

# Naturally Wrong

*Young children can learn some things effortlessly, but other learning must be taught.*

By Kieran Egan

One of the most fundamental principles of education's progressivist school of thought is the distinction between the natural and progressive and the forced and traditional. Progressivists see their task as how to replicate in schools the natural learning one sees in children's play.

While progressivist ideas originated in the 19<sup>th</sup> century, the same basic points continued to be repeated throughout the 20<sup>th</sup> century and are still dominating educational thinking in the 21<sup>st</sup> century. As the years go on, the constant re-echoes of these ideas tend to be presented as the novel, radical insights of the echoers.

In 1969 for instance, Paul Goodman complained of the increasingly unnatural schooling visited on children and announced the new program of the reformers to do away with the artificiality of schooling, by deschooling if necessary, so that children's natural learning could be released.

From different perspectives in the 1980, we have arguments by David Elkind and Neil Postman that claim that the currently dominant forms of education contravene the child's natural development and learning.

At the end of the 20<sup>th</sup> century, we began to find books continuing to claim that new research, now prominently under the label "cognitive science," has more adequately exposed how children learn and from this research new programs of education are articulated. Apart from some of the terminology, however, these new programs look very much like those being promoted in the 18<sup>th</sup> century.

Whole language, with its paradigm shifts and authentic learning, is a case in point. In short, commitment to the basic pedagogical principles of learning articulated 150 years ago has changed hardly at all in the intervening years.

The problem with progressivists' emphasis on natural learning, however, is that mother nature is a capricious pedagogue. She puts immense investment into ensuring that we learn a language, track moving objects efficiently with our eyes, classify flora, and so on, but she seems to care hardly at all about our mastering irregular Latin verbs (unless we are Roman children long ago) or basic algebra.

Recent research on infant cognition has revealed a surprising range of knowledge and intellectual competence. What infants can do, while surprising in light of millennia of theories that asserted the "blank slate" of the mind at birth, is nevertheless limited and quite precise.

As Howard Gardner puts it: "Try to get an infant to recognize faces upside down, or a toddler to speak a language which does not make phonemic distinctions or which requires that the child attends to every other word. You will soon discover the powerful, specific constraints on cognition in *Homo sapiens sapiens*."

Effortless ease in one kind of intellectual act goes together with incapacity in acts that can look very similar. That is, all learning is not alike. Some forms of learning are evolutionarily shaped to solve very precise and constrained problems, and consequently do not provide good models for general domain-unspecific learning.

The mind we have inherited from our evolutionary history is not one whose accumulation of knowledge and understanding proceeds in some gradual, regular, spontaneous, and undifferentiated way.

That the mind deploys some different modes for learning different things, particularly early in life, is an idea whose current prominence owes much to the work of Noam Chomsky.

Chomsky, observing some of young children's mistakes such as "I seed your feets," points out that it is common for children to misapply grammatical rules. Yet in learning certain forms of language, they virtually never make mistakes.

For example, if one child has a single doll and another child has three dolls, and you say, "Give me a doll" or "Give me the doll," even three-year-olds will not be confused about whom you are addressing.

Chomsky argues that because classical theories cannot account for these features of language learning, they must be explained by something else. The best candidate, he argues, is a part or parts of the brain "programmed" or genetically encoded for language learning.

That is to say, we don't simply have some general learning ability that we use to master language and then turn it to learning algebra or phone numbers or faces or names or what hairstyle is fashionable.

The overall accumulation of evidence at present establishes that human beings do not have a single mode of learning. There appears to be no relationship between children's mastery of knowledge in fields and homes and their mastery of Latin verbs.

And if there is no undifferentiated mode of learning, then it follows that we should not assume that learning in school settings must be made to conform as closely as possible to children's early effortless learning.

The belief that we know enough about the mind and its development to continue to require active learning, begin with the concrete, avoid rote learning, and other such practices is simply false.

*(Adapted with permission from Getting it Wrong from the Beginning — see our review on page 3. Dr. Egan is professor of education at Simon Fraser University.)*