

## **Teaching Data Analysis with Interactive Visual Narratives**

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### **ABSTRACT**

Data analysis is a major part of business analytics (BA), which refers to the skills, methods, and technologies that enable managers to make swift, quality decisions based on large amounts of data. BA has become a major component of Information Systems (IS) courses all over the world. The challenge for IS educators is to teach data analysis – the foundational BA concepts – to early years undergraduate students who commonly have an aversion to statistics as well as poor problem-solving skills. This article describes the development and evaluation of a learning intervention, Interactive Visual Narratives (IVN), which is informed by previous research into the efficacy of interaction, visualization, and narratives across a variety of learning contexts. The results suggest that a combination of interactive visualizations and narratives can improve the acquisition of data analysis knowledge, facilitate essential skills in problem analysis and the application of BA solutions, and enhance student engagement. These findings provide useful insights for improving students' learning outcomes and engagement.

**Keywords:** Narratives, Interactive data visualization, Business analytics

