Teaching an introductory statistics course is a great opportunity to develop critical thinking skills in our students. Further, a major objective of such a course should include activities that help students to become more critical consumers of statistical information. One approach to developing these types of critical thinking skills is to provide students with opportunities to look back at what summary statistics and graphical summaries tell them about the sample data. This session will focus on an activity designed to look critically at atypical box and whisker plots and what they tell the reader about the original data set. (Received September 15, 2014)