



Curriculum Units by Fellows of the National Initiative

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Mathematics as a Language of Symbols

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While teaching my Pre-Calculus and AP Calculus students, I have realized that using **mathematical symbols** to create **numeric and algebraic expressions**, and to solve text problems is usually a big problem for them. They struggle to translate a verbal problem statement into symbolic mathematical expressions and equations. However, to be successful in upper level Math, Physics and Chemistry students should be able to create a **mathematical model** based on the given data. This is an extremely challenging task for them. This curricular unit will emphasize an idea that **Mathematics is a language**. It will help teachers build students' competence in writing numeric and algebraic expressions while **“translating” real-life problems** into the mathematical language of symbols.

(Developed for Algebra and Trigonometry, grades 9-10; recommended for Pre-Algebra, Algebra I, Algebra II, Pre-Calculus, and Calculus, grades 7-12)

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