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The Effects of Worked Examples on Transfer of Statistical Reasoning

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Abstract: Research suggests that guided methods of instruction, such as worked examples, reduce the cognitive load placed on learners, which allows them to learn new information more efficiently and effectively. The current study examined the effect of worked examples on transfer of statistical reasoning, as compared to traditional study techniques. Students from an introductory college-level psychology course learned information related to basic statistics and hypothesis testing from a computerized instructional program. The experimental group completed a computerized program which contained worked examples and practice and feedback. The control group consisted of students who went through a computer program through which they read excerpts from a textbook used in Queens College statistical reasoning classes. The same topics were covered in both computerized programs. On posttests, the experimental group performed significantly better than the control group. This provides support for computerized worked examples as effective instruction on the college level.