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Factor Analysis and the Force Concept Inventory MATTHEW SE-MAK, COURTNEY WILLIS, RICHARD DIETZ, Physics, University of Northern Colorado — Four sections of introductory physics (n=244) at the University of Northern Colorado took the Force Concept Inventory (FCI) both before and after instruction in Newtonian mechanics. Factor analyses of the results reveal several interesting contrasts that may shed some light on the development of concept organization in the introductory physics course. Post-test FCI results indicate that at the end of the semester student responses have become more closely aligned with the particular Newtonian concept associated with each question by the authors of the FCI.

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