

1023-S1-1623 **Chris K. Caldwell*** (caldwell@utm.edu), Department of Mathematics and Statistics, 424 Andy Holt Humanities, Martin, TN 38238. *Teaching Discovery: Technology and Entrenchment*. Preliminary report.

A simple model of the mathematical discovery process is presented and applied to the teaching of number theory. Examples based on micro-computer technology are used to encourage the students to develop intuition; then to formalize their work into conjectures and proof. We seek to teach the student that tools are no substitute for thought, and that technology brings its own trials. We end with list of warnings for those seeking to incorporate technology into their teaching. (Received September 26, 2006)