

1135-K5-169 **Rasitha R Jayasekare*** (rjayasek@butler.edu), Dept. of Math, Stat & Actuarial Science,
Butler University, 4600 Sunset Ave, Indianapolis, IN 46208. *Learning Statistics through
Applications to Community.*

The elementary statistics course offered by the department of mathematics, statistics and actuarial science is a service course intended to meet the needs of students pursuing studies in many different areas within the college as well as for those who will later pursue postgraduate studies in social and natural sciences or professional programs in medicine. The topics include data analysis, descriptive statistics, linear regression, chi-square tests, analysis of variance, and tests and confidence intervals for means and proportions. In this course, the students usually undertake two group projects to analyze data on various topics. The first project is describing and learning from data and the second is an application of statistical procedures to employ inferential statistics. Last summer, the focus was on community related topics. Data on trash, recycling and waste water treatments from the community were used in the class. The student experience was changed from merely learning statistics to learning how it relates to the world outside the classroom. Students' feedback showed that they obtained a greater awareness of their community. In this talk I will present the tools and activities that were implemented for the community based learning approach in statistics. (Received August 07, 2017)