us an essential perspective in rethinking the role of mass schooling. Classical business values corrupt education, they have no place in education except as cultural artifacts to be examined.

For the first two centuries of our existence, such an institution would have been unthinkable — the young were too valuable a part of economic and social reality. Indispensable, in fact. But when the young were assigned to consume, not produce; when they were ordered to be passive, not active, as part of the general society, the schools we have were the inevitable result of this transformation. As soon as you understand the functions it was given to perform in the new corporate economy, nothing about school at all should surprise you. Not even its Columbine moments.

2

Walkabout: London

Author's Note:
I've spoken about 1,500 times since I quit schoolteaching, in every American state and twelve foreign countries, but only two audience members in all that time were so provoked to anger by what I said that they screamed insults at me from their seats. One, in 1992, was the son of a very famous economist from California, and the other, in 1998 (if memory serves), was a very famous stock speculator in New York. The reason I'm telling you this is that the substance of this chapter, albeit with somewhat different details, is what drove those men to rage. So you've been warned.

The idea I'll be arguing here — that free-form "education," the variety I call "open-source" education, is of much higher quality than rule-driven, one-size-fits-all, "testable" schooling — came to me first as a teenage boy when an amazing thing happened to my beloved Uncle Bud Zimmer. I think you'll see what I mean when I tell you Bud's miracle.

Prior to WWII, Bud was a steelworker and a deckhand on the paddlewheel river steamers which went from Pittsburgh to New Orleans. He was a tough, tough young man, looked a lot like John Wayne in *Stagecoach*, and the ladies loved him. But he was a high-school dropout. He enlisted to go to war in 1942 when I was seven, and I saw the troop train carry him off one night. Somehow he qualified for Officer's Candidate School, and was eventually shipped off to Europe to join the invasion as a lieutenant. In his platoon was an enlisted man, Al Rockwell, who would one day be heir to the Rockwell Manufacturing empire. Mr. Rockwell, a man of strong libertarian principles, insisted on going into combat as an enlisted soldier. They became friends.

I can't remember what ordinary jobs Bud held when he came back from the war as a captain, but I do know his CV didn't include a college degree. One day he called me on the phone from Cincinnati, and said that before I went to Cornell he wanted me to work for him "at a real job," to "stop sponging off your parents and earn your own money." What job did he have in mind? He said, "I want you to load 125-pound slabs of steel onto boxcars from nine to five every day. I want you to live with me near the Rockwell plant in Ohio and pay room and board. How's that sound?"

It turned out that Bud was the manager of the plant, employing thousands. "I have two dozen Harvard hotshots working for me," he said. "They'll do anything I want: shine my shoes, wax my car, but I can't let them see me favoring my nephew, so I'll have to work you twice as hard as anyone else. Is that OK?"

A real job with a grown-up's pay at 16? For that, anything would have been OK! I was too unworldly at the time to even think of the big mystery — how on Earth could a common steelworker *without an education* be ordering Harvard graduates around? And running a huge industrial plant? My mistake was thinking of Bud as a man without an education. He had a superb education: it was only schooling he lacked.

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Jonathan Goodwin

Google the cover of *Fast Company* magazine for November 2007, and you'll be staring into the unremarkable face of junior high-school dropout Jonathan Goodwin. How does a young fellow from a poor Kansas farm family rate such treatment? No high school, no college. After bailing out of seventh grade at age thirteen, Jonathan did odd jobs at a local garage. Pitiful pay. No future in that, right?

"That was my school," he told *Fast Company*.

When the price squeeze in gas came, it puzzled Jonathan. It seemed phony to him. He knew technology existed which could give cars 60 to 100 miles per gallon, and push emissions near zero. Why didn't Detroit offer it?

No matter. Jonathan could build it himself. And before you could say "crazy kid!" he had more business than he could handle, charging up to $25,000 to convert a Hummer. It didn't hurt him that one of his

best customers was Arnold Schwartzenegger, governor of California. And a one-time dropout himself.

Jonathan is taking in over a million a year doing four conversions a month. Before he was old enough to vote, he was a self-reliant human being adding value to the community. When he left seventh grade he was just a little older than America's first admiral, David Farragut was when he took command of a captured British ship off the coast of Peru in the War of 1812, at the age of 12 — and sailed it to Boston; the same age George Washington was when he dropped out of schooling; the same age as Thomas Jefferson when as a young man Thomas began to manage a large plantation and 250 employees in Virginia (both his parents being deceased). The same age you and I were once, sitting at our school desks, copying notes from a blackboard, getting yelled at.

Danica Patrick

On April 20, 2008, Danica Patrick, age 26, became the first woman in big-time auto-racing history ever to win a major event. She was driving against two-time Indy 500 winner Helio Castroneves, and roared past him in the final two laps of the Motegi, Japan 300, and won going away. "This is about finding something you love and following through with it," she told reporters after the race.

Ten years earlier, at age 16, Danica dropped out of high school and went to London, all by herself, to learn to sustain high speeds for hours at a time. You might have been in high school at 16, probably a sophomore, looking forward to a graduation far far away.

Nick Schulman

Nick Schulman, age 21, is a neighbor of mine in Manhattan, although we've never met. Had I stayed in teaching, it's likely Nick would have attended my junior high school; he might even have been in my eighth-grade English class, although he probably wouldn't have been there very often, because it was in eighth grade that Nick became a truant, cutting classes to play pool. Not a good sign, right? When he found computer games, he dropped out of school. At age 18, in 2005,

he became a poker addict. Pity his poor mother. Other kids were worrying about SATs and college, but Nick was worrying about straights and flushes.

On February 28, 2008, the *New York Post* devoted a split page to Nick. He had just won two million dollars on the world poker tour. Now that the problem of paying rent was taken care of, he was "ready for a different kind of fulfillment," he told the paper. Philosophy was what Nick had his sights set on now, and for that he planned to enroll in college. That's where you probably were at 21, too. Without the two million.

Diablo Cody

If your teenage daughter changed her name to "Diablo," you might shrug it off as a passing fancy. But if she came home one day with the announcement that her life's ambition was to be a stripper, and to prove it she created a pornographic blog called "Pussy Ranch," you might begin to worry.

In her mid-twenties, now a lap dancer, Diablo published a book about her degrading and dangerous work, called *Candy Girl*, and two years later, in a cut-to-the-thigh leopard-print gown (with a gigantic tattoo of a stripper covering her right arm and shoulder), she stepped onstage at the Oscar ceremonies in Hollywood to accept her own Oscar for best screenplay. Her movie was *Juno*, about a pregnant, unmarried teen facing the future with courage.

Diablo Cody told the audience, "Most of all I want to thank my family for loving me exactly the way I am." In the linear logic of pedagogy, Diablo was way off the recommended track, but in the different universe of open-source learning, which operates through experimentation and personal feedback loops instead of expert advice, she was right on point.

Open-Source Learning

Jonathan, Danica, Nick, Diablo. Each took an open-source road to an individualized education under personal management, exactly as Ben

Franklin once did. Open-source learning accepts that everything under the sun might be a possible starting point on the road to self-mastery and a good life — garage work, poker, lap dancing, whatever. In open source, sequences are personally designed or personally signed off on. And everyone you encounter is a potential teacher: garage mechanics, card sharps, lap dancers, race car drivers, everyone.

Potter Stewart, the former Supreme Court Justice, once remarked he couldn't define pornography, but he knew it when he saw it. Open-source is like that. To hedge it in with official algorithms is to ruin it, but I owe you at least a rough abstract: in open source, *teaching is a function*. Not a profession. Anyone with something to offer can teach. The student determines who is or is not a teacher, not the government. In open source, you don't need a license to teach any more than Socrates did. Right there you can feel how different the basic assumptions of open source are. No student faces failure for deciding not to learn from you.

In open source, students are active initiators. It all sounds too undisciplined, I know, but life beyond schooling is exactly like that. You either write your own script, or you become an actor in somebody else's script.

Shen Wenrong

The *Financial Times* of March 17, 2006, tells the story of a silent contest between college-trained executives and engineers, and a band of Chinese peasants. Since the account has real bearing on this idea of open-source learning, let me summarize it for you.

Not long ago, the ThyssenKrupp Corporation of Germany decided to unload its mighty "Phoenix" steel plant in Dortmund. Steel prices were down, and it looked to management as if they would stay down, so the decision was made to sell all 220 acres of buildings to China, even though that would throw 10,000 Germans out of work.

Management expected two payoffs: one in the sales price, and one in the bill to move the plant from Dortmund to near Shanghai. ThyssenKrupp estimated that would take three years and an army

of specialists. China bought Phoenix, but choked on the moving bill. They would do the job themselves.

One fine day a raggedy band of a thousand peasants led by peasant Shen Wenrong showed up in Dortmund. Here's a capsule of data to help you think about Mr. Shen: He didn't use a computer. He didn't have a real office. He worked from behind something looking suspiciously like a kid's school desk. Shen's first computer-less, office-less decision was to avoid German housing and meal costs. In three weeks, his crew built its own dormitories and commissary.

Then it broke the steel plant down. Crated it. Shipped it to China. Uncrated it. And set it back up, inside of *one* year, not three. Numerous rules were broken in the process whenever more creative problem-solving seemed appropriate.

In the time it took to move Phoenix, China's huge orders for steel on world markets drove prices through the roof, exactly as China's planners had calculated would happen. Phoenix in China was a big money-maker from the beginning, just as it would have been if left in Germany. So the ignorant Chinese not only worked harder than the Germans, they had better judgement, too.

How were we ever tricked into believing that specialists are needed for matters well within the reach of ordinary people? How did we come to think so little of ourselves? If unschooled peasants can demolish and re-erect a steel plant three times faster than professionals, then you and I need to re-examine everything we've been conditioned to accept as truth. Everything. That's called dialectical thinking. Once dialectics was central to school, but we don't teach it anymore. Not even to the so-called gifted and talented.

Walkabout: London

High-school dropout, Sir Richard Branson, thinks the important lesson of his life happened at the age of four. It was a London walkabout, as he tells of it in his autobiography, and tells once again in *The New Yorker* (May 2007). It happened this way: four-year-old Richard was on a drive with mother Eve in the London suburb of Shamley

Green, miles from home, in an area where Richard had never been. Eve pulled over and asked him whether he thought he could find his way home from where they were.

He said yes, whereupon she told him to get out and do so then. "Mother was determined to make us independent," he told the magazine. By age twelve he was making hundred-mile round-trip bike rides alone to the beach at Bournemouth. After a brief go at high school, Branson dropped out, never spending a day in college. At nineteen, his first successful business was launched. Virgin Airlines, his music business, and many others were in the near future, as was his announcement that he would construct a private space vehicle. On July 29, 2008, a picture of Branson, mother Eve, and his completed rocket appeared on the front page of newspapers around the world. Some 250 seats for the maiden voyage were all snapped up at $200,000 a piece.

Is four too young to become involved in serious business? Tiger Woods was sinking putts on the Mike Douglas television show at age two, so I tend to doubt it.

Glen Doman

I remember sitting in Glen Doman's office at the Institutes for the Achievement of Human Potential on Stenton Avenue in Philadelphia about twenty years ago, looking at framed tributes on his walls from the famous of the planet such as Jackie Kennedy, while Glen explained how easy it was to teach a baby to read, count, and do basic arithmetical functions.

"They learn instantly," he said, "the trouble comes if you wait until they're five, or if you spend too much time in review. Every year you delay increases the magnitude of difficulty." Doman has sold three million copies of his book, *Teach Your Baby to Read*, although you're not likely to find a single copy in a school.

I went to visit Doman for an odd reason. My daughter, then at MIT, told me he was the laughing stock of her friends. She said it in a phone call from Cambridge, and the minute we finished speaking, I

dialed Philadelphia information, got the number at The Instutitues, and rang him up, although we had no prior association. We were total strangers to one another. I asked if someday I might visit to see the alleged miracle myself.

"What are you doing this evening?" he said. An hour later I was driving to Philadelphia, where I met Glen in the late evening, stayed in a guest bedroom, and next morning was watching his school in operation. It was a place with no entrance requirements. Glen took anybody who applied. It was a place where seven-year-olds read real books and grown-up magazines for pleasure. Impromptu, the kids decided to put on a scene from *The Mikado* for my pleasure, complete with song and dance. I left with a heightened sense of just how far official schooling has dumbed us down.

The Human Genome Project

Branson's successful walkabout and the dirt-farmer savvy of Shen are only possible to people with access to the classroom of the greater world. All my life I've been saturated with warnings of how people without diplomas, certificates, and "credentials" are ruined, doomed to insignificance. You've been warned too, I know.

So how are we to account for Washington and Lincoln, our two best presidents, having almost no school between them? How to explain America's two legendary industrialists, Carnegie and Rockefeller, both being elementary school dropouts? I mean, why didn't school matter in their day, but only in ours? Is this open-source thing feasible in the modern high-tech sciences? If you think not, tell me how we got the human genome map from a horrible student, surferbum named Craig Venter and a born-again Christian homeschooler named Frances Collins, who studied whatever he wanted growing up, and for as long as he wanted to study it — no attempt at a balanced intellectual diet, or any rigorous discipline imposed from outside. Collins told the *New York Times* a few years back that Virginia authorities would have thrown his mom in jail if they knew what school looked like in the Collins home.

A Torch Singer at MIT

On April 27, 2007, national headlines announced the firing of MIT's famous director of admissions, Merilee Jones. Jones was dismissed in disgrace after 28 years of outstanding service during which MIT had granted her its highest honors and she had become a heroine of the college admissions world nationally

Jones specialized in female recruitment, not an easy sell at a tech school, but during her tenure she tripled the number of women enrolled. At the time of her dismissal, the press quoted students and faculty with characterizations of her service ranging from "beloved" to "irreplaceable." So why had she been canned? Had to be molesting students or something serious like that, right?

You'd never guess in a million years, so I might as well tell you. When MIT hired her, Jones lied on her job application about having three college degrees. Actually, she had been a nightclub singer in country bars in upstate New York.

Philip Clay, MIT's chancellor, told the press such a mistake would never happen again. No more nightclub singers! "In future…" said Clay (you can almost hear him clearing his throat), "In future we will take a big lesson from this experience."

When I read that I asked myself what lesson could possibly be learned from throwing away a brilliant colleague whose worth was proven, not theoretical? Was the lesson that doing a sensational job is insufficient job protection? For me, the lesson was that Clay himself should be fired.

Ingvar Kamprad

Degrees should never stand as proxies for education. Think of Ingvar Kamprad, diagnosed as dyslexic by self-proclaimed school experts in Sweden. He began independent life selling fish from a bicycle, without a degree. Bit by bit he added matches and xmas decorations to his inventory. What a hard life! How much better it would have been if he had gone through several colleges and become an investment banker at Bear Stearns. But as Ingvar's line of wares grew, a powerful idea

began to drive him, the idea of a store dedicated to bringing beauty and utility at low cost, to everyone. This dyslexic fish peddler is worth 31 billion dollars at the moment, as the founder of IKEA, and more important than that money — which he'll never live long enough to spend — the flame of his determination to add value to the lives of others still burns brightly.

The Graduate

You're on the road to being educated when you know yourself so thoroughly you write your own script instead of taking a part written by others. A migrant fruit picker named Charles Webb fits this description for me. You've very likely consumed a piece of Webb's imagination, if not the fruit, if you've ever seen the classic American film *The Graduate*. Webb sold millions of copies of the book, and his film became a beacon to an entire generation of American young people. It's theme, that a life built around buying things is a disaster, helped turn the film into a runaway hit, still shown and still rented years later. Charles and his wife made millions and were on every A-team guest list from Easthampton to Maui.

As their life turned into the non-life of perpetual celebrity and celebrity projects, Webb and his wife made the copyright over to the Anti-Defamation League, gave their entire fortune away, and set out as vagabonds in a trailer, at one time becoming migrants picking fruit in California.

"Wealth didn't work for us," he said.

Dropouts

Every single school day in America, 7,000 students drop out, some confused, some angry, but all are brave. If we had the sense our ancestors did, we'd look on these dropouts as a grand resource, as people whose minds the standard programming couldn't tame. We'd treat them with respect. One and a quarter million people a year, perhaps more, with potential not necessarily inferior to Ben Franklin, the dropout, or Branson, the dropout, or the dropout Wright brothers, or slum urchin Lula da Silva, grown to the presidency of Brazil

without a certificate and on the verge of making his country the first major nation to be free of petroleum out of the ground.

What does it say to us that a million and a quarter young people a year don't want to be in classrooms, don't want to be there so much they're willing to endure scorn, insult, and constant discrimination as the price of escape? Are they just unfortunates who have earned a future of misery, or is it we, the self-imprisoned and perpetually frightened, waving our wallets and homes in the burbs as evidence we must be alive, who are the truly miserable? Year after year the International Happiness Survey ranks our country as among the mediocre in happiness, along with Germany and every other Anglo-Saxon country. Does the phony pecking order created by degrees, and by elite colleges like Yale and Stanford, have anything to do with this?

Wake up! If things were really as you've been conditioned to believe, how could slum urchin Lula govern a complex modern nation? How could lower-middle-class semi-urchin Adolf Hitler have risen to command the best-schooled nation in history? How could Thomas Edison have dropped out of elementary school, gone west alone with no money or contacts, and by age 15 be enjoying multiple streams of revenue and be earning four times the wages of a skilled workman?

How could penniless elementary school dropout Edison grow up on his own in a working-class environment, invent the electric light, the phonograph, win 1,003 patents, and build General Electric? Edison had contempt for college graduates and discriminated against them in hiring all his life.

If school were the life-and-death matter you've always been told, none of this could have happened. How could George Bernard Shaw drop out of school at 14 and teach himself to be the greatest dramatist of the 20th century? Why has no school, no college, no politician, no foundation, no social thinker ever connected the dots for you as I just did?

Another Inconvenient Truth

In 2006, the University of Connecticut set out to discover how much learning happens in a student between entering as freshmen and

graduating as a senior. Five academic areas were selected to measure, using 14,000 students at 50 American colleges, including Yale, Brown, and Georgetown. At 16 of those 50 — including Yale, Brown, and Georgetown — graduating seniors knew less than incoming freshmen. Negative growth had occurred. In the other 34, no measurable change had taken place

A bald summary might look like this: after spending an average of six years in search of a BA degree or its equivalent, and spending an average of a quarter million in cash and loans, a great many young people had nothing or even less than nothing to show for the investment. What they had was a piece of magical paper. This is a script out of the Marx Brothers.

John Kanzius

On April 13, 2008, television show *Sixty Minutes* reported a heretofore unknown method of killing cancer had been invented by a patient with no background in science and no college degree. Nobel Prize–winning cancer researcher Rick Smalley said that it was the most impressive development he had ever seen in his life, that it "would change medicine forever."

The Kanzius method destroys tumors without chemotherapy, surgery, or familiar radiation. After 36 rounds of chemo, John Kanzius was desperate enough to wrack his own brains for something which the cancer empire had missed, and he found such a thing in memories of his boyhood hobby as a radio hobbyist. As a kid, Kanzius had been intrigued by a curious fact: that when harmless radio waves passed through metal, the metal heated up. Was it possible that a tumor injected with metal particles could be killed by passing radio waves through it? Ridiculous idea, isn't it? Had it merit, surely the army of trained scientists who cost the nation tens of billions every year would have found it, wouldn't they?

He tested his theory in his garage, using a machine he constructed out of used pie tins. Sure enough, when the bottom of a weiner was injected with metal and shot with radio waves, the bottom cooked

but the top remained cool. Kanzius passed his findings on to university laboratories, which reported back that in preliminary tests radio waves did, indeed, kill cancers.

No formula known could have predicted John Kanzius. How many more of him are there out there, denied a voice in our synthetic anti-meritocracy which awards privilege on the basis of college degrees and family connections? One more Kanzius? Ten more? Ten million more? An inconceivable number?

Listen friends, if peasants can deconstruct steel mills, torch singers can revolutionize admissions at high-tech colleges, junior high dropouts can get 100 miles to the gallon, beach-bum surfers can map the human genome, tiny women can blast through the male monopoly of big-time auto racing, dyslexic fish peddlars can establish global merchandising empires, and lap dancers can win Oscars for scriptwriting, some vitally important piece is missing in the conventional way schools treat learning and accomplishment.

Twenty years ago I was talking to some Amish fellows in Barnesville, Ohio, about our ridiculous space program and its waste of scarce resources. One Amish man said they had talked about building a moon rocket once, and all agreed it would be an easy thing to do, but why would anyone except a damn fool *want* to do it? If that sounds like hot air, you want to remember Richard Branson.

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The Artificial Extension of Childhood

The same young people we confine to classrooms these days once cleared this continent when it was a wilderness, built roads, canals, cities; whipped the greatest military power of earth not once but twice, sold ice to faraway India before refrigeration, and produced so many miracles — from the six-shooter to the steamboat to manned flight — that America spread glimmerings of what open-source creativity could do all around the planet.

In those days Americans weren't burdened by a concept of the phony stage of life called "adolescence," or any other artificial extension

of childhood. About the age of seven you added value to the world around you, or you were a parasite. Like all sane people, so-called kids wanted to grow up as soon as possible — that's why old photos show boys and girls looking like men and women. All that takes is carrying your share of the load, and a few open-source adventures and presto! You *are* grown up. In Ben Franklin's day when you were ready to take your turn, no pseudo-sciences out of Germany stood in your way.

The pre-Civil War American economy was dominated by independent livelihoods, and even after the war, for another fifty years or so, young men (who would be called "boys" today) like Andrew Carnegie could start life as an elementary school dropout at the age of seven, and be partners in business with the president of the Pennsylvania Railroad at age 20. Are similar lives being fashioned today? Of course they are, but it isn't considered wise to talk about it openly anymore. Think of Shawn Fanning with his millions from starting Napster at age 18, and Fanning is far from alone — it's just that those lucky ones allowed to do it are far more discreet in our time.

An earlier America celebrated accomplishment and shrewdness from any source. Kids weren't locked away to provide employment for millions. America had room for anyone with energy, brass, and ideas. Foreign visitors like Tocqueville and DuPont de Nemours were constantly being dazzled by the high energy released in a society reaching for revolutionary egalitarianism, one which mixed all ages together, took risks, and discarded the rigid categories of European tradition.

Our Civil War changed everything for the worse. Forget the propaganda you heard in school, it had nothing to do with slavery. By 1860 Europe had already abandoned the slave institution, and the United States was very close to doing the same — it wouldn't have lasted twenty more years, for many reasons, most interesting of which, for me, is the simple fact that wage-slaves, free in name only, are much cheaper to exploit, and work harder than slaves.

As soon as you put the red herring of slavery out of mind, the contest between family and nature as centers of meaning (versus profit

achieved by converting human beings into human resources) becomes clear. Northern industrialists were already privy to the power and fortune being earned converting large populations in Britain, Germany, and elsewhere from a yeomanry into a proletariat. They lusted after similar advantages, but were sophisticated enough to realize that the American traditions of independence, self-reliance, ingenuity, family, and religious worship would have to be marginalized first before this transformation could successfully be worked. Compulsory school laws to break up family closeness were a big part of the package in Germany, and that German magic was coveted in the drawing rooms of New York and Boston.

In the industrial state which emerged rampant in the wake of the Civil War, the entrepreneurial egalitarianism of the original American design was put to death by factories and licensing laws, government interventions and requirements, and eventually by forced schooling. By 1880, factories and financiers ruled the American roost, and a professional proletariat of academics, lawyers, politicians, and others dependent on the favor of the mighty were making it hot for Americans who fought to maintain a libertarian nation as promised by the Declaration and the Bill of Rights. With this radical transformation from local democracy to *de facto* oligarchy, people with minds of their own became an impediment to efficient management. Think of it this way: lives assigned to routine work are best kept childish.

Childish people are not only obedient (if we discount their occasional tantrums), but they make the best consumers because they have little natural sales resistance. Since Plato, a stream of utopian writers has worked to give management recipes to cook childish lives; lives susceptible to the will of their betters.

Take a second to think about these utopian algorithms — dividing people from one another and from their natural allies, is right at the head of the list, but all require wiping the slate as clean of close emotional ties — even ties to yourself! — as possible. Family, deep friendships, church, culture, tradition, anything which might contradict the voice of authority, is suspect. An independent mind is the

worst danger of all, but twelve years spent in a school chair (and now in front of a computer terminal or television, etc.), will convert the most crowded inner life into a virtually blank slate.

The *trouble* with open-source learning, as far as policymakers are concerned, is that it almost guarantees an independent mind and character will develop — not a cosmetic simulation of those things, which schooling cultivates. Even worse, taking charge of mixing your own education leads to a healthy self-regard — and confident folks are considerably less manageable than anxious ones.

So, in the managerial utopia which came to be planned on policy levels after the Southern side of our national dialectic was broken by Civil War, training of the young had to be pre-empted, or nearly so, and nets of rules had to replace the trial-and-error feedback loops of open source. Andrew Carnegie, one of the principal architects of the new command-and-control system saw its drawbacks clearly; he said it would act to some degree as an anti-meritocracy, denying a goodly number of the best quality people in every field the leadership their merit should have earned them — but on the whole Carnegie thought it was a fair bargain: exchanging merit for social stability and protection of capital.

America's first national commissioner of education, eminent Hegelian scholar William Torrey Harris, said in a long essay in 1906 entitled "The Philosophy of Education," that a prime purpose of the new institutional schooling was to teach *self-alienation* (in the interests of state and corporate security), and that this could be best accomplished in dark, airless corridors. It never fails to amaze me how people can hear words like that — and the school trail is littered with them — and ignore them, as if they were only idle talk.

It's time, I think, to face some basic truth: highly centralized mass production economies take on the character of oligarchies, they can't allow *natural* processes of capitalism to go unregulated; the creative destruction which Schumpeter saw as central to the health of market economoies can't be allowed to occur naturally. That's what the expression "too big to be allowed to fail" heard so frequently these

days, along with its corollary, "bail-out" should signal to anyone with a modicum of economic training. The United States is now only nominally a free market economy; corporate welfare is dominant, the enormous American military has not, for a very long time, been primarily about protecting common American citizens from harm. It exists for several never-discussed reasons: to provide employment for the underclasses; to avoid uprisings at home; to act as a centrifuge in distributing wealth through contracts back to the managers of the system and their allies; and it exists, in the gravest extreme to "go domestic," an expression heard often at officer training facilities around the country, one well-illustrated by the now-legendary paramilitary interventions at Waco and Ruby Ridge.

Highly centralized mass production economies can't function well without colonizing individual minds and converting them into a mass mind. The conversion works best if started early, in the lower grades of elementary school, in kindergarten and pre-kindergarten. The function of these collective rituals we call school has very little to do with intellectual development — consider only the familiar madness of teaching the colors and days of the week or months of the year to little people who come to school already knowing those things. The collective rituals of lower grades are about habit training, about practicing attention and fealty to authority. In this way, independent consciousness can be undermined in its formative stages.

The opposite of mass-mindedness is dialectical-mindedness. A tremendous example of this is buried in the foundational religious documents of Western culture, in the story of young Jesus closely questioning elders in the temple after slipping away from his parents, itself a contrarian action. Indeed, the New Testament is so replete with contrarianism it's little wonder it plays no part in institutional schooling, although it plays a stupendous part in Western history from the beginning of the modern era until today.

Complex minds are always dialectical. Aristotle sets that as a basic requirement of being fully human, but because the reality of dialectical minds is that they always challenge assumptions and take nothing

for granted, their presence in large numbers poses acute problems for corporate business and corporate government.

Take the matter of personal *production* as opposed to *consumption*; production of goods, values, ideas, and marching orders. Colonial and early federal America held the ideal of self-sufficiency as the very pinnacle of achievement. The ideal household aimed to produce its own food, clothing, shelter, entertainment, transportation, medical care, education, child care, and social security. A large fraction of the population never got there, but as a City on the Hill to strive for it was an ennobling vision which some families, especially on the frontier, succeeding in making happen. It was this idea of being personally empowered, in contrast to the servile states of Europe and Asia, which acted as a magnet for the world's peoples — not the prospect of two cars, a house in the suburbs, and the latest computer junk.

Were that vision to have been maintained through forced schooling, it would have destroyed corporations in embryo. Overproduction would have strangled capital accumulation by posing continuous competition — and without capital accumulation, no dominant corporations. Far from *production* as an ideal, it was *consumption* that had to be encouraged. School had to train in consumption habits: listening to others, moving on a bell or horn signal without questioning, becoming impressionable — more accurately, gullible — in order to do well on tests. Kids who insisted on producing their own lives had to be humiliated publicly as a warning to others.

Producing yourself is the ultimate form of production. For many years America's promise to the rest of the world's peoples was that if they could only manage to get here, no feudal order would thwart that dream. But after the Civil War, the argument between entrepreneurial values — which inevitably celebrate open-source learning — and industrial values — by their nature feudal — was over.

When the smoke cleared fifty years later, the imitation sciences of pedagogy and psychology had been imported from northern Germany, pressed into service through the school institution to create a

proletariat: family-less, land-less people with only weak ties to religion, tradition, or culture. Even the middle management and professional strata are best seen as a proletariat, too — a professionalized proletariat — only lightly rooted in its relationships to people, places, or principles.

To enlist public opinion behind this utopian transformation, a pathological state of youth, heretofore unrecognized by history, was designed by G. Stanley Hall of Johns Hopkins University. He called it *adolescence* and debuted the condition in a huge two-volume study of that name, published in 1904. Trained in Prussia as behavioral psychologist Wilhelm Wundt's first assistant, Hall (immensely influential in school circles at the beginning of the 20th century) identified adolescence as a dangerously irrational state of human growth requiring psychological controls inculcated through schooling.

As John Dewey's mentor at German-inspired Hopkins, Hall's invention seemed to justify the extension of state schooling into the teen years, institutionalizing the most productive fraction of humanity for psychological treatment — in confinement with poorly educated employees of the state given a virtual monopoly over training the young.

In this dazzling coup, the teenagers who had helped build the new nation were now officially deprived of fully engaged lives such as Edison or Carnegie had once enjoyed.

A managerial class having forcefully emerged in America, the Anglo-Saxon strong class system was now being imposed on the United States through forced schooling. Walt Whitman once said, "Only Hegel is fit for America," and now, following Hegel's instructions, history itself was being slowed down, the brakes put on change — by crippling the American arguments among ideas, peoples, sections, religions — through one-size-fits-all schooling. The hope for unending argument had been built into our very founding documents, into the guarantees of free speech and access to deadly weaponry given common citizens. Our division of powers — an executive, two houses of Congress, and a high court — a division which

defies engineering wisdom in its structural inefficiency — was meant to preserve argument as the best protection for common citizens.

Power was to be kept decentralized in the original conception of the United States, and experts kept in their place: decision-making was for ordinary people, not specialists. But now, all that careful, all that caringly thoughtful architecture which made America so unique, was to be put to death through bulk-process, psychological schooling, imposed by force. I urge you to examine in your own mind the assumptions which must lie behind using the police power to insist that once-sovereign spirits have no choice but to submit to being schooled by strangers. Surely this is one of the most radical acts in human history, not the least of its breathtakingly radical assertions being that you must attend *for your own good!* It is the most striking evidence of the Teutonic mind at work behind the façade of everyday schooling.

Prior to the heavy-duty interventions of social engineering into the growing-up time, America — open-source educated for two hundred years — was a spectacularly resourceful and inventive society. One need only read the many journals written by early foreign visitors (Tocqueville's being the most prominent), to see how earth-shaking the liberty given to ordinary Americans really was. Nothing like the creative energy being released had ever been seen before, or was even dreamed of as possible. With few exceptions, invention is the province of youthful insight; cut that spring of ideas off by embedding the young in a network of rules and judgements, and you should expect important negative consequences.

Shortly after adolescence was professionalized, a decline in the numbers of patent applications by Americans occurred. After WWII, when institutionalized schooling including college and kindergarten grew by leaps and bounds, that decline accelerated. Universal schooling had weakened the imagination, just as Spinoza predicted it would in 1690, and Fichte predicted in the second decade of the 19th century. Of course, both those men were heartily in favor of that weakening; their school schemes were for the benefit of the "best" people. But if

those relative ancients could work out the school mechanism and its negative effects long before it existed, surely you can, too.

Why would anybody *want* to do this? That's easy: imaginative individuals are notoriously unmanageable and unpredictable, because they are irrepressibly inventive.

The Honor Roll

Craig Venter, the beach bum surfer who shared the laurels for producing the map of the human genome, was born in 1946. He found school exquisitely boring and took vengeance by driving teachers crazy. He cut class often to hit the boogie board and only escaped junior high school because a teacher changed one of his "F" grades to "D–" so the school could be rid of him.

Venter enlisted in the navy, serving as a medical corpsman in Vietnam. There he learned to despise bureaucracy with its books of rules in place of allowing adaptation to unique situations. His autobiography, *A Life Decoded*, adds many details to this skeletal outline, but suffice it to say he was hardly anyone's likely candidate for scientific immortality. Nor could Franklin Roosevelt have been predicted, from his "C" average in high school, and his "C" average in college.

George W. Bush had a "C" average in high school and a "C" average in college (which won't surprise most of you), but that it was a higher "C" in both high school and college than was earned by Massachusetts Senator John Kerry, probably *will* surprise you. Al Gore flunked out of his first college and squeaked through his second with a "C–" average; Dick Cheney, vice-president as a I speak, flunked out too. Legendary progressive Senator Paul Wellstone scored 800 on his *combined* SATs.

US global computer dominance came from men without college degrees: Bill Gates and Paul Allen of Microsoft — no college degrees. Steve Jobs and Steve Wozniak of Apple — no college degrees. (After Wozniak was already a mega-billionaire, he took a degree to give himself eligibility to teach elementary school in California, I've been told. But that college *made* Wozniak is clearly untrue.) Michael Dell

is another un-degreed immortal of the computer game, as is Larry Ellison of Oracle.

Ted Turner, founder of CNN, dropped out of college in his freshman year; William Faulker's high school grades were too horrible to get him into the University of Mississippi, but after service as an officer in WWI, he was given a waiver and enrolled. In Faulkner's first (and last) term, he received a "D" in English and dropped out in disgust, never to return. Warren Avis, the man who pioneered auto rentals at airports, decided college was a waste of time and never even applied. Edward Hamilton, the nation's largest independent mail-order book dealer, wrote me that the advantage he had over his competition at the beginning was that he hadn't wasted his capital or time on college. Paul Orfalea, the highly intelligent, soft-spoken founder of Kinko's, was not regarded as very bright by his high school, as he tells in his memoir *Copy This*. Shawn Fanning, whose invention of Napster at age 18 almost ruined the commercial music industry, was hired by that industry in 2007 for millions of dollars, to design a plan to save it. Shawn had no college degree, and currently has no plans to get one.

Lew Wasserman

Lew Wasserman created modern Hollywood almost single-handedly with his colossal MCA talent agency; he had no college and virtually no seat-time in high school, although he did "earn" a diploma, although not in the customary fashion.

Starting at age 13, Wasserman quit school, working instead as a movie usher on Hollywood Boulevard. He was trusted sufficiently to be given keys to open the theater in the afternoon. That privilege gave him an idea how to get a diploma without attending class, through a trade with the school principal. On Wasserman's part, he would smuggle out prints of the latest films from the theater, get them to the high school long before the movie opened, screen them for a low admission fee for students, give the money to the principal to buy band instruments and football equipment, then rush the prints back to the theater before anyone arrived, with no one the wiser. That's called

quid pro quo. He was 13 when he began to employ that ancient Roman principle.

With the time saved by not copying from the blackboard, Wasserman used the hours to think up brilliant show business contracts which are still studied in law schools as models of the genre. With those contracts, he signed stars like Fred Astaire and the Gish sisters into his new MCA stable.

Warren Buffet

Warren Buffet started in business at the age of 6, selling iced Coca-Colas door-to-door in un-airconditioned Omaha, Nebraska one hot summer during the Depression.

Steadily he added other businesses to his string: selling lost golf balls to the club pro shop; sifting discarded race track betting tickets for winners accidentally thrown away; designing a system which allowed him to deliver 1,500 newspapers on one delivery route; renting pinball machines to barber shops. From age 13 he supported himself, and by 18 Buffet had the equivalent of $100,000 in the bank. Then he applied to Wharton Business School. and was turned down.

What Buffet learned open source, by active risk-taking, imagination, and real work, schools either cannot or will not teach. It's fair to ask "why not?" Why don't schools anywhere get into the minutiae of opportunity and self-sufficiency? Why do they keep selling "a good job" as the end of the school road when, as many Americans like the Lancaster Amish still believe, no "job" is worth giving up your independence for, at least not for very long?

Consider what society would look like if 65 million trapped schoolchildren learning to be consumers were suddenly set to actively imagining themselves in independent livelihoods, adding value to the rest of the community; imagining themselves as producers instead of bored consumers. Wouldn't we soon be overrun with Buffets, Venters, Wassermans, Danica Patricks and Diablo Codys? Isn't that exactly what America needs at this sorry, sterile juncture in our history, not more well-schooled zombies on whose backs the few can ride?

Did we ever have a society like that? Of course we did. Take yourself back to the days of Ben Franklin's Philadelphia, where the crackling energy of limitless possibility was everywhere, in a society where ages were mixed together promiscuously, where anyone could take a turn when they felt up to it, where possibilities popped like firecrackers. Boston was another example of this — research the unbelievable trade of ice to India as just one specimen of what is possible when imagination — and youth — go unregulated. Pittsburgh is another good place to look. Study the career of the ridiculous little Scottish bobbin-boy, Andrew Carnegie, who dropped out of elementary school at age 7 with an accent so thick everyone made fun of him. Follow his path, step by step, to Mrs. Botta's salon in Greenwich Village, where revolutions in Italy, Hungary and Cuba were being cooked up and financed, and then on to his wealth and sinister influence on a once relatively free society. The evidence is overwhelming what a hideous transformation has been made to occur, partly through schooling. But you must *work* to understand and gain courage to defeat the plan — nobody can do it for you.

Four More School Failures

Hemingway, the school dropout, once said all modern American literature can be traced back to Mark Twain, born in Missouri in 1835, in terrible health for the first ten years of his life. Comedians such as Eddie Murphy, Jon Stewart, and Stephen Colbert are descended from Twain, whose profound insight — that "irreverence, not schooling" is the creator of liberty — is a mark of his brilliance. Twain named and anatomized the "gilded age" for that period of boundless greed which followed Union victory in the Civil War, and from whose Machiavellianism the wretched institution of modern forced schooling began.

Mark Twain dropped out of school after fifth grade and went to work for a newspaper. He was 13, the year was 1848. In 2008 as I speak and write, that sort of blank-check possibility has been foreclosed on for the young, to please the managers of things.

Segue now to Robert Kiyosaki, a fourth-generation Japanese American, born in Hawaii in 1946. At school, according to his own report, "the only courses I excelled in were football and lunch. Most people didn't think I'd amount to anything." At 22, Kiyosaki was third mate on a tanker going to Tahiti. Shortly after, he joined the Marines for six years and after discharge, started his first business, which failed. He lost everything, including his marriage.

But at 37 his first break came when he studied with Buckminster Fuller, the Harvard dropout, who showed Robert that the deepest learning arises from mistakes and failure. Kiyosaki says today that if he ever builds a brand new educational system he will "build it around making mistakes." That's almost the operational definition of open-source education, sharpening your own personal feedback loops through experience and mistakes.

From penniless bankrupt to wealthy man took Robert eight years. You've heard of him as author of *Rich Dad, Poor Dad*, a kind of teacher's masterpiece. Many consider him one of the finest teachers alive in the world today.

Kindness Over Profit

John Mackey, founder of the Whole Foods Market chain, and Kip Tindell, founder of The Container Store chain, roomed together in Austin, where they played poker (a lot) while trying (not very hard) to get through the University of Texas. Both eventually dropped out, Mackey to open a health food store, Tindell to honor his obsession, which was to help people organize their messy lives.

In time, Mackey's health food store became Whole Foods Market, the nation's leading natural food emporium; and Tindell's organizational dream turned into The Container Store, a unique national chain without any clear competition. Both men found a way to add value to the world around them after they dropped out. They took their turn when the time was right; who knows whether their grand successes would have happened had they waited for a degree, or two, or three.

Mackey and Tindell had worked out a common philosophy as young men back in Austin, a radical philosophy which no business school in America would dream of teaching — that the primary purpose of business is not to make money for owners and shareholders, but to satisfy customers. Such a point of view would be unfathomable to the B-school crowd everywhere, though oddly enough, the Adam Smith who wrote *Theory of Moral Sentiments* would understand it without difficulty. Smith regarded the insatiable desire to make a lot of money as a mental disease. As do I.

Treating customers as if they matter more than profit should sound tantalizingly familiar to you, if you've been paying attention. It's an echo of Paul's directive that loving your neighbor (and your enemies) is the only way to win at life. The educated spirit can see through the illusions of winning as only dark phantasms, thoroughly conditioned in school by constant petty competitions and superiority/inferiority symbolisms. Education (not schooling) teaches what really matters, that adding value to others is the only way to add value to yourself. If you aren't useful you must be useless — and nobody wants that.

The real wealth society throws away when it allows crazy social and political leadership to stigmatize and even commodify school dropouts, and those without college degrees, is incalculable. For every John and Kip, Ingvar, Edison, Danica, or Lew Wasserman who survives the prejudice, many more are crushed by it and just give up.

The most reckless failure of our modern American nation is how we waste people in the interest of keeping systems efficient. Systems won't protect us in the time of the sweat bath we've entered; systems can't heal the diseased economy which systems-thinkers have built — only sovereign human spirits intact can do that, the kind which can't be fashioned in factory schools.

We used to make steel, now we make bubbles — with the strangest economic bubble of them all being the swollen and cancerous school bubble, early childhood to graduate college, a utopian growth which costs much more than any dividends it yields. It breaks families,

intellects, characters. It visits incompetence on tens of millions. It's a black hole of negative energy draining vitality from national life. Just losing the young from the everyday world had pernicious effects, cumulative ones. We lost our libertarian momentum in the wall-to-wall conformity well-regulated corporate life demands; we lost our unity, our cohesion, in the face of the many divisions and disconnections confinement schooling requires.

After the post-WWII boom years of the 1950s, school — one-time servant of corporate America — morphed into the largest corporation of all. It became the master corporation bleeding resources from the productive economy in a parasitic relationship which had no governor on its growth, just as cancer cells have no limits until the host dies.

We used to make steel, now we make bubbles — vast synthetic rushes of enthusiasm for real estate, high tech, health care, prison construction, whatever the schooled public, lacking ability to think for itself, can be stampeded into clamoring for, but the weirdest bubble of them all is the school bubble — kindergarten through graduate college — which robs the economy of the material resources and, more important, the fresh vision needed to move our sick society in a new direction.

By the beginning of the 21st century, the lion's share of revenue at American automakers came not from cars but from sophisticated games with money. As this enthusiasm spread from the Harvard Business School (and other sources) into the corporate world in general, gigantic enterprises like Enron and Worldcom vanished in a matter of months, carrying down with them the life savings of tens of thousands of employees and hundreds of thousands, or millions, of stockholders. The entire corporate edifice showed signs of old age, albeit brought periodically back to life with a new bubble. As I began to write this book in early 2008, Bear Stearns — America's fifth-largest investment bank — lost virtually all its value in a period of months by gambling in unsound mortgages, and since then Lehman Brothers, America's fourth largest investment bank, has joined it in collapse.

Signs that the culture was a body oozing life were everywhere, and everywhere denied by the managers of schooling (and everything else): We could no longer harvest our own food, but depended upon illegal immigration to do that; the economic base of our medical care industry was shaken at its foundations by massive defections of clientele for surgery, dental care, and medicines — which crossed the northern and southern border, or went to Asia to be cared for. Our armies, rich with machinery, but short on leadership, depended increasingly upon the poorest Americans to do the dying in a lengthening string of foreign wars best seen not as wars at all, but only as more bubbles.

In the face of such forbidding omens, with the future promising more of the same, the school scene — like the salt-grinding little machine in the fable — continued to grind out incomplete men and women as it had always done. At the exact historical moment which was calling for a renewed commitment to imagination, courage, self-reliance, resourcefulness and other early American virtues, the school mill labored to turn out young people without these attributes.

St. Paul and the Rulebook Dragon

> The Dutch city of Drachten did away with traffic signs, parking meters, and even parking spaces as part of a program called "verkeersbordvrij." The results have been pleasantly shocking: Traffic safety has improved dramatically. Under circumstances where they are drawn into leadership roles, people take it upon themselves to look out for their own and others' best interest, even in the absence of rules and enforcement.
>
> — paraphrased from Jonathan Zittrain, *The Future of the Internet*, pp 127–128

St. Paul's New Testament letters to the congregations (which later coalesced into the Christian movement) have something to say to us all about what needs changing in the way we school. For Paul, excessive

regulation ruins the quality of life and corrupts leadership by requiring bureaucrats to enforce the rules, and more officials to regulate those officials. *Ad infinitum.*

In many different words, Paul repeats over and over that the new congregations won't find salvation by following the old rules. Eliminate the religious background for a minute and what Paul faced was the school problem of our own day — the conflict between interest groups whose income and status derives from keeping things as they are, and an insurgency whose needs have been neglected by the entrenched management and which demands profound change.

Translated into contemporary idiom, Paul says make up the rules as you go along to fit individual cases. As long as the root principle of love is honored, then things will work out.

The political establishment of Paul's day was the ancient Israel of the *Mishnah*, a stupendous collection of rules for even the most obscure circumstances like the height from which someone should pour water on a manure pile. Like modern bureaucratic schooling, there can be little adaptation to particular cases, the system is wedded to certainty. Find a thief? Cut off his nose! Find an adultress? Stone her to death! When in doubt, don't think — follow the rules.

The new insurgency travelled a different road. If someone steals your coat, give him your cloak, too; if someone strikes your left cheek, turn the right one to be struck, too. Unto this last: pay workmen who labor half a day the same wage as those who labor a whole day.

Rule book people find these pronouncements maddening, incomprehensible. Our forced schooling has brought back the rule-choked social environment of Paul's day, and our surveillance society has provided the technology to punish deviants which Paul's lacked. Through the three-headed rule monster of school and college, corporations, and government, American society has been radically de-individualized, one in every five American jobs is some form of oversight over the behavior of others.

It is six times more likely you will end up in jail in the United States than it is in Communist China (which now possesses the ability to

ruin America economically by cashing in its loan to us). Six times more likely to rot in jail here than in China. All by itself that fact should cause you to re-evaluate the road that leadership — of all our political parties and corporations — has committed us to walking. It is the schools which keep us on that road.

The insurgency of 21st century America, still disorganized but daily becoming less so, has made its presence felt through the explosive growth of homeschooling, through the Internet, and through various novel areas of crime. Identity theft, a rarity throughout history, has become an unstoppable epidemic; huge commercial operations in film and music are seriously jeopardized by technologies which return control to the individual. The security of banks, government installations, and much more — like patents and copyrights — is under serious siege.

Formulas for powerful weapons like the TATP bomb which paralyzed London subways a few years ago, compounded from six pounds of peroxide, paint remover, and drain cleaner in the ratio of 3/3/1, stabilized with sawdust, and stuffed into a strong steel container to be detonated by a cell phone are circulating widely across the planet. Those materials cost less than $100 and are available in every hardware store on Earth.

Our reckless military operations in Vietnam, Iraq, and Afganistan, have violated central precepts of warfare set down by Von Clausewitz — a superior technology doesn't promiscuously attack its victims, it *threatens*. To commit a major attack is to expose your technology to scrutiny, which holds two dangers: first, that expensive machinery is badly overmatched against an insurgency trained in guerrilla tactics, and second, that the enemy will gradually upgrade his own technology by studying your tactics and stealing your weapons. What America has to show for 50 years of continuous warfare against weak, stone-age opponents, is this: besides crippling our future with a reckless expenditure of capital on products which produce nothing, like weaponry, and destroy themselves in use, we have notified every corner of the world that our overwhelming military isn't

overwhelming at all and can be beaten by ordinary people of courage, with primitive military hardware, who refuse to be intimidated.

Surely I can't be the only one to notice that Sunnis and Shiites and Taliban have reasons to risk their lives, (reasons known to everyone in the population including their fighters), and we do not. Our reasons to fight are locked up in secret meetings and memos known to a small fraction of the population — the same fraction which, not surprisingly, once upon a time gave us forced institutional schooling.

The Time of the Sweat Bath

The day of the expert, and of an elite created by rationing information and using the power of government to load the dice, has reached a crisis point I don't think it can deal with. Existing contracts between ourselves and the young don't work anymore. By supporting school-imposed order, however innocently, parents make enemies of their own children, sometimes lifelong enemies. Rimbaud, the young French poet, saw prophetically into the future this modern order of secular industrial values was creating. Over a hundred years ago, he wrote this, which fits our time better than his:

> This is the time of the sweat bath, of oceans boiling over, of underground explosions, of the planet whirled away, of exterminations sure to follow.

In a time of the sweat bath, would you prefer as allies "A" students with high SATs, or a walkabout like Richard Branson? A valedictorian or a surf bum like Craig Venter? Formulaic schooling is worthless to common citizens, even destructive. It's only useful to policymakers and managers. It must be killed, not modified. Attempts to tinker with its ruthless algorithms prolongs our society's agony and makes the situation worse. Reach into the public bazaar for guidance, not to old-fashioned cathedral builders who created the mess we're in (and will recreate eternally if given the chance). Yes, it will take courage, and no, I don't expect leadership of either American poltical party to find it. But *you* can.

Professionalism functions as a hardening of the social arteries. Its limited utility comes at far too high a price, a price which must be charged against the account of what really matters: good health, good relationships, and good, satisfying work.

As I wrote this originally, I was listening to National Public Radio interviewing a senior from Virginia Tech, the scene of the worst massacre so far in American school history. Asked what made her happy about returning to class, without hesitation she announced that it was being able, finally, to take her year-end exams. The interviewer was puzzled, and asked "why that?" She needed no time to reply. "Why, to see if I learned anything, of course." Here was the perfect product of the school factory — a young woman who would never be a problem for any important special interest. Or of any use to the rest of us when trouble comes.

Walkabout: Monongahela

I never walked through London as a four-year-old boy, but back in the early 1940s during World War II, I walked through the industrial river town of Monongahela, Pennsylvania several times a week at night, walked miles and miles with my mother, Bootie, and my sister Joanie. We walked only at night so nobody my mother had once known would notice her and her children peering into the lighted windows of homes she had once frequented as a guest. We were living in her hometown, unseen, because she was embarrassed at the failure of her marriage.

We were like anthropologists doing field studies, sister and I, studying our mother in different circumstances than we usually saw her: dusting, doing laundry, washing dishes. And mother was seeing her own early self through a different filter, too. Whatever our motives for repeating the same long route through the darkened hill streets over and over, I can't remember, but I know I never tired of it. We were all happy as pigs in the moon that is young once only — though usually in pocket no more than a nickel with which to buy one candy bar which we broke into three shares.

Those walks were transcendental experiences of a very high order; even at an age when many experiences seemed transcendental, they were outstanding. As an old man, I now see they were easily the richest family experience I was ever to have. And my greatest educational adventure, too, just as Branson's walk was his.

We took the last walk together around 1947. Beginning seven years later and continuing for years afterward, I attended five colleges, two of them Ivy League, but my degree schooling proved to be a waste of time where intellectual development was concerned. I can't seem to recall a single thing I learned at those famous universities, Cornell and Columbia; not a single class, not a single teacher. Yet I remember everything about those walks, down to the tiniest details.

Each excursion covered roughly five miles. We wove in and out of the darkened hill streets, reaching zones of settlement I was only dimly aware existed. I still hear our footsteps crunching the fall leaves or the winter snow, or sloshing through the spring rains. I can hear our hushed whispers. Every house had a story, and mother knew all of them. Many had a symbol in the front window telling the world that some man inside had gone away off to the wars. In some windows there was a special symbol — I seem to remember it was a gold star like they used to give to the best schoolchildren for exceptional work — a symbol which declared the man had died in service to the rest of us.

The presence of death on our walks added something wonderfully deep and profound to the rambles, a sadness reminding me at the corners of consciousness that someday my mother would be dead, too, and my sister, and myself.

From time to time mother would reminisce what a particular soldier or sailor, once her schoolmate, had been like as a living boy. For a little fellow this was like being confronted with ghosts. It was stunning drama. How dull those walks, and those deaths, made all my toys. In the face of a dramatic reality that ennobled, even the most ordinary toys were less than insignificant; they were humiliating by contrast, unspeakably childish. Real stories help a boy grow up; toys

beyond a point reached in early childhood retard the hard road to maturity.

I learned more about mother and sister from those walks than I could fully comprehend back then; today I realize that the personal information gathered incidentally as we walked was the most important data I was ever to have about who we Gattos and Zimmers really were. The walks were open-source learning of the highest order. I'd gladly trade Cornell and Columbia for more of them.

Sixty-five years have passed since the last walk. Reflecting on what I learned that way without effort tells me the most powerful educations are always put together open-source. They can't be achieved from somebody else's idea of which controlled inputs under which artificial conditions produce the best outputs. The analogy of education with laboratory science is a game for fools, learned fools who have damaged lives beyond numbering, ruined the promise of America, and have brought us face-to-face with a bleak future unless the expansion of the schooling bubble can be reversed.

The rigid stupidities of forced schooling, its linear logics, its bell curves, its buzzers and tests and multiple humiliations, its resort to magical spells, fills me with rage these days as an old man. Real education can only begin out of a foundation of self-awareness. Know the truth of yourself or you are nothing but a pathetic human resource. Your life will have missed its point.

These are my reflections on Richard Branson's walkabout and my own, and on the crime schooling commits daily by turning its back on open-source learning.

In 2007, an indomitable Australian woman, Eleanor Sparks, and her friends, conceived, organized, and staged that continent's first national homeschool convention. It was staged, serially, in ten major cities coast to coast, including Hobart, Tasmania. "Walkabout: London" was the keynote speech for that convention.

3

Fat Stanley and the Lancaster Amish

I Don't Take Criticism Well

Separate schooling and education into compartments, and useful distinctions jump out at you: schooling is a matter of habit and attitude training. It takes place from the outside in. Education is a matter of self-mastery, first; then self-enlargement, even self-transcendence — as all possibilities of the human spirit open themselves into zones for exploration and understanding. There are points where the two conditions inform one another, but in schooling, somebody else's agenda is always uppermost. This mind control aspect is what makes it so unpleasant, even pornographic to some, although not to the lost souls already broken to the game of pleasing others. You can easily compensate for a lack of schooling — the human record is full of stories of those who have done so in the past and those who continue to do so in the present — but without education you will stumble through life, a sitting duck for exploitation and failure, no matter how much money you make.

Mary Shelley wrote the story of Frankenstein at the age of 18, nearly 200 years ago. Today, it's studied in college courses as a profound work of literature. That famous Stratford nobody, William Shakespeare, had little seat time in a classroom, and owned no books,