From the beginning and throughout – that is the governing principle in our use of technology in teaching mathematics. Technology, in our case computer algebra systems and spreadsheets, are the go to instruments for student success, wherein simulations, solutions, structures, and success are within student reach. Technology empowers students to explore, to discover, to solve complex problems, and to report out their results in a professional manner. We illustrate this in a number of contexts. Further, we demonstrate an alternative approach to teaching differential equations through modeling and technology, in SIMIODE - Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations in which collaborative learning over a HUB based web site we are developing (www.simiode.org) will support many technologies and much student interaction with other students and faculty through the use of technology. (Received August 12, 2013)