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Alexander G. Atwood* (atwooda@sunysuffolk.edu), SUNY Suffolk County Community College, Department of Mathematics, 533 College Road, Selden, NY 11784. How the Analysis of Current Economic Growth, Income and Employment Can Be Used in Teaching an Introductory Statistics Course that Speaks to Students. Preliminary report.

The statistical analysis of economic growth, of changes in income and of changes in employment opportunities provides a powerful way to motivate students to study Statistics in an introductory course. From the years 2000 to 2010, changes in several economic indicators serve to highlight what is happening in the USA. Although US economic output grew significantly in the last ten years, with per-capita Gross Domestic Product increasing by 8%, the average worker did not reap the benefits of this economic growth, with median household income decreasing by 4%. Furthermore, a dramatic increase in the productivity of workers from 2000 to 2010 of 32%, due to automation, computerization and increased efficiency, has led to a steep decline in the number of workers needed to power the growing economy, with 10% less workers needed to power the economy in 2010 compared to 2000, while the total population of the USA has increased by 10%. While we are living in a time of increasing economic prosperity, the average worker is seeing a decline in their standard of living and is chasing after vanishing employment opportunities. What does this mean to students in our Statistics classes, and what enlightened and innovative economic policies might be created to solve these problems? (Received September 22, 2011)