Abstract Submitted for the OSS12 Meeting of The American Physical Society

What College Students Don't Know about Density D.J. WAGNER, Grove City College, SAM COHEN, Grove City College and Dallastown High School, ADAM MOYER, ELIZABETH CARBONE, KATHRYN MERRYMON, Grove City College — As part of the development of a fluid statics assessment, our research group conducted clinical interviews with students in both conceptual physics and calculus-based introductory physics courses. What were intended as "basic" questions about density quickly became a significant focus of those interviews, as only one of the eight students interviewed demonstrated a confident understanding of mass density. Questions have since been added to the fluid assessment to probe the prevalence of these difficulties. In this talk, I will summarize our preliminary data and discuss future plans for the assessment and our instruction.

> D.J. Wagner Grove City College

Date submitted: 16 Mar 2012

Electronic form version 1.4