This talk is based on a new course and preliminary textbook, *Elementary Measurement and Geometry for Teachers*. I will describe three unique features of the course: the extensive use of K-8 school mathematics textbooks and problems from Singapore, the use of geometry problems to prepare students for algebra, and the use of pre-axiomatic geometry problems to prepare students for deductive proofs in high school. The course builds upon another course and textbook by the same authors, *Elementary Mathematics for Teachers*. (Received September 29, 2004)