1035-A2-1256 **Russell L. Herman***, University of North Carolina, Department of Mathematics and Statistics, Wilmington, NC 28403, and **Gabriel Lugo**, University of North Carolina, Department of Mathematics and Statistics, Wilmington, NC 28403. *Mobile Learning Environments and Virtual Mathematics Workspaces.*

In this presentation we would like to discuss the present and possible futuristic impact of Mobile computing in the teaching and learning of Mathematics. Various mobile technologies have emerged including pocket PC's, iPods, tablet PC's and smart phones. Along with the devices there have also been changes in the way we are able to interact with computers either by verbal commands or by pen driven software. To introduce these technologies in an academic environment it is necessary that we have a unified Mobile Learning Environment in which these technologies can work seamlessly to improve communication and learning. To motivate the talk imagine the following scenario.

You are sitting in a classroom, sharing paperless worksheets, annotating your instructor's notes, writing mathematics directly on your screen using your e-pencil. Your instructor asks a question and you have the option to reply anonymously. After class you go home and work on your calculus lab with data acquisition. You share your data with your lab partner, but your lab partner is sitting in a Starbucks across town. You share one document in the virtual space provided by the instructor and when you are done, you print your document to a virtual printer. The next day you have a flat tire and miss class. But, you are not worried because the lecture has been automatically uploaded to iTunes-U.

Is this already possible? Is this a good way to learn mathematics? Do we have a choice? What software and digital tools are needed to effectively communicate mathematics? (Received September 19, 2007)