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A PROBLEM AND AN OPPORTUNITY

“One should, each day, try to hear a little song, read a good poem, see a fine picture, and if it is possible, speak a few reasonable words.”

—Johann Wolfgang von Goethe

ONE OF THOSE CHARMING STORIES that circulate in the public education community concerns an essay exam assigned by an American fifth-grade teacher. The essay question asked the students to name as many parts of the human body as they could think of, and tell what they do. One child wrote:

The human body consists of the Brainium, the Borax, and the Abominable Cavity. The Brainium contains the brain. The Borax

contains the lungs, the liver, and other living things. The Abominable Cavity contains the bowels, of which there are five—a, e, i, o, and u.¹

This is the kind of experience that causes some teachers to retire early, and others to wonder whether the whole process of education makes sense.

Yet, as the English novelist and futuristic thinker H.G. Wells observed: “History becomes more and more a race between education and catastrophe.” As long ago as 1895, Wells saw the potential for human beings to exterminate themselves, and our possibilities have only grown more numerous in the intervening years. We “thinking humans” might not be smart enough to avoid outsmarting ourselves.

The artificial world we’ve created around us now seems to have us by the throat—or by various other elements of our collective anatomy—and we’re enduring the frustrating experience of not being able to control it. Both individually and collectively, we seem hypnotized by the increasingly strange social, political, and technological landscape that now seems to be unfolding with an inexorable life of its own. We live in a world of instantaneous information, by turns bemused, amused, and frightened by the highly charged images that bombard us constantly.

The information environment we’ve created around ourselves now creates us. The swirling images, the sounds, the stories, the conversations—all become part of a shared electronic consciousness, a kind of cultural hive-mind that binds us to our circumstances. We’ve hypnotized ourselves, and this collective media-trance now shapes our thinking processes at very deep levels.

We’re now facing an important choice point in our individual and collective lives. Most of us may take the “default” choice without ever realizing we’re *making a choice*. The choice will be whether we will be creatures *of* our environment or creatures living *in* our environment. The first option is the default choice: it requires no thought at all. The second option requires that we wake up and start thinking.

ACCIDENTAL INTELLIGENCE: THE TERMINAL ASSUMPTION

“The cream always rises to the top.”

There seems to be one deeply submerged and seldom-questioned assumption at the very foundation of the public education process in almost all of the developed countries—an assumption that now *must* be questioned. It’s the taken-for-granted, given-by-God, approved-by-scientists belief that, by the time a person arrives at young adulthood, that person is about as smart as he or she is ever going to be.

The source of this “terminal assumption,” as I have named it, is the widespread confusion of “IQ” with the ability to think. They are not the same and, in fact, are only loosely related.

If you want to permanently impair your belief in the idea that IQ equates to mental ability, consider that one Ted Kaczynski, a.k.a. the famed “Unabomber” who murdered three people and injured scores of others with mail bombs, was a Harvard-educated professor of mathematics.

Many students of human mental competence—including myself—consider the introduction of IQ testing into public school systems to be one of the most destructive episodes ever witnessed in that benighted sector of our society. Aside from slotting children into an arbitrary caste system—a practice of highly questionable value—one is hard-pressed to name *any* useful application of IQ doctrine in raising or educating children. Other than amusement for university researchers, employment security for educational psychologists, and a sense of satisfaction for normatively minded school administrators, measuring IQ scores seems to have no known positive value.

If, as many IQ theorists contend, intelligence is a fixed, innate characteristic of human beings and cannot be improved significantly by education, training, or experience, then what would be the point of trying to measure it in children? How does saying to a child, “You’re

smarter than Johnny, but you're not as smart as Jenny" help Johnny, Jenny, or the child who receives the news?

If you keep the IQ scores secret from the children, presumably so as not to make them feel vain or insecure, then who should get the numbers? Wouldn't giving the scores to teachers make them more likely to treat certain children like superstars and value the others less? How does a parent benefit by knowing his or her child's IQ score? As revered as the IQ theory is in academic circles, it seems to have no demonstrable value in educating children, and is likely to be a net negative in its influence.

Nevertheless, the damage has already been done; the vast majority of educators and educational administrators seem to have bought the idea that children are distributed with respect to some innate mental competence, and that there is little hope of them moving higher than their numerical destiny. "Even if we don't know a child's actual IQ score," the conscious or unconscious reasoning goes, "we know that he or she has a certain potential that cannot be significantly exceeded."

Consider the effects of the Terminal Assumption on the thinking of teachers, administrators, and curriculum designers who subscribe to it: the child's mental software is programmed by some mysterious process as he or she grows toward young adulthood—a process not accessible to either the child or the child's caregivers. If the mental software is what it is and can't be influenced significantly, then the only function left to the educational establishment is to supply the data—the information.

To use a primitive analogy, it would be like having a personal computer on your desk but not being allowed to choose the software installed on it. If you were forced to use whatever software came with it, you could only do the things that software allowed you to do. You could supply the information, but only in the way the computer was set up to process it.

As another analogy, equating IQ with thinking ability is somewhat like deciding which race car will win based on comparing engine

performance and ignoring the know-how of the driver. Even if human beings do have certain pre-wired features of their nervous systems, there is far more variability in the *use* of their endowments than in the endowments themselves.

This Terminal Assumption, if accepted by educators—and more and more of them are *rejecting* it these days—leads unavoidably to the mindset that education is all about delivering information, or “content,” as curriculum designers used to call it. This leads to learning designs based on a “container model” of the child as learner: we figuratively unscrew the top of a kid’s head, pour in some history, or music, or math, or literature, put the top back on, and we’ve educated the kid.

The consequence of the Terminal Assumption and the container model of the learner is that cognitive skills of various kinds tend to get lost within the educational experience, and not consciously identified to the learner as explicitly valuable and worthy of study in their own right. A group-study project, for example, might present an opportunity to learn skills like brainstorming, suspending judgment, accurate listening, paraphrasing, comparing and contrasting points of view, and formulating hypotheses. But if it is presented as an exercise in “content”—dates, kings, and wars, in the case of history, for example—then the opportunity to understand the skills as skills, independent of content and context, gets scrambled into the process of finding the “correct” answers.

“You must adjust. . . . This is the legend imprinted in every schoolbook, the invisible message on every blackboard. Our schools have become vast factories for the manufacture of robots.”

—Robert M. Lindner

However, even in the face of formidable institutional support for the IQ doctrine, the idea of directly teaching cognitive skills to children has always hovered at the fringes of educational practice, and more than a few teachers and schools have made significant efforts to

establish it as an accepted methodology. With some exceptions, this commitment to “mental skills training” has tended to center on schools in “better” neighborhoods, where funding, talented teachers, and highly educated parents with high expectations come together in a fortunate combination. So far, however, this insurrection against the fixed-intelligence doctrine hasn’t reached anything like a critical mass, and still awaits a revolutionizing influence.

The Terminal Assumption found its way into the business world many years ago and still resides there comfortably, with some notable exceptions. As explained in the following section, business executives, managers, personnel experts, and company trainers have largely bought into the idea that the workers they hire are like the graduating students: they’re about as smart as they’re ever going to be.

About two decades ago, many American businesses flirted with training courses on critical thinking, creative thinking, problem solving, and team effectiveness, with mixed results. Some well-known companies committed significant resources to the objective of developing smarter people, and some still do. Conferences and seminars on thinking skills were popular, and many trade and industry conferences included an obligatory session on creativity or some related topic.

However, with the executive stampede toward “quality improvement,” brought on as a reaction to the threat of Japanese competition in the mid-1980s, many American businesses shifted their thinking toward normative methods like “total quality management,” or “TQM,” which attempted to copy the hyper-methodical practices of Japanese firms like Toyota. “Soft skills” like clear thinking and innovation were often relegated to the “maybe later” category. Now, with many organizations evolving toward more knowledge-intensive operations, coping with a shortage of workers with high-level mental skills, and facing intense competition from foreigners, we’re seeing a resurgence of interest in the gray matter.

Many executives who spent lavishly on information technology to modernize and upgrade their operations, often investing tens of millions

of dollars on computer hardware and software, saw no particular value in spending a few tens of thousands of dollars on upgrading the “human software.” Indeed, it wouldn’t have even occurred to most of them.

The extension of the Terminal Assumption from education to business worked like a two-edged sword: the public education system saw little value in teaching the skills of competent thinking, and the business sector assumed that the employees they were receiving from the education system were as competent at thinking as they were ever going to be.

As we’ll see in a later chapter, businesses now have the opportunity—and increasingly the inclination—to develop their own smart people. Having spent thirty years of my life as a consultant to businesses and an advisor to executives, I’m gratified to see the possibilities appreciated again. As business leaders increasingly reject and refute the Terminal Assumption, the “back pressure” exerted on the educational establishment will, hopefully, lead to its rejection there as well.

THE WIDENING “SMART GAP”

During his tenure as CEO of the pioneering Internet job-matching service *monster.com*, Jeff Taylor compared the kinds of jobs that businesses were seeking to fill with the kinds of skill sets applicants were offering. What he saw caused him considerable dismay. The comparison of “skills offered” against “skills sought” showed a very significant mismatch. Across the board, businesses were seeking a higher caliber of mental skills than they were finding.

Taylor predicted that this ever-growing “smart-people gap” would increasingly confound executives’ efforts to grow and develop their enterprises, to innovate, and to implement breakaway competitive strategies. In fact, Taylor warned, “Increasingly, the knowledge worker will be at the center of company desperation.”

The smart gap has become a prominent topic of the strategic conversations business leaders engage in. Most of them seem to have little faith that the public education system will begin delivering “smarter”

people to the workplace any time soon. This leaves them, as they consider it, in the position of having to compete more aggressively for talent.

“Talent management” is the new term of art for personnel directors, and increasingly for CEOs themselves. For many firms, talent management degenerates to a grim acceptance that they will have to bid ever-higher salaries to attract people who can think, plan, organize, analyze, research, decide, design, lead, manage, communicate, and—above all—solve problems. Able-bodied workers are fairly easy to find; able-*minded* workers are not.

Yet our schools, for the most part, still don’t seem to “get it.” Turning out high-school graduates who know how to use computers and surf the Internet is not the same as turning out *knowledge workers*—people who can think.

Indeed, we now have to redefine the term “knowledge workers.” Management guru Peter F. Drucker made that term a permanent part of the vocabulary of business in the 1950s, when he predicted that by 1960 at least half of the U.S. workforce would be doing “think-work” instead of “thing-work.” However, Drucker could not have anticipated the all-pervasive influence of computers and information technology.

The bank teller, for example, whom Drucker classified as a typical knowledge worker, now has to be down-classified to the status of a *data worker*. Most large businesses now have an invisible “data factory” operating in parallel with the normal operation; it’s the collection of people and resources that process information to support and shape the familiar operations we typically think of as “the business.”

In this sense, the young worker at the fast-food restaurant who pushes a coded button on a keyboard or taps an icon on a screen contributes almost nothing in the way of knowledge work. It’s data work, and low-skilled data work at that. With the kinds of technology readily available now, the job of a bank teller, for example, is really no more knowledge-intensive than that of, say, a welder in a factory. Information technology has not necessarily made people smarter;

instead, it has made many jobs easier to perform by people with limited mental skills.

As business leaders are forced to redefine Drucker's concept of knowledge work and knowledge workers, it becomes more and more apparent that true knowledge workers are relatively scarce. At the same time that businesses are becoming ever more knowledge-intensive in their operations, schools do not seem to be turning out a higher proportion of skilled thinkers.

With occasional exceptions, the kinds of educational experiences that challenge and develop knowledge skills tend to be concentrated mostly in the schools that serve wealthy or upper-middle-class families. Most of the schools in economically disadvantaged areas can barely cope with their basic mission, to say nothing of delivering a true third-wave educational experience.

Beginning in the decade of the 1990s, and increasingly since 2000, business leaders in the United States have become increasingly vocal about the general failure of the school system to equip young people with the skills they will need to succeed over the coming decades. As we'll see in a later discussion, many of them have turned from complaining about it to correcting for it as best they can.

Businesses, to some extent, are becoming the educators of last resort, and they're beginning to look carefully at ways to grow their own smart people instead of merely trying to steal them from one another. For more and more business leaders, the familiar term "ROI" has morphed from "return on investment" into "return on intelligence." Workers can no longer be just individual "production units"; businesses must now look upon them as "ITUs"—individual *thinking* units.

THE DUMBING OF AMERICA AND THE CULTURE OF AMUSEMENT

Karl Marx, the father of communism, reportedly remarked, "Religion is the opiate of the people." Were he alive and trying to sell his political

theory these days, he would very likely say, “*Television* is the opiate of the people.”

One of the most popular television shows ever broadcast in the United States, “*American Idol*,” probably best exemplifies what’s happened to the level of mental activity in the mainstream popular culture. During one round of competition in mid-2006, more votes were cast for the winning “*Idol*” contestant than for any presidential candidate in U.S. history.

“Nobody ever went broke by underestimating the
taste of the American public.”

—H.L. Mencken

The late professor Neil Postman, of New York University, devoted considerable study to the effects of the electronic media on the culture, and on the development of mental capacities of children. In his provocative book, *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*, he asserted that the rise in popularity of television coincided with a decline in rational thinking and discussion in the consciousness of American society. Postman traced three phases in the development of what he called “the culture’s conversation with itself.”²

Phase one, extending back to our very origins, was an oral phase. People shared knowledge, ideas, and their history through discussion and story-telling. Phase two, the rise of literate communication through the printed word, peaked in its impact during the nineteenth century, according to Postman. Phase three, with the arrival of what he called the “televsual” media, began the inexorable transition to a pervasive “culture of amusement.”

Postman contended that, while print media have long served as a robust platform for the reasoned exchange of ideas, the televisual media—most notably commercial TV—have proven themselves poorly suited for explaining complex concepts and for managing conversations about them. Philosopher Marshall McLuhan had already given us the

familiar but puzzling slogan “The medium is the message,”³ and Postman seconded his views with the idea that every medium limits, controls, and distorts the information we try to push through it. “The medium is the *metaphor*,” he claimed. Just as a metaphor is a figure of speech that re-codes a complex and abstract idea into a familiar concrete example, television re-codes complex information into its own unique and simplified way of presenting it.

For example, it would be very difficult to have an effective discussion of philosophy using only smoke signals; the “bandwidth” of that particular medium is simply too limited. Similarly, the experience of watching television involves the passive acceptance of a steady flow of disconnected entertainment units—audiovisual packets that are condensed, simplified, and sweetened to fit the short attention-span limitations of the medium.

With the minimal exceptions of government-supported broadcasting such as America’s PBS and England’s BBC, the economic structure of the TV industry requires that the content be selected for its commercial potential—the number of eyeballs looking at the screen when the commercial comes on. And in recent years, the intense competition for viewers has forced media producers to fight for attention by pandering ever more aggressively to a jaded public, with material that is increasingly sexualized, violent, lurid, and voyeuristic.

“America is the only nation in history that has gone directly from barbarism to decadence without the usual interval of civilization.”

—Georges Clemenceau

In what remains of “the news,” according to Postman, we’re treated to a steady parade of “talking hairdos” tantalizing us with the latest secrets about the personal lives of celebrities, robberies, shootings, car chases by police, and the mudslinging of political adversaries. We see news segments, file clips, and sound-bites of public figures so brief that

one can only assume that the people who create them are convinced that we have the attention span of a gnat. The product, of course, is the talking hairdo, not the information.

Even the websites that serve as extensions of the broadcast media operations, such as CNN Online and others, have the look of online candy stores, with carefully tuned topic headlines promising lurid video footage, celebrity news tidbits, pop-science jelly beans, and easily digestible factoids.

Television, according to professor Postman and others, is a medium forever doomed to the status of the court jester—capable only of distracting and amusing us.

In fact, Postman asked: Could television actually be making us a dumber society? By analogy, if the muscles in our bodies atrophy when we don't use them, and if abilities such as sports, singing, dancing, playing musical instruments, drawing, and painting fade with disuse, doesn't it seem that our mental faculties such as critical thinking, comparative thinking, curiosity, imagination, judgment, and logic also atrophy with disuse?

If we can't look to the televisual media to help us keep our minds sharp and support the development of the minds of our children, then what other viable media do we have for developing and exercising the faculties of clear thinking and intelligent discourse? What of the literary channel—the world of ideas as expressed in print?

The news there is not good. Americans have been reading fewer books with each passing year, and U.S. publishers have been putting out fewer of them. In fact, 2006 marked the turning point at which, for the first time, the United States lost its leadership in publishing more titles than any other country. The UK—with one-fifth the people and one-sixth the economic size of the United States—took over as the new leader in book publishing.⁴

Most newspapers in the United States have seen declining readership, and a spate of special-topic popular magazines has not slowed the decline in the numbers of people who read. *Sports Illustrated*, a traditional

men's magazine, saw its circulation stalled for a number of years, until it introduced its annual "swimsuit" issue, which put it into the light pornography business. For a male-oriented magazine, it discovered sex rather late in life, but eventually had to accept the realities of the saturated marketplace.

Big-brand marketers are using less print-based advertising and have taken to subsidizing the production of movies and TV shows in order to "place" their products into the public attention stream, where prospective customers can't tune them out or turn them off. The huge migration of advertising funds to the Internet also testifies to the steady transition of America to an electronically based culture from a print-based culture.

Screen-viewing, defined broadly as paying attention to information presented visually on display screens of various types—TVs, video players, computer monitors, movies, cell phones, PDAs, and electronic games—has displaced much of the experience of reading print on paper. The American Academy of Pediatrics has formally expressed its concern about protracted screen-viewing by children, and has recommended that parents not permit children younger than two to view *any* screen-based devices, including television.⁵

NYU's Professor Postman pointed out that television, as the least interactive of the televisual modes of information, diverts the most mental energy away from the experience of active cognition—for hours at a time. "Chewing gum for the mind," he called it. It's probably no accident that obesity in the Western cultures, particularly in America, has been steadily rising since television took over as the dominant activity in leisure time.

Brain research has demonstrated clearly that the experience of watching television for more than two to three minutes induces a trance-like state nearly indistinguishable from hypnosis. Advertising messages, in this sense, are post-hypnotic suggestions and embedded directives: "The next time *you have a headache . . .*," or "Flu season is here and . . . [it's time to get the flu and then buy our medicine]."

Noted historian David McCullough, widely praised for making history come alive in his best-selling books, worries about what he and others have called “cultural amnesia,” which is the loss of a sense of shared history and culture by a population ever more entranced by the provocative images dancing before their eyes. More and more people, says McCullough, devote their discretionary time and attention to the synthetic reality of the entertainment media rather than the active cognition that comes with reading and discussing interesting ideas. According to McCullough,

“Reportedly the average American watches twenty-eight hours of television every week, or approximately four hours a day. The average person, I’m told, reads at a rate of 250 words per minute.

“So, based on these statistics, were the average American to spend those four hours a day with a book, instead of watching television, the average American could, in a week, read:

- The complete poems of T.S. Eliot;
- Two plays by Thornton Wilder, including “Our Town”;
- The complete poems of Maya Angelou;
- Faulkner’s *The Sound and the Fury*;
- F. Scott Fitzgerald’s *The Great Gatsby*; and
- The Book of Psalms.

“That’s all in one week.

“If the average American were to forsake television for a second week, he or she could read all of *Moby Dick*, including the part about whales, and make a good start, if not finish, *The Brothers Karamazov*.”⁶

Another significant development of the American popular media, best exemplified by talk shows on radio and television, has been the increasingly strident, polarized, antagonistic pattern of discourse. With the shifting of “the news” business toward an entertainment model of

design and production now virtually complete, and the increasingly saturated media environment in the United States, those who sell us our media fix are forced by sheer competition to pander to our most primitive fears and appetites.

Media celebrities and spokespeople who formerly may have modeled thinking processes such as open-minded discourse, tolerance for differences, and respect for honest political opposition, now model the lowest levels of rudeness, intolerance, extremism, information-twisting, character assassination, and polarization. Our children have little chance of seeing role models for intelligent discourse anywhere in the popular media.

In fact, none other than *Time* magazine demonstrated its best two-valued thinking with a cover that featured New York Senator Hillary Clinton, who at the time was in the news as a possible presidential candidate for 2008. The cover layout showed a close-up view of her face along with two check-boxes, one labeled “Love Her” and the other labeled “Hate Her.” Inside, readers were invited to vote: “How do you feel about Hillary Clinton? Check one of the boxes on this week’s cover, and mail to TIME Magazine Letters, [address].”⁷

Allen Ginsberg, beat poet of the 1960s, remarked:

“We’re in science fiction now, man. Whoever controls the images—the media—controls the culture.”

On a more optimistic note, however, we must acknowledge that neither Postman nor Ginsberg, nor other scholars who seemingly despaired of the decline of the intellectual culture in America, could clearly foresee the coming impact of the Internet and the World Wide Web. It seems clear, at the time of this writing, that the culture of ideas is now rapidly and energetically migrating toward the Internet—a previously unrecognized *fourth medium* that deserves to be included in Postman’s progression of the cultural conversation.

The web page, which may turn out to be one of the most important inventions of modern time, is—potentially, at least—*both* a televisual medium *and* a text-based reading medium. Perhaps the most remarkable feature of the web is that people of all intellectual stripes can find the information that suits the level of consciousness they choose for themselves. Alternatively, the downside of this migration of intellectual activity may exaggerate the impact of the culture of amusement, possibly reinforcing a new and more worrying polarization of the society.

No Time to Read?

Excerpt from the commencement address by author and historian David McCullough, to the University of Connecticut, May 15, 1999.

“We’re being sold the idea that information is learning and we’re being sold a bill of goods.

“Information isn’t learning. Information isn’t wisdom. It isn’t common sense necessarily. It isn’t kindness. Or trustworthiness. Or good judgment. Or imagination. Or a sense of humor. Or courage. It doesn’t tell us right from wrong.

“Knowing the area of the State of Connecticut in square miles, or the date on which the United Nations Charter was signed, or the jumping capacity of a flea may be useful or valuable, but it isn’t learning of itself.

“If information were learning, you could become educated by memorizing the World Almanac. Were you to memorize the World Almanac, you wouldn’t be educated. You’d be weird.

“My message is in praise of the greatest of all avenues to learning, to wisdom, adventure, pleasure, insight, to understanding human nature, understanding ourselves and our world and our place in it.

“I rise on this beautiful morning, here in this center of learning, to sing again the old faith in books. In reading books. Reading for life, all your life.

“Nothing ever invented provides such sustenance, such infinite reward for time spent as a good book.

“Thomas Jefferson told John Adams he could not live without books. Adams, who through a long life read more even and more deeply than Jefferson, and who spent what extra money he ever had on books, wrote to Jefferson at age seventy-nine of a particular set of books he longed for on the lives of the saints, all forty-seven volumes.

“Once upon a time in the dead of winter in Dakota Territory, with the temperature well below zero, young Theodore Roosevelt took off in a makeshift boat, accompanied by two of his ranch hands, down-stream on the Little Missouri River in chase of a couple of thieves who had stolen his prized rowboat. After days on the river, he caught up and got the draw on them with his trusty Winchester, at which point they surrendered. Then, after finding a man with a team and a wagon, Roosevelt set off again to haul the thieves cross-country to justice. He left the ranch hands behind to tend to the boat, and walked alone behind the wagon, his rifle at the ready. They were headed across the snow-covered wastes of the Bad Lands to the rail head at Dickinson, and Roosevelt walked the whole way, forty miles. It was an astonishing feat, what might be called a defining moment in that eventful life. But what makes it especially memorable is that during that time, he managed to read all of *Anna Karenina*.

“I often think of that when I hear people say they haven’t time to read.”

KNOWS AND KNOW-NOTS: THE NEW SOCIAL DIVIDE

During the most intensive phase of the U.S. military operations in Iraq, the National Geographic Society commissioned a study by the Roper Public Affairs firm to find out what American high school students knew about the Middle East. The Geographic’s leaders, as well as many educators, were stunned by the results.⁸

According to the study, 63 percent of the students couldn't find Iraq on an unlabeled map that showed only the countries of the Middle East. Seventy-five percent of them couldn't locate Israel on the same map. Less than half could point out India on a map of only the Asian continent.

Many students did no better with a map of their own country. Less than one year after the legendary hurricane Katrina nearly destroyed New Orleans, 30 percent of the high school students surveyed couldn't locate the state of Louisiana, or even figure out where the hurricane had struck. Forty-eight percent of them couldn't find the state of Mississippi, which borders Louisiana.

The poll also showed that 72 percent of young Americans—between the ages of eighteen and twenty-four—did not consider it important to know anything about other countries. Fewer than 10 percent considered it important to know another language besides English, and a majority of them mistakenly estimated that English is the world's most-used language.

The Roper/Geographic poll matches up with another interesting fact: *fewer than 25 percent of Americans have passports.*

Fewer Americans visit museums than in the past. Fewer of them attend live theater performances. Fewer of them visit libraries, patronize bookstores, or visit historical sites.

Professor Jon Miller of Michigan State University found that fully one-third of the Americans he surveyed completely rejected the scientific concept of evolution: *they simply didn't believe it.* The only country in Miller's comparative surveys with a lower acceptance of evolution was Turkey.⁹

In this new, so-called "Third-Wave" world of information glut, 24/7 news, and continuous entertainment, Americans seem, paradoxically, to be getting collectively dumber—or at the very least not getting smarter.

Every developed society eventually differentiates itself into various levels of wealth, status, and power. Differences in human capacity and human ambition sooner or later show up in the material standard of

living. So it is with the process of education. Every developed society also develops an educated elite, and their material fortunes generally tend to correlate with their mental capacities. For many years, an article of faith in the American culture has held that a large middle class was the economic destiny of the country, and that a growing educated class was one of the primary causes of this democratization of wealth. This may not hold true indefinitely.

In recent years, the economic gap between the wealthy class and the middle class has been widening. If it continues to widen at its recent pace, the so-called American middle class may begin to fuse with the lower class, to form what may again look like a two-class society. Some futurists believe that the dumbing down of the popular media-based culture, together with the lack of progress in public education, may lead to an educational two-class society—the “knows” and the “know-nots.”

By about 2000, more than half of the graduate students majoring in science and technology in U.S. universities were foreign-born. That disparity continues to grow. It's also interesting to note that while the number of women enrolled in colleges and universities in the United States has been growing steadily, the number of men enrolled has been declining. In fact, by about 2005, female students outnumbered males at the bachelor's, master's, and doctoral levels. Some sociologists believe that this steady shift in mental preparedness may lead to a significant change in the balance of influence and political power, and ultimately perhaps to a “feminization” of leadership in business and politics.

WHO CARES? WHO NEEDS TO CARE?

“But the schools are out to teach patriotism; the news [media] are out to stir up excitement; and politicians are out to get re-elected. None of the three, therefore, can do anything whatever toward saving the human race from reciprocal suicide.”

—Bertrand Russell (mathematician, philosopher)

“So what?” “Why should I care about any of this? Why is this my problem?” “What do you want me to do about it?” “What *can* I do about it?” Those are, of course, all legitimate questions—variations on the same basic question, actually. If the person who answers the question answers only for him- or herself, and only within the confines of his or her own immediate self-interest, then perhaps the answer is “I *don’t* care. I have my own life to live. Don’t bother me with other people’s problems.”

But if one answers from a somewhat larger perspective, say that of a parent, a teacher, a counselor, a social services professional, a business owner or executive, a political leader, a community activist, or maybe just someone who’s concerned about where the country and culture may be heading, then perhaps there is reason to care. A person need not be a hyper-intellectual egghead to be at least vaguely concerned about the widely discussed dumbing-down of the American culture.

Practical intelligence, as we will define and explore it, could serve as a unifying concept, an organizing principle around which to structure the discussion of what some activists are calling the American “restoration agenda.” The restoration agenda is a set of priorities for bringing back a number of key values, traditions, and institutions that many feel have been lost in the transition to a here-and-now culture of electronic experience. This restoration agenda is not unique to the American culture; many thoughtful people in virtually all of the developed countries are concerned about the same kinds of issues as their American counterparts are.

More and more social commentators have been blaming the pervasive media-based culture of amusement—not always fairly, perhaps—for a variety of sins. These include the coarsening of public entertainment with the ever-increasing use of sexualization, violence, and voyeuristic content; the destruction of childhood innocence; the commercial exploitation of children by cynical marketing methods; and the polarization of political discourse with mean-spirited, narrow-minded, and antagonistic personal attacks exchanged by warring ideological camps.

All of these symptoms and others, one might argue, are indicators of a culture that has “gone dumb.”

Some will say that the battle has already been lost, that “it can’t be done.” Surely it’s too much to expect that several hundred million people will all suddenly discover the rewards of thinking clearly, reading exciting ideas, and exchanging their views intelligently with one another. But revolutions don’t start with the masses; they start with the few—those who can articulate the case for a new way of doing things and who can show others the road to get there. The masses learn by imitation and social modeling.

In 1975, the government of Venezuela created a new cabinet position: Minister for the Development of Human Intelligence. Dr. Luis Machado, a noted scholar and activist, was appointed to head the department. His mission was to influence as many public institutions as possible throughout the country to devote attention and resources to supporting the development of intelligence in its citizens, beginning at—and even before—birth. Machado launched an ambitious campaign to educate parents, healthcare professionals, educators, and caregivers of every imaginable variety about how intelligence develops in children and how to support and accelerate its progress.

To the best of my knowledge, this remarkable venture has not been replicated at the national level in any other country. The Venezuelan venture had a fatal flaw: the government gave Machado a small office, one assistant, and no budget. He labored mightily for several years to advance his mission, but eventually the government changed hands and the program was killed. Possibly the government leaders had second thoughts about the implications of millions of citizens learning how to use their gray matter more skillfully. There’s a bigger demand for sheep than for shepherds.

Malcolm Gladwell, in his best-selling book *The Tipping Point: How Little Things Can Make a Big Difference*, described the domino-like process by which ideas and ideologies sell themselves across cultures.

One of the contagion dynamics he identified was “mavenhood,” the role of people who are uniquely well positioned to promote an idea to others. Mavens, according to Gladwell, are people who have the attention of large numbers of people and who can influence them by way of the roles they play. A maven who takes a personal interest in some particular idea or movement can have a huge impact in bringing the idea to the attention of others, and making it part of the public consciousness.¹⁰

Who are the potential mavens who can promote the teaching, application, and appreciation of PI in our culture?

Parents can educate themselves about PI, upgrade their own PI skills, and teach their children every day how to use their minds more effectively. Starting with the very youngest children, parents can help them develop superior language skills, learn to love reading, make decisions for themselves, think in terms of options and possibilities, develop tolerance for ambiguity and complexity, articulate problems and work their way through to solutions, think up original ideas, and share their ideas with others. Parents can work with teachers to encourage schools to implement the teaching of PI concepts and skills.

Teachers can educate themselves about PI, upgrade their own PI skills, and change the focus of the educational experience from teaching kids what to think to teaching them *how* to think. Teachers can change the vocabulary of their practice to focus more on competence and less on content. They can bring the concepts and methods of PI to the surface, rather than leave them haphazardly scrambled into the teaching-learning experience. They can work through their professional associations to encourage schools to implement the teaching of PI concepts and skills.

Educators who train teachers in colleges and universities can educate themselves about PI, upgrade their own PI skills, and change the focus of the teacher-education process from teaching kids what to think to teaching them *how* to think. Educators can encourage teachers to play a more active part in encouraging schools to implement the teaching of PI concepts and skills.

Mental health professionals can educate themselves about PI, upgrade their own PI skills, and learn to view human adjustment through the multi-faceted prism of practical mental competence. A large aspect of the therapeutic experience is unlearning and relearning, and the concept of “therapy as learning” has much to recommend it.

Executives and managers in business organizations can educate themselves about PI, upgrade their own PI skills, and allocate training resources toward upgrading the thinking skills of their employees—all of them, not just the elite or the star performers who are anointed for success. They can make *organizational intelligence*, both individual and collective, a high priority within the cultures of their enterprises. They can use their positions of visibility and influence to encourage schools to implement the teaching of PI concepts and skills.

Consultants to business can educate themselves about PI, upgrade their own PI skills, and promote the training and development of mental skills among employees as one avenue for increasing the capacity of the enterprise to compete. Consultants can introduce the methods of effective thinking and problem solving as part of their contribution in advising executives and helping teams work more effectively.

Legislators and political leaders can educate themselves about PI, upgrade their own PI skills, and provide the leadership needed to raise the level of discourse needed to encourage schools to implement the teaching of PI concepts and skills.

Celebrities and media leaders can educate themselves about PI, upgrade their own PI skills, and provide the leadership needed to raise the level of discourse in the popular media, disavowing the practices that pander to fear, ignorance, and bigotry. They can use their positions of visibility and influence to encourage schools to implement the teaching of PI concepts and skills.

If my prescription seems rather repetitive, with the same commitment required of the influencers in various sectors of our society, then maybe that’s the message. If we’re going to rescue the culture of ideas from its captivity at the hands of the culture of amusement, we’ll have

to make the conversation about the “restoration agenda” ever more widespread, intense, and interesting. One modest hope for this book is to strengthen the case and provide a street-language vocabulary that can inform that strategic conversation.

Notes

1. *Reader's Digest*. April 1978, p.132.
2. Postman, Neil. *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*. New York: Penguin, 1985.
3. McLuhan, Marshall. *Understanding Media: the Extensions of Man*. Cambridge, MA: MIT Press, 1994 (reissued). Originally published in 1964. See also McLuhan, Marshall, *The Medium Is the Message*.
4. “U.S. Book Production Plummet 18K in 2005.” News release. RR Bowker, May 9, 2006.
5. An AAP policy paper on the association’s website recommends: “Pediatricians should urge parents to avoid television viewing for children under the age of two years. Although certain television programs may be promoted to this age group, research on early brain development shows that babies and toddlers have a critical need for direct interactions with parents and other significant care givers (e.g., child care providers) for healthy brain growth and the development of appropriate social, emotional, and cognitive skills. Therefore, exposing such young children to television programs should be discouraged.” See <http://aappolicy.aappublications.org/cgi/content/full/pediatrics;104/2/341>
6. Excerpt from the commencement address by author and historian David McCullough to the University of Connecticut, May 15, 1999.
7. *Time* magazine, August 28, 2006, cover.
8. *National Geographic*-Roper Public Affairs, 2006 Geographic Literacy Study. November 2006. See *National Geographic* website at www.nationalgeographic.com.
9. “Americans Less Likely to Accept Evolution than Europeans.” News release, Michigan State University website, www.msu.edu.
10. Gladwell, Malcolm. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown, 2000.