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**Minah Oh\***, Department of Mathematics and Statistics, 315 Roop Hall, MSC 1911, James Madison University, Harrisonburg, VA 22807. *An Applied Project for Linear Algebra Students: Finite Element Methods.*

In this talk, I will talk about an applied project for linear algebra students. Finite Element Method (FEM) is a very well-known efficient method one can use to find a good approximation for the exact solution to a given PDE. Not only is its applications in science and engineering tremendous, it is also an excellent application of linear algebra. In this project, students were introduced to the FEM through a very simple differential equation problem. Through this simple example, the students learn the essential idea of the FEM by using linear algebra. Furthermore, they learn the real world applications of FEM so that they can see linear algebra in action in the real world. (Received September 25, 2012)