

# Educationally-Appropriate Practice

*Child-centred learning reflects a basic misunderstanding of evolutionary theory.*

By William J. Matthews

Developmentalism holds that an individual's social, emotional, and cognitive development occurs at a genetically-determined pace that is the ultimate result of natural selection and evolution. This view has important implications for educational practice.

Because developmentalists believe that humans have a natural proclivity for learning that is the result of a Darwinian process, they think it may be dangerous to interfere with these natural tendencies. They believe that it is important for learning experiences to emulate those believed to occur naturally.

Developmentalist practice can be found in "child-centred," "progressive" teaching practices in Canadian schools, "progressivism" or "Plowdenism" in British schools, and "developmentally-appropriate practice" in the US.

"Learner-centred" and "discovery" approaches are yet other examples of developmentalist practice, as are the principles common to constructivist teacher education (e.g., "authentic" learning, "hands-on" learning, and "content-based" learning).

Important to note is that while whole language/balanced literacy approaches to reading are not explicitly developmentalist, they all emphasize a natural, child-centred approach to learning to read.

Developmentalists believe that the order and pace that children develop skills such as oral language and problem-solving are set in stone. As such, teachers can facilitate them but should do nothing to interfere with them.

In fact, developmentalist practice suggests not only that an interventionist approach to children's education would be ineffective but even that it is likely to cause harm by trying to force children to learn things before they are ready to do so.

The implications of developmentalism have given rise to a seeming reluctance on the part of many teach-

ers to take direct responsibility for influencing children's learning and educational development.

However, the principles of developmentalism reflect a basic misunderstanding of evolutionary theory and natural selection. While much basic human behaviour, such as walking and talking, does seem to be hard-wired, the evolutionary process has nothing to say about such recent human behaviour as learning to read and write. Evolutionary adaptation is based on a process that occurred eons ago in the so-called environment of evolutionary adaptivity. From an evolutionary perspective, current human behaviour (e.g., aggression, mate selection, avoidance of predators) can be understood as a function of adaptive problem solving.

Thus, evolutionary theory on the development of language would suggest that oral communication was a function of natural selection which increased the likelihood of reproductive survival of the individual and the likelihood that those offspring would possess the genetic predisposition to speak.

This perspective says nothing about the development of such distinctly-human skills as reading, writing, mathematics, and the use of computers, since such abilities are recent developments in human history and have not had time to be affected by the slow process of evolution and natural selection.

In fact, the evidence strongly suggests that skills such as reading, writing and mathematics are a function of explicit learning strategies and instruction. Significant differences emerge between developmentally-appropriate practices and what can be termed educationally-appropriate practices.

Educationally-appropriate practices shift the focus from primarily a within-child developmental focus to an emphasis on the environment in which instruction occurs.

Educationally-appropriate practices turn the spotlight on teacher behaviour and curriculum (i.e., materials at the instructionally-appropriate level).

Underscoring the notion of educationally-appropriate practice is the perspective that schooling is considered an intervention, designed to produce some observable, identifiable change on a range of different, socially-valued dimensions in the child's development.

As an intervention, schooling is expected to produce a significant effect relative to a no-treatment control group (e.g., children who do not attend school).

Since education is expensive, it is legitimate to ask why taxpayers should be paying for schools that are reluctant to use approaches which are effective with low-performing students who need explicit instruction, error correction, opportunities to respond, etc.

The examples of fine programs like the [Juniper Garden Children's Project](#) in Kansas City demonstrate that it is quite possible to decisively intervene in students' academic development.

The Juniper Garden Children's Project uses educationally-appropriate — as opposed to developmentally-appropriate — practices.

*(Adapted with permission from "Constructivism in the Classroom", Teacher Education Quarterly, summer 2003. Dr. Matthews is a professor in the School of Education at the University of Massachusetts.)*

