1145-F5-2877   **Kayla K. Blyman*** (`kayla.blyman@usma.edu`), United States Military Academy, Department of Mathematical Sciences, 646 Swift Road, West Point, NY 10996. *Exploring Applications of Linear Algebra through Low-Stakes Discovery Learning Assessments.*

While it is one of the most foundational classes in the undergraduate mathematics curriculum, linear algebra can be prohibitively abstract at times. But there are applications of linear algebra all around us! However, those applications are often complicated enough that it is beyond the possible scope of a single class to do justice to the richness of the example. By scheduling several class days throughout the semester for low-stakes Discovery Learning Assessments we can have students work with an application more deeply. For these days, students are expected to familiarize themselves with the context of the application before coming to class through a night before read ahead. Once they get to class they will individually take a brief computational quiz on some recent material related to the application. Next they will work in teams of 3-4 students to dive into the application. Since teams can be asked deeper, more complicated questions, they can explore the application more meaningfully than they could as individuals. Finally, to make sure that everyone was engaged in the teamwork, a very brief reflection problem is completed individually. Discovery Learning Assessment topics related to linear algebra will be discussed and sample assessments will be provided. (Received September 25, 2018)