Elementary teachers often experience math anxiety and fear which can be heightened in the online environment. This presentation will address opportunities and challenges in meeting the needs of non-traditional pre-service teachers in online mathematics education courses. Strategies to support student success will be discussed including the structure of online class meetings, implementation of virtual tutoring, and mentoring to grow and sustain motivation. Best practices for teaching this student population will be incorporated into this talk. (Received August 31, 2017)