

Meeting: 1003, Atlanta, Georgia, MAA CP W1, MAA Session on In-Service Training Programs For K–12 Mathematics Teachers

1003-W1-764 **Wayne Harvey*** (wharvey@edc.org), 55 Chapel Street, Newton, MA 02458, and **Glenn H. Stevens** and **Al Cuoco**. *Mathematics Knowledge: Implications for Teaching and Learning Mathematics in Middle and High Schools*. Preliminary report.

The Focus on Mathematics partnership is a collaboration among the Mathematics and Statistics department at Boston University, the BU School of Education, Education Development Center, five school districts, and three other Universities (funded for five years by the NSF). One of our core missions is to build a culture of regular discourse around mathematical ideas that bridges institutional boundaries and leads to changed practices in the teaching and learning of mathematics in our middle and high schools. Our presentation will provide some perspectives on the differing ways that people with differing mathematics experience and training think about what it means to know mathematics, what it means to learn mathematics, and what is the nature of mathematical thinking. We will raise implications for mathematicians preparing future teachers and we will suggest that we need whole new perspectives for both the mathematics community and the K–12 teaching community around the nature of mathematics knowledge for teaching. (Received September 29, 2004)