

1035-Z1-534 **Michael Huber*** (huber@muhlenberg.edu), Muhlenberg College, 2400 Chew Street, Allentown, PA 18062. *Using the Sympodium to Support the Teaching and Learning of Modeling*. Preliminary report.

I will discuss using the Sympodium, an interactive pen display connected to SMART Board software, in my applied mathematics courses. Using an interactive technology creates an environment in which students can learn by doing, receive immediate feedback, and refine their understanding. In addition, the Sympodium allows students to visualize and save difficult-to-understand concepts that are created with CAS or other tools. I will discuss differences with the SMART Board, student perceptions in learning (measured throughout the semesters), and how I link images to class material. With the Sympodium, students explore fundamental concepts both analytically and graphically, in every class and after class, as often as desired. The Sympodium effectively supports modeling and problem-solving. I will share assessment data on how the students feel the Sympodium has improved their learning, as well as my own perceptions on how classroom interaction has improved. I have used the Sympodium in calculus, differential equations, and mathematical modeling courses, and I taught with the SMART Board for six years before switching to the Sympodium. (Received September 10, 2007)