Washington Post, "The Answer Sheet" blog by Valerie Strauss:

A REAL paradigm shift in education

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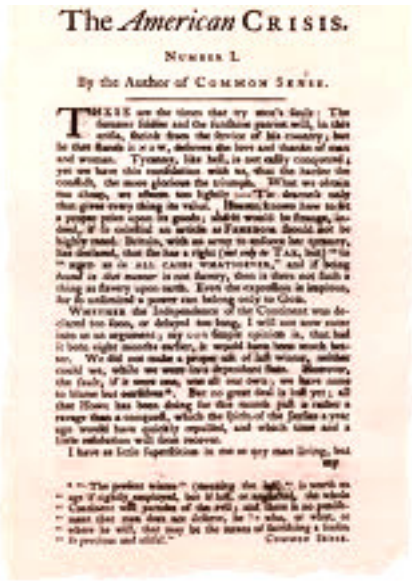
The *American* CRISIS.

NUMBER I.

By the Author of COMMON SENSE.

I envy Thomas Paine's way with language. I've been searching for years for words that would have the impact of those he penned in his 1776 pamphlet, "The Crisis."

Admittedly, "These are the times that try men's souls," and the words that followed, weren't a howling success. Only about a third of the colonists agreed with Paine's call for revolution. Another third wanted to stick with England. The remaining third were neutral or apathetic.

What Paine was able to do that I can't do is sell an idea to at least enough people to make something happen. I need to convince not a third of readers but, say, a tenth, to call their legislators and tell them to dismantle the education "reform" machine assembled in Washington by business leaders and politicians.

Long before corporate America began its assault on public schooling, American education was in trouble. Educators were, however, increasingly aware of the problems and were working on them. When Bill Gates, Jeb Bush, Mike Bloomberg, Arne Duncan, Michelle Rhee, and other big name non-educators took over, that worked stopped.

What I want people to understand is that the backbone of education — the familiar math-science-language arts-social studies "core curriculum" — is deeply, fundamentally flawed. No matter the reform initiative, there won't be significant improvement in American education until curricular problems are understood, admitted, addressed, and solved.

Few want to hear that. Reformers are sure America's schools would be fine if teachers just worked harder and smarter, and reformers are sure the teachers would do that if merit pay programs made them compete for cash. They seem incapable of understanding that classroom teachers are doing something so complicated and difficult that even the best of them are hanging on by their fingernails. If they knew how to do better, they'd be doing it. Would surgeons operate differently if they were paid more? Would commercial airline pilots make softer landings if they made more money? Would editorial writers write better editorials if their salaries were raised?

Teachers are doing the best they can with the curriculum they've been given. Here (in regrettably abstract language) is the curricular problem at the top of my list:

> *Change is in the nature of things; it is inevitable. Human societies either adapt to change or die. The traditional core curriculum delivers **existing** knowledge, but adapting to an unknown future requires **new** knowledge. New knowledge is created as relationships are discovered between parts of reality not previously thought to be related. The arbitrary walls between school subjects, and the practice of studying them in isolation from each other, block the relating process essential to knowledge creation.*

Stick with me here. This isn't complicated, just different from the usual school fare.

(1) **Change is in the nature of things; it is inevitable**. The earth heats and cools. Seasons come and go. Water tables rise and fall. Human populations increase, decrease, migrate. New tools change the ways societies function. People multiply, resources diminish, and waste builds. Civilizations appear and disappear. This is — or should be — the usual content of the core curriculum.

(2) **Human societies either adapt to change or die.** Ancient Mesopotamia, Greece, and Rome are no more. A century ago, the Elks, Eagles, and Masons were popular organizations. More recently, Kodak, Bethlehem Steel, and Sony dominated whole industries. If we value our way of life, we need to understand the dynamics of change, but it's not in the core curriculum.

(3) **The traditional core curriculum delivers *existing* knowledge, but adapting to an unknown future requires *new* knowledge**. Obviously, what will need to be known in the future isn't yet known, from which it follows that it can't be taught. However, the *process* by means of which new knowledge is created *can* be taught.

(4) **New knowledge is created as relationships are discovered between parts of reality not previously thought to be related.** Levels of respect for elders and rates of societal change are related. Elapsed time since death and level of isotopes in fossil remains are related. Exposure to lead and learning difficulties are related. *Discovering and exploring relationships, not mentally storing information, educates.*

(5) **The arbitrary walls between school subjects, and studying them in isolation from each other, block the relating process essential to knowledge creation**. If astronomers only studied the heavens, and oceanographers only studied the ocean, the relationship of moon, sun, and tides would remain unknown. Technological and economic change profoundly impact values, beliefs, and behavior, but study of their connections is missing from the curriculum. Again: Discovering and exploring relationships, not mentally storing information, educates.

(6) **What needs to be known in the future can't yet be taught, but the *process* by means of which that knowledge is created can-and must-be taught.** Traditional instruction places far too much emphasis on content. The problem isn't just that what students need to know can't be known. The unreasonable amount of information dumped on them, the brief life in memory of

most of it, and easy electronic access to a near-infinite amount of it, make merely delivering information a poor use of time. Focusing on the real world rather than on second-hand textbook versions of reality, and understanding the process by means of which sense is made of that world, are keys to new worlds of performance.

Standardized, high-stakes tests are the single greatest obstacle in the way of curricular improvement. Sold to the public as a necessary club to hold over teachers' heads, the tests are dumbing down kids at a spectacular rate. The problem isn't test overuse. The problem is their inability to measure what most needs to be measured.

Standardized tests are to accountability what a finger in the wind is to a weather station. What they measure — information stored in memory — is useful, but for kids facing an unknown future, that's not nearly enough. They need to know how to create new knowledge. That knowledge will be *original*, and standardized tests can't evaluate original, non-standard thought.

Unwilling to trust teacher judgment, we've handed their responsibilities to machines incapable of making judgment calls.

Tell business leaders and politicians to put their own houses in order and give education back to educators.

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