Professor Sanders' teaching and research interests are focused on appropriate use of statistical methods in educational research, with particular emphasis on research using experimental design.

She has partnered with multidisciplinary research teams in a host of study designs and an array of content areas. Her study designs have ranged from small correlational studies using surveys as outcomes to full-scale curriculum efficacy trials across large numbers of schools. Project content areas have included literacy acquisition and interventions (native and non-native language learners and children with cognitive disabilities); school and classroom behavior interventions; cognition and social outcomes for children with disabilities; and connections between teacher knowledge/beliefs and their students' outcomes (e.g., elementary literacy curricula, high school science and math curricula, and engineering education).

Her own research investigates how statistical tests perform across large numbers of samples generated from specific conditions. For example, she questions how will the test of the linear growth component in a repeated measures analysis of variance perform if individuals are not all measured at the same time (a situation that is common in research where children are tested individually). This type of investigation involves conducting Monte Carlo simulation studies by programming sample generation and analysis procedures from software such as SAS, R, Mplus, or Fortran, which Professor Sanders uses in her research.

**IN DEPTH**

Watch Professor Sanders' EduTalk on how collecting good data and making proper measurements is essential to addressing educational inequities.

*education.uw.edu/sanders-talk*