

Washington Post, “The Answer Sheet” blog by Valerie Strauss. Posted January 12, 2015:

One thing schools should do to boost students’ intellectual growth

By Marion Brady

America’s schools aren’t going to significantly improve until a main reason for their flat performance is correctly diagnosed and addressed.

The problem isn’t teacher incompetence. Neither is it poor subject-matter standards, too-short school days or years, kids’ lack of grit, inadequate teacher training programs, failure to unleash market forces, union protection of bad teachers, insufficient academic rigor, or any of the other reasons currently being advanced.

Much that affects learner performance—poverty, disability, education of parents, local culture, and so on—can’t be fixed by education policy. A fundamental performance-limiting problem that *can* be fixed in school but has never been adequately addressed is this: INFORMATION OVERLOAD.

The human brain is wonderful. Nobody yet knows the extent of its potential. But about one of the brain’s characteristics, there’s not the slightest doubt: IT DOES A POOR JOB OF STORING AND RETRIEVING WHAT THE TRADITIONAL CORE CURRICULUM GIVES IT—RANDOM, UNORGANIZED INFORMATION.

Every adult who has attended a typical secondary school knows that’s true, but the core is treated as if Moses had brought it down from Mt. Sinai along with the Ten Commandments. (Actually, it emerged from a three-day meeting of 10 school administrators in 1892.)

That the information being dumped on millions of kids by the core curriculum is “learned” is a myth, a fiction, a very expensive joke.

SKEPTIC: You’re not serious! Where’s the proof?

MB (Me): The end-of-course testing ritual.

SKEPTIC: How does that prove that learning isn’t happening?

MB: Learners prepare for the tests by cramming.

SKEPTIC: Cramming is what serious students do. It’s a normal part of learning.

MB: No, it’s a normal part of test-driven schooling, which has little to do with learning. Cramming of previously “covered” information isn’t learned. It’s shoved into short-term memory to meet a short-term goal—passing a test. When the test is over, the information is dumped.

SKEPTIC: Some of it will be remembered.

MB: That's the hope of those who subscribe to the discredited learning theory that if you throw enough mud on the wall, some of it is bound to stick. America is spending well over a half-trillion dollars a year on schooling. That "some of it will be remembered" isn't much of a return on that enormous investment. Even more alarming is the waste of learner time and intellectual potential, the costs of which are inestimable.

SKEPTIC: So what do you suggest?

MB: We need to face up to the information overload problem. It's not the *amount* of information the core unloads on kids—the brain can handle that, and much more. The problem is the core's lack of information organizers. Even if every subject in the core had a simple, workable memory-organizing system (and none of them does), it's unreasonable to expect kids to cope, *simultaneously*, with five or six *different* information-organizing systems.

SKEPTIC: I don't see an alternative.

MB: And neither will anyone else as long as the adequacy of the core is taken for granted. What learners must have in their heads if they're to cope with the knowledge explosion is an information organizer that makes everything they know part of a *single, simple, easily used structure of knowledge*. Logic, not undependable memory, is the best tool for retrieving what's in our heads.

SKEPTIC: How is that possible? The kinds of information the core subjects cover is just too different and too specialized to be stored and accessed by just one organizer.

MB: Thousands of years before the academic disciplines and the school subjects based on them became the organizers of schooling, humans were creating complex civilizations, dreaming up sophisticated theories and philosophies, completing vast engineering projects, building still-standing monuments. Could they have done that without organized thought? No.

SKEPTIC: Well, they might not have given names like "biology," "geography," "chemistry," "economics," and so on to specialized knowledge, but they were specializations just the same.

MB: True. But those specializations morphed out of organized general knowledge.

SKEPTIC: General knowledge doesn't have organizers.

MB: Of course it has organizers. If it didn't, it wouldn't be knowledge, just random information. Organized information—knowledge—is fundamental to humanness, survival, civil society, routine functioning.

SKEPTIC: And those organizers are...?

MB: The ones I've been pointing out for decades, the ones everyone uses all the time, the ones ignored by policymakers. The basic organizers of all knowledge—general and

specialized—are the five elements of our best models of reality—stories and drama. We create stories, plays, *and common sense* by locating experiences in time and space, identifying the participating actors, describing what happened or is happening, noting, insofar as possible, the states of mind of the actors, then weaving the five together systemically. That’s five kinds of information—time, place, actors, plot, action—systemically integrated. Or, to put it even more simply—when, where, who, what, why—systemically integrated.

SKEPTIC: That’s too simple to be useful.

MB: Simple, yes, but only at the most general level, which it needs to be to provide initial access to everything stored in memory. Think of the five elements as the brain’s interstate highways, connecting to state roads (history, geography, government, etc.) which connect to county roads (time lines, topography, democracy, etc.) Everything connected to everything, on a single map.

For example, my morning paper tells me that Israel’s Supreme Court has ordered the government to demolish the West Bank Settlement of Amona because it was built on privately owned Palestinian land. Kids coming to that news item “cold” wouldn’t be able to make adequate sense of it. Kids bringing the five organizers to the news item wouldn’t be able to make good sense of it either, but they’d know what they needed to find out. The news item tells them who, when, where, and what, but says nothing about the fifth element, the “why” that explains Palestinian and Israeli actors’ actions. Knowing what they didn’t know, kids would start down the “why” road searching for Palestinian and Israeli actors’ values, beliefs, world views. Eventually, they’d learn that Palestinians think the land belongs to them because it’s been in their families for many generations, and some Israeli settlers think the land belongs to them because “we were here first.”

If, before subjecting adolescents to the intricacies of specialized studies, they’re given activities that help them conclude, *for themselves*, how their brains select, sort, store, relate, integrate, and manipulate existing information and create new information, their intellectual performance will easily surpass that of every previous generation.

Don’t tell me I’m exaggerating the benefits of helping adolescents understand how they process information. Thousands of hours of working directly with them, reading their journals, listening as they generate explanatory hypotheses, postulate causal sequences, invent graphic representations of complex relationships, interpret unfamiliar data from other cultures, and much, much else, tell me I’m right.

Formal, deliberate use of the five-element information organizer we routinely use except in school would give us something we don’t now have—a true general education academic discipline. Not only could that discipline replace thus-far failed attempts to create coherent curricula using various mixes of specialized studies, it would radically enhance memory, make clear the holistic nature of knowledge, lay a solid foundation for life-long learning, stretch learners’ minds in ways the core will never be able to do, make

apparent the importance of fields of study and ways of learning shoved aside by reading and math test prep, expose the superficiality of instruction limited by what commercial publishers produce—just to start a list of the benefits of a curriculum that respects the systemic nature of knowledge.

A true general education discipline can do all that and more, and do it better and quicker. Its efficiency would give magnet schools more time to focus on their specializations. Project-based schools could undertake more complex projects. Art, music, dance, drama, and other electives sacrificed to test-based “reform” could be reinstalled and expanded. Highly specialized classes could be offered. Learners could undertake field work and apprenticeships. And teachers could plan together, exploiting the richness of a curriculum that aligns and integrates their specializations.

Skepticism is acceptable. Rejection without a trial, isn't.

###

An illustrative GENERAL education course of study for adolescents:

<http://www.marionbrady.com/documents/Connections.pdf>