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Barbara Bennie* (bennie.barb@uwlax.edu), 1725 State St, Mathematics Department,
University of Wisconsin - La Crosse, La Crosse, WI 54601. *The Role of the Sampling Distribution
in Student Learning of Inferential Statistics.*

Within an Elementary Statistics course, the sampling distribution is labeled by some as being a threshold concept. It is hypothesized that if students are able to develop a true understanding of the sampling distribution, then the conceptual understanding and practical application of related inferential methods will naturally follow. Alternatively, a lack of understanding of the sampling distribution is thought to lead to difficulty in learning the corresponding inferential methods. We examine student learning of the sampling distribution and its association with student performance on key procedural and conceptual elements from the course. Our aim is to assess to what extent the sampling distribution truly is a threshold concept. (Received August 28, 2008)