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Using interactive graphics to teach multivariate data analysis to psychology students.

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Summary: This paper discusses the use of interactive graphics to teach multivariate data analysis to Psychology students. Three techniques are explored through separate activities: parallel coordinates/boxplots; principal components/exploratory factor analysis; and cluster analysis. With interactive graphics, students may perform important parts of the analysis "by hand," using techniques such as pointing at, selecting and changing the colors of the points/observations. Our experience demonstrates that this approach is very useful when teaching an intermediate/advanced course on multivariate data analysis to students of Psychology, who tend to have low to moderate proficiency in Mathematics. (Contains 6 figures.) (ERIC)

Classification: K85

Keywords: interactive graphics; multivariate data; parallel boxplots; Cluster analysis; data analysis; psychology; computer graphics; educational technology; computer software; video technology; computer assisted instruction; statistics; mathematical concepts; class activities; college instruction; college mathematics; introductory courses; teaching methods; instructional effectiveness; multivariate analysis
<http://www.amstat.org/publications/jse/v19n1/valero-mora.pdf>