College of Education
Department of Human Development & Quantitative Methodology

EDHD 840: LANGUAGE AND LITERACY DEVELOPMENT
Fall 2016

Monday 1:00 – 3:45pm

Key 0117

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Course Description

This course is designed to introduce students to early language and literacy development from a developmental science perspective. My goal is to familiarize you with how language development is studied why it is important to study. We will focus on cognitive mechanisms of learning and connect the study of language to the study of development more generally.

Course Components

Weekly Participation	30%
Leading Discussion [2x]	20%
Midterm Assignment	15%
Final Paper & Presentation	35%

Participation

I expect everyone to participate every week. My goal is to foster a culture of free intellectual exchange and exploration. **If you have difficulty talking in class, please meet with me as soon as possible so that we can discuss strategies.** Each class will be a mixture of me "lecturing" and general discussion, for which strong preparation (a thorough and critical reading of all the papers) will be required. **You should come prepared to class with at least 2 questions/comments/ideas to share each week.**

In-class discussion leaders

Each week one student will serve as the discussion leader. Your goal in this role is to facilitate the class discussion about the articles we have read and related topics. The discussion leader should 1) *briefly* summarize the main points of the articles (working under the assumption that everyone has read them and given them some thought already). You are not expected to bring in additional sources, though if you come across something you want to include you are welcome to; 2) make connections to readings/topics in other weeks as appropriate; 3) pose questions to the class and help direct the flow of the conversation. Putting together slides or handouts is NOT required, though you may if you wish (for example, if there are figures or tables from the papers

you want to highlight, or if you want to lay out a visual representation of a theoretical model or sequence of findings). Please do not make slides that include bulleted lists of points, as these tend to squelch rather than facilitate discussion.

Things to consider while reading
(whether you are leading the discussion or not)

- What is the main idea or big-picture take-away from the article? How would you explain it to your grandmother?
- What is the hypothesis? Why is *that* the hypothesis?
- Does the method adequately test the hypothesis? Are there alternative explanations for the findings? How would you tease those apart?
- What other *kinds* of evidence would be nice/necessary to fully support the argument? (e.g., a corpus analysis to complement an experiment; a computational model to articulate a theory; an experiment that could investigate causation)
- What is the next/another experiment to do to follow-up on these findings?
- **In what ways do the assigned papers relate to one another? How do the studies/approaches/hypotheses relate to the theories we've discussed or to topics we've covered in other weeks?**

Midterm Assignment
The midterm assignment will be an at-home written exercise, answering no more than 2 questions with around 500-1000 words each.

Final Project: Paper & Presentation
The final project is a proposal (in both oral presentation and written form) for an empirical study of language and/or literacy development. The project should directly engage the course material by critiquing and/or elaborating on one of the papers read for class. Any topic covered in class is acceptable, and any form of study is acceptable (e.g., experiment, corpus analysis, computational model). You are not required to do extra reading, but you may bring in additional sources if you wish. You should not spend significant time summarizing any papers included in the course, but any additional sources should be summarized (as I may not be familiar with them!). Your *hypothesis* must be clear, as must the way in which it relates to the focal paper. While you do not need to fully describe every detail of your proposed method, you must make it clear how you will test your hypothesis (e.g., provide multiple examples of stimuli, a justification for a particular participant sample, a justification for the type of computational model, etc.). You should also consider how you will interpret your results (i.e., what types of alternative explanations might be possible and what would they imply).

Presentation: All students will give a presentation during the final class session that covers their proposed study. Presentations will be approximately 15 minutes long with an additional 5 minutes for discussion. Extensive PowerPoints are not required, but you should think carefully about what kind of visual material will help your classmates (and me) follow your reasoning.

Paper: The paper describing your proposed research should be no more than 2000 words. You may include figures as necessary. All citations should adhere to APA format. You are encouraged to incorporate the feedback from the class discussion of your project into your paper as appropriate.

No extensions will be granted for the paper or presentation (other than those adhering to the university policy for excused absences). It is possible to turn in the paper and do the presentation early if you anticipate a conflict with the dates provided in the syllabus.

University Policies

Please refer to the university policies website for all course related university policies.

http://www.ugst.umd.edu/courserelatedpolicies.html

All students are expected to be familiar with these policies, including that on plagiarism and academic integrity.

Overview of Course Content

Exact dates of each topic subject to change based on class interest.

Week	Date	Topic	Discussion Leader
1	29-Aug	Introduction to Language	Alexa
2*	**12-Sep**	Theories of development and language acquisition	Alexa
3	19-Sep	Input to infants and early speech processing	
4	26-Sep	Recognizing words in fluent speech	
5	3-Oct	Linking words to referents	
6	10-Oct	Basic Syntax: Sequence learning & lexical categories	
7	17-Oct	Syntactic structure and what is learned/learnable	
8	24-Oct	Midterm synthesis [midterm assignment due 8am 10/27]	Alexa
9	31-Oct	Predicting variation in language acquisition	
10	7-Nov	Group differences in language acquisition	
11	14-Nov	Foundations of Literacy	
12	21-Nov	Models for reading *1-page proposal for final project due*	
13	28-Nov	Variation in reading outcomes	
14	5-Dec	*End of semester synthesis* *Peer feedback on proposals due by end of day*	Alexa
15	12-Dec	Presentations	-
	15-Dec	*Final paper due by 8:00am to Canvas*	

Readings by Week

The reading list may be revised as the course goes along. All readings will be made available on Elms.

WEEK 1: Organizational issues and background

Pinker, S. (1999). Words and rules: The ingredients of language. Basic Books. **Chapters 1 and 2**

WEEK 2: Theories of development and language acquisition

Beckner, C., Blythe, R., Bybee, J., Christiansen, M. H., Croft, W., Ellis, N. C., ... & Schoenemann, T. (2009). Language is a complex adaptive system: Position paper. *Language learning*, *59*(s1), 1-26.

Blumberg, M. (2006). *Basic Instinct: The Genesis of Behavior*. NY: Basic Books CHAPTER 5 "Developing an Instinct"

WEEK 3: Input to infants and early speech processing

Kuhl, P. K. (2004). Early language acquisition: Cracking the speech code. *Nature Reviews Neuroscience*, 5, 831-843.

Goldstein, M. H., & Schwade, J. A. (2008). Social feedback to infants' babbling facilitates rapid phonological learning. *Psychological Science*, *19*(5), 515-523.

Maye, J., Werker, J. & Gerken, L. A. (2002). Infant sensitivity to distributional information can affect phonetic discrimination. *Cognition*, 82: B101-B111.

Werker, J. F., & Tees, R. C. (1984). Cross-language speech perception: evidence for perceptual reorganization during the first year of life. *Infant Behaviour and Development, 7,* 49–63

WEEK 4: Recognizing words in fluent speech

Jusczyk, P., & Aslin, R. (1995). Infants' detection of the sound patterns of words in fluent speech. *Cognitive Psychology, 29*, 1-23.

Saffran, J., Aslin, R., & Newport, E. (1996). Statistical learning by 8-month-old infants. *Science, 274,* 1926-1928

Fernald, A., & Hurtado, N. (2006). Names in frames: Infants interpret words in sentence frames faster than words in isolation. *Developmental science*, *9*(3), F33-F40.

Yurovsky, D., Yu, C. & Smith, L.B. (2012). Statistical speech segmentation and word learning in parallel: scaffolding from child directed speech.

WEEK 5: Linking words to meanings

Markman, E. (1990). Constraints children place on word meanings. *Cognitive Science*, 14, 57-77.

Smith, L.B., Jones, S.S., Landau, B., Gershkoff-Stowe, L. & Samuelson, L. (2002). Object name learning provides on-the-job training for attention. *Psychological Science*, 13, 13-19.

Horst, J. S., Scott, E. J. & Pollard, J. A. (2010). The role of competition in word learning via referent selection. *Developmental Science, 13*, 706-713.

Scott, R. M. & Fisher, C. (2012). 2.5-year-olds use cross-situational consistency to learn verbs under referential uncertainty. *Cognition*, *122*(2), 163-180.

Naigles, L. (1990). Children use syntax to learn verb meanings. Journal of Child Language, 17, 357-374.

WEEK 6: Basic syntax: sequence learning & lexical categories

Marcus, G.F., Vijayan, S., Bandi Rao, S., & Vishton, P.M. (1999). Rule learning by seven-month-old infants. Science, 283, 77-80.

responses to Marcus et al. (don't need to read all of them exhaustively – get the main idea or focus on what most interests you)

Saffran, J. R., Pollak, S. D., Seibel, R. L., & Shkolnik, A. (2007). Dog is a dog is a dog: Infant rule learning is not specific to language. *Cognition*, *105*(3), 669-680.

Gomez, R. L., & Gerken, L. (1999). Artificial grammar learning by 1-year-olds leads to specific and abstract knowledge. *Cognition*, *70*(2), 109-135.

Shi, R., Werker, J. F., & Morgan, J. L. (1999). Newborn infants' sensitivity to perceptual cues to lexical and grammatical words. *Cognition*, 72, B11-B21.

Mintz, T. H. (2003). Frequent frames as a cue for grammatical categories in child directed speech. *Cognition*, 90, 91-117.

WEEK 7: Syntactic structure: what is learned and what is learnable

Lidz, J., Waxman, S. R. & Freedman, J. (2003). What infants know about syntax but couldn't have learned: Experimental evidence for syntactic structure at 18 months. *Cognition*, 89, B65-B73.

responses to Lidz et al. (don't need to read all of them exhaustively – get the main idea or focus on what most interests you)

Tomasello, M. (2000). The item-based nature of children's early syntactic development. *Trends in Cognitive Sciences*, 4(4), 156-163.

Seidenberg, M.S., & MacDonald, M.C. (1999). A probabilistic constraints approach to language acquisition and processing. *Cognitive Science*. 23, 569-588.

Chang, Dell & Bock (2006) Becoming Syntactic

WEEK 8: MIDTERM SYNTHESIS

Reading TBD

Midterm assignment due on/before Thursday morning

WEEK 9: Predicting variation in language acquisition

Tsao, F. M., Liu, H. M., & Kuhl, P. K. (2004). Speech perception in infancy predicts language development in the second year of life: A longitudinal study. *Child Development*, 1067-1084.

Newman, R., Ratner, N. B., Jusczyk, A. M., Jusczyk, P. W., & Dow, K. A. (2006) Infants' Early Ability to Segment the Conversational Speech Signal Predicts Later Language Development: A Retrospective Analysis. *Developmental Psychology*, *42*(4) 643-655.

Weisleder, A., & Fernald, A. (2013). Talking to children matters early language experience strengthens processing and builds vocabulary. *Psychological Science*, *24*(11), 2143-2152.

Rowe, M. L., & Goldin-Meadow, S. (2009). Differences in early gesture explain SES disparities in child vocabulary size at school entry. *Science, 323*, 951-953.

XX Kidd, E. (2012). Implicit statistical learning is directly associated with the acquisition of syntax. *Developmental Psychology*, *48*(1), 171.

WEEK 10: Group differences in language acquisition

Mayo, J., & Eigsti, I.M. (2012). A comparison of statistical learning in school-aged children with high functioning autism and typically developing peers. *Journal of Autism and Developmental Disorders, 42(11)*, 2476-2485. doi: 10.1007/s10803-012-1493-0.

de Marchena, A., Eigsti, I.M., Worek, A., Ono, K.E., & Snedeker, J. (2011). Mutual exclusivity in autism spectrum disorders: Testing the pragmatic hypothesis. *Cognition, 119,* 96-113.

Evans, J. L., Saffran, J. R., & Robe-Torres, K. (2009). Statistical learning in children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, *52*(2), 321-335.

Plante, E., Gomez, R., & Gerken, L. (2002). Sensitivity to word order cues by normal and language/learning disabled adults. *Journal of Communication Disorders*, *35*(5), 453-462.

WEEK 11: Foundations of literacy

Snow, C., Burns, S., & Griffin, P. (Eds.) *Preventing reading difficulties in young children.* Chapter 2 (pp 41-83).

Anthony,J. L. & Francis, D. J. (2005). Development of Phonological Awareness. *Current Directions in Psychological Science*, 14, 255-259.

Whitehurst, G. J. & Lonigan, C. J. (1998) Child development and emergent literacy. *Child Development. Vol 69(3)* 848-872.

WEEK 12: Models for reading

Harm, M. W. & Seidenberg, M. S. (1999). Phonology, reading acquisition and dyslexia: Insights from connectionist models. *Psych Review, 106,* 491-528.

WEEK 13: Variation in reading outcomes

Snow, C., Burns, S., & Griffin, P. (Eds.) *Preventing reading difficulties in young children.* Chapters 3-4 (pp 87-133).

Vellutino, F.R., Fletcher, J.M., Snowling, M.J., & Scanlon, D.M. (2004). Specific reading disability (dyslexia): What have we learned in the past four decades? *Journal of Child Psychology and Psychiatry*, 45(1), 2-40.

Oliver, B.R., Dale, P. S., & Plomin, R. (2005). Predicting literacy at age 7 from preliteracy at age 4. *Psychological Science*, 16, 861-865.

WEEK 14: End of semester synthesis
Reading TBD

WEEK 15: Project Presentations
No reading