

1106-G1-2536 **Spencer Payton***, Department of Mathematics, PO Box 643113, Neill 103, Washington State University, Pullman, WA 99163. *Unifying Concepts in the Introductory Linear Algebra Course.*

The introductory linear algebra course provides many unique challenges to undergraduate students. With so many new concepts and definitions, students often struggle to see the inherent connections between these concepts. In this action research study, I attempted to discover alternative ways of presenting these connections to undergraduates. I observed and collected data from several introductory linear algebra classes, including my own. Data was collected from student responses to worksheets, midterm examinations, and interviews. In my presentation of the material to my class, I attempted to illustrate connections through solution sets of matrix equations. This presentation led to several students displaying what I describe as a linear systematic concept image. These students seemed more able to see and make connections between linear algebraic concepts. (Received September 16, 2014)