Abstract: This study describes the classroom environment of an online and in-class statistics class. A questionnaire was administered to a sample of 48 students from both classes. The students were asked to respond to statements on their classroom environment in the following three learning dimensions: (a) student cohesiveness (b) teacher support and (c) task orientation in their actual and preferred classrooms. A three two way analysis of variance (ANOVA) was conducted to investigate the three dimensions. In the student cohesiveness and teacher support dimensions, the in-class students had higher ratings than their online counterparts in both the actual and preferred classrooms. We may infer that online students have a lower expectation for these two dimensions than in-class students since they experience lower levels of these dimensions in their actual classroom to begin with. Overall, students in both classes preferred to have more experiences in the three dimensions.