1145-VH-2401   **Dushanthi N Herath*** (`dherath@maryville.edu`), Department of Mathematics and Data Science, 650 Maryville University Drive, St. Louis, MO 63141, and **Guangwei Fan** (`gfan@maryville.edu`), Department of Mathematics and Data Science, 650 Maryville University Drive, St. Louis, MO 63141. *Creating an Engaging Environment and Revolutionizing Teaching and Learning in Introductory Statistics.* Preliminary report.

Faculty at Maryville University created an introductory course in statistics which connects mathematical education to real world data and analysis. In this course students use statistical concepts learned in class to work on real world projects using R Commander (Rcmdr). Rcmdr is a graphical user interface which is free, open source, and a point and click interface which generates data analysis and related graphics. Rcmdr is easy and intuitive for students in introductory level statistics with minimum math background to perform statistical analysis on real world problems. The introductory statistics course will maximize student's ability to meet expectations in critical thinking, communication, presentation, and creativity. By assigning projects from collecting, processing, analyzing, and presenting real-world data from multiple disciplines, inviting guest speakers to class, we are able to create an engaging and revolutionized teaching and learning environment. Some examples of projects and tools used in teaching will be demonstrated. The students are provided with an eBook on the LMS, and by the end of the semester students create their own customized eBook with their projects. (Received September 25, 2018)