Students enrolling in a Discrete Math course intended for Computer Science Majors will enter the classroom with a wide spectrum of comfort with and interest in mathematics. While some may be pursuing a minor or double-major in math, others will be less interested and may even suffer from math anxiety. Math anxiety tends to disproportionately affect women and people of color - groups that are already underrepresented in STEM. Thus it falls upon the course instructor to ensure that the classroom environment supports and encourages students at all levels. This presentation will discuss methods that allow instructors to guide students toward the confidence to engage in active problem solving by utilizing an Inquiry-Based Learning model. We also cover strategies and tips to create a classroom dynamic in which IBL can be successfully implemented. (Received September 17, 2019)