1035-Z1-1549

Mike J Simmers* (mjsimmers@charter.net), Mike Simmers, 411 Crabtree Avenue, Plover, WI 54467. A Comparison of Quantitative (Aiken & Dreger's Mathematics Attitude Scale and a Semantic Differential) and Qualitative (Open-response) Methods in Measuring Student Attitudes toward Mathematics.

A large portion of the high school and college student population often struggle with learning pre-calculus mathematics. This study investigated the origins of when, where, and why the aversion to mathematics began for students.

Students from Intermediate Algebra courses (154 students) and a Calculus II course (10 students) voluntarily filled out the three-part research survey. The first part a was a 21-item semantic differential measuring a student's feelings toward mathematics courses, the second part was a 20-question Mathematics Attitude Scale (Aiken & Dreger), and the third part consisted of five open-response questions exploring when, where, and why a student's like or dislike of mathematics originated.

This talk will examine how qualitative analysis can help to clarify quantitative numbers. The talk will focus on the effectiveness of each assessment agent. (Received September 20, 2007)