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**SUMMER 2024** 

# NEWS YOU **can use**



# where children teach adults.

#### Why Play is Serious Work: For Children & Adults

#### A Commentary

On March 26, the United Nations declared an international day of play to take place annually on June 11th. With over 140 countries as partners, this announcement cements not only every child's Right to Play, but also highlights the many benefits of play for children and adults alike. Read more



#### Screens and children's well-being: The latest evidence of technology's impact on mental health and education

Children are increasingly accessing technology both in and out of classrooms. The impact this has on children's development and education is important for everyone, from caregivers to educators to policymakers, to understand. Kathy Hirsh-Pasek participated in a Brookings Institute Webinar on this important discussion. Listen here!

# Happenings at Ambler

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We are thrilled to announce the launch of our GEO-OWL Academy, a unique summer camp experience at Temple University Ambler Campus, tailored for middle school-age explorers! This initiative, funded by the National Science Foundation (NSF) and spearheaded by Dr. Nora Newcombe, centers on the exciting world of geospatial exploration and spatial cogn on the exciting world of geospatial exploration and spatial cognition.ition.

This weeklong camp is designed for children aged 11 to 14, focusing on geospatial skills and the wonders of our natural world. The camp is free of charge and packed with thrilling activities!



Virtual Exploration Engaging with virtual environments to enhance spatial thinking and navigation skills. Scavenger Hunts Fun, challenging hunts that encourage teamwork and critical

Nature Data Collection Campers will Collect data on bugs, birds, data other fascinating and other fascinature elements of nature July 22 to July 26

9 am to 4 pm daily

Temple University Ambler Campus

Ready to sign up? Call us at 215-204-7665 or email merve.tansan@temple.edu to secure a spot for your young explorer!

Participation in this summer camp also involves taking part in research activities aimed at understanding how children learn and navigate new environments. At GEO-OWL Academy, campers will dive deep into the world of geospatial data collection and map-based analysis, engaging in immersive learning experiences that bring education to life. Guided by experts with over 15 years of experience in geospatial education, they will explore the beautiful Ambler Campus through hands-on activities. Thanks to our NSF grant, this incredible, expertly guided adventure is offered completely free of charge!

# Happenings at the Lab



Postdoc Samantha Cohen presented data from the Marvelous Moments grant at the Context and Episodic Memory Conference in Philadelphia, PA in late May. Marvelous Moments looked at how children learn to remember and what happens in the developing brain. She discussed how different aspects of episodic memory change between four and seven years. Her talk was titled: "Pattern Separation and Pattern Completion in Early Childhood."



Nora Newcombe, Laura H. Carnell Professor of Psychology, has been inducted into the National Academy of Sciences. This is one of the highest honors a scientist can receive in the US and recognizes individuals who have made exceptional contributions to scientific research in their fields.



#### The Cactus Study

An exciting new study is starting up in the Temple Infant and Child Lab! The Cactus Study, is recruiting participants! We are investigating the brain signals associated with social interaction with toddlers and their caregivers in collaboration with the Developmental Science ab at Temple. Toddlers will get to wear an EEG cap (like the one to the right) while playing and interacting during a fun visit on Temple's Main Campus.

Study in the Spotlight



#### Interested in participating?

Please contact us at (215) 839 - 6202, devlab@temple.edu, or visit this link in the QR code. Toddlers must be between 18 and 30 months of age and accompanied by a primary caregiver.



Why are some people better at navigating spaces than others? Check out these articles featuring Dr. Nora Newcombe to find out!

Expertise from our Lab



Some people can strike off on any journey with no guide except their 'pigeon senses'. How do they do it? And can this ability be learned? <u>Read about it here.</u>

Why do some people always get lost? Research suggests that experience may matter more than innate ability when it comes to a sense of direction. <u>Read about it here.</u>

### Featured Findings From Our Newly Minted Ph.D.s

*Dr. Kim Nguyen*, who defended her Doctoral Dissertation this past April, thanks everyone who joined the Temple Tour Study. In this study, participants walked around the 3rd floor of Weiss Hall taking a tour of the objects along the path. At each object, they learned a fun fact about the item, such as giraffes talk to each other at night. She found that with age, memory for the events experienced on the tour and memory for the spatial location of the objects along the tour increased. Strong memory for the Tour events activated the hippocampus, an area that helps relate information that overlap (such as being seen along the same tour), even in young children! This summer, we will analyze how various areas of the brain work together to support memory for events such as the Tour.

Dr. Allyson Masters, who completed her Doctoral Dissertation this past May, studied parents perceptions of play. Ally Masters' dissertation surveyed parents in the US and China about their beliefs on playful learning activities. She found that parents in both the US and China perceive unstructured activities (e.g., Child jumping on a bed or a sofa) as more playful and structured activities (e.g., Child identifies letters and words, sings ABC's) as more imbued with learning. A follow-up study found that, when given the choice to categorize 37 common childhood activities as only play, only learning, both play and learning, or neither play nor learning, parents in both countries overwhelmingly categorized most activities as both play and learning. Furthermore, when parents were asked which of the pillars of playful learning (active, engaging, meaningful, socially interactive, iterative, and joyful) contributed to these categorizations, joy stood out as significantly negatively associated with activities considered only learning, and significantly positively associated with playful learning. This finding was true in both countries, indicating that parents in both the US and China see learning alone as not joyful, but when play is brought into learning activities parents consider them joyful as well.



Dr. Elias Blinkoff, who defended his doctoral dissertation last summer, recently published an article in Education Sciences based on that research, which evaluated the results of an instructional coaching program for kindergarten teachers in the State of New Hampshire. The program focused on teacher-facilitated, student-led guided play, evidence-informed principles of how children learn, and what skills children need to learn for success in the classroom and beyond. These aims were shaped by both the science of learning and the passage of a New Hampshire state law that required play-based kindergarten. Classroom observations conducted before and after coaching revealed changes in instruction and student behaviors that were consistent with the program's goals of enabling more playful learning. Dr. Blinkoff also presented these results at the National Research Conference on Early Childhood in Arlington, Virginia this June. Read the full article here.

# Findings in the Field

#### **The Fading Memories of Youth**

Infantile Amnesia is the inability to recall events that occurred during the first few years of life. This past March, Dr. Nora Newcombe discussed the mysterious phenomenon with Science. Click here to learn more!

#### **Playgrounds to Pixels:** Children in the Digital Tech Era

Kashev Rastogi invited Kathy Hirsh-Pasek to talk about the psychological impact of technology, especially on children. She takes a dive deep into how children play and learn, and the ways technology is forever changing these interactions.

Listen here.



#### **Building Executive Function Skills Through** Games: The Power of Playful Learning

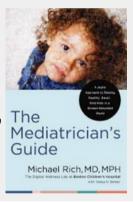
Dr. Molly Scott, Associate Director of the Active Playful Learning project and Research Scientist at TICL recently published an article in Young Children on the power of playful learning in building children's executive function skills. Along with her colleague Dr. Cindy Wiltshire, the duo share the importance of how certain games and activities can help develop important abilities like inhibitory control and cognitive flexibility.

New Book

The Mediatrician's Guide: A Joyful Approach to Raising Healthy, Smart, Kind Kids in a Screen-Saturated World By Michael Rich, MD, MHP

In this holistic approach, Dr. Michael Rich empowers you to guide your children toward smart and healthy digital choices with straightforward instructions and actionable advice that you can customize to your family's specific needs.

Known as the "Mediatrician" due to his acclaimed work as a pediatrician, child health researcher, and children's media specialist, Dr. Rich presents a compassionate and realistic look at the reality of growing up in a screensaturated world — and how you can help your kids emerge from a technology-rich environment as happy, well-informed, empathetic adults.



#### Play for All Ages: Designing Intergenerational Spaces That Build **Connections and Encourage Learning**



Dr. Kathy Hirsh-Pasek brought Playful Learning Landscapes center stage in this Generations United hosted webinar on March 7, 2024. She spoke about how to develop joyful intergenerational spaces that foster playful learning, creativity, and meaningful cross-age connections.



# Our **Directors**



Kathy Hirsh-Pasek, a Professor of Psychology at Temple University and a Senior Fellow at the Brookings Institute was declared a "scientific entrepreneur" from the American Association of Psychology. Writing 17 books and 250+ publications, she served as President of the International Congress for Infant Studies, was on the Governing Board of the Society for Research in Child Development and is on the board of Zero to Three. Her Einstein Never Used Flashcards won the Book for a Better Life Award in 2003 with her Becoming Brilliant (2016) reaching the NYTimes Best Sellers List in education. Her newest book Making Schools Work (Nov. 2022) is the first education book co-written with teachers, administrators and scientists. It already sparked a national grant to re-imagine education. Hirsh-Pasek won awards from every psychological and educational society for her basic science and translational work designed to bridge basic science and educational impact. She also was honored with the Simms Mann Award and the Association of Children's Museum Great Friend to Kids Award. She is a founding member of the Latin American School for Educational and Cognitive Neuroscience, she spearheaded a global network of scientists devoted to educational science. Co-founder of the global Learning Science Exchange Fellowship (LSX), she brings together scientists, journalists, policy makers and entertainers, to put learning science in the hands of educators. In 2021, she was elected as a member of the National Academy of Education. Her initiative Playful Learning Landscapes re-imagines cities and public squares as places with science infused designs that enhance academic and social opportunities. Hirsh-Pasek frequently comments for the press (e.g. NPR, NYT) and blogs for the Brookings Institution.

**Nora Newcombe, Ph.D.,** is a Laura H. Carnell Professor of Psychology at Temple University. Dr. Newcombe was educated at Antioch College, where she graduated with a major in psychology in 1972 and at Harvard University, where she received her Ph.D. in Psychology and Social Relations in 1976. She taught previously at Penn State University. Her research in cognition and cognitive development has centered on spatial cognition and on episodic memory, along with translational work on STEM education. She served as the PI of the NSF-funded Spatial Intelligence and Learning Center (SILC) from 2006-2018, headquartered at Temple and involving Northwestern, the University of Chicago and the University of Pennsylvania as primary partners. Dr. Newcombe currently serves as Past President of the International Mind Brain Education Society (IMBES), and as Editor of *Psychological Science in the Public Interest*, a journal of the Association for Psychological Science.

Honors include the Distinguished Scientific Contributions Award from the Society for Research in Child Development, the William James Fellow Award from APS, the Howard Crosby Warren Medal from the Society of Experimental Psychologists, the George Miller Award and the G. Stanley Hall Awards from APA, the Award for Distinguished Service to Psychological Science, also from APA. She has received three mentor awards, from Women in Cognitive Science, APA Division 7, and APS. She is a fellow of four divisions of the American Psychological Association (General, Experimental, Developmental, and Psychology of Women), of the Association for Psychological Science, and of the American Association for the Advancement of Science, and has been a Visiting Professor at the University of Pennsylvania, Princeton, the Wissenschaftskolleg in Berlin and the University of Otago. She is a member of the American Academy of Arts and Sciences and the Society of Experimental Psychologists.



Thank you to our sponsors: The LEGO Foundation, William Penn Foundation, Vanguard Strong Start for Kids, NSF, The Bezos Foundation, Stan & Debra Lefkowitz, NIH

#### Interested in participating in research? Scan the QR code and fill out the form to receive more information!



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