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**Examining gender differences on FCI performance in algebra** and calculus based physics courses KIMBERLEY KREUTZER, ANDREW BOUDREAUX, Western Washington University — The Force Concept Inventory (FCI) has been widely used to assess student understanding of Newtonian principles. Studies have shown a marked difference in the performance of men and women on both pre- and post-tests [1,2] and also indicate that experiential based instruction may lead to a reduction in this gender gap [1,3]. This poster presents FCI data collected at Western Washington University. Initial analysis of gender differences are consistent with those reported nationally. We also discuss factors that may contribute to the differences in performance and propose instructional strategies that are designed to address the gender gap.

[1] M. Lorenzo, et. al., "Reducing the gender gap in the physics classroom," AJP 74(2), 118-122 (2006)

[2] J. Docktor and K. Heller, "Gender Differences in Both Force Concept Inventory and Introductory Physics Performance," *Proceedings at the 2008 PERC* 

[3] S. Pollack, *et. al.*, "Reducing the gender gap in the physics classroom: How sufficient is interactive engagement?" *PRST-PER* **3** (2007)

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