1014-H1-270 David Fowler* (dfowler@unl.edu), 118 Henzlik, University of Nebraska-Lincoln, Lincoln, NE 68588-0355. Helping Mathematics Students Become Math Presenters. Preliminary report.
A requirement in our course for college mathematics students planning to become secondary teachers is to develop a fifteen minute "after-dinner talk" on a mathematics topic for presentation to non-mathematicians. Students choose from a list of about two dozen questions covering a variety of elementary ("When do two negatives equal a positive?"), general ("What is calculus?"), and technical ("Can an irrational number raised to an irrational power be rational?") concepts that a school mathematics teacher should be able to explain to an intelligent adult, as well as topics that the teacher would cover in most school math curricula. The challenge in the assignment is to communicate a mathematical concept in non-technical language.

The students must first present their topic to the class using a whiteboard, computer projection, or other presentation medium. After a critique by the class, each student then writes a formal paper, using an equation editor and adding graphics to produce a polished hard-copy publication. Each person in the class receives a set of the collected papers.

My talk includes the list of topics, excerpts from student papers, student perceptions of the effectiveness of the assignment, and my thoughts for future extension of the assignment. (Received September 03, 2005)

