1086-G5-432   **Daniel A Ramras*** (`ramras@nmsu.edu`). *The Wronskian as a method for introducing vector spaces.*

One challenge in most linear algebra classes is the jump from R^n to the general notion of a vector space. I'll discuss a method for introducing vector spaces that focuses on the example of real-valued function spaces. These are different enough from R^n to be new and interesting, yet concrete and familiar enough for students to explore on their own with the proper guidance. I'll describe a method helping students discover various ideas like linear combinations, linear independence, and linear transformations in the context of function spaces, culminating in Wronskian matrix and its application to independence of functions. (Received September 01, 2012)