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Hands-on Correlation Activities in Introductory Statistics.

The concept of relationships is among the more popular and intuitive topics in an introductory statistics course. This presentation describes some interactive activities in which students collect (from classmates) data that can then be used for a computerized study of linear correlation. Benefits include the opportunity for meaningful interaction and groupwork, connection to topics of everyday interest, early introduction to software, appeal to kinesthetic learners, and giving a context to further study of correlation.

The activities involve having groups of students measure or survey classmates' height, wingspan, heart rate, vertical jump height, reading and shopping habits, coordination skills, etc. These items are chosen to have a wide range of typical correlation levels. Students interact freely during this class; the talk includes sample photographs.

Students subsequently analyze the data with Minitab. Important issues such as units, coding, and rounding often surface during data entry. A lab worksheet then guides students through calculations of the linear correlation coefficients and comparison with their predictions. The talk also includes optional questions involving simple and multiple regression. (Received August 17, 2007)