



Using R and GGobi to Enhance the Learning of Multivariate Analysis and Data Mining

Dianne Cook

Iowa State University.

E-mail: dicook@iastate.edu

Abstract: Developments in free software, like R and GGobi, and classroom technology have made it possible to enhance lectures with interactive demos, and dynamic graphics of multivariate spaces. In combination with a careful selection of data, for example collected on music clips, spam, or sport, this makes for a good classroom experience for students. These improvements help to keep students interested and involved in class, and understand the concepts and the operation of multivariate methods. The general approach will be outlined and examples of selected lessons will be shown.

Key words and phrases: multiple linked plots, brushing, tour, scatterplot matrix, parallel coordinates, classification, cluster analysis, inference, hypothesis testing, curriculum development.

