Andrew J. Bernoff* (ajb@hmc.edu), Department of Mathematics, Harvey Mudd College, 301 Platt Blvd, Claremont, CA 91711. Embracing the iPhone Generation: The Evolving Mathematics Curriculum at Liberal Arts Colleges.

Google. Twitter. Facebook. The Human Genome. Wolfram Alpha. Smart phones. This generation of liberal arts undergraduates has access to computational resources, social connectivity and scientific data undreamt of a generation ago. Moreover, the internet and these computational resources are the engine driving the job market and opening new fields of academic research. In this talk I will review some initiatives at Harvey Mudd College (and more broadly at liberal arts institutions) responding to these challenges and opportunities. Specifically, I will discuss the growth of our Joint Majors in Mathematics and Computer Science and Mathematical and Computational Biology, the changes in our Mathematics Clinic Program which immerses small groups of students in industrial-sponsored research, and the evolution of our core curriculum to leverage this technology and meet changing student needs. Finally, I will discuss how social media and internet-driven information access is transforming the student experience and some of the pitfalls and opportunities this creates, including pathways for reaching and engaging underrepresented populations in the mathematical sciences. (Received September 20, 2012)