

## **I Think I Can, I Think I Can: Impacting Pre-service Teachers' Dispositions toward Mathematics (Workshop)**

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### **Abstract**

Many pre-service teachers in K-8 teacher preparation programs have experienced difficulty with mathematics during their K-12 student careers. This has a potentially negative impact on their dispositions toward mathematics in general and when teaching mathematics to students in grades K-8. This workshop (a) briefly describes the research on learned helplessness and learned optimism with regard to mathematics instruction, (b) outlines a two year research study of pre-service teachers' dispositions toward mathematics, (c) allows participants to examine tools used for assessing mathematics dispositions, and (d) explores implications for pre-service teacher programs.

### **Relationship to the Conference Theme: Mathematics in a Global Community**

Positively impacting pre-service teachers' dispositions toward mathematics is an essential process given the global community in which we live. Students in grades K-8 today will graduate from high school and post high school programs, begin careers, and raise their own children in a global economy where jobs, goods, services, and lifestyles are defined and shaped by interactions with other countries. The interdependence of all life requires attention to a shared commitment to raising standards with regard to the use of natural resources. The fields of business, industry, research, economics, medicine, agriculture, and technology all depend upon a well prepared work force and savvy consumers.

I Think I Can, I Think I Can: Impacting Pre-service Teachers' Dispositions toward Mathematics is a workshop that encourages participants to act locally while thinking globally. Pre-service teachers have the potential to shape K-8 students' dispositions toward mathematics for the future. This is one tangible strategy for positively impacting the future of mathematics in a global community.