

March 16 2011 2:15 PM

By [Alison Gopnik](#)

Illustration by Alex Eben Meyer

Ours is an age of pedagogy. Anxious parents instruct their children more and more, at younger and younger ages, until they're reading books to babies in the womb. They pressure teachers to make kindergartens and nurseries more like schools. So does the law—the 2001 No Child Left Behind Act explicitly urged more direct instruction in federally funded preschools.

There are skeptics, of course, including some parents, many preschool teachers, and even a few policy-makers. Shouldn't very young children be allowed to explore, inquire, play, and discover, they ask? Perhaps direct instruction can help children learn specific facts and skills, but what about curiosity and creativity—abilities that are even more important for learning in the long run? Two forthcoming studies in the journal —[one from a lab at MIT](#) and [one from my lab at UC-Berkeley](#)—suggest that the doubters are on to something. While learning from a teacher may help children get to a specific answer more quickly, it also makes them less likely to discover new information about a problem and to create a new and unexpected solution.

What do we already know about how teaching affects learning? Not as much as (a) -4 (d) -4 (y) -4a5( ) -6 f-2 ( (ki) ) 1 (re) g(ki)N1

In the first study, MIT professor Laura Schulz, her graduate student Elizabeth Bonawitz, and their colleagues looked at how 4-year-

Knowing what to expect from a teacher is a really good thing, of course: It lets you get the right answers more quickly than you would otherwise. Indeed, these studies show that 4-year-olds understand how teaching works and can learn from teachers. But there is an intrinsic trade-off between that kind of learning and the more wide-ranging learning that is so natural for young children. Knowing this, it's more important than ever to give children's remarkable, spontaneous learning abilities free rein. That means a rich, stable, and safe world, with affectionate and supportive grown-ups, and lots of opportunities for exploration and play. Not school for babies.