

Implications for Six Elements of Epistemology of a Shift Toward More Visible Processes

Parameter	Print Culture <i>(Focus on Knowledge Products)</i>	Digital Culture <i>(Focus on Knowledge Processes)</i>
1. <i>Knowledge</i>	Knowledge products are not obviously connected to the process that created them.	Knowledge products are more immediately embedded within the knowledge community. Closure is harder to achieve, so knowledge seems to be more an ongoing process than an object.
2. <i>Teaching</i>	Working with disembodied knowledge objects (e.g., books). Products seem to be far removed from process of knowledge development.	More views of knowledge-in-process available. Easier to get students involved in co-creation of knowledge.
3. <i>Collaboration</i>	Harder to see social creation of knowledge: it occurs more one-to-one or in small groups. Distance discourages collaboration. Knowledge in many fields tends to be identified with an individual.	Communal collaboration more apparent. Easier to recognize social nature of knowledge. Collaboration more likely to be the norm. Knowledge more likely to be identified with community.
4. <i>Pub/Authority</i>	Print publication costly so access limited by gate keepers (editors); publication is thus the privilege of a few and therefore takes on powerful sense of authority.	Lower cost of electronic publication and shortening of print publication cycle through aid of information technology result in greater access to publishing. Co-publication of some print elements with publication on the Web. Sense of authority of print publication is therefore reduced.

5. <i>Thinking</i>	Cognitive skills needed to produce knowledge products more highly valued: structural (linear, logical) thinking skills are favored.	Cognitive skills to produce consensus in a collaborative process of knowledge-building also valued. Thinking skills leading toward conversational congruence as well as hypertextual and associational thinking gain credence.
6. <i>Classroom</i>	The place where students encounter knowledge products as explained to them by teachers and where they are given guidance (and/or the tools) to create their own knowledge products.	The place where students encounter knowledge-building processes and are given guidance about how to participate in them.

("Primacy of process: Teaching and learning in a computer age," Trent Batson and Randy Bass, *Change*, Vol. 28, No. 2 (MarApr 1996), pp. 42-47)