EDHD 779P: Fake News & Alternative Facts: How Children Learn to Navigate Evidence in a Complex Social World

In this course we will explore how young children come to understand how evidence is acquired, produced, and used to make inferences and draw conclusion about the world, and how that process interacts with their developing social understanding. Topics will include selective trust, epistemic cognition, scientific reasoning, causal learning, motivated cognition, confirmation bias, and how children learn from media. We will explore both basic research in development on these topics as well as ways in which this research can be used to foster critical thinking and scientific literacy in childhood and beyond, in both formal and informal educational settings.

Course Structure

Each week we will read several articles on that week's topic. Each student will be expected to submit several discussion questions and come prepared to engage in a lively discussion. One student each week will present a summary of the articles, and will be responsible for leading the discussion. That said, engaging discussions are a shared responsibility, and each student plays an important role, as do I.

Assignments and Grading

There will be three major components to your grade in this course. 10% will be your work in helping to co-create this course. As you'll see, this syllabus is a "living document." I've sketched out the general topics I think we ought to cover, and proposed some readings for some of them. Part of your work in this course will be to think deeply about what we need to know and what we need to be discussing. Although I consider myself responsible for assigning the readings, I welcome any ideas or suggestions you have as we go along. Each of you comes from different theoretical and methodological backgrounds, and I want to capitalize on that diversity in making this a class out of which each of you can get something useful. **Note: Please add possible readings with your initials (as you'll see Hailey has done some below), and include as much information as possible.**

Another 40% will be determined based on your participation in and leading of class discussions. The final 50% will be based on a cumulative research and writing project. More details about this project will be forthcoming, but the general structure is that you will propose to dig deeper into one of the course topics, providing a thorough literature review and proposal for critical next steps in that area of research. Though this will be an ongoing project over the course of the semester, and you will receive only one final grade on the project there will be key components due as follows, in order to help you structure your work:

1. Topic choice and paragraph summary of area and importance (due **September 30)**
2. Proposed reference list for literature review (due **October 15)**
3. Revised reference list for literature review due (**November 1)**
4. Draft literature review (due **November 15)**
5. Draft proposal for next steps in research (due **December 1)**
6. Final paper (due **December 15)**

Planned Topics, and Some Preliminary Readings (these will be edited as we go)

8/27 -- *Intro, discussion of topics, assignment of discussion leaders*

9/3 -- *No class, labor day*

9/10 – *Theories of Empirical Reasoning and Selective Social Learning*

Harris, P. L., Koenig, M. A., Corriveau, K. H., & Jaswal, V. K. (2018). Cognitive foundations of learning from testimony. *Annual Review of Psychology*, *69,* 251-273.

Kuhn, D. (1989). Children and adults as intuitive scientists. *Psychological Review*, *96*, 674.

Mills, C. M. (2013). Knowing when to doubt: developing a critical stance when learning from others. *Developmental Psychology*, *49*, 404

The Roots of Statistical Inference
(9/17 & 9/24)

The scientist in the crib? Intuitive statistics early in life

Xu, F., & Garcia, V. (2008). Intuitive statistics by 8-month-old infants. *Proceedings of the National Academy of Sciences*, *105*(13), 5012-5015.

Téglás, E., Girotto, V., Gonzalez, M., & Bonatti, L. L. (2007). Intuitions of probabilities shape expectations about the future at 12 months and beyond. *Proceedings of the National Academy of Sciences*, *104*(48), 19156-19159.

Gweon, H., Tenenbaum, J. B., & Schulz, L. E. (2010). Infants consider both the sample and the sampling process in inductive generalization. *Proceedings of the National Academy of Sciences*, 201003095.

The social scientist in the crib? Connecting the statistical and the social

Gweon, H., & Schulz, L. (2011). 16-month-olds rationally infer causes of failed actions. *Science*, *332*(6037), 1524-1524.

Kushnir, T., Xu, F., & Wellman, H. M. (2010). Young children use statistical sampling to infer the preferences of other people. *Psychological science*, *21*(8), 1134-1140.

Jara-Ettinger, J., Gweon, H., Schulz, L. E., & Tenenbaum, J. B. (2016). The naïve utility calculus: Computational principles underlying commonsense psychology. *Trends in cognitive sciences*, *20*(8), 589-604.

The Questioning Child: How Children Gather Evidence
(10/1, 10/8, 10/15)

Thinking about social kinds: How children reason about what is true about other people
(10/22, 10/29)

Inquiry in Context: The Role of Parents, Educators, and Society
(11/5, 11/12, 11/19)

Implications: Politics, Education, and Society
(11/26, 12/3)

Closing Thoughts
(12/10)