

<p>Ellen Cushman cushman@msu.edu Office hours: T/Th 1 PM-3:00 PM, and by appointment</p>	<p>TE 918: Disciplinary Knowledge and School Subjects</p> <p>http://angel.msu.edu</p> <p>T 9:10 AM to 12:00 PM 214 Berkey Hall</p>
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Objectives

This course has a twofold purpose: to explore the nature of disciplinary knowledge (e.g. how it comes to be made, contested, extended, and valued) and to understand the correspondence between disciplinary and school knowledge. We'll begin by exploring a small selection of epistemological pathways to disciplinary knowledge in the sciences and humanities: classification, inquiry, and experience. Other pathways include, but aren't limited to, dialogue, imagining, metacognition, comparison, interpretation, narrative, and modeling—any one of which might be something you and your group choose to present for the last part of the semester. Epistemological pathways are rhetorical, multimodal, ruled by conventions, and when used well, accrue various kinds of symbolic and social capital. Throughout the semester, we'll explore the theories behind disciplinary knowledge at the same time as we consider applications for and ramifications of these.

Epistemological pathways to knowledge making	Implications for schooling, discipline formation, social and institutional structures, and learning
classification	taxonomies, episteme, categories, objectification, reductionism
inquiry	truth, scientific method, paradigms, reliability, validity, research
experience	activity, local knowledges, mediations, forms of intelligence
Your choice	

While we won't be able to explore all the epistemological and sign mediations that shape learning and knowledge making, my hope is that the selections chosen here will allow you to 1) research an epistemological framework and schooling, curricular or pedagogical practice of your choice; 2) characterize the strengths and limitations of this framework; 3) explore the social, cultural, and institutional influences this framework has and for whom; and 4) propose useful interventions that build upon the strengths and address the limitations of the epistemological pathway you choose to explore.

In the meantime, you will be exploring these relationships through a small group project. Participants will organize into subject-specific groups and complete a term-long project examining the relationship between a specific school subject and its related discipline(s). Within these smaller groups, participants will be able to consider the collective course discussions in the context of a subject matter of particular interest to them (literacy, mathematics, biological or physical sciences, etc.). These projects will become the basis for (y)our learning at the end of the semester around topics interesting to you.

Beginning Explorations of Disciplinary Knowledge

Our purposes in the first half of the class include developing a common language for talking about knowledge in disciplines. I anticipate that our discussions of these different aspects of disciplinary knowledge will produce a common set of concepts, intellectual tools, and orienting questions, though I've organized the course to facilitate our exploration of four overarching questions. Our consideration of classification, inquiry, and experience should be useful for examining disciplines, their formation, their relations to school subjects, and their influences on society in ways that can guide your work in the whole class and smaller groups. I also plan to encourage a dialectic between what the small groups are learning and what the larger class is discussing.

- 1) *The nature of knowledge in different domains:* What sort of knowledge is sought and produced? What are the objects of inquiry, the aims of engaged work and creativity? What kinds of claims are made and what forms do they take? What are some of the core terms for knowledge (e.g., interpretation, conjecture, theory)? How do these terms vary across disciplines?

- 2) *How is knowledge developed?* Where do new ideas come from? How do scholars explore? What sorts of tools and materials do they use in their explorations? How are an individual knowledge maker's intellectual pursuits shaped by trends, methodological innovations, social questions, and personal history?
- 3) *What makes something true or accepted?* On what basis do scholars come to believe something? How are claims inspected, to what end, and what constitutes evidence or proof? What does argument and contestation look like? How do new claims relate to previous accepted knowledge?
- 4) *What is the role of community?* What kinds of knowledges exist in communities, disciplines, and schools? How might scholars and teachers work with community-based knowledge makers to develop collaborative knowledge products? How do communities shape knowledge production and what counts as useful knowledge? In what ways do local knowledges come to be (de)valued in school and academe and why?
- 5) *What is the rhetoric of a field and how is it used?* What audiences participate in, receive, and engage with the knowledge work of a field? What kinds of discursive conventions arise from the audience's demands? How can audiences from different disciplines or areas of society be reached? What role does reading play, and what do scholars read? What kinds of writing do scholars do, and what sorts of texts are produced? How do scholars talk to one another, and about what aspects of the work?

Throughout the course, we will use these questions to ground our discussions and readings.

Developing our Intellectual Community

The reading, writing, inquiry, and discussion in this class depend upon your engagement and willingness to be both a teacher and student as I am. I have much to learn from your expertise and look forward to doing so. Likewise, I hope that your participation in this class will help us collectively build much of the course materials.

To facilitate this community building, I've made you all editors in our Angel site. Each of the three themes will have folders into which we will submit curricular activities, discussion forums, and readings. We'll sign up for discussion leader positions at the beginning of class and I'll model up front one way in which you might run class. You are welcomed and encouraged to share with me your discussion agenda before the class you're assigned—I'll respond to it with feedback and suggestions and make this a top priority.

You'll also be posting your writing to these folders and your groups will create and develop folders of your own on the site. If you would like to give a small writing assignment before the class that you're assigned to teach, please do so 7 days before your scheduled class session. Please also find ways to integrate these ideas and writings into the activities and learning of the class. Your group's work will be central to the last part of the semester and so you should start building the content of that curricular unit for our class ASAP.

As we develop the intellectual community of class, it will be important for us to respect each other's ideas and engage in what Peter Elbow has called the believing and doubting strategy. Professor Wilson, who has taught this course in the past, described perfectly this strategy in her Spring 2005 syllabus: "Listening carefully, treating ideas with respect and interest, raising and responding to questions, sharing the floor -- all these will matter in constructing an environment where satisfying and challenging intellectual work can take place. One part of exploring an idea or an argument is to attend closely to it to understand its logic, intention, and meaning. Listening generously, assuming that ideas and claims are made for good reasons, is crucial to thinking well. Another part is to be skeptical, to consider what is missing or logically flawed. Using both -- generosity (often associated with giving people time to explain themselves) and skepticism (often associated with asking hard questions) -- contributes to careful unpacking of ideas and to good thinking" (4).

Course Requirements and Grading

Attendance and participation

You will be asked to help make this class work well through your strong participation. I'm seeing you as teachers who are quite capable of engaging a class in the readings. Teaching others to understand and

engage a reading also helps you learn the materials well. Early in class, please sign up to lead two class discussions on a topic from our readings. Two times over the semester, you will be responsible for leading the discussion and developing activities of one-half of the class period. To effectively lead this discussion, you will want to prepare handouts and other materials on angel that explain what our agenda is for the day's class, what questions we'll explore, and a set of activities you want us to engage in to help us get into the day's readings. If you want to talk to me about your ideas for class ahead of time, I would welcome that opportunity and indeed strongly encourage it. In addition, you will be responsible for all the readings and engaging in the activities each day of class.

Regular attendance and participation in discussion is essential to the development of our intellectual community. To that end, you will be allowed to miss two classes without penalty. If you miss more than two classes, you will lower your final course grade by .5 grade points for each class missed beyond the allotted number. If you have a medical or personal reason for not being in class, please let me know and document it as best as possible. I am very flexible when the excuse is legit.

Self-Determined Writing Assignment

By the second class, please write a 1-page proposal for the writing that would be most useful to you in this class. The writing should be at least 15 pages, include additional readings to the ones assigned here, and be suitable for audiences beyond this class. Your choices could include informal opinion pieces for the back page of the *Chronicle* and a short presentation paper for AERA, NRA, NCTE etc. It could include a series of book reviews that you would like to submit to pre-selected scholarly journals of your choice. It could include a section of your dissertation prospectus or literature review. Whatever you choose your 1-page typed proposal for this writing that should include the following information for us: 1) who is the audience of this piece; 2) what is your purpose; 3) what rhetorical exigencies are you addressing (what is the problem, challenge, nature of the situation that you're writing in, in other words, how you might answer the so what question—so what, why is your work significant?); 4) why this is an important or helpful piece for you to write; 5) a timeline for completion that has due date no later than 3/27.

Final Group Disciplinary/School Knowledge Project

In subject matter groups, you will examine the similarities and differences between disciplinary and school knowledge around an epistemological pathway of your choice that's relevant to your subject.

Your group will develop the curricular materials, learning objectives, and activities for the end of the semester as you explore with us your chosen epistemological pathway.

Each group will also meet with me at least twice during the term (once in February and once again in late March). Your group project will include a paper and a curricular unit for our class both due on the day your group will present:

1. **Paper:** A theoretical overview of the particular epistemological pathway in a paper of 10-12 pages with works cited for me. This paper is only for me, though sections of it you may want to present to class. This paper will include
 - a. An introduction to the theory of knowledge
 - b. A consideration of how it has been used, contested, revised in a discipline
 - c. An analysis of the larger social, cognitive, institutional, or cultural ramifications that such a knowledge making strategy has
 - d. A suggestion for ways in which your school knowledge project might address the strengths and limitations of such knowledge making practices.
2. **Curricular Unit**
 - a. A set of readings to assign to the class for discussion and learning.
 - b. A set of activities you would like the class to engage in during your class time.
 - c. An analysis of school curricula, standards, technologies, institutional arrangements, and/or pedagogies that are influenced by this epistemological framework.

Final grades in the class will be determined as follows:

class participation	25%
self-determined essay	25%
final paper	25%
final curricular unit	25%

Required Readings

This course is book-heavy. Readings include both books that are readily available on line (e.g., Barnes and Noble (<http://www.barnesandnoble.com/>), Amazon.com (<http://www.amazon.com>), etc. and in bookstores, as well as articles. Many of them should also be available through used bookstores (you might want to check www.abebooks.com), as well as the university's library on reserve for our class.

We will also make it a practice to recommend additional readings of possible interest to the group. These will be posted as a course document on the angel website.

Books (you will want to get these immediately)

- Bruner, J. (1960/1966). *The process of education*. Cambridge: Harvard University Press.
 Dewey, J. (2001). *The School and Society: The Child and the curriculum*. Dover.
 Deloria, V. and Wildcat, D. (2001). *Power and Place: Indian Education in America*. Fulcrum.
 Foucault, M. (1982) *The Archeology of Knowledge*. New York: Pantheon.
 ---. (1994). *The Order of Things*. NY:NY, Vintage.
 Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
 Rose, Mike. (2006). *An Open Language: Selected Writing on Literacy, Learning, and Opportunity*. Boston, MA: Bedford.
 Smith, Barbara Herrnstein. (2006). *Scandalous Knowledge: Science Truth and the Human*. Durham, NC: Duke UP.
 Wilson, E. O. (1998). *Consilience: The unity of knowledge*. New York: Knopf.
 Vygotsky, L. (2006). *Mind in Society* (new edition). Boston, MA: Harvard UP.

Articles and book chapters (these will all be posted on the course Angle site)

- Aristotle, selections from *Categories, Rhetoric, and Parts of Animals*.
 Committee on Development of an Addendum to the National Science Education Standards on Scientific Inquiry. "Inquiry and the National Science Education Standards: a guide for teaching and learning." Center for Science, Mathematics, and Engineering Education, National Research Council.
 New London Group. Pedagogy of Multiliteracies. *Harvard Educational Review*.
 Moll, Luis. Selected writings.
 Smagorinsky, Peter. Selected writings.
 Deans, Tom.
 Anderson, Daniel.

Weeks	Themes	Readings Due	Homework, Assignments & Activities by week
1 –4 1/9-1/30/	Classification Taxonomies, reductionism, objectification, ordering, episteme, observation	Due 1/16 Aristotle Categories: Books 1 and 2 Rhetoric: Book 1, parts 1-3 On the Parts of Animals: Book 1, parts 1-3 (Aristotle all on Angel) Due 1/23 Foucault, chps. 5 & 10 from <i>The Order of Things</i> and Part 2 all & Part 4.6 from <i>The Archeology of Knowledge</i> . Due 1/30 Deloria and Wildcat, all	1 Intros, form groups, map what we know re: disciplines. 2 search taxonomies and eugenics in bio/ag index. Post examples of these for class discussion. 3. develop a metatheory of how classifying works. 4. What influences has Western reductionism had?
5-7 2/6-2/20	Inquiry Scientific method, Truth, Reliability, Validity,	Due 2/6 Kuhn, all. and Inquiry and the National Science Standards (angel). Rose from part 1, intro, "Complexity,	5. Paradigms—how are these related to episteme? 6. How have science and the humanities

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	Paradigms, Paradigm shifts as experienced, Social construction	Rigor,..." & from part 3 intro, & "Narrowing" Due 2/13 Wilson, all. Due 2/20 Smith, all. Rose Part 2 all.	constructed knowledge? 7 & 8 What influence did post modernism have on knowledge making? 9. How is one knowledge maker's work shaped by paradigm shifts?
08-12 2/27-3/27	Experience Multimodality, activity, experiential learning, locations of knowledge, Play	Due 2/27 Vygotsky, all. Moll (angel) Due 3/6 Spring Break. Due 3/13 Dewey, all. Rose, Part 4 intro, intro to PL, "Baltimore." Due 3/20 Bruner, all; Rose Part 5 intro, "our hands", & "method" Due 3/27 Multiliteracies (Angel); Smagorinsky (Angel); Mediation in learning.	10. How do our bodies, activity, and media facilitate learning? 12. Connections between knowledge, curriculum, pedagogy. 13. Experience, learning, in school. 14. Mediation tools in disciplinary learning and knowledge making. Workshop for group presentations.
12-end 4/3-4/24	Your choice	Readings/writings assigned by groups	