1023-P5-92 Bret Benesh* (benesh@math.harvard.edu), Department of Mathematics, One Oxford St., Cambridge, MA 02138, and Tim Boester, Aaron Weinberg and Emilie Wiesner. How your students use their textbook: A preliminary report. Preliminary report.

While most mathematics textbooks are written to help the reader develop an understanding of the mathematical content, our hypothesis is that many undergraduate students do not use textbooks in ways that help them gain this understanding. Many teachers have anecdotal accounts of the ways students use textbooks, but this has not been studied in detail.

In this pilot study, we administered an anonymous written survey to over 1300 students in a variety of undergraduate mathematics courses at several universities. The survey questions asked students to identify the parts of the textbook they use, the times they use them, their goals in using them, and how their professor asked them to use their textbook.

Among other results, we found that almost 90% of students look at the examples in their text, and overall students rate "giving lots of examples" as a more important aspect of a textbook than explaining the "big ideas" or explaining the "underlying concepts" of problems. In addition, within a class, students' perceptions of how they are asked to use their textbook vary considerably. However, when students believe they are asked to read their textbook daily or weekly, they are more likely to use the book to prepare for class than if they are asked less frequently. (Received July 30, 2006)