

Institutional Failure, and a Proposal

Learning is essential to survival. It's also normal, natural, inherently satisfying, even exhilarating. Why, then, must our system for educating be held together by the force of law, required attendance, bureaucratic mandates, extrinsic rewards, threats, and command-and-control management?

Something fundamental is wrong, and the current push to impose "rigor" – to do better, longer, and harder what brought us to our present state, will make the situation worse.

American education is suffering from "paradigm paralysis." The education establishment must face the fact that it has SYSTEM problems, and the politicians, celebrities, and corporate heads now calling the education shots must face the fact that they don't have a clue about how to solve them.

Here's the major source of problems:

1. Learners are drowning in information – forced under threat to "cover" ever-increasing volumes of content at rates far beyond their capabilities.
2. Even if all the information being dumped on them could be stored in memory, a fundamental problem would remain. Because no one knows the future, or how it will play out for each individual, it's impossible to say what the young need to know.
3. Given these variables, a required curriculum, subject-matter standards, and standardized tests make no sense. Inertia, not logic, is driving the institution.
4. All that can be known for certain is that, consciously or unconsciously, every waking moment throughout life, every learner is asking, "What's going on here?" and "What should I do about it?"
5. Helping learners answer those two questions, in every situation, from the present moment through the rest of their lives, is the challenge. Recognizing it as such gives general education the simple, clear, practical purpose it has never had.
6. In pursuit of that purpose, the familiar, traditional core curriculum can play a role, but it's too fragmented, disorganized, and disconnected from learner experience and the real world to meet the need.
7. What an acceptable curriculum must do is display the whole of which school subjects, "street knowledge," and all other personal knowledge are working parts.
8. Unfortunately, that whole can't be "taught" in the usual sense of the word – it can't, that is, be transferred from textbook or teacher talk to learner understanding.
9. For that task, experience isn't just the best teacher; it's the *only* teacher. And adolescents are the best learners. They've developed the basic skills, and are able to think abstractly and holistically, but aren't yet locked into the arbitrary, artificial, relationship-obstructing, creativity-limiting boundaries of the traditional separate-subject curriculum.

Who else says so?

John Goodlad (Education researcher and theorist): “The division into subjects and periods encourages a segmented rather than an integrated view of knowledge. Consequently, what students are asked to relate to in schooling becomes increasingly artificial, cut off from the human experiences subject matter is supposed to reflect.” (*A Place Called School*, McGraw-Hill, 1984, p.266)

Thomas Merton (Trappist monk, poet, social activist): “The world itself is no problem, but we are a problem to ourselves because we are alienated from ourselves, and this alienation is due precisely to an inveterate habit of division by which we break reality into pieces and then wonder why, after we have manipulated the pieces until they fall apart, we find ourselves out of touch with life, with reality, with the world, and most of all with ourselves.” (*Contemplation In a World of Action*, Paulist Press, 1992, p.153)

Peter M. Senge (Director of the Center for Organizational Learning, MIT Sloan School of Management): “From a very early age, we are taught to break apart problems, to fragment the world. This apparently makes complex tasks and subjects more manageable, but we pay a hidden, enormous price. We can no longer see the consequences of our actions; we lose our intrinsic sense of connection to a larger whole.” (*The Fifth Discipline*, Currency Doubleday 1990, p.3)

Kurt Vonnegut (Influential 20th Century writer and novelist): "The things other people have put into my head, at any rate, do not fit together nicely, are often useless and ugly, are out of proportion with one another, and out of proportion with life as it really is outside my head." (Preface to *Breakfast of Champions*, 1973)

Dee Hock (Founder and CEO Emeritus of VISA): “What if the very concept of separability (mind or body, cause or effect, mankind or nature, competition or cooperation, public or private, man or woman, you or me) is a grand delusion of Western civilization, epitomized by the Industrial Age, useful in certain scientific ways of knowing but fundamentally flawed with respect to understanding and wisdom? What if our notions of separability, particularity, and measurement are just a momentary aberration in the great evolution of consciousness?” (*Birth of the Chaordic Age*, Barrett-Koehler Publishers, Inc., 1999, pp. 19, 20)

Additional problems with the core curriculum:

- Ignores vast and extremely important new fields of knowledge
- Has no built-in mechanisms forcing it to adopt new insights and adapt to inevitable social change
- Vastly overworks learner short-term memory at the expense of “higher order” thought processes
- Fails to make use of the single most valuable teaching resource – learner first-hand experience
- Doesn’t move learners steadily through ever-increasing levels of conceptual complexity
- Demands seat-time passivity at odds with youthful nature

- Reinforces standardization to the neglect of individual initiative, imagination, and creativity
- Is so inefficient it leaves inadequate time for apprenticeships, internships, co-ops, projects, free play, art, music, physical movement, and activities linking to the real world and adulthood
- Fails to recognize the implications of the transition from pre-literate, difficult learner access to limited information, to today's near-instantaneous access to a universe of information
- Is extremely expensive to administer.

Addressing the Problems

General Systems Theory as it developed during World War II, and new insights into how the brain organizes and processes information, make it possible to show that the various specialized fields of study that make up traditional schooling, and all other past, present, and future knowledge, are parts of a single, integrated, mutually supportive structure of knowledge.

Introduction to Systems (formerly Connections: Investigating Reality)

Introduction to Systems is a course of study designed to make use of these developments and insights to help learners at the middle school level and above lift into consciousness, examine, elaborate, refine, and make practical use of the models of reality that shape their own and others' thought and action. It doesn't replace familiar core content, just uses it differently.

Introduction to Systems (IS) is free, needing merely to be downloaded. Its use may suggest but requires no special training, no change in staffing, schedules, policies, administrative reports, or other bureaucratic processes or procedures.

It's offered as a "first draft" of a general education curriculum that respects the seamless, holistic nature of reality, in the hope that it will improve humankind's chance of survival.

Change

Adoption of *IS* won't be problem free. Inertia, and the current simplistic "standards and accountability" thrust of education "reform," are external obstacles to change.

Many, perhaps most professional educators will also resist acceptance, for *Introduction to Systems* minimizes the role played by recall, requiring instead the routine use of all thought processes. It also changes the learner's primary task from interpreting secondhand information read or heard, to observing, describing, analyzing, and reacting directly to the real world. Most difficult for educators, however, will be abandonment of the conventional wisdom that learning is optimal when learners are paying rapt, intense attention to the teacher-expert.

In fact, learning is optimal when small, interactive groups are presented with a real problem, an anomaly, an ambiguity, a dilemma, an incongruity, a question with no right or wrong answer. Presenting that challenge, then joining the group not as authority

but as co-learner and facilitator, is the teacher's most effective role. No one unwilling to play that role should make use of *Connections*.

Connections: Investigating Reality moves forward very slowly as teams engage in dialog, argue the relative merit of ideas, write journal entries, apply and test their insights in the real world, try to see reality from a differing cultural perspectives, look at the ordinary and the familiar until it becomes "strange enough to see," move from "knowing," to "knowing what they know," explore parallels and intersections not mentioned or suggested in *Connections*, and so on.

Link: The assumptions, problems, recommendations for implementation, examples of and rationale for suggested instructional activities are explored in the 2011 book, *What's Worth Learning?* published by Information Age Publishing, Inc., Charlotte NC 18277: <http://www.infoagepub.com/index.php?id=14> The book is available for free download from www.marionbrady.com.

Link: *Introduction to Systems*, a free, ready-to-use course of study operationalizing *What's Worth Learning?* can be downloaded from:

<http://www.marionbrady.com/IntroductiontoSystems.asp>

For example

The three short activities that follow are typical of those in *Introduction to Systems*. Keep in mind that these examples are parts of an on-going *process*. Learners aren't asked at some later date to take any sort of quiz or test that requires them to remember the content of these or other activities. If, at some later time, previous activities are useful, they are simply identified and learners can refresh their memories by turning back to that activity or to their journal notes about it.

These activities (1) push learners to exercise thought processes other than simple recall, thought processes essential for creative problem solving, and (2) step by step, help them build an organizing framework for linking together everything they learn, from any source, in school or out, for the rest of their lives.

(From *Introduction to Systems*, Part 4, page 11)

Investigation: Stirrups and the Rise of Feudalism

Before the Middle Ages in Europe, all armies fought on foot. Horses and other animals hauled wagons when the armies traveled, but the horses stayed behind when the fighting began. The invention of the stirrup changed that. The change was so significant that it helped bring a new age to Europe.

Below, in random sequence, is a list of 14 changes that followed the invention of stirrups. Rearrange the list to show as many direct cause-effect relationships as you can. (Copying the 14 items on slips of paper may make them easier to shuffle and arrange.) Show the changes in a diagram.

- Horse saddles with stirrups
- Improvements in metallurgy and metal-working skills
- Armor for men and horses
- Increase in need for grain
- Increased social class and wealth differences
- Increase in cost of fighting
- Greater stability on horseback
- Help in donning armor, mounting, care of horses
- Need for bigger, stronger horses, and more of them
- More land under cultivation
- Taxation of farmers and peasants
- Bridge construction
- More effective use of lance and battleaxe
- Advances in animal husbandry and breeding

(From *Introduction to Systems*, part 3, p. 11)

Investigation: Traditional Afghan Society

Below is a statement from a traditional man from Afghanistan.* **Identify an idea, belief or value that differs from one held by most people you know. Summarize both views in your journal.**

“Everything I need to know to lead the good life and prepare for the life hereafter has been known for centuries. In his compassion for man, God has provided in the *Koran* a guide which is both complete and final. It does not make life hard for men, by telling them what they do not need to know or cannot understand. Neither does it omit the answers to any questions man might need to ask. All knowledge is to be revered, but the knowledge which has been given by God is infinitely more worthy than any knowledge man discovers, even as the Giver is infinitely more worthy than man.”

In your journal, explain how this traditional Afghan is likely to feel about:

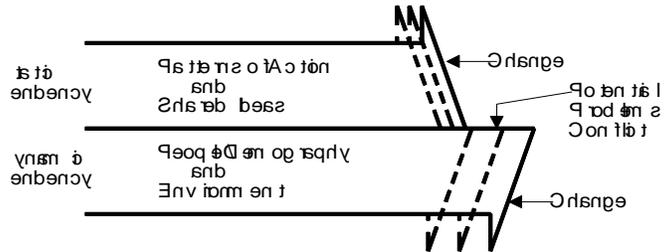
1. University professors and scientists
2. Laws and courts set up by the government
3. A natural disaster in Afghanistan, such as a drought.

*Adapted from Teter, Park, “Let Them Eat Cake, A Look at Peace Corps Cultural Training,” (*PC/Evaluation*, October 1968) p. II, 55.

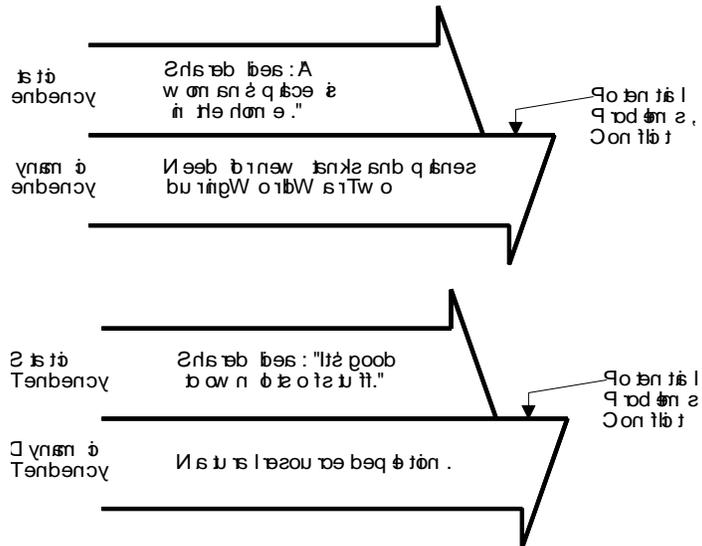
(From *Introduction to Systems*, Part 5, pages 12-13)

Investigation: Change-Triggered Conflicts

The graphic below identifies a frequent cause of societal friction and conflict:



Examples:



These kinds of problems are difficult to solve. If a new way of acting or thinking is proposed to adapt to change, people often feel insecure, angry or frustrated. On the other hand, it's almost impossible to stop demographic and environmental change.

Step 1 *One familiar American pattern of action is using personal autos to travel wherever and whenever we want to go. Make an arrow diagram like those on this page, showing this pattern as a “static tendency.” Then identify an environmental or demographic change that will likely result in problems or conflict with this pattern.*

Step 2 *A deep-seated American belief is that every generation will live better than the previous generation. Make another arrow diagram showing this as a “static tendency,” and identify an environmental or demographic change that may threaten this belief.*

Again:

The traditional, familiar, math-science-language arts-social studies “core” curriculum remains in place not for any theoretical or practical reason related to merit. It remains in place because it isn't examined, and it isn't examined because its use is taken for granted.

But:

Neither *Introduction to Systems* nor any other alternative to the curricular status quo is going to gain widespread acceptance until the present top-down, simplistic, centralized attempt to micromanage what's taught to whom, when, where, and how, is ended.

Pressure to make that happen won't come from state or federal politicians. It won't come from corporate America, fixated on the half-trillion dollars a year that taxpayers now invest in education. It won't come from rich philanthropists or celebrities who've bought the conventional wisdom that "the system" is fine, that it needs merely the discipline of market forces. And it won't come from an education establishment unwilling or unable to imagine alternatives to past practice and the status quo.

The pressure will have to come from the bottom up, from bored and frustrated students at all levels.[†] It will have to come from that minority of educators able to see past the narrow boundaries of their specializations. It will have to come from respected corporate figures who know that, given current directions of change and the unpredictability of the future, their best interests lie not in telling the young what to know, but in stimulating their imaginations and discovering and releasing their inherent potential.

And it will have to come, finally, from parents, grandparents, and a general citizenry wise enough to vote out of office those who lack faith in democracy and community.

For more information, see links (next page).

[†]Here's how: **The Bartleby Project**—<http://bartlebyproject.com/gatto.html>

What's Worth Learning? published by Information Age Publishing, Inc.,
Charlotte NC 18277: <http://www.infoagepub.com/index.php?id=14>. Also available for free
download at <http://www.marionbrady.com/Books.asp>

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