Joshua Brandon Holden* (holden@rose-hulman.edu), CM#125, 5500 Wabash Ave., Terre Haute, IN 47803. Math in Your Hands: The Use of Tablet PCs and Computer Algebra Systems in a Calculus Classroom.

In the Fall Quarter of 2008 we explored the use of Tablet PCs in calculus classes in order to foster student engagement by incorporating active learning and collaborative activities. The use of tablets can make many improvements in a classroom, but mathematics classes pose special challenges which have not yet been systematically explored at Rose-Hulman. The most difficult of these from a technical perspective is the integration of computer algebra systems such as Maple with other Tablet PC software. This project explores ways to achieve this integration as well as other pedagogical improvements which the use of Tablet PCs could bring to mathematics classrooms. We will report on the reactions of students as well as the impressions of the professor. (Received September 15, 2008)