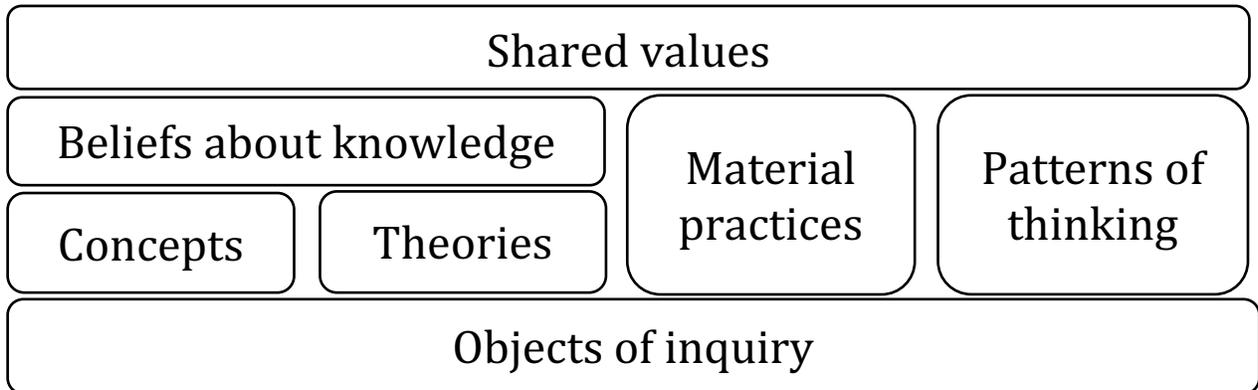


Components of a Discipline

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While there is no firm consensus regarding what constitutes a discipline, the graphic below attempts to identify the generally agreed upon components of a discipline's "epistemic culture" (Cetina 1999), which is its culture of creating and evaluating knowledge. Below each description is a list of questions that is intended to provoke thinking about that specific disciplinary component. These questions can be used to help you reflect on your discipline during course design, or you might consider having your students directly engage on some of these questions in class discussion or in a reflective assignment.



Shared values are broad preferences concerning appropriate courses of action for scholars or outcomes of disciplinary work. Thomas Kuhn (1962/2012) argues that they are the most widely shared element of scholarly practice and they typically become visible only when the members of a particular community enter a crisis or are forced to choose between incompatible ways of practicing their discipline (184).

- What is the purpose of knowledge produced in the field (e.g. understanding, explanation, critique, etc...)?
- Do scholars in the field have an obligation to the public? In what ways (if any) does the public participate in the work of the discipline?
- Should scholars engage in advocacy related to their research?
- Should potential impacts influence the course of research or scholarship in the field?

Beliefs about knowledge (i.e. epistemologies) are a discipline's primary assumptions about what can be known about the world and how it can be known (Repko 2008, p. 89). These beliefs help determine what will be accepted as viable explanation of a problem or question. They also aid in the selection of future unsolved problems and in the evaluation of the importance of each (Kuhn 2012, 183).

- What kinds of information constitutes evidence in the field? What kinds of information is considered invalid? Why?
- Is replication of findings necessary for research to be valid?
- Is it valid to use one's personal perspective to frame a research question or hypothesis?
- Can the world under investigation be reduced to individual, independent elements?
- Are there limitations of knowledge produced by the discipline?
- Must theories deployed in a research process be confirmed by empirical data gathered?
- Does the researcher influence or shape the object under investigation?

Concepts are defined by Janet Donald (2002) as units “of thought or element[s] of knowledge that allows us to organize experience” (11). These may include vocabularies, but they may also be what Kuhn (1962/2012) argues are more generalized expressions that are “deployed without question or dissent by group members, which can readily be cast in a logical form....” (182).

- What are the major concepts that contribute to the discipline? What are others that may be marginalized, not widely accepted, or have been abandoned through time? Why?
- Are there specialized symbol systems (e.g. notation, equations) used by scholars in the field?

Theories refer to a generalized scholarly explanation about some aspect of the natural or human world, how it works, and why specific facts are related (Repko 2008, 101). Scholarly communities range not only in the types of theoretical approaches on which they draw, but also the ways in which theories are deployed and their assumptions about the role of theories in their work (Lamont 2009, p. 54).

- What is “theory” in your field and what role does it play in knowledge production and meaning-making activities?
- Is an explicitly stated theory necessary to begin scholarly activity in your field?
- What are the major theories that contribute to the discipline? What are others that may be marginalized, not widely accepted, or have been abandoned through time? Why?

Material practices are a set of organized or regulated activities aimed at the illumination of the phenomena under investigation. Disciplines merge specialized activities (methods) with particular kinds of materials (e.g. technologies, artifacts, objects, material resources, etc...) in a process of inquiry.

- What are the primary methodologies used in the field (e.g. participant-observation, symbolic logic, close reading)? How are they similar to or different from other fields?
- What are the primary materials or technologies used in conducting the work of the field?
- What are the accepted indicators for demonstrating or communicating knowledge in the field (e.g. musical score, lab report, proof)?

Patterns of thinking include the process used reflect on, analyze, and evaluate our practices and findings, including its criteria for validity, as well as the processes we use to develop ideas that are unique, useful, and worthy of further elaboration.

- How do you know a research question is worth pursuing?
- What criteria are used to evaluate rival knowledge claims or judge creative products?
- Are hypotheses used in your field? If so, how? If not, why not?
- Are the types of questions guiding research in your field constrained by the level of certainty expected in the answer?

Objects of inquiry are the aspects of existence and experience that are of interest to scholars and are susceptible to scholarly description and explanation (Szostak 2004, 30-31). Thomas Kuhn (1962/2009) describes something similar in his notion of disciplinary “exemplars” which take the form of both concrete problem-solutions that students encounter through a process of being disciplined and “technical problem-solutions found in the periodical literature” (186).

- What are the primary objects of research in the field?
- Are natural, cultural, or social contexts important to consider when investigating phenomena in your field?
- What is the spatial and temporal scale of your research object?