

PART I

DESIGN AND THE CURRICULUM

Consider, to begin with, the traditional method we use to go about creating a new curriculum:

We start with what the existing curriculum is, rather than with what we want the new curriculum to accomplish. Although it is important, even necessary, to refine continuously whatever we have in the way of a curriculum, creating a new curriculum by simply refining the old one prevents us from considering distinctly different possibilities and from achieving significant change.

In looking for ways to improve or create a curriculum, we tend to concentrate more on methods of instruction—how we like to teach—than on the purposes of that instruction. Means customarily take precedence over ends.

We make curriculum decisions incrementally, grade by grade and subject by subject. The trees concern us more than the forest. Furthermore, the need for a revised or new curriculum to incorporate connectedness over time and across domains of knowledge is honored more in rhetoric than in practice.

We take the various curriculum domains to be defined by the traditional school subjects and the textbooks that define the substance and organization of those subjects. For example, to judge from the typical school curriculum, natural science would seem to be composed of the disciplines earth science, biology, chemistry, and physics (usually in that order)—and the contents of those separate disciplines are what the textbooks say they are.

In revising or creating a curriculum, we follow unexamined traditions, rarely

drawing explicitly on research and systematic craft knowledge. The customary experiment-a-week in natural science, for instance, may be the antithesis of real scientific inquiry, yet its place in the curriculum is threatened only by financial duress, not by the lack of empirical evidence demonstrating its value.

We premise our curricula on the day-before-yesterday's technologies, not on today's (never mind tomorrow's). It is as though Boeing set out to create the 777 by assuming propellers and a 10,000-foot ceiling. By thinking of computers and advanced communications technologies as "add-ons" rather than as integral parts of the curriculum infrastructure, the possibilities of major changes in the curriculum are severely limited.

No doubt some improvements have been achieved by these means. But is there a better way? Project 2061 believes that there is. It is to view curriculum as a design challenge and, hence, to approach the creation of curricula more or less in the way in which directors approach the creation of motion pictures and plays; entrepreneurs approach the development of new business; or architects and engineers approach the creation of buildings, vehicles, parks, manufacturing processes, and systems of many kinds.

Chapter 1: Curriculum Design recapitulates and elaborates on the general design approach described in the Prologue and applies it to curriculum design in particular.
Chapter 2: Curriculum Specifications proposes some important dimensions of a curriculum that have to be taken into account in a curriculum-design effort.