



Cognition, Learning, and Development Lab

Opportunities for Undergrads

We study cognitive development, with a primary focus on how humans think, learn, and solve problems in the domain of mathematics. The development of mathematical thinking presents a paradox. On one hand, young children (and possibly even infants) have been shown to possess strikingly sophisticated reasoning abilities in the numerical domain. On the other hand, math is a notoriously difficult subject to learn in school, with many children failing to achieve basic competence. In our studies, we investigate basic cognitive processes that contribute to the understanding (and misunderstanding) of math.

Some of our studies focus on key theoretical issues in the field of cognitive development. Other studies focus on real-world applications related to learning and instruction. Recently, one of our studies was highlighted in *Education Week*, the major national newspaper covering K-12 education.

Your responsibilities in the lab may include: interacting with child participants, interacting with undergraduate participants, running experiments, coding data, participating in scientific discussions in weekly lab meetings, designing experiments, analyzing data, presenting results at national conferences, and co-authoring journal articles. We are currently looking for undergraduates who are interested in joining our tutoring team. The tutoring team goes to local elementary schools to play math games with second graders.

Check out our website for more information
<http://www.nd.edu/~nmcneil>