Undergraduate Spotlight

Senior Ashley Taylor reflects, “As I'm nearing the end of my time at Carnegie Mellon, I feel incredibly fortunate to have had the opportunity to work at the Children's School. Over the years, I’ve worn many hats here. My Children's School experience began before freshman year, in fact. When visiting the campus, I toured the Children's School, as it was one of my primary motivations for attending CMU. I immediately fell in love with the energy of the school. Unfortunately, during my freshman year, my interactions with the Children's School were limited; I only observed in the classrooms for my Child Development class, but I knew that I wanted to come back in some other capacity.

During my sophomore year, I joined one of CMU's psychology labs, so I shifted from observer to researcher. My next transition came during my junior year, when I interned in the Kindergarten classroom as part of Dr. Carver's Practicum in Child Development class. I loved being in the classroom and interacting with the children on a daily basis, so this year I added another position to my list: classroom aide. Additionally, I'm completing a senior honors thesis by conducting a study with children in the 4's and K's classes (see Research Spotlight). Sometimes it feels like I live at the Children's School, but there's no other place I'd rather be. Though I'm excited to graduate, I'll miss the Children's School immensely, and I consider myself blessed to be a member of the Children's School family!

Spring Science Spree on April 25th

CMU students from the Mortar Board Senior Honor Society are planning a family event on the Children's School playground for Saturday, April 25th from 10am to Noon. Please join us for science experiments and demonstrations organized by seniors who are striving to integrate their scholarship with leadership and service. Dr. Carver is the Mortar Board faculty advisor, and Ashley Taylor, featured above, is the webmaster. You can learn more about the organization at http://carnegiemellonmortarboard.weebly.com. Watch for more information and a chance to RSVP via email.
Research Spotlight

The Construction Game

Think of a letter (for instance, a capital “E”). If you were instructed to flip the letter upside down, or rotate it 90°, you would likely be able to visualize how the letter would change. Young children, on the other hand, often have difficulty with this task, as they are not yet skilled in using mental rotation. The ability to manipulate an image in one’s head has been shown to correlate with success in fields such as math and science, so it stands to reason that children who master this skill early will be at an advantage in future learning.

The goal of Ashley Taylor’s senior honors thesis, which she is conducting in collaboration with Dr. Sharon Carver, is to examine how working with a partner on a game that requires the use of mental rotation affects an individual child’s ability to employ mental rotation in future tasks. Simply put, does working with a peer help to increase a child’s ability to understand future mental rotation tasks? To examine this topic, Ashley has assigned children to work either individually or with a friend to complete tasks: either commercially-available games that require the use of mental rotation strategies (Trucky 3, Royal Rescue, and Castle Logix) or “building replication” tasks designed to employ the same building skills as the games, but without requiring mental rotation ability. Within these four conditions, 4’s and Kindergartners participated in three brief, 15-minute sessions to practice their skills. Children’s mental rotation abilities were assessed before and after these practice sessions using the Children’s Mental Transformation Task (CMTT). During the CMTT, Ashley shows children an image of two shapes and asks which of the four answer options can be made by putting the two shapes together. (See sample below.)

“If you had two puzzle pieces just like these, which of these shapes could you make if you put them together?”
(Answer circled on right.)