

1035-I1-1774

Kimberly R. Swetz* (kimberly.swetz@usafa.edu), Department of the Air Force, HQ USAFA/DFMS, 2354 Fairchild Drive Suite 6D124, USAF Academy, CO 80840-6252, and **Jadonna Brewton**. *Calculus from the mouths of babes: Improving Students' Math Communication Skills Using Formal Problem Briefs*. Preliminary report.

One of our goals in core calculus courses in the Department of Mathematics at the United States Air Force Academy is to improve students' ability to communicate technical material in a clear and concise manner using a structured problem-solving framework (PSF). One method we use to assess students' skills is requiring them to formally brief problems in class. A student prepares a formal brief in any medium (PowerPoint, Windows Journal, Word, Graphing Software, etc) that best facilitates the discussion and presents the problem from start to finish while entertaining any comments/questions from classmates. We advocate the use of a PSF as both a problem-solving strategy as well as an organized way to present a thorough solution to a problem. We believe that this not only equips our students with a better approach to problem-solving, but also enhances their skills in communicating mathematics. We will discuss the classroom logistics for this approach and learning benefits for the students as well as the instructor. We will also highlight examples of student work. (Received September 20, 2007)