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Patricia E Sullivan* (sullivan@msmc.edu), Mt. St. Mary College, 330 Powell Ave, Newburgh, NY 12550. Math- Science-Technology for the 21st Century An Integrated Math, Science and Technology sequence for Students Preparing To be Elementary School Teachers. Preliminary report.

At Mt St Mary college math and science faculty collaborated with the education department to design a three semester sequence for pre-service teachers integrating math, science and technology. In these courses topics are introduced through real life applications chosen from the "big ideas" of science. For example, data analysis, statistics and probability are used to analyze data obtained from students' own science investigations. The college classroom models pedagogical approaches that students can implement in the classroom. Problem-based learning, inquiry-based experiments and hands-on, minds-on critical thinking activities prepare prospective teachers to provide their students with the skills needed to solve problems and develop experiments to answer questions. The presentation will include a brief overview of the design and development of this three semester program. Strategies for productive colaboration, insights into what worked and did not work and preliminary results will be discussed. The presenter will make recommendations that may be helpful for those who wish to implement a similar program in their institutions. (Received September 15, 2000)