Dr. Rittle-Johnson's research focuses on understanding how knowledge change occurs. Her specific interests are in how children learn problem-solving procedures and key concepts in domains such as mathematics. For example, what roles do spatial diagrams or generating explanations have in promoting learning of concepts and procedures? This research bridges between psychological theory and educational practice, and Professor Rittle-Johnson also collaborates with teachers, cognitive scientists, and computer scientists to apply and test her research in educational settings.