

1035-D1-1248 **Eric Robinson*** (Robinson@Ithaca.edu) and **John C Maceli** (maceli@Ithaca). *A Taxonomy of Mathematical Modeling in High School*. Preliminary report.

One of the recommendations of the MAA Curriculum Foundations Project is to replace the traditional college algebra course with courses stressing mathematical modeling among other things. In fact, some new curriculum approaches to high school mathematics programs do exactly that. A focus on mathematical modeling is beneficial for all students for several reasons. In this talk we will provide examples of three attributes of mathematical modeling that can benefit students in high school and college in multiple ways. These ways include the ability to actually develop mathematics within meaningful contexts, assist students in looking for and understanding connections between different concepts, and as a meta-mathematical way to organize thinking. (Received September 19, 2007)