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Tharanga Mahesh Kumara Wijetunge* (wijet1tm@cmich.edu), PE 214, Department of Mathematics, Central Michigan University, Mt. Pleasant, MI 48859, and **Dennis St. John.** *The TI-Nspire Navigator CAS system and pre-service teachers: Changing the communication in a mathematics classroom.*

Active participation in classroom activities is one of the key aspects of an effective mathematics classroom environment. It is also vital to have effective mechanisms to identify or rather monitor students' engagement especially in the presence of technology in a mathematics classroom. The TI-Navigator CAS system allows students to connect their calculators to an instructor-monitored wireless network. The subjects of the current study include pre-service secondary mathematics teachers. This study examines how these students react to this constructive student response system. We are investigating how the different features, for example posing questions and retrieving answers using the system, affect participants' engagement and learning. Since the subjects are aspiring teachers, we are also investigating how the use of the Navigator system may impact their perspectives on teaching. Finally using the statistical analysis for pre-test/post-test scores of selected mathematical content, we will see if there are any effects on participants' mathematical achievement as well. By examining students' reactions, perspectives and achievement we hope to gain a better understanding of engagement in a math classroom with an enhanced constructive student response system. (Received September 17, 2012)