

**TERM PROJECT**  
**PSYC 430: Cognitive Development**  
**Fall 2010**

The term project has been designed to meet several goals:

- To improve your skills in identifying, locating, and evaluating psychological research articles,
- To teach you how to read, understand, and think critically about psychological research reports and their implications for real world issues, and
- To enhance your ability to develop clear, effective and scientifically-sound arguments in written forms of expression, for both academic and more general audiences.

**Instructional Partnership.** One unique feature of this course is that we are relying on instructional partnership between a faculty member, the KU Libraries, and the Writing Center to guide you through the completion of the term project this semester. Specifically, Dr. Greenhoot will be collaborating with the Psychology specialist from KU Libraries, Erin Ellis, Director of the KU Writing Center, Terese Thonus, and graduate student fellows (GSFs: Tiffany Meites and Sunkey Sun) who have been trained as research and writing consultants trained by the Libraries and the KU Writing Center, to help you complete various components of this project.

This project asks you to write two short papers about the real-world applications of an area of the empirical literature on cognitive development. The goal of this project is for you to construct an empirically-based advice column that provides practical recommendations for parents in response to one of several hypothetical questions sent in by readers of a parenting magazine. **A critical component of this assignment is that you support your practical recommendations with scientific evidence.** For each hypothetical parent-reader question, we have identified one scientific journal article relevant to writing a response- these are already posted on Blackboard under Assignments. Your major tasks are (a) to select at least three more empirical journal articles relevant to the topic and submit those to us for feedback, (b) to write an academic-style review paper (the Term Paper, 4-5 pages double spaced, or 1200 to 1800 words) in which you summarize and integrate the research on this topic, and (c) write an “advice column” (500 to 900 words) answering the reader question, based on the research you have reviewed. The term project has been broken down into a series of staged assignments distributed across the semester. See the steps outlined below for more info.

#### TERM PROJECT STEPS

1. **Tuesday, September 7 and Thursday, September 9: Literature Search Lab:** On each of these two days during class time, half of the class will attend a lab in the Watson Library Instruction Lab instructed by the Psychology librarian, Erin Ellis, and the GTAs/GSFs (check blackboard for announcement about which day to attend the lab). The other half of the class should attend class in Smith 100 with Dr. Greenhoot. During the literature search lab, you will learn how to identify trustworthy scientific sources, how to find scientific articles presenting research relevant to particular topics in cognitive development, how to obtain copies of those articles, and how to distinguish between different types of scholarly (and nonscholarly) sources.
2. **Thursday, September 16. Articles/Research Question Due.** On this day, your 3 empirical articles and a paragraph on each one explaining why you chose them are due in class. You should submit
  - (a) Your chosen paper topic and the Research Question that your paper will be addressing
  - (b) The full references for the 3 articles you have selected
  - (c) For each of the 3 articles, a short paragraph (a few sentences) explaining how it is relevant to your paper topic, and why you chose this particular one instead of other relevant articles (i.e., what *stuck out* about it? how will it be useful to you?).
  - (d) A copy of the first page of each of the 3 articles you selected.

This assignment is worth 25 points- you will be graded on **completeness** (i.e., whether you submit everything we asked for) and the **appropriateness** of the article you select (whether it comes from an appropriate scientific source and whether it is really relevant to your paper topic).

3. **Tuesday, September 21. Interpreting Empirical Articles.** During class in late September, we will be examining in detail a scientific research report (i.e., an empirical article) on an issue related to the topic covered that day (sociocultural theories) and discussing how to read and interpret scientific results. This article is already a part of the assigned readings and is included in the Coursepack Volume 1. This exercise will teach you something about the course content (how social interactions drive cognitive development) AND will provide you some guided experience in reading and evaluating research reports in scientific journals, which you will need to do in your paper. After this class period, you will find that there are additional empirical papers included in the required course reading, thus you will be using these skills for more general purposes in this course as well.
4. **Tuesday, October 12. Term Paper Rough Draft due /In-class Review and Analysis.** A rough draft of your term paper on your selected topic is due this day. At a minimum, this rough draft should include descriptions of the research in each of your 4 articles and should also include some discussion of the limitations and/or strengths of each study. During class, you will work with a group of students who have selected the same topic as you. The goal will be to share your rough drafts, and to discuss and challenge each others arguments about the “reader question” you are answering. This assignment is worth 25 points: 5 pts for each article you discuss in your rough draft and 5 pts for participating in the class session.
5. **Tuesday October 26. Term Paper due.** Submit via SafeAssign link on Blackboard. The Term Paper is worth 100 points. The graduate student fellows will be available for individual writing consultations before this date- signup through Blackboard.
6. **Thursday, November 11. Optional Term Paper Rewrites Due.** You may revise your paper (new grade to be averaged with old grade) and resubmit it by November 11. The graduate student fellows will hold (optional) individual consulting hours before this date to work with you on your revisions and/or constructing your Advice Column- signup through Blackboard.
7. **Tuesday November 23. Advice Column Due.** Using your analysis of the empirical literature from your Term Paper, now write an Advice Column providing practical recommendations to parents in response to the reader question, using the empirical findings to support/justify your recommendations. Recommended length is similar to that of the Application essay- between 500 and 900 words.
8. **Wednesday, December 15. Optional Advice Column Rewrites Due.** You may revise your advice column and resubmit it by the day of the final exam.

## TOPICS

\*\*\*Note, we have identified one empirical article for each topic and posted the entire article on Bb.

1. *I am a stay-at-home father to three children, ages 5 months, 3 years, and 13 years. My mother-in-law keeps telling me that she thinks my kids are not getting enough sleep, and that if we don't get them on a good schedule with enough sleep it will interfere with their ability to learn and develop cognitively. I have to admit that my kids do stay up late (they just seem to be night-owls) and we get up early so that my 13-year-old can get to school by 8am, and I like to keep busy with the little ones during the daytime so they don't always get naps. But even when I try to get the kids to sleep more, they resist. I think my mother-in-law is just being judgmental and overly rigid here, but it would be concerning to me if my children's intellectual development were being affected by their lack of sleep. Is this just an old wives' tale? –Tired in Topeka*  
 Gomez, R., Bootzin, R., & Nadel, L. (2006). Naps promote abstraction in language-learning infants. *Psychological Science, 17*, 670-674.

2. *My 11-month-old son's daycare center is really into "Baby Signs," or teaching babies sign language. They've already taught him how to sign "all done" and "more" and they've just sent home a pamphlet with a bunch of other signs that they want me to use with him. The caregivers think that teaching children to communicate nonverbally is normal, and that it keeps them from getting frustrated and makes the day run smoother, but I am really concerned that this will slow my son's spoken language development. After all, if he can sign "milk" why would he bother trying to learn how to say "milk?" So should I agree to use signs and gestures with my baby or not? **Concerned in Cincinnati***

Goodwyn, S.W. & Acredolo, L.P. (1993). Symbolic Gesture versus Word: Is There a Modality Advantage for Onset of Symbol Use? *Child Development, 64*, pp. 688-701.

3. *I am a new father and I want the best for my baby daughter. I want to give her the head start in life I never had, so that she can get a scholarship to college and get a good job. I've seen all kinds of great products out there, like Baby Einstein videos and Leapfrog electronic toys, that are supposed to be able to teach babies all sorts of amazing things- a second language, music and art appreciation, how to read, and all sorts of facts. The problem is that these products are expensive, and money is really tight in our family right now. Is it really worth it to invest in all these early learning videos and toys? If my daughter doesn't get exposed to these videos and electronic toys as an infant or toddler, is she going to be behind her peers later? **Worried in Washington***

Kuhl, P.K., Tsao, F.M., & Liu, H.M. (2003). Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning. *Proceeds of the National Academy of Science, 100*, 9096-9101.

4. *I am a single mother to a young daughter and I want her life to be better than mine has been. I never completed high school, mostly because I really struggled in math, and this has seriously affected my career opportunities and my self esteem. Now that my daughter is starting to learn more about numbers at home and in preschool, I've been thinking a lot about how I could help get her on the right track in math. I also know that American kids in general lag behind children from many other countries (e.g., China) in math skills, so this seems to be a widespread problem. Many parents have gotten the message that reading with your child will help with reading and verbal skills, but what can I do to help make sure my daughter succeeds in math too? **Numerically-Challenged in Charleston***

Vandermaas- Peeler, M., Nelson, J., Bumpass, C., & Sassine, B. (2009). Numeracy-related exchanges in joint storybook-reading and play. *International Journal of Early Years Education, 17*, 67-84.

5. *Six months ago, something awful happened to my family. My husband was home alone with my 16-month-old daughter, Libby, when an intruder broke in and killed him. The intruder stole all of our prescription medications and our plasma TV, but the police still don't know exactly what happened and have no suspects. I am still struggling to recover from the loss of my husband and I have so many questions. Is it possible that Libby actually remembers what happened? Now that she is talking could she tell us what she saw? I am not sure if I want her to remember this traumatic event, but finding the killer might help bring some peace to our lives. **Still Grieving in Greensboro***

Cheatham, C.L., & Bauer, P.J. (2005). Construction of a more coherent story: Prior verbal recall predicts later verbal accessibility of early memories. *Memory, 13*, 516-532.