

W(h)ither the Learning Sciences? An Acerbic Ruminant
Dor Abrahamson, University of California Berkeley

“Where is the science in the learning sciences?” Andrew Ortony

The field of the Learning Sciences (LS) was created in the 1980's by cognitive scientists who sensed a need to reinvigorate educational research, which, they worried, had become intellectually staid, pragmatically effete, and thus unfit to tackle educational problems of teaching and learning academic skills and subject matter content. By some views, LS is founded on three disciplinary pillars—cognition, sociocultural theory, and design. Drawing on these three disciplinary pillars, design-based research emerged as the LS flagship approach to educational scholarship, an approach where the practice of pedagogical R&D serves as a context for identifying and pursuing research questions germane to the field. Design-based research is intrinsically proactive—it is about going beyond perennial documentation of educational inequity; it looks to solve those problems.

Soon, in the LS annals, studies of cognition found a formidable ally in sociocultural theory. That took some negotiation, but I believe we are happily getting there. And so I am heartened by recent arguments from Anna Stetsenko, who, from the bastions of sociocultural theory, is re-reading Vygotsky as promoting transformative pedagogy. Vygotsky, whose oeuvre would foreground the role of cultural practices in forming children's cognition, was deeply interested in understanding the mind as a means of improving education. He even contributed to a dynamical systems theory of neuroscience, then an embryonic field. Like Piaget, Vygotsky understood that to mind the learning gap, we must mind the science of learning with empirical studies of cognition.

What the founders of LS did not, and perhaps could not, anticipate, is that cognition—their intellectual bread and butter, their rigorous workshop tool, their practicable tack on design—would gradually fall by the wayside in the LS agenda. There is an irony here. Cognition, along with studies of epistemology, had been the LS elusive obvious, the synthetic a priori, the stuff that goes without saying, the *raison-d'être* of the budding field. Cognition is the invisible waters that the founding mothers and fathers swam in, what they wished to infuse educational research with. Yet now, LS students can train, graduate, and flourish without ever seriously attending to the literatures of cognitive development, sensation and perception, memory, problem solving, etc., all indispensable stock constituents of what it takes to do research on individual learning in the sociocultural context. It is as though entire LS research projects have thrown out the baby's mind with its sociocultural bathwater.

A certain mindset threatens to pervade some forms of LS scholarship. Possibly borrowing from the polarized society we live in, this mindset creates an artificial binary opposition between cognition and everything else. Cognition seems to have become a vestige of a curious archaic epistemology that despises the social and the cultural, as if, for example, Vygotsky had not spent years studying biological cognition at the same time as he investigated social mediation. Any researcher studying the epigenesis of mind in the sociocultural context seems, today, to be considered out of touch and “missing the big picture.” This issue, I worry, is grounded in a category error confusing methodology, levels of analysis, epistemology, ideology, and social action. I'm calling for a recommitment to intellectual diversity in the Learning Sciences, in which we recognize that we need a variety of rigorous empirical scholarship to produce actionable accounts of transformative practice.