Mary D Shepherd* (mary.shepherd@asu.edu), 333 E. Encanto Dr., Tempe, AZ 85281, and Carla van de Sande. Reading Online Mathematics Textbooks, A Preliminary Study. Preliminary report.

With traditional mathematics textbooks, students often complain about how hard it is to read their mathematics textbook. Teachers tell students to read an assignment either before or after coming to class, but most teachers are well aware that their students are not doing this. Many would agree that reading is critical for understanding, and that students will not reap the full benefits of the course if they ignore their reading assignments. There is not a large body of research on how students read their mathematics textbooks. It does appear that first year university students do not read mathematics textbooks well, even when they are good readers. Online mathematics textbooks and online learning are fairly recent (and increasingly popular) additions to what is available to students for learning material. Online texts can have interactive checks of comprehension and the inclusion of activities that foster reading strategies. There is virtually no research about how students read and interact with online mathematics textbooks. The emphasis of this study is to begin to understand how readers interact with an online mathematics textbook and study the effects of some online interactive activities that are intended to help students monitor their own comprehension as they read. (Received September 22, 2010)