Hello from the KID Lab at Michigan State University!

This is an update on research projects that have been conducted at the Knowledge in Development Lab under the direction of Dr. Judith Danovitch over the past year. Our lab is very excited to celebrate its one year anniversary this fall. We could not have succeeded without the help of the parents, children, and educators in our community. We have enjoyed working within the community very much and your involvement has provided us with a better understanding of how children develop.

What is the Knowledge in Development Lab?

The Knowledge and Development Lab is located on Michigan State University’s campus within the Department of Psychology. Graduate and undergraduate students conduct experiments in order to gain a better understanding of how children process information, how they seek out and evaluate knowledge throughout their development, and how such thought processes develop.

The lab primarily works with children between the ages of 2 to 12. A visit to our lab entails one session, scheduled by the parent, lasting no longer than half an hour, where the children complete a game or activity with our friendly researchers. Our research rooms are located just outside our waiting room where parents can observe the interaction through our video monitoring system. At the end of each session, children receive a prize as well as a free pass to the Impression 5 Science Center.

When a study is complete, we analyze the differences in thinking between children of different ages and we publish the results so that they are available to other scientists, parents, and educators.

Meet Dr. Danovitch

Dr. Judith Danovitch is a professor in the department of Psychology. She received her BA in Psychology and Biology from Harvard University and her Ph.D. in Psychology from Yale University. When she is not conducting research or teaching Developmental Psychology courses at MSU, she enjoys reading and traveling with her family.
Sharing Knowledge
Participants: Kindergarteners, 2nd and 4th graders

In the Sharing Knowledge Study, students participating helped us find out: Do children know what kinds of information are useful to share with people that have different motives? For example, do they realize that an animal caregiver would want to know different things about animals than a person who makes pictures of animals?

Children were provided with a series of two facts about unusual animals and were asked to share one of the pieces of information with both an animal caretaker and a person who makes pictures of animals.

The results demonstrate that children show an increasing ability to share relevant pieces of information as they grow older, although even kindergarteners were able to do so in some situations. Our findings have implications for education as younger children may benefit from specific instructions about what is relevant or irrelevant information.

Student researchers: Reem Alzahabi and Megan Bissett

Example Question
This is an orycteropus. Henry has never seen or heard of an orycteropus before.

What do you think Henry would want to know?

A: An orycteropus digs burrows to sleep in at night.

OR

A: An orycteropus has large feet with pointy toes.

Experts Know Best
Participants: Preschool students ages 3 - 5

The “What Do Experts Know?” study examined what skills contribute to children’s ability to make judgments about what people know and their expertise. Specifically, we were interested in whether being able to categorize living and non-living things and whether theory of mind (the understanding that other people have different thoughts and beliefs than you do) play roles in children’s developing an understanding of expertise.

Forty-six children participated in a series of games involving puppets, books, and other kid-friendly objects. In one game, children were introduced to two puppets who were experts about either eagles or bicycles (see photo). Each child then answered questions about which expert would know more about a given topic. For example, “who would know more about how ducks swim?”

Our results showed that categorization and theory of mind both contribute to children’s ability to make judgments about people around them and their expertise. This suggests that children’s understanding of other people’s expertise depends on first understanding both the physical and social worlds. These findings will help us understand how parents and teachers can better explain what it means to be an expert to young children!

Student researchers: Erica Jacob, Meghan Kanya, and Jessica Rice
The World at Their Fingertips
Participants: Elementary school students ages 8 - 12

Thanks to computers and the internet, children growing up today have more immediate access to information than any other generation in human history. This project studies how internet experience influences children’s perceptions of how quickly and easily information can be attained. Children and adults participated at local schools and at the Michigan State Grandparent’s University this summer.

We found that children and adults who spend more time on the internet, and especially those who spend more time on the internet looking up information, were much more likely to think they could find answers to questions faster. They also felt that the answers they found would be more likely to be accurate.

This relationship is not enough to prove that internet experience causes people to view information as being easier to attain and more accurate; however, it provides a valuable stepping stone to drawing that inference. We are still working toward understanding the effects of the internet on the first generation to grow up with the world at their fingertips so look out for future updates!

Student researchers: Danielle Brimmeier, James Gabriels, and James Rossi

Where Our Research has Lead Us:

Michigan State University Undergraduate Research and Arts Forum

The KID Lab is proud to have bright and talented student research assistants involved in all aspects of our research projects. On April 16, 2009, they had the opportunity to present findings from their studies at Michigan State University’s University Undergraduate Research and Arts Forum (UURAF). Reem Alzahabi and Megan Bissett presented findings on whether children know the kinds of information that are useful to share with people that have different motives (photo1). James Gabriels and Danielle Brimmeier addressed the question of how internet experience influences children’s perceptions of information (photo 2). Erica Jacob, Meghan Kanya, and Jessica Rice presented research on preschool children’s understanding of expertise (photo 3).

All of the KID Lab presentations received positive feedback from the judges and it was an enjoyable and educational experience for everyone involved!
What Next?

Research at the KID Lab never ends! When we finish gathering evidence for our initial research questions, we often need to conduct follow-up studies in order to gain a more complete picture of certain aspects of child development. Also, much is still unknown about children’s cognition and how it changes across the lifespan. We are eager to learn more about these fascinating phenomena. Some topics we will be addressing in our upcoming research include:

- Children’s ability to evaluate computers as a source of information
- Children’s understanding of messages that come from biased or neutral sources
- Children’s trust in people who have previously answered a question right or wrong

A Special Thank You!

We would like to thank the following schools and organizations for allowing us to visit and conduct our research:

- Eastminster Child Development Center
- MSU Child Development Labs in East Lansing and Haslett
- MSU Grandparent’s University
- People’s Church Preschool
- St. Martha School
- St. Thomas Aquinas School

We also extend a big thank you to the parents and children who visited our lab on the MSU campus. Our research would not be possible without your support!

Get Involved!

We are always looking for families, daycare centers, and schools that are interested in participating in our research. You can contact us by calling 517-432-8166, sending an email to msukidlab@gmail.com, or signing up on our website at http://psychology.msu.edu/kid/. If you are a parent, we will contact you as soon as we have a study available for your child’s age group.

Also, if you have moved, changed your phone number or contact information, or simply have questions or concerns, please let us know!