Teacher Appreciation Week (May 8-12th)

We are incredibly fortunate to have extremely dedicated and wonderfully talented teachers here at the Children’s School. We are grateful for the effort, love, and thoughtfulness they offer every day to create joyful and developmentally appropriate learning experiences for your children. Be sure to take a moment to express appreciation to your child’s teacher for all that they do!

May 2023 Dates

Wednesday, May 17th – Preschool 3’s Year-End Celebration
11:45am to 12:45pm on the Children’s School Playground

Thursday, May 18th - Last Regular Day for ALL PROGRAMS
Preschool 4’s Year-End Celebration
1:15 to 2:30pm on the Children’s School Playground

Friday, May 19th - Kindergarten Graduation at 10:00am in MMC 103
Followed by celebration on the Children’s School Playground until Noon

Monday, May 22nd to Wednesday, May 31st – Professional Development Days

Monday, June 5th – First Day of “BUGS” Camp

All these dates are posted on the FACTS Family Portal and our web calendar https://www.cmu.edu/dietrich/psychology/cs/.
Celebrating Administrative Professionals

Wednesday, April 26th was Administrative Professionals Day, a time dedicated to recognizing “the professionals who keep an office running smoothly every day.” We are grateful beyond measure to Ms. Drash, Miss Hancock, Ms. Yetter, and Dr. Carver for helping all members of the Children’s School learning community to make the most of the educational experiences we offer. We appreciate their advocacy with the department and campus community as well. What a fantastic team!

COME CELEBRATE!!!

Your entire family is invited to attend your child’s class celebration during the last week of school in May. We hope that all our families will join us!

• Preschool 3’s Celebration: Wednesday, May 17th from 11:45am -12:45pm on the Playground
• Preschool 4’s Celebration: Thursday, May 18th from 1:15-2:30pm on the Playground
• Kindergarten Graduation: Friday, May 19th at 10:00am in MMC 103 and then on the Playground until 12:00pm

We look forward to celebrating with you and hope that the connections you make with other families will help you engage your child with peers during the summer months.

Congratulations to the O’Neill Family

Congratulations to Ms. O’Neill and her family on the birth of James Francis on April 13th. Green Room friend, Quinn, is the proud Big Sister!

We look forward to Ms. O’Neill returning to our educational team in the fall of 2023.

Fond Farewells

Two of our educators have decided not to return to the Children’s School in the fall. Mrs. Krissy Opferman joined the Children’s School team in 2010 and is retiring early to spend more time with her family, including a new grandchild who is on the way. Ms. Loren Rau, who just joined our team this year, will be moving back to her hometown of Columbus, Ohio, where her husband will be starting a new job. Please join us in wishing these amazing educators all the best in the years ahead.
Parent Survey Coming Soon!

We want your input! Your ideas about what is going great at the Children’s School and ways we could improve really matter to us. Our annual survey is a fantastic opportunity to make your voice heard and give your feedback. The survey will be shared via email this week and remain open through May 15th. Your honest feedback will help us reflect on the work that we have done this year so that we can best prepare for advances in the year ahead.

Classroom Year in Pictures

Families are always welcome to download the photos and videos from the classroom web sites for their own personal use. As we approach the end of the school year, Children’s School educators are collecting classroom photos into a Year in Pictures slide show as a gift for families. For your convenience, they will also collect all the year’s photos into a Google folder that families can download all at once. Watch your classroom blog during the last week of school for directions and the Google folder link for the photos and Year in Pictures slide show.

Please remember that during the enrollment process, all parents & guardians signed an agreement that you will not post photographs of other people’s children or of adults besides yourselves on the web or in social media venues. You can find more detail on our social media recommendations in your Family Handbook. Review the slideshow and year’s photos with your child so that together you can affirm how much they have grown this year!

Community Service Committee Update

Diaper Drive: Thanks so much to everyone who contributed to our April diaper drive to benefit South Hills Interfaith ministry! Thanks to all of you, we were able to make a sizeable donation that will go to help local families in need.

We appreciate Christine Larson (mom to Aidan in the Preschool 3’s) for organizing this drive!

EITC and OSTC Funding Updates

As you know, the Children’s School participates in the state’s Educational Improvement Tax Credit (EITC) program as well as the Opportunity Scholarship Tax Credit (OSTC) program. We are pleased to have received funding from FCC Asset Management, Inc. in March 2023. If you would like more information or can help us to build a list of prospective businesses, please contact Linda Hancock at lh37@andrew.cmu.edu.
Garden Work and Planting

During the week of May 8th, the Garden Committee will be working on the Hillside Garden to prepare the space for planting annuals with the children during the week of May 15th. If you are interested in helping the Garden Committee with these projects, contact Miss Hancock at lh37@andrew.cmu.edu or 412-268-2198.

Adopt the Garden

During July and August, our garden will continue to grow but needs some friends to help with watering and weeding. If your family would be interested in adopting our garden for a week in July or August, please contact Miss Hancock at lh37@andrew.cmu.edu or 412-268-2198.

Pave the Way to Play

For over 50 years, the Children’s School has emphasized the importance of outdoor learning experiences for the children in our care. Our playground — or outdoor classroom — is a magical place full of many open-ended opportunities. One of the hallmark activities is tricycle riding. It is a memory that is engrained in generations of our students. Trikes of all shapes and sizes are available for our friends to zoom around the bike path. When Children’s School alums return to visit, whether they are 10 years old or 30, one of their first questions is always, “Do you still have the trikes? I remember…” and then they proceed to recall fond memories of their time here.

We need your help to continue making memories.

Your support will help to refurbish the bike path on our playground and maintain the smooth, consistent surface necessary for the children to use our trikes and other wheeled toys safely. Cost estimates to replace our existing EcoTrail bike path with cement exceed $40,000. All costs for playground maintenance and enhancement are the responsibility of the Children’s School.

As the school year comes to an end, please consider making a donation to the Children’s School “Pave the Way to Play” fundraising campaign at https://crowdfunding.cmu.edu/campaigns/pave-the-way-to-play. We appreciate your support!
Asian American and Pacific Islander Heritage Month

May is Asian American and Pacific Islander Heritage Month. This month, we recognize and celebrate the rich culture and contributions of Asian Americans and Pacific Islanders (AAPI) in the US. Young children can enjoy celebrating this special month in many ways. Here at the Children’s School, we will have a display of books for teachers to use in their classrooms that highlight Asian American and Pacific Islander culture. If you would like to share anything special about your Asian American or Pacific Islander heritage with your child’s class, please contact your child’s teacher! We would love to have you share with the children! Below are some ideas that we have shared in the past for celebrating Asian American and Pacific Islander heritage at home.

• Locate the Asian and Pacific Island nations on a globe. Don’t have a globe at home? No problem. You can use Google Earth to virtually visit and explore any location on the planet. Keep in mind that the term Asian Pacific encompasses a wide range of cultures and places. How many of the locations below can you find together?

- The continent of Asia – Asia is home to 48 different countries, including China, Japan, Korea, the Philippines, India, Sri Lanka, Nepal, Bhutan, and many others.


• Virtually explore the world of Asian American and Pacific Islander Heritage: https://www.nps.gov/subjects/aapiheritage/places.htm
This site makes it easy to take your family on a virtual tour of National Parks and historic sites that pay tribute the heritage and leadership of Asian Americans and Pacific Islanders.

https://asianpacificheritage.gov/- At this joint website from The Library of Congress, National Archives, National Endowment for the Humanities, National Gallery of Art, National Park Service, Smithsonian Institution, and United Stated Holocaust Memorial Museum, visitors can find a wide range of AAPI virtual events to explore and discover!
AAPI Heritage Month, continued …

• Read a children’s book featuring AAPI characters or written by AAPI authors. The website below offers great book ideas that are appropriate for various age levels: https://socialjusticebooks.org/booklists/asian-americans/

• Learn about local Asian American Pacific Islander Heritage at the Pittsburgh History Center: https://www.heinzhistorycenter.org/blog/western-pennsylvania-history/asian-american-heritage-at-the-heinz-history-center

• Get Cooking! Invite your child to join you in the kitchen as you try your hand at some Asian and Pacific Islander recipes. This website offers 30 different recipes to consider: https://www.eatingwell.com/gallery/7901536/recipes-for-aapi-month/

International Assoc. of Laboratory Schools

During the last week of April, educational leaders from laboratory schools in eight countries met in Toronto, Canada for the annual IALS conference, including veteran Children’s School educator, Jean Bird, who serves on the IALS Board of Directors. The conference theme was, “Designing Cultures of Learning: The Essential Purpose of Lab Schools”. Mrs. Bird and Dr. Carver co-presented the Children’s School approaches to “Reconnecting Constituents in Cultures of Learning: From Isolation to Integration”.

They both felt honored to be sharing and reflecting with colleagues committed to focusing on relationship-building, developmental approaches to education, inquiry learning and research, and inclusive access for diverse learners. Educators shared common challenges of balancing best practices with regulatory frameworks in children’s programming and of also effectively integrating the laboratory school aspects of our mission. Both keynote speakers and session presenters inspired everyone to intentionally learn from indigenous perspectives and welcome all learners, as well as to engage the children in purposeful inclusion of all, with generosity in sharing their authentic selves, gratitude for the gifts of the land, and openness to the gifts of others.

Participants were encouraged to think of a school as a “house of democracy”, to promote essential “habits of mind” in a play-based program, and to sensitively discuss racial, ethnic, and cultural differences with young children. The schedule also allowed time to observe early childhood and elementary classrooms at the Jackman Institute for Child Study and the Mabin School, as well as to learn about new laboratory schools opening at universities in Guyana and Iraq. Throughout the experience, every person was treated as an honored guest within the lab school community. With a colleague from Jamaica, we found a sign on the walkway overlooking Lake Ontario saying, “SWIM FLY NEST, GATHER LOVE BREATHE, ALL SPECIES WELCOME”. May we always be so open and responsive at the Children’s School.
Hello Children’s School families, we are the Andrianos Family: Theo, Emilee, Lillianna (5) and Olivia (3). As Lilly nears the end of her Kindergarten year, we are amazed at how she thrived over the past 3 years being around her school friends and the wonderful staff and educators. Her fondness for hands-on activities, reading, and nature has grown exponentially, and she absolutely loved the performing arts unit. She proudly demonstrated her tap-dancing skills and shared enthusiastic accounts of enacting “I’m the King of the Mountain”. Lilly leads the Kindness Pledge with us at mealtime and explains to Olivia that she will get to do fun activities next year when she starts in the Red and Blue Rooms.

Outside the classroom, Lilly enjoys swimming, Ninja Gym, and soccer. As a family, we spend time hiking, playing in our yard, and chasing our “boysies” Cooper and Boone. We love to visit museums, play games, and have dance parties! During Lilly’s first 2 years at the CMU Children’s School, we lived in Regent Square and were board members of the Run Around the Square, a 5k foot race in which Lilly placed 2nd last summer. We loved walking the trails through Frick Park and throwing rocks in the creek! Theo was raised in the Square and returned to the area after finishing his BS at Penn State. He enjoys mountain biking and camping, which he has taught Lilly to do as well. He has worked for PNC as a project manager and scrum master for the past 10 years. Emilee is originally from Ohio and played soccer for Marietta College. She was inducted to her high school’s athletic Hall of Fame shortly after Lilly was born and completed her Doctorate in Infectious Diseases and Microbiology at the University of Pittsburgh’s Graduate School of Public Health in 2012. After a post-doc, she joined ProImmune, Inc., where she is currently a Senior Immunology Specialist working with pharmaceutical, biotech, and academic institutes developing novel therapeutics and vaccines.

We moved from our Regent Square home to Bradford Woods last summer and have enjoyed exploring the area and meeting new friends. We will miss our daily drives with Lilly and hearing all about her day, but we look forward to continuing our CMU Children’s School journey with Olivia!
Undergraduate Spotlight: Seniors

Farewell & best wishes to the Children’s School seniors graduating this spring.

• **Summer Abraham**  
(Psychology / Decision Science / Design for Learning)

Four years ago, when I was deciding what college to attend, my mom sent me an article about Dr. Carver and the Children’s School. Reading that article and exploring the Children’s School sold me on Carnegie Mellon; so as soon as I got on campus, I started working at the Children’s School. Some of my favorite experiences have been taking a tour of Carnegie Mellon Campus led by CMU’s architect with the Green Room friends, playing hide-and-seek on the playground, building with blocks, and attending the family festival. Also, I recently had the Red and Blue Room friends decorate a graduation stole that I am planning to wear when I graduate in May!

Throughout the past four years, including the pandemic, the most consistent thing in my life has been the Children’s School. The energy of the friends and the passion of the teachers is infectious, and I am eager to go to school in the mornings, and I have loved getting to know other undergraduate students who are interested in working with children. The Children’s School is truly a magical place, and I am so glad to have had the opportunity to get to know the wonderful community of people around it. I hope to continue to work in the education field in the future, and my memories and lessons learned from the Children’s School will always stay with me.

• **Stewart Harrison**  
(Drama / Social and Political History)

I have been working at the Children’s School for all four years I have been at CMU, and it has been one of the highlights of my time here. I started in the library reorganizing all the books, and then I started helping with dismissal and started interacting with the children here. I was blown away by their creativity, earnestness, and humor. I would ask how old they thought I was and got answers of everything from 4 to 5000. I also asked what they wanted to be when they grew up (best answer = robot). During the pandemic, I couldn’t see them, and I had to do my work after school hours. It was sad to not be able to interact with them anymore, but it was still fun to see the art they put on the walls and watch them learn and grow. As I interacted with them more in my Junior and Senior years, watching these children develop personalities and learn how to be people never failed to brighten my days. I am going to be sad to leave the Children’s School behind as I graduate and head into the real world, but I will remember everything I learned here for a very long time.

See you next time, See you next time,  
See you next time, At the Children’s School!
Research Spotlight

In many cases, research conducted at the Children’s School is early career training for undergraduate researchers, graduate students, and post-doctoral fellows working in faculty labs, and it often includes pilot work in the early stages of the research cycle. Part of these essential processes involves learning to summarize key elements of projects to present them succinctly in professional settings in order to receive substantive feedback that will then guide future research. The Research Methods students recently held their spring poster session, and below is a graduate student poster about research that will be presented this month at the Vision Sciences Society conference. Similar research will continue during the June camp next month (see January’s Matching Game description).

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**Building blocks of recursive pattern processing in human adults, children, and monkeys**

Abhishek M. Dedhe¹, Steven T. Piantadosi², Jessica F. Cantlon¹

¹Carnegie Mellon University, ²University of California, Berkeley

**Abstract**

Recursive patterns consist of things embedded within other things of the same kind. Active generation of recursive sequences is often argued to be a key behavioral marker of rich, algorithmic cognition but the precise cognitive mechanisms underlying recursive sequence generation remain mysterious. Here, we investigate three potential building blocks of recursive pattern processing: hierarchical reasoning, ordinal reasoning, and associative chaining. Our Bayesian mixture model quantifies the extent to which these three cognitive mechanisms contribute to a recursive center-embedded sequence generation task in human adults, children, and monkeys. We also probe the role of underlying relational support in recursive rule learning. The presence of relational support (either perceptual or semantic) facilitates the preferential generation of recursive center-embedded sequences via hierarchical reasoning in human adults and children. Notably, a small number of adults generate recursive center-embedded sequences even in the absence of relational support. In monkeys, some children, and most adults (in the absence of relational support), the use of ordinal reasoning predominates. Overall, our observations suggest that ordinal reasoning may be more developmentally and evolutionarily primary than hierarchical reasoning.

**Behavioral Results**

- **Likely Behavior**
  - Participants could generate any sequence they wanted, but three types of sequences were most likely:
  - Center-embedded: { [ ] } or { [ ] } [ ]
  - Crossed: { [ ] [ ] }
  - Tail-embedded: { [ ] [ ] [ ] }

**Bayesian Model**

- We used a Bayesian analysis method to determine the cognitive mechanisms underlying participants' recursive task performance.
- Participants could generate any sequence they wanted, but three types of sequences were most likely:
- Center-embedded: { [ ] } or { [ ] } [ ]
- Crossed: { [ ] [ ] }
- Tail-embedded: { [ ] [ ] [ ] }

**Mechanism Results**

- **Hierarchical**
  - Participants default to hierarchical mechanisms when relational support is available.
- **Ordinal**
  - Humans adults use hierarchical mechanisms across domains, and most frequently when relational support is available.
- **Associative**
  - Some human children use associative mechanisms whereas others use ordinal mechanisms.
- **Random (noise)**
  - Some participants do not use a dominant cognitive mechanism: they are noisy.

**Participants**

- **Adults:** n = 94
- **Children:** n = 53. Age range = 3-5 years.
- **Monkeys:** n = 2

**Sequence Generation Task**

- Participants were trained on two sequences, then tested on a novel sequence composed of the internal pairs of the training sequences.
- We manipulated relational support to test whether it facilitates recursive rule discovery.

**Data Analysis**

- Data analysis was conducted in R Stan.
- The NUTS algorithm (a type of MCMC sampling) was used to compute the posterior by running 4 chains over 10,000 iterations.

**Acknowledgments**

- We thank CMU’s Children School and Nour Al-Daghshy for research support.
- NIH (R01HD085996 to J.F.C).

**Conclusion**

Ordinal reasoning is more developmentally and evolutionarily primary than hierarchical reasoning – when human adults, children, and monkeys cannot find relational structure to build a hierarchy, they default to ordinal reasoning.
In this series of articles, I have reflected on Fred Rogers’ timeless priorities for “raising creative, curious, caring neighbors and citizens – people who can build stronger, more inclusive communities and a more just and loving world” (p. 7). In presentations at the National Coalition for Campus Children’s Centers (N4C) and the International Association of Laboratory Schools (IALS) conferences, Mrs. Sweet, Mrs. Bird, and I have shared our educators’ reflections on Behr and Rydzewski’s 2021 book, *When You Wonder, You’re Learning*, as instrumental in our steps toward “the new important” in the current global context. Interestingly, these priorities align beautifully with the indigenous perspectives for repairing the world, as shared in a keynote address at the IALS conference by Dr. Niigaanwewidam Sinclair, who is Anishinaabe and a professor in Native Studies at U. Manitoba, Canada (https://umanitoba.ca/centres/ccwoc/artists_affiliates/Sinclair.html). In their epilogue, Behr and Rydzewski stress that, “What was ‘normal’ yesterday doesn’t have to define tomorrow” (p. 208). Similarly, Sinclair emphasized that laboratory schools are ideal places to begin adopting Anishinaabe ways that can bring peace and justice to all. If fact, he encouraged us that, in many ways, we have already begun.

Dr. Sinclair emphasized that the Anishinaabe accept the mystery in the world and aim to “reconcile the why?”. In many ways, this approach resonates with the priority on Curiosity, but the Anishinaabe attention to the mysteries of nature yields a deeper sense of responsible and sustainable inquiry. With respect to Learning and Growing, the Anishinaabe identify the most important teachers as the elders and the children, which is why they dedicate so much time to intergenerational interactions. Such interactions promote the “deep listening and loving speech” that Rogers noted as so important to Communication and helps children build the trusting relationships that both the Anishinaabe and Rogers recognized as an essential foundation for learning. Similarly, both the Anishinaabe and Rogers emphasize the principle of loving and being loved as central to human Connection. The Anishinaabe go a step further, however, by emphasizing the need to reconnect to the land, by taking the time to listen, watch, and share with both the land and with others.

According to Dr. Sinclair, the Anishinaabe think that each individual’s “job is to be a gift giver”. For Rogers, each of us can use our Creativity to innovate in ways that enrich the world for everyone. Because everyone has a gift to give, the Anishinaabe clans are egalitarian, using “the circle” to share everyone’s ideas and make decisions. In much the same way, Rogers emphasized Collaboration to build bridges through cooperation and compromise, using diversity as a strength to forge “richer and more original and more enduring” (p. 118) ways to do the difficult work of repairing the world. In addition, life, love, and learning are all intertwined in the Anishinaabe community because they all take place within the same lodge. In a way, that notion is similar to Fred Rogers’ “neighborhood”, both the real one and the “Neighborhood of Make Believe.”

Now, it is our job to contribute our unique gifts to help build the neighborhood, the Children’s School neighborhood, the Pittsburgh neighborhood, or whatever neighborhoods we call our home for life, love, and learning. Behr and Rydzewski close by saying that, “Every day … parents, educators, and young people themselves are doing what Rogers did – combining timeless ideas with new ways of learning to make the world more accepting, more compassionate, and more humane” (p. 209). Perhaps the summer months will give us opportunities to reconnect with each other and with the land in ways that help us acknowledge with gratitude the gifts we have received and have to offer.
## May

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