

1125-N1-1158 **Khalid Bouhjar***, School of Teacher Education, 1114 West Call Street, 2208L Stone Building, Tallahassee, FL 32306-4459, **Muhammad Haider**, School of Teacher Education, 1114 West Call Street, 2204E Stone Building, Tallahassee, FL 32306-4459, and **Christine Andrews Larson**, School of Teacher Education, 1114 West Call Street, G127 Stone Building, Tallahassee, FL 32306-4459. *Examining Students' Procedural and Conceptual Understanding of Eigenvectors and Eigenvalues in the Context of Inquiry-Oriented Instruction*. Preliminary report.

This study examines students' procedural and conceptual understanding as evidenced by their written responses to two questions designed to assess aspects of their understanding of eigenvalues and eigenvectors. This analysis draws on data taken from 126 students whose instructors taught using a particular inquiry-oriented instructional approach and 129 comparable students whose instructors did not use this instructional approach. In this proposal, we offer examples of student responses that provide insight into their reasoning and summarize broad trends observed in our quantitative analysis. In general, students in both groups performed better on the procedural item than on the conceptual item. Additionally, the group of students who were taught with the inquiry-oriented approach outperformed the group of students who were taught using other approaches. (Received September 15, 2016)