

1023-97-1012

**Mary F. Majerus\*** (majerum@westminster-mo.edu), 501 Westminster Ave., Dept. of Mathematics, Fulton, MO 65251, and **April Collins-Potterfield** (pottera@westminster-mo.edu), 501 Westminster College, Dept of Natural Sciences, Fulton, MO 65251. *Making Physiology Significant and Statistics Meaningful.*

An interdisciplinary approach was used to improve: attitudes about the meaningfulness of math, data description ability, and ability to apply mathematical skills. The approach involved collection of personal health data (blood pressure, heart rate, tidal volume, etc.) by a physiology class and mathematical analyses of those data by a statistics class. Data were used throughout the semester by students learning to organize, describe, and draw conclusions about larger populations. Results were presented electronically and in small groups of students during combined class sessions. Hypothesis testing was done using the classroom data for questions generated. As a final project, the statistics students were consultants for the physiology students in data analysis for their independent research projects. This demonstrated to the physiology students the importance of statistical analysis and demonstrated to the statistics students the variety of applications of their skills. Assessment consisted of pre and post-surveys to measure effects on both the cognitive and attitudinal outcomes. Results demonstrated that students' attitudes toward the meaningfulness of statistics in data analysis changed as well as the ability to apply statistical measures to biological data. (Received September 24, 2006)