School gardens are powerful tools for engaging young children from diverse backgrounds in a common activity with many math and science learning opportunities. Research suggests that gardens afford interdisciplinary, inquiry-based learning and provide a natural context for interaction with the local community.

With the school garden movement growing rapidly in the U.S. since the 1990s, studies have suggested correlations exist between garden learning and school-situated academic assessment, and other goals such as social/emotional and environmental learning, but much of this work tends toward advocacy rather than objective study.
This project builds on a small pilot that suggests relationships between exposure to concepts in the garden and retention of concepts about biology. If this study finds, using controlled and rigorous methods, that young children’s learning of math and science concepts can be supported and reinforced by lessons in the garden, then we will have made important contributions to cognitive science and to improving children’s learning.

Further extensions of the work will scale up to more schools, grades, and subjects (history, writing, drawing). These findings will enable those deciding on a garden, or programing lessons for an existing garden to make decisions based on evidence about its value for learning.

Please contact Dr. Sue Hespos if you have any questions regarding the project on learning in school gardens. hespos@northwestern.edu