

Temple University Infant & Child Lab

Haines House 1<sup>st</sup> Floor 580 Meetinghouse Road, Ambler, PA 19002

Interested in scheduling or know someone who is? We currently have studies for children 10 months to 12 years old.

Give us a call at: 267-468-8610

Or, send us email: infantlab@temple.edu

We would love to speak with you!

We're on the Web

Like Temple Infant and Child Lab



#### **Congratulations!**

**Dr. Jessa Reed**, Graduate Student, earned her doctorate degree

**Dr. Amy Pace**, Postdoctoral Fellow, will be starting as an Assistant Professor at University of Washington in the Winter

**Paula Yust**, Lab Coordinator, will be starting as a graduate student at Duke University in the Fall

# We welcome several new members to the TICL family:

**Dr. Rebecca Alper**, Postdoctoral Fellow for Enhancing the Communication Foundation project

**Dr. Nicole Fletcher**, Postdoctoral Fellow for Spatial Intelligence in Preschool project

**Dr. Rufan Luo**, Postdoctoral Fellow for Enhancing the Communication Foundation project

**Molly Scott**, Graduate Student for Language for Reading project

**Lillian Masek,** Graduate Student for Enhancing the Communication Foundation project

**Jacob Schatz**, Lab Coordinator for Language for Reading project

**Josie Tejada**, Lab Coordinator for Enhancing the Communication Foundation project

... and we are especially excited to announce the birth of **Elena "Ellie" Pasek**, granddaughter of co-director Dr. Kathy Hirsh-Pasek, born on May 2, 2015.

## **Studies in the Spotlight**

## It's a talk back!

For years, researchers have referred to the "30 million word gap," the idea that lowincome children hear 30 million fewer words by the time they are 3 years old than their middle-income peers. Pretty shocking! This statistic has captivated researchers, policy makers and educators since it was published by Betty Hart and Todd Risley in 1995, and is believed to lead to even bigger gaps in reading as children get older.

But is the language gap really so simple? We had a feeling the difference lies in more than just the number of words these kids are hearing.

Our team, along with researchers at the University of Texas and Georgia State University looked at videos of moms and their 2-year-olds playing together with books and toys during a study from the early 90's. We then looked at how those kids did on a language test a year later, when they were three. As we suspected, the kids who did better on that language test weren't just hearing more words, they were being spoken to differently. It turns out kids whose moms had conversations with them—where they took turns speaking back and forth and back and forth—were the ones who did the best on the language test later on. Sometimes these back and forth "conversations" don't even include much language! If a child without words coos at her mother and her mother coos back, that can work wonders for her language as she learns to speak, read and write. Here at the lab, we like to call that... a talk back!



Check it out! We decided to test these findings out. We put signs up around a supermarket with questions like "What's your favorite vegetable?" This simple addition helped parents have more conversations with their kids. Mission accomplished!

## The truth behind "educational" apps

How do you know if those "educational" apps your child loves to play on your ipad are *really* teaching them anything? There are over 80,000 apps being marketed as "educational" in the app store right now, but the people who develop these games and tag them as educational aren't the scientists who study the way kids learn. Together with a digital learning consultant, we combed through what's out there to try and figure out how we can put the education back in educational apps. Here's what we found! In order to help your child learn, apps should be:

**Minds-on, not minds-off.** When children are actively working through problems while playing on the ipad, they're probably learning, too!

**Engaging, not distracting.** Extras-- like the cow that moos when you tap it-usually only distract children and don't add much to the learning experience.

**Meaningful.** Children will learn the most when the apps they're playing with are right at their level. If a child is just learning the letters of the alphabet, a game involving sounding out long words isn't going to do much for them.

**Full of social interaction.** Playing with the ipad doesn't have to be an isolated activity! Apps that encourage children to play with a parent or a peer will help them to feel more connected and make the learning experience more meaningful.



We hope that app developers will keep this list in mind and more of the "educational" apps out there will start truly fostering learning.

## Play: it's about more than just fun and games!

If you've ever squeezed your car into a tight parking spot or thought twice about which way to insert your bank card into an ATM you've used spatial skills. These are the skills that help you think about space and manipulate objects, and they're fundamental to math and science learning.

We decided to look more closely at the way kids develop spatial skills by testing kids ages 4-7 and giving their parents a survey asking about the kinds of things they play with the most, ranging from video games to art supplies to bikes. The kids who played more with toys like puzzles, blocks and board games had better spatial skills than the others in our study. In fact, the toys they played with mattered even more than how much parents tried to teach them about shapes.

So if you want to help your child start off on the right foot with their spatial skills, it may be all in the toys they play with! Check it out! Do kids learn more from electronic toys or traditional ones? We tested it out and kids playing with a traditional shapesorter heard more spatial talk from their parents than kids playing with an electronic one that named the shapes as they played.





## Contact Us:

Check out our website: http://www.temple.edu/infantlab http://facebook.com/infantlab

Questions? Call us: 267-468-8610 Email us: infantiab@temple.edu

The Temple Infant and Child Lab is co-directed by Nora Newcombe, Ph.D. & Kathy Hirsh-Pasek, Ph.D. Department of Psychology, 1701 N. 13<sup>th</sup> St. Philadelphia, PA 19122 Directors: Kathy Hirsh-Pasek, Ph.D. Nora Newcombe, Ph.D.

Lab Coordinators: Kate Margulis Jelani Medford Jacob Schatz Josie Tejada

Undergraduate Summer Interns: Sara Schroer Ian Becker Amy Giacomucci

## Graduate Students:

Corinne Holmes Junko Kanero Dani Levine Lillian Masek Zoe Ngo Jessa Reed, Ph.D. Molly Scott Leah Sheline

#### **Post-doctoral Researchers:**

Rebecca Alper, Ph.D. Nicole Fletcher, Ph.D. Brenna Hassinger-Das, Ph.D. Rufan Luo, Ph.D. Amy Pace, Ph.D. Tamara Spiewak Toub, Ph.D

#### Meet the Co-Directors



**Nora Newcombe** is Professor of Psychology and James H. Glackin Distinguished Faculty Fellow at Temple University. Her Ph.D. is from Harvard University. Her research focuses on spatial cognition and development, including the nature of gender differences in spatial ability. She is also interested in the development of autobiographical and episodic memory. Dr. Newcombe is the author of numerous scholarly chapters, articles, and books on aspects of cognitive development, including Making Space with Janellen Huttenlocher (published by the MIT Press, 2000). Her work has been recognized by several awards, including the George A. Miller Award and the G. Stanley Hall Award from the APA. She is a member of the American Academy of Arts and Sciences and of the Society of Experimental Psychologists. She has served as Editor of the Journal of Experimental Psychology: General and Associate Editor of Psychological Bulletin, as well as on many grant panels and advisory boards. She is currently Principal Investigator of the NSF-funded Spatial Intelligence and Learning Center, whose mission is to understand human spatial cognition, with an emphasis on the idea that spatial knowledge and skills can be improved, and to apply the resulting knowledge to foster spatial learning, especially in Science, Technology, Engineering, and Math (STEM) disciplines. Follow Nora on twitter @NoraNewcombe.



Kathryn Hirsh-Pasek is the Stanley and Debra Lefkowitz Distinguished Faculty Fellow in the Department of Psychology at Temple University, where she serves as co-director of the Infant and Child Lab and Co-Founder of the Center for Re-Imagining Children's Learning and Education (CiRCLE). Kathy received her Ph.D. at the University of Pennsylvania. Her research in the areas of early language development, literacy and infant cognition has been funded by the NSF, NICHD, and IES, resulting in 11 books and over 150 publications. With her long time collaborator, Roberta Golinkoff, she is a recipient of The APA Bronfenbrenner Award for lifetime contribution to the science of developmental psychology and the APA Award for Distinguished Service to Psychological Science, as well as the 2015 recipient of the APS James McKeen Cattell Fellow Award for a lifetime of outstanding contributions to applied psychological research. She recently received the APA Distinguished Scientific Lecturer Award given by the Science Directorate. She also received Temple University's Great Teacher Award and Paul Eberman Research Award. She is a Fellow of the APA and the APS, served as the Associate Editor of Child Development and treasurer of the International Association for Infant Studies. Her book, Einstein Never used Flashcards: How children really learn and why they need to play more and memorize less won the prestigious Books for Better Life Award in 2003. Kathy is deeply invested in bridging the gap between research and practice. Follow Kathy on twitter @KathyandRol.