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Anand L. Pardhanani* (pardhan@earlham.edu), Department of Mathematics, Earlham College, Richmond, IN 47374. *A powerful, easy-to-use computer algebra alternative that students love, but (most) teachers have not yet discovered!*

Teaching with technology that combines powerful graphics with sophisticated mathematics is known to be very effective. Many quality products strive to meet this need, including Maple, Mathematica, Matlab and others. While these tools have been successful and effective for some students, many other students (and teachers!) find the learning effort prohibitive, or beyond their capacity. This has been particularly true in my lower-division undergraduate courses, where technology is precisely what I need to attract and help students.

In this presentation I will demonstrate a powerful, new, inexpensive alternative to sophisticated computer algebra systems. I will also demonstrate class activities and labs I have developed based on this technology for calculus and differential equations. The typical student profile in these classes has been broadly multidisciplinary, with wide disparities in their math skills and preparedness. Such classes not only require appropriate technology, but also appropriate ways to integrate it into an effective learning experience.

A strong argument in favor of this technology is that students love it, and use it enthusiastically in my labs. But the best measure of its success has been seeing them use it for other classes and personal interests! (Received September 08, 2008)