The variety of technological resources available to math teachers (at all levels, K and up) has never been greater, and many (if not the majority of) schools allocate a significant portion of their budget to the purchase and maintenance of technology. Thus, it is natural that schools encourage, pressure, or even require their faculty to make use of technology in the classroom. This fact is not lost on pre-service math teachers.

The natural question arises for the teacher educator: “How can one best prepare pre-service teachers to use technology in the mathematics classroom?” A common strategy is to instruct pre-service teachers on how to use specific technologies. This strategy has two flaws: there are too many different technologies to discuss, and specific technologies become obsolete over time. We propose a different answer to the question above, based on our experience with a professional development course for in-service secondary school teachers. The course was funded by a Massachusetts DOE Technology Enhancement Competitive grant and emphasized teaching mathematics using technology. (Received September 22, 2010)