Meeting: 1003, Atlanta, Georgia, SS 2A, AMS-MAA-MER Special Session on Mathematics and Education Reform, I

1003-97-696 Michael Starbird* (starbird@math.utexas.edu), Department of Mathematics, The University of Texas at Austin, 1 University Station, C1200, Austin, TX 78712. *Ideas to Enliven Liberal Arts Students.* Preliminary report.

Mathematics is a living, growing enterprise, full of creativity and imagination. Students can be convinced of this reality if their mathematical education includes contemporary topics. Modern abstract topics such as chaos, fractals, and aperiodic tilings, and modern applied topics such as public key cryptography, election paradoxes, and intriguing applications of statistics and probability all provide eye-opening ideas for students. Students who do not have technical majors can bring mathematics into their own lives by understanding new ideas and by incorporating the analytical strategies of mathematics into their own thinking habits. (Received September 27, 2004)