A first step to help prepare students to teach mathematics in the elementary schools is to determine their background skills in mathematics, as well as their attitudes and experiences about learning mathematics. I will report on the results of a mathematical skill’s assessment that I have been using in Mathematics for Elementary Teachers at Rhode Island College. In addition, I will report on the students’ attitudes and experiences about learning mathematics based on their journals. Using this information, I will present recommendations and suggestions about teaching mathematics to prospective elementary teachers (Received September 15, 2000)