

achievement

BUMP IT UP!

If I wasn't convinced already that schools needed to change, my oldest son Wesley certainly brought the lesson home. Wesley was a very bright, precocious five-year-old. Quick witted, with a vocabulary of about a 10-year-old, and surrounded by educators from the day he was born, he entered the structure of schooling. He was immediately faced with his first struggle to learn some-



thing — reading. Never before had learning been difficult. Prior to attending school, Wesley could memorize anything and could articulate his inner thoughts and feelings whenever asked. I remember distinctly scheduling an appointment with the psychologist at the local hospital,



because Wesley was still doing letter reversals two months into school. The system gave me the typical answer: “He’s a boy, he’ll grow out of it.” Knowing that this was a red flag for this particular child, I didn’t wait. I spent the next thirteen years as a parent struggling with the “traditional system” to provide for a child who could read and write at about a fifth-grade level and wanted to take physics and chemistry. Unfortunately, there are thousands of Wesleys out there. I believe we must fundamentally change our reference of what achievement is all about.

As I sat down to write this chapter I was faced with a topic that on the surface appears to be simple and direct, only to find that there is neither a simple nor direct way to define “achievement.” For many politicians it may have very little to do with learning. It is so complex I encountered one colleague who is planning to write an entire book on the subject. With that in mind I offer here what might be termed “food for thought.” I have asked students and educators across the United States and Canada how they define “achievement.” The definitions varied widely, but the ones I found most compelling portrayed achievement as both a journey and a destination. I would describe achievement, in terms of PCT, as the gaining of new behaviors that help reduce error. These can be

skills, abilities, or knowledge that give individuals ways to maintain dynamic balance, thus allowing an individual to better deal with a more complex world.

– **SHELLEY ROY**

In this chapter we will take a closer look at what educators see as the three cornerstones of learning — curriculum, assessment, and instruction — through the lens of PCT. Like the three vertices of an equilateral triangle, curriculum, assessment, and instruction need to be aligned, each carrying its own weight. Each supports the other like the warp and woof of a tapestry of growth and learning.

The term “curriculum” is used to describe the *what* of teaching and learning. It has over the past decades taken the form of behavioral objectives, goals, outcomes, and most recently standards. Education has moved far beyond The Three R’s: reading, writing, and arithmetic. An interesting side note here comes from a colleague of ours, Lloyd Klinedinst: “The term ‘curriculum’ comes from the Latin word for running, course, race, a race-ground, career. It is not unrelated to the Latin word for circus, which is a circled or enclosed space for games and athletic contests. ... So for me the term ‘curriculum’ as it is most commonly

“The problem is that the kind of mastery required for students to earn school credits, grades, and high scores on tests is often considered trivial, contrived, and meaningless — by both students and adults.”

Fred Newmann, Walter Secada, & Gary Wehlage



used places limits on learning.”

“Assessment” is the *measurement* of learning and should directly correlate to both the curriculum and the instruction. We should measure learning by the way in which it was taught — what is often described as seamless or embedded assessment. In such a scenario, an observer of a classroom would not be able to tell if you were teaching or assessing. Assessment specialists recommend that we distinguish between assessment and evaluation, assessment being the gathering of data and evaluation constituting a judgement. For educators today these two terms have become

blurred. Assessment of learning has been a topic of great discussion among politicians, researchers, and educators over the past decade. This topic has come to the forefront in the United States with the “No Child Left Behind” legislation. Assessment has taken many forms through the years: Paper-and-pencil assessments include multiple choice tests, true-false tests, teacher-designed tests, and standardized achievement tests. Alternative assessments include portfolios, demonstrations, and assessment packages that can be a combination of all of these and other forms of assessment.

“Instruction” is the *how* of teaching and describes the way in which educators teach. Over the last decade as new technology has allowed us to glimpse the inner-workings of the brain, educators have been flooded with information on effective instructional strategies. As educators, understanding PCT helps us filter all of these developments in curriculum, assessment, and instruction and spend our time wisely for the greatest chance of success.

CURRICULUM FOR THE 21ST CENTURY

In the chapter on Perceptual Control Theory we talked about the fact that each of us has billions of our own unique references.