Douglas A. Lapp\* (lapp1da@cmich.edu), Dept. of Mathematics, 214 Pearce Hall, Mount Pleasant, MI 48859. Merging Mathematics, Pedagogy, and Technology: A New Design for Preparing Secondary Mathematics Teachers. Preliminary report.

This session describes a newly designed pre-service secondary teacher preparation program. The program is part of a five-year NSF funded project to develop and implement a four-course sequence that will explicitly connect secondary teachers' mathematical and pedagogical content knowledge and at the same time deepen conceptual understanding of upper-level undergraduate content. The new program and resources draw on research on teaching and learning and NSF-funded, standards-based curricula. Although the overall program will be described, this talk focuses on the use of technology in the new program. I will share our approach for infusing technology into four new courses that are designed to make explicit connections between the secondary and the college/university mathematics curricula for pre-service teachers while at the same time merging mathematics and pedagogical content. Our program provides two years of prolonged exposure to Standards-Based teaching where the students regularly use technologies such as computer algebra systems, dynamic geometry systems, and dynamic statistics software. Our project operates on the assumption that teachers will be better prepared them to implement reform curricula if they learn (or relearn) mathematics using technology as a tool. (Received September 25, 2006)