Research Spotlight

The Pet Name Game

Dr. Dan Hufnagle is investigating the development of children’s knowledge of sound categories. While children understand ambiguous language very well in context, they often categorize individual sounds in a very graded fashion, especially if those sounds are acoustically ambiguous. Adults, on the other hand, tend to perceive sounds in a less graded manner. The goal of this experiment is to understand what kind of language input helps children shift to adult-like categorization patterns in an experiment that takes 2 sessions.

Children hear a computer say names of animals (Daw and Taw are pictured below), which they repeat to the experimenter while playing a game of helping identify someone’s pets. In one session, children hear daw and taw in distinctive contexts (Dawgoo and Tawbow). In the other, they hear daw and taw in similar contexts (Dawbow and Tawbow). Children also hear the syllables daw and taw on their own in both sessions. Sometimes the sounds are ambiguous (acoustically intermediate between daw and taw). Your child’s responses to these intermediate sounds help us understand how they are categorizing sounds.

The researcher predicts that children will show more adult-like categorization patterns for daw and taw when they are exposed to sounds that include more distinctive contexts (tawgoo and dawbow) than sounds that include less distinctive contexts (tawbow and dawbow).

Participate in an exciting science project to learn how the brain develops!

Researchers in Dr. Marlene Behrmann’s Neuroscience Lab are seeking right-handed, 5-8 year old subjects for a study of how the brain becomes organized for processing objects and faces. Each 1.5 hour session will be conducted at the new Scientific Imaging and Brain Research Center (SIBR) at CMU. The child will lie in the brain scanner and be shown pictures of objects, while the researchers record his/her brain activation. Afterwards, the child will look at pictures of objects on a computer to determine which objects are the same or different. There is a flyer with additional information enclosed with this newsletter.

Please contact Lauren Lorenzi at Carnegie Mellon University if you are interested in having your child participate (412-268-8228 LLorenzi@andrew.cmu.edu).
Research Spotlight continued …

The Matching Game

Graduate student Bryan Matlen and undergraduate Emma Adair are working with Dr. David Klahr to investigate how children learn relational categories. In this study, children are shown two standards of a relational category and are asked to select another member of that category. Among two possible answer choices is a category choice that is related *relationally* to the first two sets (e.g., they all are facing each other) and the other response category choice is a set that is related *perceptually* to the first two sets (e.g., they are the same objects). Examples of a relational category are shown below. The researchers are conducting this study because previous research suggests that providing comparisons fosters children’s learning of relational categories.

“These are both Daxes, do you see why they are both Daxes?”

“Which one of these is also a Dax?”

EITC Scholarship Funding Update

Thanks to Highmark Casualty Insurance Company for contributing $5,000 to the Children’s School Scholarship Fund through the Educational Improvement Tax Credit (EITC) program. If you would like more information about your business participating or can suggest prospective businesses, please contact one of our Educational Administrators, Mrs. Rosenblum & Miss Hancock, at ed-admin@andrew.cmu.edu.
Dr. Erik Thiessen’s Developmental Research Methods students are preparing their final projects for the semester. Though the research procedures are still being finalized, the topics are listed below. Families whose children participate will receive fuller parent descriptions via the child’s backpack. Everyone can read the study descriptions on the Research Bulletin Board outside the Children’s School Office. Notice the interesting range of important topics in early childhood development!

**Impact of Collaborative Puzzle Completion on Sharing Quantity** – Exploring whether preschool 4’s who complete a puzzle with a partner later share more stickers than those who complete the puzzle alone. (The Puzzle Game)

**Self-Control When Told Not to Touch** – Testing the effectiveness of stern vs. friendly directions not to touch an appealing toy on preschool 3’s likelihood of obeying. (The Plasma Ball Game)

**The Role of Sound in Letter Naming** – Determining whether pronouncing a “pseudoword” shown on a card helps preschool 3’s and 4’s name the letters. (The Letter Name Game)

**Decision-Making about Toy Quality** – Exploring the role of conscious vs. unconscious thought in kindergartners’ judgments of toy quality after being given multiple attributes. (The Thinking Game)

**Memory for Stories with Same vs. Opposite Gender Character** – Testing whether kindergartners answer more comprehension questions correctly when the main character is the same gender. (The Storybook Game)

**Undergraduate Spotlight: Getting to Know You!!**

Anna Rosenblum is a third year architecture student at Carnegie Mellon University who enjoys reading, watching movies, listening to music, and spending time with her family (especially watching Desperate Housewives with her mother, Mrs. Rosenblum). Her interest in sustainable design, urban issues, and history led her to CMU, where she is very much enjoying her experience. She has been working on and off at the Children's School since the winter of 2008 and has had the pleasure of volunteering and being a part of the Children's School community for the past 11 years. Her time at the Children's School has provided her with invaluable experiences that have greatly prepared her for positions assisting with the School of Architecture’s Saturday Sequence architecture programs as well as her experiences last summer as a teacher for the Carnegie Museum of Art's Architecture Summer Camps. While pursuing a Bachelor’s degree in Architecture as well as a minor in history, her schoolwork keeps her busy during the semester, but she does look forward to helping us again in May.

Anna has also been helpful in supplying the school with her own and some of her peers’ old drawings and models from their studio last semester. The main focus of her studio last semester was “site” and so many of the projects are concerned with issues of site and the environment, dealing with matters such as sunlight, how their buildings interact with the ground and integrate into their surroundings. We hope that these plans, sections, elevations, diagrams, experiential images and other planning and architectural drawings will be a great addition to our building unit, when the students may enjoy drawing or just examining these drawings.