Michael A Furuto\* (mfuruto@hawaii.edu) and Ryan Orphan (orphanr@hawaii.edu). NCAA Basketball Conference Champions: Does it Help with the Madness?

While many students traditionally struggle in college mathematics, this study aims to engage students by connecting mathematics and data analytics to college basketball. We performed a statistical breakdown of how far conference champions in comparison to non-champions advance in the NCAA March Madness Basketball Tournament. Our research focused on the conferences that had both a conference champion and at least one non-champion compete in the Tournament. This allowed us to focus strictly on the question at hand: does being a conference champion help a team progress deeper into the Tournament? The March Madness Tournament has been held annually with at least 64 teams since 1985, so we statistically analyzed every bracket for the past 34 years to determine that conference champions had an average of 1.687 wins per tournament, while non-champions had an average of 1.117 wins. During the course of our research, we highlighted the top 6 conferences (ACC, Big East, Big 12, Big 10, Pac-12, and SEC) because those conferences consistently send the majority of the tournament's participating teams. Our research findings indicated that there is a statistically significant difference between the advancement of the conference champions over the non-champions. (Received September 14, 2018)