

Department of Statistics
Assessment Update 2009

The Statistics Department has an ongoing process of assessing and improving the statistics major program. The number of students majoring in statistics has recently increased. Our focus on using contemporary statistical application to educate students about the usefulness of statistics sometimes leads to the development of new statistics courses for the statistics major.

Many students find statistical concepts difficult to master. One colleague writes statistics lyrics set to popular music in order to capture and highlight the meanings of statistical concepts. For example, he rewrote the lyrics in the Beatles's song, "Yellow Submarine", to describe the importance of various ways to summarize sample data. Hence, the first line of the chorus, "We all lived in a yellow submarine", is changed to, "We all need good sample summaries". He also wrote statistical lyrics for the song "Ain't No Sunshine" by Bill Withers to explain the interpretation of testing hypotheses. In response to student feedback, this professor is using more contemporary music, such as songs by Coldplay and James Blunt for various purposes. These statistics songs are written for various levels of Statistics courses. Many students report that the songs are interesting, help them to understand and remember key concepts, and reinforce the importance of learning statistics.

Some Statistics instructors require projects with written reports. These projects have several desirable features: (1) even in a lecture class of 144 students, students get some exposure to active learning in Statistics, (2) students can 'personalize' the subject matter by making it relevant to his/her personal and/or professional life, (3) requiring written reports helps promote the educational goal of improving students' writing. However, with large introductory lectures, it is not feasible to make the writing component large enough to qualify as a 'writing intensive' course.