have built, but to learn how to use creatively and profitably whatever mathematics the student knows. We have seen that mathematical modeling in all classes engages and energizes high school students in ways that "standard mathematics" doesn't and can't. Modeling opens students to the creative aspects of mathematics and places the emphasis and focus on thinking rather than remembering. Modeling is slow, so mathematics is no longer a speed race. Mathematical modeling becomes an adventure in merging our mathematical knowledge with our understanding of how the world works; with each informing and strengthening the other. Examples from NCSSM's curriculum and students will illustrate what is possible. (Received September 15, 2020)