

Miller, G. F. (2001). *The relationship between college student learning styles and assessment methods in elementary statistics*. EdD Columbia University Teachers College. Supervisor: Phillip J. Smith.

This study investigated the relationship between students' learning styles and their choice of grade weightings for and performance on three classroom assessment instruments. The student learning styles were measured using McCarthy's Learning Type Measure. Students chose weightings for a take home examination, a research project, and an in-class examination. The sample for the study consisted of 44 students in two sections of an elementary statistics course at an urban community college. Using analysis of variance of the weighting and performance data when organized by student learning type, the investigator found no significant relationship between learning types and the grade weightings and no significant relationship between learning types and performance on the assessment instruments. There was a significant positive correlation between the score for Type 2 learners and the performance on the in-class examination and also a significant positive correlation between the score for Type 4 learners and the weight assigned for the project. Both of these correlations validate the characteristics of these learning types as they are conceptualized by McCarthy, Kolb, and others. Type 4 learners are generally risk takers and learn by perceiving through concrete experience and processing through active experimentation. Type 2 learners generally perceive information through reflective observation data, the investigator conducted clinical interviews to ascertain differences between students' rationales for their grade weightings and how student learning styles may have affected students' performances on the various assessment instruments.