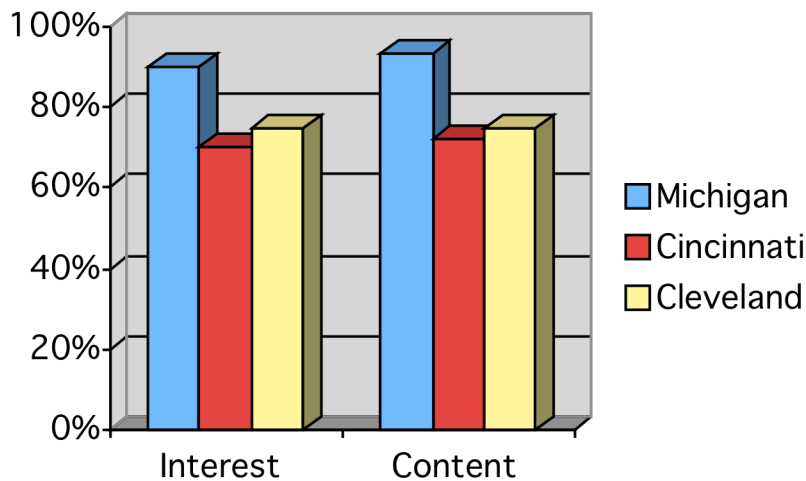


## 2005 PROM/SE Mathematics Summer Academy Participant's Perceptions & Reflections

A) Participants were asked to rate to what degree the course deepened their content knowledge and increased their interest in the subject. The graph displays those who agree or strongly agree with the statements.

### Increased Interest & Content Knowledge



*"I learned that I need make visual connections between the concepts that I teach. Too often students are only using formulas and may not understand the idea of how surface area and volume represent square units and cubic units."*

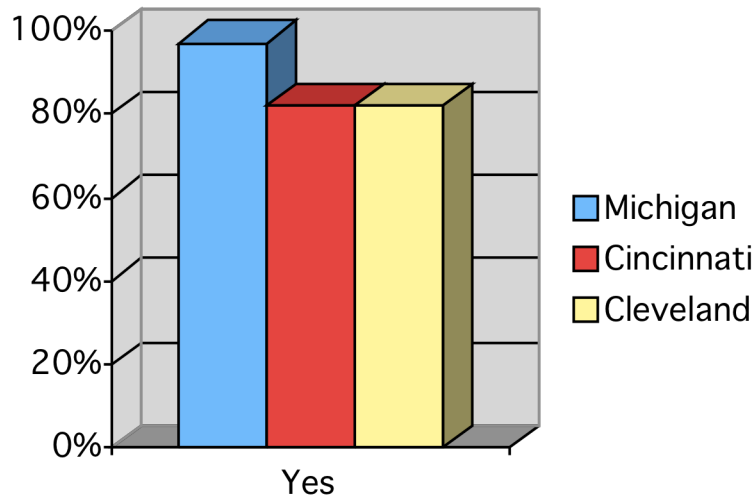
*"I learned that it is very important to question your students correctly in order to get them to "mathematize". I also need to let the students explore more deeply INSIDE the activity to help them get them "doing math" and not just following procedures and doing the worksheet. "*

*"The importance of building on concepts through the grades. One idea in particular which I "realized" was that the arrays introduced in 2nd/3rd grade to help with understanding of multiplication become very powerful as the students begin to think about geometry and developing formulas. The connections are so important, and the students need lots of time for practice to deepen their understanding."*

*"DIVISION OF FRACTIONS. I have had to develop my own explanations each year for division of fractions. After this course and discussion I have explanations deeply imbedded that will be of benefice throughout my teaching."*

B) Participants responded to a question regarding whether they would recommend the course they took to other teachers. Those attending the 5-day course in Michigan responded much more favorably than those attending the 3-day courses in Ohio.

### Recommend Course to Others



*"It is an extremely exhausting week, I didn't catch everything, but what I did get was very beneficial and would recommend to anyone."*

*"As a high school math teacher who has participated in many professional development opportunities, this has been the best as far as the mathematics covered and the pedagogical approach in my classroom."*

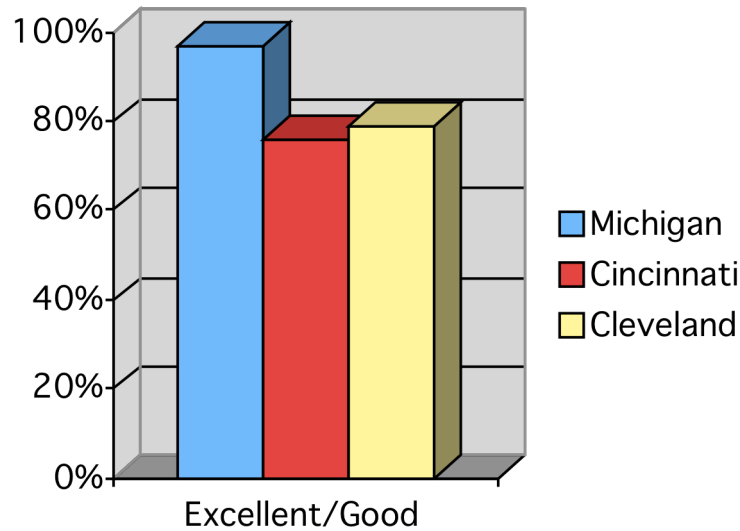
*"This was extraordinary!! It I have many things in my journal and notes that I intend to resurrect and put in motion."*

*"I was amazed that when students were presented with a problem, regardless of age, there were a variety of ways the problem was attacked in order to be completed. When we as teachers solved problems and then discussed them, I realized I need to give more time for my students to share their thoughts and ideas on how they solved the problem. I will be using more manipulatives this year so the learning will become more meaningful. This means I may not keep up with the set curriculum calendar because I'm going to give more time for exploration and reflection the problem."*

*"Over the past three days we have worked with many different technological resources including the graphing calculators, CBR's, and the internet with specific programs. I have worked with these in the past, but not to the degree that I worked with them here. I will definitely try to use these in my own teaching in the future."*

C) Participants who rated the Academy as "good" or "excellent" were grouped into one category. The remainder of the response ratings were "neutral/no opinion" or as "poor/very poor."

### Overall Rating of Academy



*"This is the best professional development I have ever been to. It challenged me as a student and as a teacher. I have not only taken teaching ideas and plans, but also a different way of thinking. Lessons and problems are great, but being able to go through the process to improve a problem myself I may come across is much more helpful. A week is a long time, and I am impressed by the use of the time. I really appreciate all of the information I have learned."*

*"I am glad that the first PD that was offered to teachers who were not associates was so well planned out and well done. Now, I know that the teachers from my building will go back and say positive things about PROM/SE as PD and hopefully, more teachers will be willing to participate."*

*"This has been the most productive course I have taken through High Aims as a math associate. I had a better understanding of the goal of this workshop and felt like I gained some wonderful insights and resources."*

*"It has been one of the better professional development opportunities I have attended in the last 4 years."*