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Selling Students Short:
How Market Driven School Reforms Undermine Student Learning and our Shared Democratic Ideals.

A Thesis

Presented to the Faculty of the

Department of Educational Foundations and Policy Studies

West Chester University

West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for

the Degree of

Master of Science

By

Andrew Malkasian

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Abstract

Outside influence in education is nothing new, but over the last half-century, these influences have coalesced around a single point of interest: infusing American education with principles of free-market economics. As a result, teachers are now instructing students in a fast-paced, hyper-competitive, data-driven environment where performance and quantitative outcomes are paramount. Consequently, students are no longer taught, nor encouraged, to be active participants in a democratic society but rather workers in an ever-expanding capitalist market that mandates winners and losers - a notion wholly contradictory to the spirit of education.

The purpose of this research is to indicate how market principles not only undermine student learning but also threaten the nature of our democracy. The founding fathers believed an education grounded in small "r" republican values would ensure the continuation of the United States beyond their generation. Therefore, when education if forcible aligned with the principles of capitalism, the concept of the public good is supplanted by unmitigated competition, and the ideals of a participatory democracy replaced by a devotion to the market economy. In the spirit of fighting back, I have proposed a six-session workshop to help teachers define, identify, and correct the market's influence in modern American schools. Rather than yielding education to reformers with little interest in what is best for students, this campaign seeks to empower teachers to make the change they demand.

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Chapter 1

Introduction and Positionality

The Wilkes-Barre Question:

In a 2013 informal question and answer session, the famed American historian, Joseph Ellis, posed what he called the “Wilkes-Barre Question.” The name derives from the bizarre detail that the population of 18th century Virginia roughly corresponds to half the population of modern-day Wilkes Barre, Pennsylvania. With this unique framing, Ellis asked, “If we go to Wilke Barre today and we search assiduously, do you think we can find George Washington, Thomas Jefferson, James Madison, George Mason, Patrick Henry, [and] John Marshall?”[1] Confidently, Ellis asserts, “We’re not going to find ‘em.” While he does stress his belief in the fact that individuals with similar qualities do latently still exist there, Ellis argues that they won’t rise to the level of the “greatest generation of political leadership in American history” (Politics and Prose, 2014). At the root of this query is a question that historians often ponder: what accounts for such celebrated political leadership coalescing all at once in such a short span of time?

Ellis admittedly doesn’t know the answer to this question nor would any serious historian attempt to answer the query with overt confidence. As Ellis elaborates, he attempts to hash out some sort of an answer, but each point simply pays homage to the founders’ sense of honor, strength of character, and duty to each other as well as to the country they had just helped create. While these adages may be true, they’re also trite, redundant, and ultimately serve to undermine

[1] Each of the men listed by Ellis were prominent Virginians of the Revolutionary Era.

the question itself. Granted, the validity of Ellis' question is debatable anyway, but I would argue the heart of the question might be worth exploring beyond Ellis' framing.

From my perspective, the "Wilkes-Barre Question" may be too narrow if not also searching for an answer in the wrong direction. By reversing the question, however, and making it a forward-thinking probe a thoughtful challenge arises. Rather than asking why such leadership arose in colonial Virginia in the late eighteenth century, we should be asking why this type of leadership isn't cultivated by our modern political discourse or nurtured in our nation's schools today. Why can't, as Ellis argues, modern American's rise to become the "greatest generation of political leadership?" Despite our hagiographic remembrances, the founding generation does not hold some innate sensibility that modern Americans do not. As John Adams' self-effacing argument asserts,

> I ought not to object to your reverence for your fathers as you call them,...but to tell you a very great secret, as far as I am capable of comparing the merit of different periods, I have no reason to believe that we were better than you are. We had as many poor Creatures and selfish Beings, in proportion among us as you have among you: nor were there then more enlightened Men, or in greater Number in proportion than there are now. (*Founders Online*, 1811)

The leadership that Ellis celebrates was by its own assessment, no better than we are now. So, we must think deeper. And ask more probing questions. We need to understand why such high-minded ideals as social transformation or republican virtue aren't rewarded or able to rise to the surface of our national conversation? It's also imperative in looking to answer these questions that we take a step back and question what larger social, political, economic, and educational limits are placed on the American populace that confines, or hinders the natural talents, desires, wants, and hopes of successive generations from becoming the vanguard of a new epoch of American leadership? Rather than thinking of the founding generation as supernatural deities

beyond our abilities, we need to buttress Adams' assertion and seek to fulfill the idea that we too can, as Tennyson once wrote, "seek a newer world."

Great Man Theory

Ellis isn't alone in his assessment either. Some positivist historians simply explain the founding era as the direct result of Thomas Carlyle's nineteenth century "Great Man" theory. Carlyle (1840) boldly argued, "[A]ll things that we see standing accomplished in the world are properly the outer material result, the practical realization and embodiment, of thoughts that dwelt in the Great Men sent into the world" (para. 1). As Carlyle would have it, the American Revolution and the founding generation were the result - and the confluence - of only great men. So, Wilkes Barre would not have individuals with such latent qualities as Ellis suggested that the founders exhibited in abundance because "Great Men" are the "living light-fountain, which…is good and pleasant to be near." Meaning, if Carlyle is to be believed, the great man's presence would be quite obvious, and we would naturally find ourselves attracted to him. Therefore, there would be no need to "search assiduously" nor a reason to ponder this question in the least.

While Carlyle's postulate seems absurd, it's made even worse when we realize that his erroneous argument has concretized itself in our historical consciousness. The cultural deification of our founders has cast their actions into the realm of the supernatural which then naturally limits our own abilities to question, argue, and make for ourselves a "more perfect" world. Ellis is part of this idolization process, too as he frames the founders in a similar light. The argument that I think is much more important to make is that you can still greatly appreciate the aptitude the founders exhibited when debating, shaping, and creating an enlightenment government without accepting the "Great Man" theory. But to accept Carlyle's theory would necessarily strip the founders of their individual agency thus ignoring their experiences,

ambitions and overlooking their flaws and failures. The founders were most importantly, people and it's important to remember that basic point.

The controversial sociologist, Herbert Spencer (1873) countered Carlyle's "Great Man" theory when he argued, "You must admit that the genesis of a great man depends on the long series of complex influences which has produced the race in which he appears....Before he can remake his society, his society must make him" (para 4). To try and answer some part of the "Wilkes-Barre Question" we must look to see in what ways colonial and early American society shaped the founders. As legal scholar David Takacs (2003) argues, "We come to know the world more fully by knowing how we know the world" (p. 29). Therefore, the epistemological factors that produced the likes of the men listed above cannot be ignored. Rather than blindly assuming that the founders were "great men" and casting their actions as something otherworldly, we must understand the myriad of influences that shaped their behavior, beliefs, and consciousness.

The American founders were imbued with a rationalist mindset born out of the Enlightenment. The Declaration, the Revolution, and the Constitution are all products of that mentality which hinged on rational, empirical, and holistic thinking. This emergent intellectual philosophy sought to apply reason and logic to address the ills of society, to unlock the wonders of the natural world, and to improve the human condition The Enlightenment influenced not only the founding of the United States but also the intellectual framework in which the founders acted. As the science and technology writer Steven Johnson (2009) argues, the most "fascinating" aspect of the founders to our modern sensibilities "is that they were active participants in revolutions in multiple fields: politics, chemistry, physics, education, and religion" (p. xix). Even the most trivial examination of the founders' biographies would tell of Franklin's science experiments, Jefferson's push for education, or Washington's interest in scientific agriculture, or

any number of other anecdotes telling of their fluid curiosities. The founders interdisciplinary focus and "connective sensibilities," as Johnson (2009) continues, "runs against the grain of our specialized intellectual culture" (p. xx). Such explorative and unfocused dabbling finds little support in mainstream academia or within the modern marketplace.

In our twenty-first century specialized world, intellectuals and academics have been cordoned off to act exclusively in their areas of expertise. Naturally, strict adherence to a specific knowledgebase as well as the fracturing of information strengthens authority in a manner that limits critical thinking and stifles curiosity. So, when expertise and mastery become primary focuses of our education system in lieu of critical thinking, we not only resign ourselves to an indoctrinating style of education, or as Educational theorist Paolo Freire called it, the banking system of education, but we also – and naturally - limit student success. If we do not teach students how to value or assess the knowledge that they consume, then the reason we no longer have the political leadership equal to the founding era becomes obvious. It is not because we lack the "great men" it is because we've structurally limited individuals' natural curiosity to fit the mold and the demands of the marketplace and the testing center. We've managed to create a system of education that stifles curiosity, limits achievement, and devalues knowledge by fully establishing education as a transactional endeavor rather than an informative one.

Positionality

The commencement program at my high school graduation listed each student's academic achievements beside their names. Some of my classmates had multiple listings after their names including the monetary value of their scholarships and the name of the university they were attending in the fall. Other students, including myself, had a blank space next to our names. I still take an odd and subversive pride in that. I'm sure my mother, a well-respected

math teacher in the district, was slightly embarrassed by it, but that empty space meant something more to me. I never liked the rat race of school. Too often I felt pushed to achieve an arbitrary goal; cajoled to satisfy teachers' demands rather than my own academic needs or desires. Therefore, having nothing beside my name meant I was in control. It would be my responsibility to fill in that blank space with achievements that were valuable to me personally and not dictated by any social norms of success. That void was mine to fill, mine to flesh out, and mine to decide what was worthwhile.

Granted, I was lucky. On the whole, I had teachers and administrators who took great interest in my individual success and formulated a schedule that best fit my needs as a student. I was not interested in college or grades, but I was curious and motivated by various subjects and my principal recognized that and therefore provided me with an environment that kept me in school and encouraged my independent curiosities. At one point during my senior year of high school, I had four different humanities classes when most students in my school were only required and allowed one. Additionally, my principal found ways to engage my interest in film and video. Knowing that my attention was most often drawn to specific challenges, she asked me to film a promotional video for the school district that was used at district meetings and open houses. I felt that interests were legitimized which, in turn, gave me a larger purpose.

By accommodating my learning style and general curiosity, my principal ensured that I wasn't another dropout statistic. However, I didn't necessarily realize this at the time. It wasn't until I became a teacher that I realized just how liberating my experiences were. Takacs (2003) reminds us that "when we ask students to learn to think for themselves and to understand themselves as thinkers—rather than telling them what to think and have them recite it back…we help foster habits of introspection, analysis, and open, joyous communication" (p. 28). When my

curiosities were nurtured and appreciated by my teachers I began to relish going to school. No longer was I a student defeated by poor math grades or disengaged by rote learning experiences. I was given agency over my own education at an age when most students are forced into specific disciplines and their curiosities are relegated to after school activities or clubs. My high school principal's attention meant that my curiosity was never stifled, my achievements were never limited, and knowledge was never devalued or off limits. Those experiences converted a disinterested failing student into a lifelong learner. By assuring me that my curiosities were not passing phases but important and meaningful endeavors, they gave me the motivation to see that blank space in my commencement program not as a reflective measure of my success but an opportunity. But again, I was lucky, and it's taken me nearly two decades to realize just how lucky I was.

A Problem

As a teacher, I'm compelled to reflect on my teaching on a near constant basis. Yet, my reflection has largely been limited to perfunctory administrative check boxes based upon the Danielson rubric created by the self-proclaimed teacher-effectiveness expert Charlotte Danielson. To properly meet the requirements of Ms. Danielson's fourth domain of reflection teachers must "accurately and effectively assesses the lesson's effectiveness." Ignoring the semantic redundancy, the framing of these expectations is a bit confusing if not entirely limiting. "Distinguished" reflection according to Danielson naturally limits teachers' reflection to their immediate impact rather than allowing them to take into consideration the larger environment of their classroom or the systemic limitations of their school, community, and society. As a result, this limited rubric has inculcated an understanding of "reflection" that inhibits teachers from being truly reflective practitioners. While it makes sense that her rubric wouldn't include features

of its own downfall, limiting teacher reflection to a quantifiable scale ensures that reflection will only ever pertain to teacher evaluations and methods of accountability. To limit critical reflection makes sense from a positivist standpoint because truly reflective teachers begin to question hegemonic practices that are meant to be protected.

In a very real sense, the outside influences on the classroom are just as important to understand as the influence within. Adult education specialist Stephen Brookfield (1995) explains this in his book *Becoming a Critically Reflective Teacher.* From his perspective, true critical reflection has two purposes: “The first is to understand how consideration of power undergird, frame, and distort educational processes and interactions. The second is to question assumptions and practices that seem to make our teaching lives easier but actually work against our own best long-term assumptions” (p. 8). That second point is where the Danielson rubric strips teachers of their professional consciousness and autonomy. Critical reflection must be part of a teacher’s thought process so that they begin to think more globally about issues within their classrooms. More specifically, as Brookfield argues, critical reflection helps teachers “learn to stop blaming themselves and they develop a more accurate understanding of the cultural and political limits to their ability….” It was within this reflective practice that my students’ complaints began to register as something more than teenage angst.

Admittedly, many of my student’s complaints did at first sound just like the complaints of a moody teenager but then I began to listen a little closer. Some them shared with me their weekly schedules, which included sports games and practices, rehearsals, recitals, extra tutoring, religious duties, and any other activities that their parents deem necessary. I was astonished to learn that one of my students is a competitive swimmer who spends seven nights a week in a pool essentially against her will. She covered her clear frustration and anxiety about the situation

with nervous laughter as she explained to me that her dad thinks it will be good for her. Commonly I hear students fear their parent's reactions to grades below an A. Too often, parents meet with me about their child's grades exclaiming their worry about college acceptance. Yet, while I'm inclined to meet these parents with frustration, I find myself feeling angry *for* and *with* them. The parents' hopes for their children's success are born out of the same natural competitiveness that has enveloped modern American education and that frustrates their children. The parents and students feel the same stress but approach the situation differently and there is seemingly no relief.

Over my first few years of teaching middle school, I've seen the competitive aspects of education creep into the daily proceedings of student-teacher interactions. I've had students e-mail me frantically concerned about an upcoming test or quiz. Or, I've had students send me e-mails worried about an assignment that isn't due for weeks. While I don't begrudge their interest in preparedness, I do find myself distressed by their intense focus on "points" and "final grades." I recently had a colleague inundated with student e-mails imploring her to correct a grade before the marking period ended. Unsatisfied that they had not received a response within an hour, those same students e-mailed the principal requesting an intervention. This behavior is typical and, in some cases, even rewarded. Teachers, including myself, implore students to advocate for themselves, but too often that notion is interpreted to mean that students should approach the teacher with concerns over grades rather than the content they're learning.

I've tried to structure my class in such a way that students don't feel any added stress or obsess over their grades. However, I'm only partially successful and when I am, students immediately think of my class differently. Just recently, I had a student tell me that her test grade didn't matter because, "you know, it's American history. I'll never need that." She left my room

and I thought about her response for a time. While I sat there, I couldn't get past the feeling that she was right. As a student and as a new teacher this idea would have infuriated me and to a certain extent it still does. I would argue that my student's thinking about my class is not truly of her own making. Rather, the influences of how our culture and society has begun to frame specific academic disciplines.

By talking with my students, I've gained a new perspective that I wouldn't have otherwise had. These conversations have forced me to question my purpose and position as a teacher. Such an exercise has revealed to me a part of how students think about social studies, history, and the related subjects. As much as I may not like it, our economy has no mandate for the humanities. Rather, the humanities get in the way of additional science and mathematics instruction. And students have expressed this point of view, too. The pressures from state testing and parental expectations have fundamentally altered their opinions on abstract thought and a liberal education. For a long time, I was simply teaching content and felt that content alone would entice students into exercising their civic duty because that's all that ever mattered to me as a student. My own biases limited my effectiveness in the classroom and without a reflective exercise of my own predispositions, I would have only ever talked past my students in a monologue they couldn't have been less interested in. In reflecting upon my teaching, it became obvious that the stress that students felt or the disengagement they displayed was a systemic issue and not necessarily something I was doing or something *wrong* with them. Instead, schools have begun to leave kids behind while diminishing their desire to learn. When success is rewarded with increased work or accelerated courses, students either feel increasingly stressed or begin to disengage from their learning entirely.

Making matters worse, many students were predisposed to not engage in their history classes and this reality cut across social, cultural, and economic lines. Some students wouldn't dare linger at the feet of the humanities when money is waiting for young engineers and computer scientists after college. Others could not care about the issues presented in their history books because their attention was focused on something outside of the classroom. For those less advantaged students, their lot in life was enough turmoil to muddle through. By the eighth grade many students are jaded to the prospect that education can offer something more than the examples that lay before them. Some students even outwardly acknowledge this point. To them, education is a nuanced game and they have figured out the path of least resistance. How could you blame them? Others are eager to amass the most points to please their teachers and parents to ensure their perceived "success." Yet, it's obvious, even to an outsider that this isn't what constitutes learning. This environment doesn't foster inquisitive or thoughtful citizens. Rather, it's only reduces learning to a set of quantifiable data points that stifles curiosity, limits achievement, and devalues knowledge.

More often than not, schools are home to fast-tracked curriculums, accelerated coursework, and advanced classes. Such accelerations and advancements are designed to ensure that students have the competitive edge in the marketplace of collegiate acceptance as well as the desired conformity for their eventual entrance into the job force. This increase in speed is also designed to help districts meet the misguided funding requirements set forth by the federal government and the various state governments. Rather than equally funding schools, monies are typically allocated for the highest performing ones, thus creating a harden caste of *good* schools and *bad* schools. This competitive tilt to education seemingly starts earlier and earlier with each passing generation.

Even still, it's obvious that every parent wants their children to learn. Yet, America has redefined what "learning" means and how it can be achieved and even applied in the twenty-first century. Rather than allowing students time to learn at their own pace, or to develop their own learning styles, America has made education a competitive field by which only certain students can ever excel. Yet, those students who excel are not necessarily abstract or deeply critical thinkers, they're more often than not, the best test takers, the students who played the game correctly, or adapted to the accelerated rate of learning most effectively. Bolstering such realities, funding incentives and federal grant monies are allocated based upon a school district's ability to maintain the competitive status quo. Such competitive learning environments commodify knowledge whereas real learning provides context, meaning, and authentic application. Giving students agency in their own education means that learning would necessarily happen at the pace best for individual students and not at the whims of the market. When students are given opportunities to explore their own interests, learning follows behind naturally. It is pretty simple: Educate children based on their needs, not our social and economic demands. Doing so stunts their intellectual growth, undermines the purpose of education, and ultimately focuses their attention on monetary gain over democratic engagement. But that's only part of the issue.

A Growing Concern

In the Spring of 2018, the *Atlantic Magazine* published an article detailing the increase in competitiveness in education. In his essay, education writer Jeffrey Selingo (2018) argues that "With application numbers at record highs, highly selective colleges are forced to make impossible choices, assigning a fixed number of slots to a growing pool of students who, each year, are harder to differentiate…" (para. 1). Therefore, parents are pushing their students in every possible way to distinguish their applications from other students and not just for colleges

but high-performing private high schools as well. Selingo observes further that colleges are not necessarily just looking for grades but also how far students have “travel[ed] in their high school journey” (para. 6)? In short, did they “earn” their education beyond just what their grade point average indicates; was their education rigorous enough or provide them with diverse experiences.

Such requirements manifestly create an unequal system that is largely based upon “hoop-jumping” rather than learning. Reflection gives teachers a more nuanced understanding of the dynamics in their room as discussed about, but also of the larger society. To ensure what’s best for our students we have to be willing to ask questions that put our own actions into question. After all, teachers must analyze the work they do and cannot be apolitical actors in a system where the outside world so often interferes. Whether interference takes the shape of legislators and governors running roughshod over the teaching profession or historical trends long in the making, teachers who are critically reflective are able to identify what specific factors hamper their abilities and those of their students. Takacs (2003) argued, “When we encourage examination of our own knowledge formation processes, we develop habits of informed skepticism – of questioning the authority of all knowledge sources including ourselves” (p. 31). Such an exercise truly gives any teacher a better understanding of themselves and their interconnectedness to the larger forces behind American education. For me, it has provoked an unsettling question in my mind: what is the purpose of education? What is the end result of this enterprise? What is it that we’re actually teaching?

As a student, I never thought about school long enough to question its purpose. But as I sat in pre-service education classes and endless professional development meetings my mind couldn’t help but ponder that question more often than not. The worst part of the question is that we’re almost conditioned not to ask it in the first place. Education, therefore, is an installed

wheel in our head as Nineteenth century German philosopher Max Striner would have argued. We never question its goals, its outcome, or its purpose. From kindergarten on, we attend school without truly gaining a sense of clarity. Purposeful goals are often minimally defined or shrouded in pleasing jargon. For example, just look up the mission statement of your nearest public school – it's all agreeable on the surface, but what does it truly mean? Anything?

Our hazy understanding allows to fall victim to a semantic bait and switch. When reformers, legislators, or presidential administrations begin to alter the underlying principle of American education, we're susceptible to their *good* intentions and naïve to the pretense. Especially when couched in the terms of national security or student achievement these reform initiatives are never fully questioned as they should be. No matter how engrained this *wheel* may be, when we step back and genuinely and critically reflect on the system as a whole, it's hard not to come away with serious questions especially when we consider how America has outlined education's purpose over the last half-century or more.

In October 1957 radio dials across the globe were tuned into the pulsating Russian satellite orbiting the earth. sputnik was a testament to communist power on earth as well as in space and to most people living west of the "Iron Curtain" this was incredibly frightening reality to face. It was an existential threat. In the United States the collective response, led by military personnel and President Eisenhower, was to increase and enhance science education at all levels to directly compete with the Soviets. The 1958 National Defense of Education Act set forth a standard in the second half of the twentieth century that altered the purpose of American education. In his State of the Union address that same year, Eisenhower (1958) declared that,

> In both education and research, redoubled exertions will be necessary on the part of all Americans if we are to rise to the demands of our times. This means hard work on the part of state and local governments, private industry, schools and colleges, private

> organizations and foundations, teachers, parents, and—perhaps most important of all—the student himself. (pg. 7)

A statement that reads like a clarion call for collective action is rather an entreaty for private enterprise to become more concerned with the aim of education. This effort inaugurated the federal government's role in shaping the larger national purpose of education from an overtly public good to one of potentially private requirements. This was a situation that policy makers and educators have not felt a need to alter or abolish but strengthen over time.

In the last forty years, federal interventions in American education have increased. The alleged and announced purpose of each of these initiatives has been to increase our standing in the world and ensure a more rigorous education for our children. Casting these reforms in such a manner has also reshaped the public's perspective on education, too. This became easier as the political zeitgeist turned away from New Deal liberalism near the end of the century.

Ronald Reagan's election to the presidency in 1980 emboldened conservative powerbrokers who sought to reshape the economy and to transform the institutions that serviced the public good, particularly schools. Seeing the government increase in size and yearly expenditures from the end of the Second World War, they looked to cut spending and monetize sectors of the economy that had never been part of the free market. That also meant a reconfiguration of the classroom to reflect the workplace environment. As specifically detailed by educational psychologists David Berliner and Bruce Biddle (1996) in *The Manufactured Crisis: Myths, Fraud and the Attack on America's Public School,* conservatives saw public schools has having a monopoly status which had no "market" incentives to increase student performances. These free-market economists saw public schools' absence from the capitalist market resulting in students were not prepared for the coming technological revolution of the twenty-first century. So, not only did Reaganites and far-right conservatives

push competition between institutions they also pushed for competition among students to ensure that each graduating class was adequately prepared to play a role in the new economy (pp. 134–137). Not only would competivizing education increase rigor and performance, but it would also bolster the American economy. How could American's, and even educators as a whole, argue with such policies that simultaneously bolstered the U.S. economy, student performances, and ensured our national security?

In order to fully reimagine the purpose of education, reformers needed to present a growing problem. So, under the superficial guise of national security and public service, the Regan administration problematized education by proclaiming that the United States was "A Nation at Risk" when compared to other countries around the world. The 1983 report that highlighted the immediate demand of education reform entirely reshaped the conversation about education. Its effects were slow to take their full effect, but they did help usher in the Bush Administration's No Child Left Behind (NCLB) policy in 2001, which offered up a solution to this perceived *risk* by incentivizing schools to bolster their performances by increasing teacher accountability and high-stakes testing which solidified this commodification of American education. Similarly, and despite his clear objections to NCLB, the Obama administration compounded the issue by making education a more overt competitive field. In his 2011 State of the Union Address, Obama (2011) insisted that his administration was done "just pouring money into a system that's not working" (para. 36). Instead, his administration launched "Race to the Top," a program the president himself deemed a funding competition. Regardless of the political orientation of the presidential administration, education reforms over the past few decades have all pushed education reform closer to the marketplace.

While these interventions have sometimes contradicted or replaced each other, each has incrementally altered the public purpose of education. Rather than desiring an education which is encouraged to, "elevate the minds of our children and exalt their courage; to accelerate and animate their industry and activity" as John Adams (1775) proclaimed, we've blatantly *competivized* education (para. 2). We've made it a field prone to speed, intellectual fragmentation, and devoid of critical thinking. Students can no longer luxuriate in their learning; they must always be on the intellectual *go*. When an institution of the public good has been fostered to maturity in the belly of the world's largest capitalist economy it was only a matter of time before it was commodified and competivized.

This philosophy has only hardened under President Trump but has also become more blatantly obvious. Betsy DeVos, Education Secretary under President Trump, strongly advocates, as many conservative leaders do, an education system that runs as a business. Despite this tired old trope having waxed and waned overtime, its continued adherence would successfully dismantle public schooling as we know it. Or as the *Washington Post (2016)* argued in a December 2016 editorial that ran in the wake of her controversial nomination, running public schools as a business "…is in contrast to the notion that America's public education system is a civic institution — the country's most important, in fact — that can't be run like a business without ensuring that some children will be winners and others will be losers, just like in business" (para. 14). For DeVos to remake the system the purpose of American education could never again be about the individual student but rather the dictates of the free market. For the students, only the strong would survive. DeVos may oversee the complete transformation of the system, but she is in no way wholly responsible for it.

This transformation has all been made possible by a neo-liberal revolution in the global marketplace. When you consider the crisis of capitalism's need for constant expansion and new markets, capitalism must either find those new markets, make those new markets, or face utter collapse. Neo-liberalism has served as the natural antidote to the limitations of capitalist expansion in America as well as the across the globe. Such a term certainly needs a more clarifying definition. As public pedagogy expert and critical theorist Henry Giroux (2004) describes it, Neo-Liberalism is

> wedded to the belief that the market should be the organizing principle for all political, social, and economic decisions, neo-liberalism wages an incessant attack on democracy, public goods, the welfare states, and non-commodified values. Under neo-liberalism, everything is for sale or is plundered for profit. (p. 495)

Therefore, when education is cast through a neo-liberal lens, the natural purpose can only become competitive. And competition naturally brings about the deconstruction of institutions which are specifically designed to exist outside of the marketplace.

When social programs or institutions that serve the larger public are reduced or eliminated, the entire purpose of our government is directly threatened. Rather than serving all of the citizens, the government looks to reward only the strongest. For the weak, their problems become singularly their own. The neoliberal mindset would alter the social contract to one of unencumbered social Darwinism – a theory of social competition associated with the controversial sociologist Herbert Spencer as mentioned above. While he may have questioned the great man theory which counters the argument of singularly heroic men shaping our society, he does assert – as well as coin the term - "Survival of the Fittest" as a means of a society eliminating its weakest link. So, to follow Spencer's argument as expressed above, society is not shaped by men but by the society in which they live. With a country founded on republican principles, a "survival of the fittest" mentality alters our collective behaviors and forces us to see

each other as direct competitors. Therefore, the very nature of supporting the public good, or approaching a problem from a communal perspective would naturally make the actions of the founders seem other worldly or cast them as individually great men. If republican virtue is a liability in the competitive free-market world, then maybe Ellis is right when he argues that no one could ever rise to the level of the greatest generation of American leadership. From my perspective, education is a vital cog in this inculcation.

Currently our society is set on shaping children in the sphere of free-market competition where altruism, charity, and the public good are seen as threats or just wasteful expenditures. When we only cast the success of education in the frame of profit margins, we must ask ourselves what we've become. This is nothing new. Even president George Washington (1788) observed, "In a country like this…if there cannot be money found to answer the common purposes of education…it is evident that there is something amiss in the ruling political power" (para. 6). We must ask ourselves then, what should the purpose of education be?

Qualitative Research

It is not enough to look at this problem from 30,000 feet. In fact, it may make the issue more difficult to understand to only view it from the long-zoom or the macro level. So, it is necessary to zoom-in and focus our attention more specifically on the micro effects. We need to examine the real world that is directly affected by this competivization of education. Of course, I could examine the pure data and I could certainly extrapolate positive trends out of it. But I'm not interested in examining whether or not the competitive form of education bares out, I'm concerned with understanding what it's doing to our students.

From my perspective, the competivization of education is demoralizing, unsettling, and counterproductive. This form of schooling is dangerous to our survival as a nation, and is not in

keeping with the values, ethics, and ideals of the country's founding despite the rhetoric of those in government who have been - and who are currently - shaping educational policy. As a teacher I did not sign up to induce stress or create ideal workers. Moreover, I'm not interested in students having their thoughts and actions reduced to quantifiable data points that are essentially meaningless. When we stop thinking of them as products but as individuals, we may be surprised by what they're capable of – all of them. To better understand the impact of this issue, I will employ the interdisciplinary tools of qualitative research. Rather than researching the issue from a traditional "hard-science" perspective, qualitative research examines "the world of lived experiences" as sociologist Norman K. Denzin and educational researcher Yvonna S. Lincoln (2005) suggest (pg. 2). Qualitative research provides dimensionality to the problem. It creates dynamic characters, explains the minutia of larger social forces, and provides a holistic understanding of an issue: in this case, the competivization of education.

In such a data-driven field as education, the idea of qualitative research is not always accepted or taken seriously. Therefore, this approach is not without its strong detractors. As Denzin and Lincoln (2005) point out, positivists "allege that the so-called new experimental qualitative researchers write fiction; not science and have no way of verifying their truth statements" (p. 2). When data is so heavily emphasized it makes sense that research devoid of quantitative statistics and analytics is mistrusted. We're so hesitant to trust information that cannot be easily mapped, charted, or diagrammed. "These critics," as Denzin and Lincoln continue, "presume a stable, unchanging reality that can be studied with the empirical methods of objective social science" (pg. 2). But in fact, that's the entire problem in the first place. When we reduce complex issues to a single point, we only ever treat the symptoms and not the entire problem, which explains why it's so important to use the tools of qualitative research.

When a problem is the result of a variety of influences it is necessary to examine how those forces help to create the issue. To limit the examination to quantifiable data means that you're only seeing part of the problem's cause. By employing qualitative research, we can begin to understand the problem from many perspectives. When we place the issue in a context, we can understand its genesis as well as its perpetuation. The problem that this type of analysis attempts to understand is intricate, delicate, and varied and cannot be minimized to comprehensible charts, graphs, or bell curves. In fact, qualitative research is comprised of all that makes our lives unique.

Therefore, a qualitative researcher uses photography, audio recordings, personal stories, private diaries, family videos, and anything that exemplifies the ordinary to help tell a story. However, that is not to ignore the political, the social, or the historical. In fact, qualitative research floats between these methodologies to tell the story as effectively as possible. "This process creates and brings psychological and emotional unity to an interpretive experience" (Denzin & Lincoln, 2005, p. 5). This is the dynamism of qualitative research. It is necessary to functionally understand the human side of what we're doing as researchers. Quantitative research has no emotional quotient and does not take into consideration

> that humans are storytelling creatures, that we narrate the existence of ourselves and others, has created a climate of acceptance for the role of the language, the power of description, the hidden and delicious puzzles of literary tropes, the nearness of emotion, feeling, caring, connection, community engendered by narration. (Lincoln, 2005, p. 25)

This is the importance of qualitative research. Especially in a field like education, if we're not concerned with the human story then we're most likely doing it wrong. It is through this method of understanding that we can begin to better understand the issues surrounding education to

ensure, as Paulo Freire (2005) stated, "the creation of a world in which it will be easier to love" (pg. 40).

Critical Action Research

Teachers often - and rightly - concern themselves with engaging their students. We rewrite lesson, employ new strategies, and discuss better ways to engage our learners. Yet, all the while, teachers themselves remain distant and often detached from their own profession. Rather than active participants in the development of curriculum and policy; they're simply trained to react.

When I was a kid - and even now as a teacher - I would hear how the teaching profession was cyclical and prone to emerging fads, which would eventually be replaced by some new passing craze that ultimately means nothing or is just a repackaged fad of the past. I don't want to be part of an environment that passively waits for things to change. I need things to change. I demand things to change. And not on the terms dictated by policy makers and school boards but driven by the needs of teachers and students.

However, teachers are only ever trained to focus on their classrooms and not the larger forces at play. So, what processes can teachers employ to truly make change? As discussed above, critical reflection allows teachers to highlight systemic issues that inhibit the success of their students, but reflection is naturally limiting. Reflection does not provide a means to make a change that would correct or address the issues. The same is true for qualitative research, which only explains the problems. So, the question remains: how can teachers drive through substantive change?

Critical action research provides the methodology that can expand the role of the teacher. As clearly stated by education professor Meghan Manfra (2009), "Instead of simply

implementing outsider knowledge, teachers engage in decision making and curriculum theorizing. They become responsible (and responsive) to both theory and practice" (p. 34). Critical action research will help create change as directed by the first-hand knowledge of teachers. At the same time qualitative research will inform the critical action research to promote the change we teachers hope to see.

It is through critical action research that I can ask the questions that expand beyond my classroom. Rather than examining disengagement in my classroom as only a matter of my own doing, I can question the larger social forces at play. I can question the nature of our district's and state's education goals. I can question the social forces that have implemented a competivization of education. I can begin to question the entire structure of education.

However, that does not mean that I will necessarily *know* the answers to the questions. But it does mean that I can employ action within my classroom that can help me improve upon the problem. I can make my classroom more dialogical, less competitive, and more democratic in the process. This system is inherently dependent upon change and reflective practices. Necessarily then, critical action research is cyclical in nature, but cyclical in an active manner. Whatever action I take "must be" as educator Patricia Hinchey (2015) explains, "systematically analyzed to determine whether desired improvements have occurred and whether desired improvements have occurred and whether unintended consequences, good or bad, turned up as well" (pg. 4). Hinchey's proposal means that teachers must be active practitioners as well as researchers. To understand the change they seek to implement, they must also understand what does and does not work. Yet, this must also be a structured endeavor, there must be a plan.

Critical Action Plan

To be effective, or at least worthwhile, this critical action plan must be well thought out and organized. To examine the issue without a clear path forward or without an understanding of purpose would be self-defeating. If this problem is worth examining, then it's worth examining it correctly.

School reforms are very often a top-down proposition. Therefore, for this plan to be grounded in the forces that it's arguing for, it must be democratic, it must include students, and it must *do* something that highlights or illustrates the change that is necessary. First, we need an aim, or a cogent approach to the change we demand.

First, and perhaps most importantly, is the development of a research question. As with any good research question, the question cannot be self-affirming. I shouldn't already know the answer to the question. This question must stem from my experiences as a teacher and speak to a serious issue that I see in my classroom. As discussed above, I fear the effects of an education system that has become hyper-competitive. I'm concerned that the education system has been refocused from one that ostensibly sought critical thinkers and lifelong learners to one that mandates obedient workers and lifelong consumers. The research question should then reflect these concerns as well as hopefully provide information that would help solve the concern.

Good research comes from good question but constructing a good research question is not meant to be easy. I'm inclined to ask: Can education be removed from the commands of the marketplace to truly reflect the needs of individual students? Shouldn't our legislators, elected leaders, and political bodies be concerned with an educational system that is singularly focused on its marketplace relevance over its teaching of democratic norms? Shouldn't schools be more concerned with strengthening and continuing the ideals of our republic over the profits of our

free market? However, these questions do not lead us to a complete understanding or correction of the implied issues. So, more specifically, I want to know if we can pull back the reigns on this *new* form of education and provide students with learning environments that reward curiosity, inspire critical thinking, and engage students beyond the hollow demands of a grade point average? To that same point, how can we draw attention to these damaging efforts to commodify education? How can we create a movement or campaign to ensure the public becomes aware of these issues, but also drives forward a substantive course of change? Granted, this is not a singular question, but each seeks to challenge the nature of current mode education. There's obviously much more to a plan than just a set of questions (Hinchey, 2015, p. 53). Beyond just the question, there's processes to help answer the question that include, as listed by Hinchey, formulating a plan, collecting data, analyzing data, implementing the action plan, and then recording the results. But first, I must talk to my students.

Chapter 2

Thematic Concern, Conceptual Framework, and Definitions

Thematic Concern

The United States certainly didn't invent the classic liberal education, but it certainly was a manifestation of that pedagogical tradition. While the specifics of their educational experiences varied widely, the American founders were generally educated in a manner that reflected the classic principles of a liberal education. This pedagogical approach casts a large net where each subject compliments the next, where learning inculcates a deep sense of critical awareness and encourages students to think more holistically about their existence and engagement in the larger world around them. Such a tradition elicits a more interdisciplinary and democratic view of the world, one that allowed the founders to manifest enlightenment thinking into a social and political revolution. Yet, American education no longer reflects such an approach.

From a critical viewpoint, modern American education appears a bit like Aesop's fabled hare. The velocity of which undermines the whole endeavor. Much of what is taught in our modern schools is some variation of a fast paced, hyper-focused, fragmented curriculum which hinders interdisciplinary engagement thus creating a stark disassociation between disciplines and reducing broader and deeper learning. The free market is the underlying force within the broader spectrum of schooling that has surreptitiously pushed federal legislators, school boards, principals, and teachers to fully embrace these narrowed curriculums across the country. For too long, schools have been seen as vocational training grounds, more so than anything else. Such efforts whittle away at not only what education can be, but rather what education should be.

I'm certainly not alone in this concern. Intrepid teachers across the nation are independently devising plans to fight back against this wave of course accelerations, high-stakes testing, and quantifiable learning outcomes. However, such efforts, when left to individuals in their disparate classroom are easily bowled over and crushed by the outward forces of the larger society. I contend that this effort must be led by a unified coalition of teachers who not only understand the importance of a liberal education, but also see that such a transformation is indeed, part of our political and social heritage. If a liberal education was good enough for the founders, why wouldn't it be good enough for our students today?

Conceptual Framework

1. As a country founded on Enlightenment ideals what should a democratic education look like?

2. How has the purpose of American education changed over time, specifically as a result of various political, social, and economic forces that influence our body politic?

3. How does the market influence effect schools in general, but student learning more specifically?

4. What processes are used to reinforce market involvement within education, whether surreptitiously or overtly?

5. In what ways can we mitigate, if not remove, the market forces that have dictated much of American education over the last forty years? How can we start anew?

Definitions

Constitutive:

Republic/Republicanism An ideal born out of the Enlightenment in which the citizen, as historian Gordon Wood describes it, is devoted to the general commonweal at the cost of private desires and interests. (Wood, 1993, p. 104) While private desires are not meant to be eliminated, they are to remain secondary to the public good. Or as John F. Kennedy summarized it in 1961, "Ask not what your country can do for; ask what you can do for your country."

"Great Man" An 1840 theory proposed by Thomas Carlyle in which he argued that all "great" things within society are the direct result of the actions, thoughts, and desires of intrinsically "great" men.(Carlyle, 1840) In essence, Carlyle postulates that certain men are born with innate qualities of greatness that dictates the course of history.

Social Darwinism A term deriving from the work of biologist Charles Darwin's theory of evolution and applied to social and economic interactions. Often associated with Herbert Spencer, this adapted theory argues that the weakest within a society will fail allowing for the fittest to survive. A theory often associated with unregulated capitalism. This theory became a prominent philosophy in the latter parts of the 19th century economic expansion and increasing immigration.

Enlightenment An eighteenth-century intellectual movement which applied logic and reason to understanding the world. The movement challenged long standing traditions in exchange for revolutionary political and scientific changes. Also, a primary focus of the founders during the creation of the United States.

Interdisciplinary This approach to education utilizes the tools, techniques, and methodologies from various disciplines to better understand a specific topic from different perspectives or with deeper knowledge.

Agency	An individual's ability to act on their own accord based upon their own reason, logic, and judgement for a desired outcome.
Neoliberalism	This economic outlook seeks to deregulate the market and privatize services that are customarily operated by the public sector, i.e., schools, hospitals, jails, etc.
Capitalism	An economic system where the exchange of goods and services are controlled by private enterprises in the pursuit of maximizing profits.
Pedagogical	Simply defined as the act of teaching but inclusive of the larger impacts of how teaching and learning can influence society as a whole.
Liberal Education	Commonly referred to as the "liberal arts" this form of education is defined as a "philosophy of education that empowers individuals with broad knowledge and transferable skills, and a strong sense of values, ethics, and civic engagement." (*Liberal Education*, 2013)
Banking Model	An educational practice identified by Brazilian educational theorist Paolo Freire where "knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing." The term's name derives from the idea of teachers depositing information into the proverbial empty minds of their students.
Dialogical	A teaching methodology in Critical Pedagogy which emphasizes the importance of dialogue between the teacher and the student. A process which undermines the banking model but also allows for the creation of the student-teacher and the teacher-student.

Critical Pedagogy	Created by Paolo Freire, wherein both teachers and students alike question and examine the nature of one's own thinking especially within the context of power structures within the classroom and society at large.
Democratic Education	A pedagogical philosophy championed by John Dewey and predicated upon teaching and reinforcing the belief of equal participation and shared control of society.

Operative:
For the purpose of this paper, the following terms are defined as:

Competivized/Competivization	An effect within modern American public education where districts, schools, teachers, and students often compete against each other for resources, rankings, and grades. A feature of the market economy that has encroached upon American classrooms.
Commodified	An item that has been transformed into a consumer good that can be bought and sold on the free market.
Public Schools	A system of education that is funded and supported by the community. The system has roots in American Colonial governments and remains the main source of education across the United States
The Market	A place where buyers and sellers of goods and services meet. More broadly, as it relates its use in this work, the term can be understood as the economic system as a whole in the United States.
Founding Fathers/Founders	A group of men from the early part of the American republic who shaped, designed, and influenced much of the foundational aspects of the United States and its government. Their legacies are often celebrated and revered in the study of American history, but many of their actions present problems when considering their full biographies.

Chapter 3

The Narrative

Philosophical Positionality

To see the Declaration of Independence now is to see a document worn by age. Constant relocations, poor preservation, and thirty-five years of sun exposure have left the once bold iron-gall ink faded and nearly illegible. All that remains now are the pale-brown shadows of those revolutionary words. The document's current state reflects our contemporary political environment, too. No, I don't mean the zeitgeist of a passing administration or the turmoil brought-on by an ineffective Congress but rather the arresting fealty toward the founders' perceived intent. Too often our current political leaders are prone to celebrate constitutional originalism or adhere to static renderings of the founder's actions rather than seeing the world anew as the Declaration did nearly 240 years ago. This myopic and static vision of what the founders believed, or thought, has limited the imaginations of our modern-day leaders; and has ultimately restricted our abilities to adapt to modern challenges; and, those forces combined have stripped Americans of our most important historical and political legacy: social transformation.

Social and political transformations are woven into our national DNA. It is who we are as a people. This isn't just some liberal interpretation of our political inheritance. Even conservative historian Daniel J. Boorstin argued that "what distinguishes our kind of society and the Jeffersonian view of our society from others is that it is not ideological, it's not stuck in the prison of some dogma but rather is constantly responding to the changes in the world" (Burns, 1997). Our political identity cannot be exclusively tied to 18th century political debates in which we had no part. We cannot allow ourselves, just out of habit or fear of the unknown, to remain

stagnate and disengaged from the world. To do so would be contrary to the nature of our shared national spirit. In the twilight of his years, Jefferson (1824) argued this idea exactly when he reasoned,

> Can one generation bind another, and all others, in succession for ever [sic]? I think not. The Creator has made the earth for the living, not the dead…. A generation may bind itself, as long as its majority continues in life; when that has disappeared, another majority is in place, holds all the rights and powers their predecessors once held and may change their laws and institutions to suit themselves. Nothing then is unchangeable but the inherent and unalienable rights of man. (para. 4)

Simply put, we have every right to envision a new future, a new society, and a new system of education that "suits" our desires. Forced reverence for a previous generation limits our connection to the world and also limits our understanding of what the founders secured.

The American Revolutionaries threw off direct control of kings and imagined a world of their own making. To renounce that inheritance by denying our collective right to reimage society not only undermines the spirit of the Declaration but our own will as individuals. Paolo Freire (2000) emphasized that his "…presence in the world is not so much of someone who is merely adapting to something external, but of someone who is inserted as if belonging essentially to it. It is the position of one who struggles to become the subject and maker of history and not simply a passive, disconnected object" (p. 55). We cannot just be a product of history and of society; we have to be *of* society and *of* history. We not only have the obligation to live up to the virtues of our political inheritance by seeking to remake our larger society, but we also have a personal obligation to fulfill our roles as citizens in a larger democratic community. From my perspective, that must start with education and we needn't look very far for inspiration.

Framing

There's really no explanation for it, nor a moment when it became a conscious point of fact, but I have always had a deep interest in American history. The subject matter isn't just an academic discipline or a professional pursuit, it remains an active interest as well as a clarifying point of reference as I experience the world. I appreciate that this may sound pedantic and purposefully overzealous, but this notion fully defines my approach to the classroom and to matters that have larger political implications. It is the study of American history that gives me a sense that *we*, as a collective citizenry, have a larger role to play within our communities and that *we* must strengthen the bonds of democracy to be more inclusive, representative, and diverse.

Therefore, it is an innate desire to teach my students the importance, if not the need, for civic engagement so that their society best reflects their lived experiences. I firmly believe that we must implore our students to become active citizens within their communities and beyond. Yet, at the same time, I'm not comfortable instilling some sense of jingoism or mythologizing history where the founders are only ever seen as perfect marble and stone rather than flesh and bone. Some curriculums are wont to create history as a passive rather than an active subject matter. Therefore, teaching the importance of civic engagement is nearly an impossible task when the founders are only ever presented as otherworldly figures.

I do not desire a denigration of the founders for the sake of my own aggrandizement or the motivation of my students' civic engagement, but rather I wish to ensure my students obtain a realistic portrayal of their colonial forbearers. I want my students to question their motivations, study their contradictory actions, and lament their failures. Most importantly, at least in the abstract, I hope that a study of the founding era, will help engender an awareness that they're just as capable of shaping and reshaping the world around them, just as the founders were. To do so

means respecting students as learners and as individuals who possess distinctive agency. It means understanding the simple premise that Takacs (2003) explains: "students want knowledge that is meaningful" (p. 34). Teaching history – or anything for that matter - cannot and should not just be about ensuring high test scores or creating a nationalistic populace, but to teach students *what* is possible. I believe education should motivate students to seek knowledge of their own choosing. I believe education should empower students to question authority, explore their own curiosities, and gain critical awareness as individuals as well as citizens. It must allow students to envision themselves as part of the world and not just as bystanders in a world designed to pass them by. In short, I believe education must be democratic. It must adhere to the principles of what *needs to* be, what *can* be, and what *ought* to be. Education needs to be more undefined and interdisciplinary, and a lot less rigid, and hyper focused. In reality, it needs to be more like the educational experiences of the founding generation.

The Revolution's Legacy

A true understanding of the American War for Independence to understand that its success did not just mete out a political revolution, but a social revolution as well. If the founders were apt to throw off the bonds of the English monarchy and the divine right of kings, then they necessarily were, as Steven Johnson (2009) explains, "embracing the possibility that everything would have to be reinvented" (p. 239). The entire social structure would have to be reconstructed and reimagined. Considering the Revolution was the natural manifestation of enlightenment thought in the new world, this social reconstruction would naturally mean, as American historian Gordon Wood (1993) details, "pushing back the boundaries of darkness and barbarism and spreading light and knowledge" (p. 191). It was through education that this "pushing back" would take place which stemmed from their robust adherence to the small "r" republican ideal.

No longer were these men monarchist[s], but rather republicans. Therefore, the spirit of a collective good was cast throughout the country and with that came an immense responsibility.

For the first time, “they had the ability, like no other people before in modern times, to shape their politics and their society as they saw fit”(Wood, 1993, p. 190). It was this responsibility and their devotion to republican ideals that “required everyone to be educated”(Wood, 1993, p. 349). To the founding generation, a liberal education was the aim, which was not limited to the basic reading, writing, and arithmetic. Such an education included a host of other disciplines that sought to create a well-rounded “gentleman.” As James Madison’s college roommate, Willian Bradford argued, “A Liberal Education…is a sort of general lover that wooes [sic] all the Muses and Graces”(Wood, 1993, p. 108). A liberal education is not limited, fragmented or stagnate, it’s the opposite. This liberalized form of education is as John Adams (1775) wrote a means “…to elevate the minds of our children and exalt their courage; to accelerate and animate their industry and activity; to excite in them an habitual contempt of meanness, abhorrence of injustice and inhumanity, and an ambition to excel in every capacity, faculty, and virtue” (para 2). It is this idea of education being both a holistic endeavor as well a liberating one that underpins my philosophy of education. For a democracy – or a republic - to function, the citizens must be open-minded, active, and encouraged to push back against the seeds of intolerance and authoritarian control.

As an American teacher, I hold a natural reverence for the founding generation, but not just for their actions, but rather their appreciation and acquisition of knowledge. The free exchange of ideas and the contest between competing philosophies exemplified their true genius. Thomas Jefferson (1813) put words to this concept when he explained, “Ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and

improvement of his condition…And like the air in which we breathe, move, and have our physical being, [Ideas are] incapable of confinement, or exclusive appropriation" (para. 6). To me, this is the key to the success of the founders and education policy should take note. The founders were not self-limiting or stifled by their primary occupation to study one subject forever and always. In fact, I would strongly contend that it was their polymathic sensibilities that was most responsible for their civic engagement and unique contributions to the nation. The Revolution was not preordained and was in reality, as Joseph Ellis (2000) claims, "an improvisational affair" that was made better by their interdisciplinary mindsets (pg. 5).

"Vital fields of intellectual achievement," as Steven Johnson (2009) argues, "cannot be cordoned off from one another and relegated to the specialists" (p. vxiii). By doing so is to not only turn on our back on the legacy left by the founding generation but also to limit the achievements of our students. When information is not clearly useful to students, they often turn their backs on those subjects especially when they're not immediately successful in them. Until a subject reveals its practicality or becomes relevant, why would a student want to learn it or, why should they have to learn it? To break down the walls between various subjects and disciplines would create an educational environment where students see the natural interconnectedness between the disciplines. I don't necessarily mean that schools should abolish subjects or rigorous lessons on singular topics. Instead, I want students to be self-motivated to engage in these subjects because they've happened upon an issue worth exploring that necessitates the tools of an unfamiliar discipline. To engage students in the subjects this way would mean to increase student autonomy and to encourage – and trust – their innate sensibilities to want to learn.

I can appreciate the leap of faith that it would take for some teachers to *trust* their students at learning a subject matter because of their natural curiosity. However, learning cannot

just be a matter of dispensing facts for students to memorize. It needs to be a deeper and more meaningful experience especially if knowledge is more accessible than ever before (Epstein, 2019, pp. 276–277). When we encourage students to follow their personal curiosities, they will naturally look to that diverse array of tools at their disposal – those subjects that would no longer be cordoned off - to engage with the world around them. Simply put, an interdisciplinary understanding of the world is only natural. While facilitating an understanding of the interdependence of subjects is incredibly important to a liberal education, it also aids in the strengthening of our shared democratic values.

Student Agency

While it may be a bit trite if not pedagogically stunted, I always like to ask my students to try and define the word "democracy" before I explain the concept in practice. In most cases we have a really substantive conversation. Some students know the Greek roots of the word which steers the conversation in curious directions while other students are truly learning the words meaning for the first time. From this dichotomy arises an examination of the very ideas of *Demos Kratias* – do people – do we - really have the power? Students usually squirm in their seats at this point. They're not sure how to answer. It's an engaging lesson in the power of Socratic pedagogies. It's a process, but it nonetheless gives the students license to question the world around them by reflecting on their own experiences. Even though the results of this conversation cannot be scaled on a rubric or rated by an observational domain, the students are beginning to see how their questioning of the world can provide them a sense of ownership over their own learning.

From my perspective, allowing students to identify their role in their own education only makes sense. By communicating and engaging the students in a conversation a dialogical

classroom emerges, which provides an authentic environment in which learning can take place. According to Freire (2018), “dialogue is…an existential necessity” (p. 88). Human beings are social creatures and dialogue and communication is the means to understanding our world. In fact, Noam Chomsky (1992), the famed linguist, has asserted that language is a critical and innate component to thinking. “It's something that your mind grows in a particular environment, just the way your body grows in a particular environment…. A child can't help acquiring [language], though we can improve the way it's acquired as we can improve the way a child walks…” (para. 30). As a child might walk around to gain a physical sense of the world around them so too must students be allowed to talk in their classrooms in order to express and grapple with the world as they experience it.

However, our collective educational approach negates this basic reality with the continuation and strengthening of what Freire calls the “banking-model” of education. Students are often treated like empty vessels and teachers pour knowledge into their heads for future use. The banking model of education can only ever be a passive experience for students. To be truly authentic in our approach to student engagement, we must ensure that not only are students listening, but they’re also talking. As Freire (2018) explains,

> The teacher cannot think for her students, nor can she impose her thoughts on them. Authentic thinking, thinking that is concerned about reality, does not take place in ivory tower isolation, but only in communication. If it is true that thought has meaning only when generated by action upon the world, the subordination of students to teachers becomes impossible. (p. 77)

A dialogical classroom is the classroom we all naturally yearn for. They’re the classes that every teacher and student has had that changes our mood, challenges our assumptions, and pushes us to think the impossible possible. It’s the class that when the bell rings we ignore it. It’s a class where students are engaged not because we’ve incentivized them, but because we’ve

opened up the lines of communication. In a technical sense, the dialogical classroom "problem-poses" reality. By doing so, students, "develop their power to perceive critically *the way they exist* in the world *with which* and *in which* they find themselves" (Freire & Macedo, 2018, p. 83). For Freire, problem-posing strips away the perceptions of reality to reveal the real issues that stand in the way of those students as individuals and as students – regardless of their backgrounds. To ignore this concept, as education professor Perry Marker (2000) postulates would be "invalidating the very space in which students live, learn, and dream" (p. 139). By providing students' the allowance to uncover their own realities, they are consequently no longer forced to look at the shadows on the cave wall.

Dialogue is a simple principal for which critical pedagogy and democratic education demand. It allows students to ask questions without judgment, it authenticates their learning by inviting them into it, and it approaches critical thinking as a reality and not just a pedagogical buzzword. Too often, students are advised what and how to think by school curriculums or by what skills and knowledge the market demands through the mercurial job market. This educational oppression limits the abilities of students by taking away their choice. Their choice to question, to think, and to be. Therefore, teachers must help students recognize the reality of their being social and historical beings. Once they've recognized this reality, they can begin to act as individuals who have a stake in their communities regardless of who they are.

This is the conduit for a true democratic education. Education researcher E. Wayne Ross (2000) argues this point more clearly when he stated, "citizens should have the opportunity to inform themselves; take part in inquiry, discussion, and policy formation; and advance their ideas through political action" (p. 55). By allowing our students to be equal players in their own education, students become, as Freire argued, people *of* the world rather than just people *in* the

world. While they may need to be an adult to vote, they needn't be any age to ensure their voices are heard.

An educational philosophy that is supportive of student involvement and autonomy must also be inclusive of students who push back against this approach to their education. If I am as steadfast in my philosophical outlook as described above, I can't also be sensitive to a student's contrarian point of view. Marker (2000) persuasively argues, "Education either functions as an instrument that is used to educate children into the conformity and logic of the present system or it becomes "practice of freedom…" (p. 142). I believe that if I'm true to my educational philosophy that students should be rewarded for questioning, for pushing back against pre-ordained knowledge, and rewarded for exploring alternatives to their prescribed reality. Otherwise, I'm no better than the hegemonic practices that I'm pushing against. And in no way do I feel it appropriate to instill my thoughts and opinions into the minds of my students. My philosophy can be easily reduced to one statement the late polemic essayist Christopher Hitchens is best remembered for: "Take the risk of thinking for yourself, much more happiness, truth, beauty, and wisdom will come to you that way" (*Christopher Hitchens vs William Dembski - Debate*, 2010). It's a matter wholly dependent upon whether students have the appropriate tools and courage to do so, however.

The idea that schools can change society is rooted in centuries of educational reform movements led by such figures as Thomas Jefferson, Horace Mann, Thomas Dewey, George S. Counts, and Paolo Freire. The central theme to each of their efforts is not so much a question as to whether education can change society, but rather that education *does* change society. Yet this is not to suggest that education cannot also be changed by society itself. It's very often a two-way street in that regard. Yet, the argument here is that education *must* change society.

My desire for educational change is not extreme, nor is it emblematic of a contemptuous feeling toward the United States, or even hopeful in undermining the fabric of our political or social histories, but rather it's deeply rooted in reconnecting us to what we have seemingly lost. The founders provided a framework, not a mandate, we cannot remain idle or simply genuflect in the shadows of what they've created if we're not willing to think and act for ourselves. Educational theorist George S. Counts (1978) argued, "If America should lose her honest devotion to democracy, or if she should lose her revolutionary temper, she will no longer be America" (p. 37). Therefore, questioning the foundations of American education may seem radical to those who benefit from its current structure but pushing for its transformation is actually more in line with our political heritage than accepting the status-quo and dealing with its shortcomings. In this light, certain questions naturally arise: If a democratic and interdisciplinary education is the ideal, what then stands in the way of us realizing such a transformation of public education? What forces extinguish this flame, what limits our ability to live up to our revolutionary inheritance?

Advertise One Thing; Sell Another

I graduated from Gooding High School in south central Idaho in 2004. That district is approximately 2,500 miles away from where I currently teach. The two schools are separated by a continent but united by an odd symmetry in their individual mission statements. Both schools affirm that their desire is to increase the "achievement" or "opportunities" for their students to become "contributors" to society. While the exact wording doesn't match, the well-meaning, albeit ambiguous, sentiment certainly do. Each statement satisfies our abstract demands of what we expect education to be, however, proclaiming a specific vision is different than describing what exists in actuality. And this isn't meant to place blame at the feet of the schools or the

districts themselves, but rather imply that their actions are necessarily incongruent with their words. As writer and education activist Jonathan Kozol (2009) puts it, "School advertises one thing, [and] sells another" (p. 7). And therein lies the issue.

For American education has been commodified and remade to reflect the capitalist system. Our current mode of education is driven by the demands of the free-market economy which has a pathological desire to quantify nearly every part of our society and has remade education, not to mention society as a whole, into data points wherein nothing matters except that which can be counted, measured, and, of course, controlled. Therefore, the earnest and prudent vision statement of any school does not truly reflect their specific goals, but rather provide a diversion from what their schools are mandated to focus on: test scores, career readiness, and teacher accountability.

If education is only facilitating the expansion and continuation of the current social, economic, and political structure, it cannot honestly call itself education. *Training* seems to be a more appropriate term for anything demanding standardization and approbation. Simply put, education, *true education*, needs to be transformative and must provoke students to understand their own innate potential. Even if it's a cliched approach, the simple examination of the Latin roots of the word gives us more reason to believe that this approach is wrong. "Education" is derived from the Latin word *educere*; wherein *e* represents a variant of the prefix *ex* meaning "out" and *ducere*, means "lead." From its roots, education means that a teacher must help lead out the natural talents of a student. Or help develop the talents that may latently reside within ("Definition of Educe," 2020). Even the most casual observer of education policy could recognize that our current approach is nothing like this. We've seemingly reversed the flow. Now, teachers are *leading* students to the information that aid their achievement in the

marketplace. Consequently, education has become fragmented, accelerated, mechanistic, and quantifiable. These outcomes strengthen the larger economic forces and the capitalist bottom line but also threaten the democratic ideal. Yet, this may be more common than we may realize.

How has the purpose of American education changed over time, specifically as a result of various political, social, and economic forces that influence our body politic?

1976 wasn't the just the bicentennial anniversary of American independence, but also of Adam Smith's *The Wealth of Nations.* The unique symmetry is often interpreted as something more than a mere coincidence. While the latter formed the economic foundations of free-market capitalism, the former was the first to employ its principles which, as President Ronald Reagan would go on to argue, directly "led to our prosperity and [has] given us our freedom" (*President Reagan on Dr. Friedman and Free To Choose*, 1990). A bold statement, but one that began to gain new appeal considering its most hearty champion and noted American economist Milton Friedman, was awarded that year's Nobel Prize for Economics.

It seems fortuitous that Friedman, a devoted acolyte of Adam Smith, had received such a high honor in the same year the foundational text of capitalism was celebrating its two-hundredth anniversary. However, the growing concern of inflation in the mid-1970s made Friedman's perspective more attractive and helped popularize a return to Smithian economics. There was a natural attraction to Friedman's approach, too. Friedman (1969) firmly believed that "most forms of government activity, infringe on somebody's liberty" (pg. 2). Therefore, maximizing personal, economic, and political freedom was in effect, the solution to many of the market's problems and it was a refrain that naturally appealed to the American populace. It was also one that Friedman had been championing for years.

The expert in the dismal science didn't limit his indignation for the government's involvement in just the economy, he was outwardly concerned with government's involvement in all institutions. As a 1969 *Time Magazine* (1969) profile indicated, "Faith in the free market had caused Friedman to condemn many Establishment institutions as monopolies. His targets included the New York Stock Exchange and the public-school system" (para. 5). The "special treatment" of education had been a source of his ire for more than two decades. In a country based on the principles of free enterprise, Freidman (1955) saw the education system an "indiscriminate extension of governmental responsibility" (p. 1). Consequently, Friedman advocated for American schools to be administered by the dictates of the free market, as he argued competition would naturally lead to better and more substantive outcomes. A notion that was once odd and perhaps contradictory, has since paved the way for neoliberal and market driven school reform initiatives passed by state legislatures and the US Congress over the last 40 years. In such an environment, a liberal education, an interdisciplinary approach to learning, and a more democratic curriculum do not fit into a system dictated by the marketplace.

What Friedman considered a burden of government or a stark monopoly, the founders saw as a core element to the American experiment thus giving us a sense of why public education remains such an enduring facet of our society. Yet, even in the early republic, the market played a pivotal role in defining and augmenting the purpose behind early educational policy. Which begs the question, what precipitated the market having such an influence on a society built on enlightenment ideals? Additionally, how has that notion been exploited to become such a singular force in the 21st century? More to the point, what does the market influence look liked today? Ultimately, the coincidence of 1976 is perhaps more of an echo than some twist of fate.

Education & The Republican Ideal

In many ways, 1776 presaged the collision between republican principles and market forces throughout American history. The Jeffersonian ideals of a republican nation were buttressed, out of mere necessity, by Hamilton's economic initiatives in the aftermath of the Revolution. It is this very point that perpetuates the natural duality, and inherent contradictions, at the heart of the American experiment. While these notions naturally ebb and flow, there's no denying their impact especially considering how often than can become entangled. It's important to remember, however, that the basis for the Revolution wasn't the principles of free enterprise, but rather the Enlightenment.

What could have been, as Gordon Wood (2011) asserts, "a mere colonial rebellion" became something much more with the infusion of Enlightenment principals (p. 37). At the heart of such ideals is the deep-set motivation "to push back ignorance and barbarism and increase politeness and civilization." These efforts were extensive and essential in forming the foundational aspects of American republican virtue. Having won their freedom was one thing, preserving it was certainly another. And in the case of a fledgling nation, the public good, the collective will, and the "sacrifice of private desires for the public interest" necessitated a system to propagate such a belief and imbue the public with an innate devotion to republican ideals. (Wood, 1993, p. 104) A point Jefferson (1787) argued just weeks after the unveiling of the new U.S. Constitution when he proclaimed that we must "Educate and inform the whole mass of the people, enable them to see that it is their interest to preserve peace and order…" (para 3). In that sense, a liberal education was necessary to secure the liberty so recently procure but there was just one problem. The newly created U.S. Constitution lacked any sort of educational mandate.

Without federal authority to demand, foster, or create an education system, the burden fell to the newly independent states and local communities to fund the republican endeavor on their own. A point that added to the already heavy burden the states were struggling with in the late 1780s and the years immediately after the Revolution. To establish themselves on solid footing, the states were mutually in need of raising routine taxes in the pursuit of fully managing their new bureaucracies, establishing the authority of the respective state houses, and funding the many activities desired by their individual populations. And these new states were certainly not in possession of overflowing treasuries, either. The War for Independence wasn't cheap, and its purposes were not quickly forgotten by the American people. The overzealous taxation of the king and Parliament had left its mark on the body politic, so the funding of public institutions, particularly education was not an entirely well-received position. Combining this sentiment with the financial reality of the new states made such a cause "more than they could handle, both administratively and fiscally"(*Empire of Liberty*, 2011, p. 460). Consequently, so many actions that naturally belonged to the state – education most specifically - fell back into the influence of private wealth and fortune – the same place they resided before the republican led Revolution.

While the desire for a more "comprehensive" and republican-minded education system remained alive in the abstract, it was dealt plenty of challenges leaving room enough for private schooling to emerge and thrive. Exacerbating the fact, in some cases, education remained a private matter even after the revolution because the subsistence farmers needed the work of their children and didn't want compulsory education to limit their output (*Empire of Liberty*, 2011, p. 474). It's a simple notion, really. The ideals of an educated populace didn't immediately provide for the sustenance nor the substance needed to compete in the burgeoning American marketplace. And therein lies the reality.

America, despite overtures to the contrary, and hopes for a high-minded educated populace, was not just borne out of the ideals of republicanism. No, that's just half the story. The origins of the American Revolution cannot be separated from the economic template set forth by colonial charter. The profit margins of merchants, shipping magnates, and artisans were a significant motive for colonial rebellion. The early machinations of the American Revolution blossomed in the meeting halls of labor unions and business groups throughout colonial America long before it was sanctified in parchment. In fact, the First Continental Congress met in Carpenters Hall, the meeting house of a building trade guild, before growing too large and needing to move to the more well-known Pennsylvania State House (Wood, 1993).

The duality of the marketplace and the public good are hard concepts to reconcile as they are natural rivals. For the high-minded gentleman class, those dedicated to the republican ideals, the idea of a tradesman, business owner, or merchant engaging in politics or public policy didn't just seem implausible but also improper. "By classical Republican standards [their deliberative and decision making] participation would imply the participation of private "interests" in government, with the participants becoming judges of their own interests. Yet that was precisely what democracy in America came to mean" (Wood, 1993, p. 244). And, precisely what education in America came to mean as well. Private interests forced their way into having a voice over the public good. However, there wasn't - and isn't - a need for republican virtue in the competitive marketplace. The market is a selfish game, at least in theory and until a crisis emerges and public funds are needed to aid its recovery. The larger point, however, is that the marketplace is very often a one-way street. Therefore, education has slowly bowed to the whims of the market and has ensured the proper training of job-related skills and marketplace principles. An education that was "practical and useful" was the natural extension of the American

experience – a point that was emphasized with nearly every passing generation and a point that Milton Friedman would adopt and reimage nearly two centuries later. While the threads of the American economy and a cohesive system of education may have been closely associated for centuries, they became more tightly wound than ever before in the second half of the 20th century. For most of the nation's history the market has frequently influenced education by chance and necessity, but this modern fusion would be deliberate and methodical.

Education & The Marketplace

In 1955 Friedman, then a Cambridge University economist, asserted that marketplace competition would benefit American education and reduce the government's role at the same time. This proposed change would come in the form of vouchers which was the equivalent dollar amount spent per-pupil in their immediate communities which they could then use to attend any school of their choosing. From a certain perspective, this measure is a poorly disguised effort to publicly fund private education. However, he girds his arguments against the detractors by emphasizing that such efforts will increase freedom in the system and the market will dictate that every school meets the "consumer demands." Friedman furthers his argument by asserting the direct competition between government run schools - as he calls them - and private ones, specifically religious schools, will create such a demand that schools will "spring up to meet the demand." It's important to note that this is perhaps the first suggestion that overt market principles should dictate the course of American education. But to what end? What demand will these schools meet? For Freidman (1955), education's purpose is an agreeable notion in the abstract. He asserted that, "A stable and democratic society is impossible without widespread acceptance of some common set of values…." Yet, it's easy to see, even without explicitly stating it, that the common values that he alludes to are those of the free market (pg. 2).

In the same year that Friedman published his educational treatise, John Kenneth Galbraith set to work on his now famed book, *The Affluent Society.* The Harvard economist, while not directly rebuking Friedman's earlier argument, did highlight a potential weakness in his position - something that wouldn't be uncommon over the course of their decades-long rivalry. Throughout the book, Galbraith (1998) makes clear something that Friedman was perhaps unwilling to admit. In effect, education was a "double-edged sword for the affluent society" (p. 155).

The beneficiaries of the free market, the captains of industry, and the corporate executives required an educational system for the "technical and scientific requirements of modern industry" but education also by its very nature induced "more independent and critical attitudes" which of course "undermined the want-creating power which is indispensable to the modern economy" (Galbraith, 1998, p. 159). Galbraith's idea was not necessarily a rebuke of neoclassical economics or of Friedman directly, but rather a cogent argument underscoring the fact that education plays a vital role in preparing students for their place within the economy and at the same time that education may also undermine the fundamentals of the market.

The truth in that point became evident in a confidential memorandum written in the late summer of 1971. The Powell Memorandum as it is colloquially known was made at the request of the U.S. Chamber of Commerce's Education Committee Charmain, Eugene Sydnor, Jr. who was concerned with the contemporaneous view of the free-market system and suggested the system was under attack. Sydnor's concern prompted him to reach out to Lewis F. Powell, Jr., the one-time head of the Richmond and Virginia state school boards and a man Nixon would nominate for the Supreme Court of the United States just two months later. Powell certainly

understood the nature of Galbraith's double-edged sword argument but sought a solution in very clear terms.

The veracity of the complaints made within the memo were not up for extended debate by Powell. From his perspective these assertions were a matter of fact buttressed by an early reference to Friedman who was directly named and quoted in the report. Referencing the free-market sage naturally added a certain ideological weight to the memo's arguments. Yet, Friedman was just the baseline. Powell made a very concerted effort to explain how the Chamber of Commerce and business interests writ large could manifest a more benevolent environment for their causes.

The memo's authors propose that the chamber of commerce create the environment they desire by simply fighting for it, arguing that "it is long overdue – for the wisdom, ingenuity, and resources of American business to be marshalled against those who would destroy it" (Lewis F. Powell, Jr., 1971, p. 4). This wasn't just a fight that would provide the market economy with more respect, but a fight that would remake the forces that shape the entire society. In detail, Powell listed out which institutions need to be challenged. The list included nearly every facet of American culture: television networks, book publishers, advertising methods, political strategies, the judicial system, and most comprehensively education.

On a macro level, Powell argued that the Chamber should establish a staff of scholars, speakers, and associated bureaus in order to shape national education to be more friendly to the free enterprise system. Yet, on the micro level, and much more nefarious, was the suggestion for the Chamber to influence everything from the teacher at the front of the classroom through to the evaluation of textbooks used by individual students. The marketplace wouldn't just influence education from the outside, it was now in the front of students' classrooms and open on their

desks. The market would no longer sit idly by. If Friedman provided the first suggestion of market principles dictating educational policy, the Powell memo provided an explicit explanation of how to accomplish the task with an implicit undermining of the "double-edged-sword" argument that Galbraith had previous highlighted. In short, Friedman provided the idea, and Powell provided the plan.

Even still, Powell's memo is often dismissed as liberal fantasy, or even "the skeleton key for historians and advocates on the left seeking to explain conservative dominance" (Longman & Schmitt, 2016). Such an argument makes sense to a certain extent; there's little verifiable proof that such policies were followed or enacted because of Powell's suggestions. The allure of the Powell memo may certainly be ideological, but it doesn't mean that the contents are different from much of what free market overtly advocates, now, and during the 1960s and 1970s. Moreover, the concerns over the Powell memo are not leftist propaganda cooked up in retrospect, but rather contemporaneous concerns – a point that underscores the modern disquiet as warranted and not simply hysterical cries of liberal lackeys from a latter era. In his 1973 publication of *Economics and the Public Purpose,* Galbraith (1973) makes a bold claim that closely mirrors what Powell had confidentially written two years earlier:

> …with the rise of the great corporation goes the power extensively to enforce its will on the society not only to fix prices and costs but to influence consumers, and organize the supply of materials and components, and mobilize its own savings and capital, and develop a strategy for handling labor, and influence the attitudes of the community and the actions of the state - then the purposes of its controlling intelligence, of its technostructure, become of the highest importance. They are not confined by the market. They transcend the market, use the market as an instrument and are the chariot to which society, if not chained, is at least attached. That the modem corporation deploys such power the neoclassical model, of course, denies. (p. 91)

This "planning system" that Galbraith described certainly exerts incredible influence if the assertion is to be believed on the surface. It also lends credence to the idea that education could

be a clear means for the market to influence “attitudes of the community and the actions of the state.” So, maybe the Powell memo is a red herring in the liberal pursuit of nefarious actions, but at the very least, Galbraith was correct that a natural extension of this influence would be outright denial. However, that may be a convenient diversion. If you simply take the memo on its face, business already had the confidence that they could spin any narrative they desired. They already had the tools in their arsenal, the adverting know-how, the political acumen, and the access. The only thing they truly needed was someone with power who could sell it.

The Great Communicator

For the conservative movement, 1976 was more than just the bicentennial of the country, it was a glimpse into the future. Although he didn’t win the Republican primary battle against Gerald Ford who had ascended to the Presidency after Richard Nixon’s resignation, Ronald Reagan was clearly the heir apparent to the new conservative movement. A mantle that had remained vacant since the 1964 Goldwater campaign launched a new conservative challenge to New Deal liberalism. Reagan had spent the better part of two decades positioning himself as the spokesman for small government, low taxes, and returning America to a place of strength. There’s no doubt that he talked a good game, but could the actor really play the part? Was he a serious candidate?

Despite being a deeply conservative governor of California, Reagan was a well-known supporter of Franklin Roosevelt and the New Deal during the 1930s as well as the twice-elected president of the Screen Actors Guild. It’s a wonder that the one-time liberal Hollywood actor would evolve into an icon of conservative politics, but as irony would have it, his acting skills were the source of his conservative transformation. From the mid-1950s through the early 1960s Reagan was the spokesperson for the corporate giant General Electric, which provided him with

a new pro-business, small government perspective. Not only did the marketing position provide him with more public recognition but it also ingratiated him with conservative power brokers. Considering the electoral drubbing of Barry Goldwater in 1964, Reagan should have recalculated his position, but his overt confidence left him undeterred helping to engender a broad base of appeal for a similar conservative message which propelled him to victory in the 1966 California gubernatorial election. Not only could Reagan assert an impassioned confidence, but he could also sell a conservative message unlike others who came before him (Raines, 1981, p. 1).

Yet, Reagan was also a product of his time – a man whose talents were ideal for a moment of crisis. His success as the conservative governor of a state home to Haight-Ashbury and the Summer of Love proved to an older generation of Americans that conservatism was the key to "making America great again." Despite student-led protests, a deeply unpopular war, a presidential resignation, and growing inflation, Reagan was a calming presence for some Americans, particularly for those who were fearful of an uncertain future in the wake of grave uncertainty. It is in this moment of crisis and social unrest that Reagan provided the confidence needed for conservatism to crawl out from the shadow of New Deal liberalism. A natural extension of that growing popularity was the subsequent and persistent conservative approach to governance. The conservative counter to New Deal government interventions were (and remains) to offer up free market principles as solutions to entirely unrelated problems – a point that has recast the purpose of American education in profound ways.

Reagan's past success and growing political appeal contributed to his victory in the 1980 presidential election. Despite his age (then the oldest President ever elected) being a tangential point of concern, his overt confidence, bravado, and reassuring message gained him wide support against the backdrop of a crashing economy, rising inflation, and President Carter's crisis in

confidence. Reagan's own sense of self-assurance was not just a part of his personality, but also a point of political calculation. He believed that economics was fifty percent psychology and if you simply thought the economy would improve, it would. Therefore, if Reagan could frame a positive message then the economy would necessarily respond, inflation would decrease, and the American people would become more receptive to Reagan's supply-side economic philosophy (Reeves, 2006, p. 12).

In effect, Reagan's approach worked. He successfully framed economic issues so it was clear that government was indeed the problem, and that the market would compete to satisfy "consumer demands" (Friedman, 1955, p. 5). He repeated these points during his first term so frequently that it made them seem like such obvious solutions that American's were more than willing to accept them as "common sense" approaches to near everything. Yet, one the most successful applications of this approach was in Reagan's efforts to reform education.

Naturally, Reagan can't be given credit for creating the proposals, they were decades-old conservative talking points of free-market advocates who were eager to break the supposed "*monopoly"* of American education. But unlike Friedman, Powell, or anyone else, Reagan knew how to successfully peddle the position that the free market could do the job of educating American children better than the government could. It wasn't just his use of the bully pulpit either, but rather the simple fact that he had plenty of practice in selling a corporate message (Friedman, 1955, p. 1).

Reagan's Sales Pitch

President Reagan's weekly radio messages were a token gesture toward a bygone era - a conservative bent on FDR's fireside chats. However, Reagan made something more out of the medium. For him, the radio was a means to project his message, his administration's agenda, and

his personality. The radio, as Twitter is for President Trump today, was an unfiltered way to communicate without the interference of reporters or news editors. Whether it was his political genius or the reliance on his past training as an actor, the President recognized the power of the FM dial. In fact, Reagan's weekly radio address was scheduled for Saturday to ensure that the President could directly influence the headlines of the Sunday morning newspapers (Rowland & Jones, 2002, p. 87). And while the dulcet tones of these addresses could certainly make them seem impromptu, they were anything but.

"It's time we face the truth," Reagan told the American people in a radio address in early March 1983. For the first time as President, Reagan was fully articulating his administration's educational reform initiative. In just under six minutes, Reagan argued that "America can do better" (*President Reagan's Radio Address to the Nation on Education — 3/12/83*). He forcefully decried the increasing interference by the government in education highlighting that as government intervention increased, "Scholastic aptitude test scores went down, down, and down." The reasoning behind such an emphasis is abundantly clear. As he proclaimed in his first inaugural address, "Government is not the solution to our problem, government *is* the problem" *(Brinkley, 1999, p. 540).* Such framing of the issue was a deliberate action long in the making, but so was the timing of his announcement.

With the public unaware, Reagan delivered his message just six weeks prior to the release of an incendiary report highlighting the diminishing success of American schools and the failing prospects of its students. When the report, titled *A Nation at Risk,* was released in April that same year, it received such intense media coverage which certainly helped Reagan's cause. Of course, the President knew what the report was going to say, and by making a seemingly innocuous

winter radio address, he had created a distinct advantage for his own political gain; he had, in effect, put himself well ahead of public reaction.

While the American populace was alarmed over the report's findings, the old commercial pitchman went to work. In addition to his March address, the president dedicated a late April broadcast to the report's findings which were only released a few days before. This time, the President struck a different tone. Where he was a bit aggressive in March, he was shrewd and determined in April. While effectively the same speech, both combined to lay out – in detail – the administration's entire new educational platform.

In both speeches audiences gain a real sense of the President's attempt to dramatically decrease the role government played in education and, as he argued, move forward with "common sense as our guide" (*President Reagan's Radio Address to the Nation on Education - 4/30/83*). From the perspective of the administration, this commonsense approach called for a return to God buttressed by a proposed Constitutional amendment allowing school prayer. In line with reducing the role of government, he called for the abolishment of the newly created Department of Education which would ostensibly return control back to the individual states. Thirdly, he highlighted a tuition tax credit which would reduce the "double-payment burden" of those families paying private school tuition and school taxes within the same communities. And lastly, he argued for a voucher system in which parents would be able to choose the school that their children attend thus creating an educational marketplace. All told, it was a remarkable approach that collectively reimagined American education unlike any initiative before. He had taken what were fringe concepts of education reform to concrete initiatives of a presidential administration. While Friedman and Powell could only imagine the alterations, Reagan gave them legitimacy and a push to becoming a reality. These once fringe ideas were now talking

points of a President - a man who could use the bully pulpit to inculcate radical change under the guise of nostalgia and simpler times.

Consequently, each proposal firmly established – once and for all – the infusion of market principles into the world of American schools. But Reagan went one step further, too. Ensuring that education was blatantly tied to market values, he invited private influences by boldly encouraging "corporations, community organizations, and neighborhood groups across the country to adopt schools and help them meet their education needs…" (*President Reagan's Radio Address to the Nation on Education - 3/12/83*). Rather than seeking a collective action to address the proposed issues within education, he was eager to allow competition, private industry, and market influence to dictate the course of American education. This approach has systematically changed the course of American education by reshaping the goals and the purposes of public education.

A Nation At Risk

The *Nation at Risk* report wasn't asserted a competitive sensibility into an institution that is not designed to producing winners and losers. Afterall this is what happens when you see public institution reimagined under a market driven approach to reform. Once international comparable statistics became available in the late 1960s the United States saw its educational rankings as a serious systemic, cultural, and value driven crisis. But it's important to remember, that this was in comparison to international standards, which provides an entirely different means to measure success. Naturally, educational systems across the globe impose different standards, incentives, and requirements for matriculation. A comparison in a vacuum would of course place the United States at a disadvantage.

On the whole, our educational system typically reflects our values and desires of a holistic education: "Primary students in our country not only study the three Rs, but they also paint, play musical instruments, debate, and compete in chess tournaments in their schools. American high schools offer a huge range of courses, and students are encouraged to sample these courses as electives and to participate in a host of extracurricular activities (Berliner, 1996, p. 53). The American education system is much more diverse, and dare I suggest, liberal by nature - a point that *A Nation at Risk* does highlight but not as a strength but as a considerable liability instead.

From the outset, the report reads as though it is trying to strengthen American schools. It articulates a need for increased teaching standards, higher graduation requirements, and more time for the core subjects, none of which are – on the surface - objectionable, or directly reflective of the marketplace effecting education. In fact, the report doesn't even suggest the basic indicators of the market's influence. There's no mention whatsoever of high-stakes testing, school-choice, or voucher programs but the report didn't have to mentioned them to invoke them. The damage was already done. What the report did do, however, and did very effectively, was to create a widespread panic about American schools thus laying the groundwork for the infusion of market values within the system as a whole. As education historian Diane Ravitch (2016), a former advocate of these kinds of reforms, now argues,

> It was here that the seeds of "crisis" were planted, here that business groups and politicians discovered they could pin the blame for economic and social problems on the nation's schools…. It laid the ideological and rhetorical groundwork for the corporate-style reformers who three decades later maintained that our schools were declining and failing, that public education itself was "broken" and obsolete, that radical free-market solutions were called for. (p. 31)

As if the only reason American children are educated at all, the report suggests that American business are losing profit and precious working capital in retraining their employees

because education isn't preparing them appropriately. Despite clear evidence to the contrary, the report lends credence to the complaint of American business that it was the fault of American schools for their lack of global competitiveness. In fact, American businesses were not competing globally because global markets had shifted toward cheaper production methods leaving the old industrial model to lay to waste. Talk about yielding to the dictates of the free market.

With the *Nation at Risk* report, American business found an acceptable scapegoat. Rather than accept the dictates of the market, business interest would have to remake education in order to help them compete in a new global economy. This "Manufactured Crisis" as Berliner and Biddle call it, has stripped schooling from the those who have the pedagogical know-how and handed power over to those eager to please the corporate powerbrokers. It also reverses the specific aims of education. No longer are schools educating students to be participants in their communities or active citizens in a democracy, now, and almost exclusively, they're being trained as future workers in a global economy – one where they'll have no say or no real stake in the outcome.

Granted, this transformation was not immediate, nor did it end in 1989 when Reagan's second term was up. Rather it has only increased since that time. From the middle of 1980s through to the Trump administration, education reform initiatives have grown to include massive and wide-scale testing, increased efforts to control teachers, and significant attempts to limit the scope of school curricula. The effect is quite extraordinary. Despite the efforts to frame their reform measures as "what's best for students", they have universally "provoked lower standards and…narrowed curriculum and increased teaching to the test" (Goldstein, 2015, p. 209). When everything must be quantified, measured, or scored, the efforts of all those involved become

exclusively focused a singular outcome. When a singular outcome becomes the focus, and success is narrowly defined, naturally students will fall victim to the dictates of the market. Some students will "win" while other will "lose." No longer do our schools have an incentive to induce broad base learning or invoke democratic principles because there's no reason to do so. As argued above, the marketplace has no need for republican virtues and democratic values. This is a wholly different game with a much different purpose.

The current system of education has created politically complacent citizens, where politics is something that happens *to* rather something that is shaped *by* people of a community. Market values have replaced the values and ethics of the public good, thus communities are politically and economically fractured and transformed into more individualized experiences where a modern updated version of social Darwinism undermines the very fabric of our shared beliefs. Rather than a communal-bond, interactions are only transactional where a person is no longer a colleague, neighbor, or friend, but a competitor. This reality ultimately influences the very nature of our democracy, but it immediately impacts our students and their long-term learning. But, exactly how it does that is perhaps the biggest question we must answer?

How does the market influence effect schools in general, but student learning more specifically?

There are three weeks each spring that I absolutely dread. As a Pennsylvania teacher, I'm required to proctor the Pennsylvania System of School Assessment (PSSA). Every year, sometime between March and April, I'm tasked with actively monitoring students who are taking the test. The operative word is "actively." I'm barred from silently reading, catching up on e-mail, or even preparing new lesson plans. What I am allowed to do, however, is quietly amble through the room and ensure that the students are taking the test within the prescribed rules. So, in short, I pace a lot, which gives me time to think. I often think about the pure tedium of

proctoring this exam or fume over the reality that I'm wasting my time. That thinking is limiting and not entirely productive either. So, over the last few years, I've found myself thinking more and more about the students taking the test. For them, this test represents, by and large, the core of their schooling experiences. The test defines the school year, dictates which topics are taught, and imposes a certain rhythm and speed to their learning. The kids are aware of this, too. The test is a constant source of conversation in classrooms. It's a constant framework from which lessons are created and students are instructed. These standardized tests flatten learning, increase student stress, and necessarily shape how this generation conceives of learning. Worst of all, this entire trend wasn't accidental.

Over the last forty years the neo-liberal influence over the public good, particularly education, has forced public institutions to align themselves with the market-economy. As a result, schools must uniformly compete in an open marketplace. Not only must they compete against each other for state and federal dollars, but their students must also participate in this mandated contest of intellects. This neo-liberal reordering of educational practices has introduced an increased level of competition in the classroom that ultimately effects students in profound ways. Competition reduces students desire to learn, reduces their innate motivation, and also changes their perception of education. Considering that education has now been commodified, students only see education as a mean to an end, a way to find a job, or to increase their earning potential. Increased competition has reduced and nearly eliminated the notion that learning is an abstractly good thing.

It's easy to criticize standardized tests but that is not my direct purpose in this thesis. My focus is more specific than the repercussion of the test itself. Rather, I intend to highlight the consequences of increased educational competition on students. While research with that direct

focus is limited, if existing at all, there are many studies that examine the periphery of this subject. Therefore, the literature discussed herein seeks to explain the larger purposes and implications of what is clearly an increased *competivization* of American education. For clarity's sake, the research included is organized into three categories: "Neoliberalism & Education," "Educational Competition," and "The Effects on Student Learning." While the extent of this research does not exhaustively describe each of these topics, it does provide a starting point for understanding how the market has influenced, undermined, and limited student experiences and learning outcomes.

Neoliberalism & Education

School reform movements manifest themselves in many ways. Perhaps the most pernicious and surreptitious is neoliberalism. The term frequently appears in educational philosophy but is not often or clearly defined. Daniel Saunders, (2007) an Educational Policy Studies professor Florida International University sensibly states that the term *liberalism* can be a bit confusing when trying to understand the term in context. In this case, the term "liberal" is a reference to the belief in the laissez-faire economic policy and the unrelenting freedom of the market (pp. 2–3). While the power of the market holds a certain allure for some policy makers, its effects have had a pronounced effect on education. Neoliberalism, as used here, is exclusively related to an economic principal that seeks increased profits and a reduction of government spending – a notion that is often conflated where profits are sought in government run sectors of the economy, i.e., education.

The term may be a bit misleading on its face, but the consensus regarding its effects on education are without ambiguity. In many cases, educational policy researchers have cogently argued that neoliberalism has shifted the focus of education away from students and towards free

market relevance. According to Saunders (2007), neoliberalism's effect on education is most obvious when "the core educational functions of the institution are transformed into commodities that are to be sold on the open market, which leads to an emphasis on competition, measurement, assessment, and an unyielding focus on money" (p. 2). Education Policy Studies Professor Christopher Tienken (2013) similarly asserts that " Neoliberals believe that social services, including education, should be part of the free market system and open to market competition" (p. 300). Both assessments underscore the transformation of education from a public good to an extension of the market economy, including the increased emphasis on assessment and competition, but each appraisal come just short of explaining exactly how that transformation is happening as far as it relates to students.

Tienken (2007) and Saunders (2013) emphasize how neoliberalism has decreased the dynamic potentiality of a classroom by reimagining education as a consumer good that can be bought and sold (p. 5; p. 304). As a product on the open market, education is now meant to be standardized, routinized, and, most often, scripted. As a result, teachers are to be fully controlled and forced into being neutral arbiters of static information (p. 4). Teachers must either follow scripts or refrain from engaging the students with critical analysis. The students, of course, don't fare much better. Their classrooms experiences have been reduced to a "banking model" of education, which tells students what to think and reinforces that sentiment with rigorous and high-stakes testing that often determines the students educational future (Tienken, 2013, p. 293). When a product is commodified, it therefore must be static, predictable and, of course, quantifiable.

In order to measure and compute the success of neo-liberal policies in education, standardized test have infiltrated nearly every level of education. The strict control over the

curriculum is to ensure predictable results. Yet, there is a critical problem that is often overlooked. Tienken (2013) argues that "When the curriculum content is monitored with a standardized test in which the questions do not align to the cognitive levels of the students subjected to the testing scheme, the results from the tests can be an inaccurate and unfair measure of achievement" (p. 311). But, this is an open market educational system and failure is not a believed to be a problem with the system, but rather with the student. In essence, the testing itself reinforces failure like an educational version of the ouroboros. Tienken makes this reality abundantly clear as he continues his argument suggesting that tests, which determine the level of funding for a school, reinforce a cyclical social Darwinism where impoverished or underperforming students remain poor and academically adrift whereas wealthier and higher-achieving students are continuously provided academic opportunities to excel. Ironically then, the problems that neo-liberal educational reformers point to as *ills* of the system are simply reinforced and made worse by their own movement. The tests ensure a system of winners and losers as the market demands and if education is a consumer good, then competition, not to mention losers, is a necessary component. But to what end?

Educational Competition

This neoliberal influence has transformed education into what higher education scholars Sheila Slaughter and Larry Leslie call, "Academic Capitalism." Neoliberal school reformers erroneously argue that infusing competition into education will ensure that students receive only the best practices and outcomes. Not only have such practices placed undue competitive pressure on schools' administrators and districts, but these same pressures have also snuck into the classroom. The effect of competition is real and damaging to students in numerous ways but is most pervasive in curbing students desire to learn.

Competition is an all-American attribute. There's competition on the field of play, competition for recognition at work, and even competition in our personal lives. This ubiquity and influence of competition has been reified in our minds to be a good and natural manifestation of human interaction. While it's clear from anyone's experience that education has always had some level competition; the neoliberal refashioning of American schools has introduced competition into the classrooms in ways that are truly regressive.

The most obvious example of competition in the classroom is the assigning of grades. Granted, grades are not a matter of public knowledge necessarily, but they do influence student behaviors in ways that may be counter to how teachers initially intended, particularly as it relates to a student's attribution of their own success. Educational psychologists in China, led by Shui-fong Lam (2004), studied the effects of competition in the classroom and prefaced their research by stating that "Attribution theory suggests that a person's explanation for success and failure is influential in determining whether or not one continues to make an effort to pursue valued outcomes. If students believe that ability is not something they can change and the outcomes of their study are attributed to ability, they will be less likely to work hard on their study" (p. 282). In short, grades can, and often do, reinforce the idea that students' performances are something outside of their direct control. However, grades also create a model for comparison between students that increases competition as it relates to a shared and common goal within the larger classroom.

Sally M. Reis and Mary G. Rizza (2001), an educational psychology professor and a professor of educational foundations respectively, reinforce this idea. In their joint study on the effect of competition in the classroom, they argue that grades create an atmosphere where's students "look to another's performance as a guide to judge oneself" (p. 55). To the extent that

this influences learning, Reis and Rizza reference a very specific example: “Tesser discussed two piano players, explaining that self-evaluation will be increased through reflection if the two do not share the same self-definition of being a concert pianist. If, however, they are both striving for the same goal, then comparison will be used and competition may ensue” (p. 55). The specific relevance to this research isn’t necessarily that teachers should try to discourage grade comparison between students but rather teachers automatically push all of their students to achieve a common and singular goal. That common goal can and may be different from classroom to classroom, but a singular objective, a specified standard, a designed curricular outcome, or a relevant skill to a standardized test remains the singular focus for all students in most classrooms. Ultimately, a singular goal, one related to a competitive classroom environment, naturally affects more than just their grades.

Research suggests that goals are not as benevolent as we’re prone to think. Particularly as it relates to the bifurcated study of Goal Theory. As Millersville University education professor Sandra A. Deemer (2004) explains, “two very different messages can be converted in the classroom depending on whether the environment is characterized by mastery or performance goals.” Mastery goals “are focused on engaging in achievement behavior with the purpose of developing one’s competence.” Whereas “performance goals are ones where the purpose of engaging in achievement behavior is to demonstrate one’s competence or avoid the demonstration of a lack of competence” (pp. 4–5). To some, these definitions may be a bit confounding. However, Deemer provides clear distinctions of these two goals which help provide a clearer understanding.

The definition of mastery as it relates to goal theory is a bit different than when educators hear of mastery in the academic sense. In short, this “mastery” is a bit more of a bottom-up than

it is a top-down mastery. A mastery where students are inclined to engage with the material under their own volition rather than a specific classroom mandate. Mastery goal-oriented classrooms are described as environments where students are encouraged to, as Deemer (2004) clarifies, "view the development of new skills as a necessary outcome of learning tasks, and to accept, and persist in, challenging learning situations" (p. 5). Mastery goal-oriented classrooms are where a student finds personal initiative to accept, endure and prevail over challenging experience and learns a valuable lesson as a result.

Unfortunately, that method does not fit into the mold of a competitive classroom where learning is quantified and measured on arbitrary timetables. Competition requires performance, and therefore, performance-oriented classrooms are the most common settings in which our students learn. Deemer (2004) argues that "Performance-oriented environments define success relative to others' performance and often discourage students from taking on challenging achievement experiences" (p. 5). This is directly related to the effect that grades can have on students learning, but also explains a larger phenomenon that occurs in the modern classroom.

The reality is that the neoliberal impact on education has permanently altered the goal orientation in schools and teachers are a part of a systemic inculcation of performance goals. Most frightening perhaps is the notion that some research has suggested that teachers are more inclined to invoke performance goals and measures as a regular part of the instruction because they so often feel "responsible for preparing students for admission to college, professional training schools, and the workplace" (Deemer, 2004, p. 5). Consequently, when students are pressured and measured on their ability to perform specific tasks, they begin to change the way in which the engage with their own education that have serious and lasting effects.

In multiple studies on the effects of competition in the classroom, the argument is made, as well as experimentally observed, that performance oriented learning environments decrease student motivation as well as produce avoidance behaviors when students face challenging situation that might produce a poor performance (Lam et al., 2004; Posselt & Lipson, 2016; Rizza & Reis, 2001). Two studies in particular prove this point to a distributing degree.

The Rizza and Reis' study, discussed above, focused on eleven high school girls in an extremely competitive high school. And while competition was an innate part of their academic careers, specifically their admission into their exceedingly selective school, it became clear through their direct research that many of the students navigated through an unspoken labyrinth of homework and classwork in which they could find easier paths to better grades. As the Rizza and Reiz (2001) suggests, "They [the students] made choices about when they would study, and which test or assignment would be more important to their grade-point average" (p. 58). Rather than take each assignment, test, or project as an opportunity to learn for the sake of learning, they saw each test and assignment through the lens of how they would be perceived. By only focusing on their individual grade-point average suggests that students, as implicitly reinforced by their school, were only focused on the perception of their learning rather than its actuality. Yet, they're not alone.

In a study conducted in China in 2004, Shui-fong Lam and her colleagues looked to test the conclusions made by goal theory previously noted. During the study, fifty-six students in the seventh grade took a two-hour Chinese typewriting course. They were separated into four classes of about fifteen students each. All of the classes were taught in exactly the same way, but the explanations were a bit different. Two of the classes were told that would be given certificates of completion along with their class ranking at the end of the two hours. The ranking

would indicate the students' results from the best to the worst. These classes were the "competitive condition" classes. The other two classes were only told that they would be given a certificate at the end of their class; the certificate would not include a ranking whatsoever.

The lessons consisted of two "rounds" which started with a teaching session followed by a typing exercise and then a corresponding test. The first-round test was made simpler for beginners. After their "successful experiences" a questionnaire was presented to them. The questions were a barometer of their enjoyment, attribution, and self-efficacy on the second test. After the questions the instructor began lesson two, which was more difficult and advanced than the first which was designed to ensure the students would experience failure. Again, at the conclusion of the second test, students were asked to answer a few questions related to their experiences in the second lesson. Students were then asked to take a final test based upon their chosen difficult. Test A would be easier, Test B would be more difficult. Before they took the final test, they could take a mock test to practice. The difficulty selection for the presumptive final test was used to measure the students' performance after their experience with failure. The results were a bit curious.

As the study describes, "In the competitive condition, 25 (92%) of the 27 students chose Test A, the easy test that could protect their ego but helped them little in learning. In contrast, only 11 (44%) of the 25 students in the non-competitive condition made such a choice…. The students in the competitive condition tended to sacrifice the learning opportunity in order to assure good performance. On the other hand, more students in the non-competitive condition valued the opportunity of mastering new skills and were not threatened by the possibility of poor performance" (Shui-fong Lam et al., 2004, p. 289).

Perhaps more to the point of the study, students in the performance based, or competitive condition class, performed much better than the other students on *easy* tasks. Yet, the two conditions were statistically the same in difficult tasks. Further still, there were no significant differences in the two groupings of students in their respective enjoyment, achievement attribution, or self-efficacy after their failures. However, there was a significant difference in their self-evaluation. "The students in the competitive condition had more negative self-evaluation than did their counterparts in the non-competitive condition. They tended to agree more with the statements that they were 'quite a failure', 'not smart', 'dumber than their classmates', and 'poor in eye- hand coordination'" (Shui-fong Lam et al., 2004, p. 291). Such findings are only made worse when you realize that those feelings of self-defeat and failure are held by students only after a two-hour typing class and not after a full school year or academic career.

While the Chinese study and the eleven girls from the highly selective high school are only two examples, it's clear how competition can impact students' learning. Rather than focus on experience of learning in the abstract they remain singularly focused on performance, on their ability to produce on command, and their desire to avoid specific challenges. These two studies do prove that competition is effective, but only in a specific manner. Competition is effective in the classroom in the sense that it has changed students' perception of education to be more associated with neoliberal tendencies. To this point, scholars have observed clear indications of cultural and generational shifts in thinking related to the purpose and need for education.

College may have previously been a valuable experience in the abstract, but now it is tied to extrinsic motivations like status, materialism, and egocentrism (Posselt & Lipson, 2016). Motivation for learning has been entirely altered by the neoliberal influence. Students are

seeking college degrees because it provides them increased capital in the market place rather than seeking degrees because they're intellectually interested in learning something (Saunders, 2007, p. 5). This orientation of educational goals combined with an increased competition not only diminishes an innate desire to learn it also has specific effects on the actual health and self-worth of students form grade school to college.

The Effects On Student Learning

The neo-liberal influence on education has not only altered classroom goals, teachers' objectives, and student's motivations, it has also affected the mental health of school children, not to mention their decreased desire to learn. In numerous studies, it's become clear that an increased competivization, buttressed by high stakes testing and parental expectations, have students feeling the relentless pressure of market demands earlier and earlier in their lives.

Despite their best efforts to prepare the children for an uncertain future, many parents unknowingly force their children into participating in the neoliberal reorientation of education at incredibly early ages. In an article written by Alissa Quart (2006) in *The Atlantic Magazine*, she has called this the new "child-enrichment" business, which has affected the current mode of parenthood by helping to groom children for their experience in the market-based education system. As the Quart explains further, this child-enrichment craze has "expanded to include such disparate phenomena as the teaching of baby sign language, the IQ testing of toddlers, and the proliferation of video programs like the Baby Einstein series" (p. 1). It's hard to blame parents for this when such programs are marketed as a tool designed to help foster intellectual growth in children because, as the article continues, parents are eager to push their kids to excel from an early age to ensure that they "become high-earning adults" in order to help out their parents in an era when financial stability and security seems fanciful at best. Again, such behaviors are

playing right into neoliberal policies. The expectations placed on children from an early age necessarily significantly influences their general behavior. “But with so much competition for everything from preschool to summer camp to college, children must work harder and train more extensively than ever to outachieve their equally avid young rivals” (p. 2). The early introduction to competition has effects that only worsen over time, too.

In 2014, Valerie Strauss (2014) of *The Washington Post* conducted a series of short interviews with a group of elementary students who were preparing to take a Texas standardized test. They were asked about their hesitation and fears regarding the test. What is clear is that the students were not concerned about performing well because of their own interests, but rather they feared the external implications of failure. Students were quoted as saying the following when they considered the possibility of failing or performing poorly on the test, “You won’t learn how to work hard. You will be lazy.” “You will be wasting that good brain that God gave you.” “You won’t feel proud of yourself. You can’t say ‘good job,’ to yourself” (para. 3). Clearly, the students are internalizing the results of their performance over the material that is meant to be learned. Students have been conditioned to believe that the outcome is the only important part. Otherwise, they’re not allowed to be proud of their efforts, or they’ll be wasting a divine gift. This is tantamount to child abuse in the sense that we’re naturally setting certain kids up for failure in a system that doesn’t just require winners and losers but reinforces those roles.

Richard Weissbourd (2011), a child and family psychologist at Harvard’s Graduate School of Education, formally studied the implications of increased pressure on students. Much of his research was conducted by holding personal interviews with students and parents led him to realize very quickly that that parents have pressured their students to achieve at such a high level that even basic moral behaviors were left by the wayside. One parent defended their

actions very bluntly stating, “I agree with you that it’s important for kids to be good people, but, realistically, that won’t help my child get into a place like Harvard” (p. 23). Extending that line of thought, students indicated similar beliefs. In another study that Weissbourd conducted, he found that one-third of the forty high school juniors he surveyed felt it was more important to get into a good college rather than be a good person. When the results were read to their teachers, they rejected the report yet they rejected the report only because they believed the number was too low (p. 24)! The problem here is obvious, we’re not teaching students to be anything other than what Weissbourd calls, “performance machines,” which can’t bode well for the growth and maturity of the whole child.

Weissbourd (2011) states, it's clear that making children into performance machines does indeed have long lasting and detrimental effects on students’ overall development and health. “A child who is socially skilled, deeply loyal, funny, feisty, caring, and imaginative may never come to value these qualities or see them as anywhere near the core of his or her being. In these circumstances, children are also more likely to view others in terms of their achievements and see them as competitors or threats. They suffer both a diminished sense of others and a diminished sense of themselves” (p. 24). Weissbourd argues that schools and parents must find a balance. However, his suggestions on how schools can find that balance are most compelling because they’re successfully in use now, albeit in small quantities, in certain classrooms, and with certain teachers. In no particular order, he suggests longer class periods, the limitations on advanced placement classes, the limit of extracurriculars to only those that truly interest them, as well as a reduction in homework with a focus on only assigning homework that is most meaningful. Most importantly, Weissbourd’s final claim is that achievement – or performance goals – should only be one part of a students’ value. “That means not only providing students

with various opportunities in the arts, sports, and community service. It also means taking on the deep work of cultivating in the school a rich and nuanced view of human nature and finding ways to value students for their many qualities: their contributions to the community; their ability to tune in to others; their excitement about learning; and how deeply they value those who differ from themselves in race, class, or gender" (p. 26).

I couldn't agree more with Weissbourd's suggestions, but the continuation of standardized high-stakes tests make it impossible to implement any of his proposals. The problems with standardized tests are evident but what is not mentioned previously in this review is the influence tests have on the shaping and limiting of student learning. In general, we know what the effects of testing are on the macrolevel. The tests are not high-stakes but they are often used for high-stakes purposes such as determining which students will pass or graduate, which teachers are fired or given raises, and which schools are reorganized or given more funding ("National Council of Teachers of English," 2014). In 2014**,** the National Council of Teachers of English produced a policy brief which studied the effects of standardized tests on student learning. The test effects students in three key areas: the nature of teaching, the narrowing of curricula, and the limitation of student learning. The last two points have yet to be discussed in the review but their impact on students are perhaps most important.

The narrowing of curricula is the fulcrum for neoliberal policies to implement a market-based influence over education. By narrowing the spectrum of information, the test naturally sanctions knowledge and simultaneously reinforces the test relevance. In the board sense, "Standardized tests narrow the entire curriculum in many schools, often squeezing out subjects such as music, art, foreign languages, and, especially in elementary grades, social studies, because they are not included in tests" ("National Council of Teachers of English," 2014, p. 2).

By doing this, school costs can be reduced, and student performance can be focused on developing skills that have market relevance. The results of a narrowing curriculum are vast and can be described similarly across subjects but lead directly to the complete limitation of student learning.

When students are only ever introduced to a small swath of information across a vast landscape of knowledge, students with varied intellectual abilities, or different learning styles are immediately set up for failure. "Most important, standardized tests limit student learning because they focus only on cognitive dimensions, ignoring many other qualities that are essential to student success" ("National Council of Teachers of English," 2014, p. 2). In short, a test diminishes so-called soft skills: curiosity, perseverance, and sociability. The tests do not take into consideration the full range of knowledge a student may possess. "Students who have literacy abilities that extend beyond but do not fully encompass the narrow band of skills measured by standardized tests may not understand or appreciate their own capacities and become disengaged from school" ("National Council of Teachers of English," 2014, p. 2). Therefore, controlling teachers engagement with their classes, narrowing of the curricula, and limiting student learning undermines the very essence of education, but not an educational system aligned with the neoliberal principles. While students may be able to find themselves jobs, they certainly won't have the wherewithal to understand the exploitive condition that that their schooling has forced upon them.

Meaning What?

The research examined above explains that standardized tests reduce the learning experience to a very specific notion. The tests propose the false premise that only certain information is necessary and other knowledge or information is extraneous. Such a top down

approach to learning ostensibly sanctions knowledge and legitimizes what is important for students to know while also reshaping schools to have a singular goal: test scores. In turn, the test shifts the purpose of schools. Rather than offering authentic learning environments, schools are now forced to concentrate their efforts on quantitative data, test-preparation, and increasing student performances. No longer is there time for students to actually learn, instead they must perform.

Students who perform poorly, as well as their teachers, find themselves missing out on federal dollars relegating underperforming schools to a harmful cycle of failure. Whereas students who do well on the test, as well as their teachers, are rewarded with additional monies and added local control over curriculum. In essence, the school system creates a social Darwinist environment with no end in sight. Despite the fact that competition has negative effects on students' motivation and their desires to learn, the market surreptitiously provides an invigorating solution to problem that is has effectively created. One that outwardly appears to advance students' learning experiences but one that naturally reinforces market principals just the same. And we've ***all*** fallen prey to its effects.

What processes are used to reinforce market involvement within education, whether surreptitiously or overtly?

The inclusion of educational technology in American classrooms has been wide ranging and incredibly beneficial. Just the sheer amount of information we can access in a moment's notice creates a dynamic that was otherwise absent in the classroom. It can also provide a greater range of accessibility for all leaners at any age. I've seen students who are visually impaired engage in a general education classroom with ease and agility due to adaptive technologies. I've assisted kids with translation applications so they can, in real time, access materials in a language they're more comfortable using in an academic setting. Most recently,

I've communicated with my students during a global pandemic and have actually *seen* them as a result of our collective adoption of Zoom and Microsoft Teams. This growing field engenders an impression of endless possibilities where the expansion of the proverbial classroom walls knows no bounds. It really does seem to provide something education has never seen before in more ways than one. While technology provides new opportunities for students it also provides new pathways for the commodification of learning environments to take place. Therefore, we must not blindly accept technologies into the room without understanding their full impact and question the full breadth of their influence.

There Are No "Silver Bullets"

A few years back I picked up Diane Ravitch's *The Death and Life of the Great American School System*. While I enjoyed her book thoroughly, a point she made in the first chapter stuck me and continues to color my educational perspective. Early on, Ravitch makes the claim that there are no "silver bullets" or, as I tend to think of it, general panaceas that will once and for all "fix" American education. Education is for the nimble, not for the domineering. We cannot imagine there are simple solutions to big issues. That's too easy. The problems are too complex, and the stakes too high requiring a more thoughtful and detailed analysis to produce effective solutions. Therefore, we must be careful not to think of educational technology as a cure-all, but that may be a lost notion at this point.

In fact, educational technology expert Neil Selwyn (2017) makes the argument that technology is already being used as a "magic solution" (pg. 104). He specifically identifies this growing trend as "solutionism." Meaning that many who see educational technology as a *solution* to larger education concerns naturally limit their own ability to shift and change policy for the greater good. To that point exactly, the focus on digital technologies are often more

concerned with solving problems of future students rather than those right in front of us. Technology can focus our attention on the possibilities and not necessarily the inadequacies of education as it stands today. Selwyn (2017) accentuates his argument specifically by claiming that this approach, “is an acceptable stance for a business that is gambling with finances and profit, but with the education of a student who is in school today we only have one chance” (pg. 105). We must get it right. While the inclusion of technology can provide exciting solutions to seemingly larger issues, it can also serve to undermine the very idea of education at the same time.

While I will defend myself against the accusations of being a luddite, I wonder about the lasting effects of constantly using these wired devices in the classroom. Lessons and materials are no longer tangible bur rather cloud based and accessed through a labyrinth of corporate brands and tech company access points. Naturally this shifts education in a new direction and perhaps a critical eye is our best approach to fully realizing its effects. Therefore, we need to ask pointed questions, specifically related to what effect the infusion of ever-changing technology has on teacher preparation and student learning. Simply put, what are teachers teaching and what are students learning? Additionally, we need to recognize the ways in which these devices reinforce market principles within the classroom. If tests provide data points for an increase in competivization, then technology is an inculcating force of corporate dependency. Lastly, and most importantly, what’s the psychological toll on so much screen time? What does our reliance on technology in the classroom do for the critical and abstract thinking skills of our students? There is a pernicious influence that technology exudes that can often be missed by our ever-changing attitudes and growing comfortability with the digital world and the commodification of

public spaces. While educational technology may solve immediate and short-term problems I wonder if we're missing the forest for the trees in more ways than one.

What Am I Even Teaching?

As I arrived at film school in the Fall of 2005, it wasn't so much the celluloid stories were telling that fueled our conversations as much as the medium itself In the mid-2000s video technology had emerged as a serious – and cheaper - alternative to celluloid film. As a result, technology was an on-going conversation at the core of my degree program that forced all of us in the program to think about what *type* of filmmakers we wanted to be. Could we be *filmmakers* if we shot video? Could we use non-linear editing software if we exclusively shot super-16? What aesthetic differences were there between 29.97 frames per second compared to the archetypal 24 frames per second? I was excited by this debate. By the end of my degree program, the marketplace had essentially made the choice for me. Video was easy, cheap, and was quickly becoming an equal to film.

In the final years of school, I began to appreciate the complexities of video and also understood that if I wanted a job, I would need to know video and the wide array of technologies that supported the growing field. By the time I got an industry job, I was just as confident on the set of a major film or television production as I was talking about the technical side of the industry. In some ways, technology became the only currency for remaining in the industry - it was a requirement that I wasn't fully able to recognize or identify as a growing problem until I switched careers leaving tv and film for education.

In 2015, I became a teacher and proudly followed in the footsteps of my mother and grandfather. Being in front of the classroom and teaching American history just felt right and not just that I was continuing in what we regard as "the family business." Quickly, and not

surprisingly, my film and video skills naturally converged with my instructional approach. I began to apply my film and video skills directly to creating history lessons. This integration of technology and instruction pushed me in a direction I wasn't fully expecting. As a matter of course, I naturally become receptive to, and more inclusive of, new technologies in the classroom that I felt were strengthening my approach to lesson planning.

My early lessons had students navigating through dynamic web quests, analyzing primary documents with online graphic organizers, and even playing historically themed video games. All of these lessons mirrored what my pre-service training had indicated were good lessons – they were student-centered, active, and reliant upon authentic experiences. In other words, students were clearly doing things in my room and as far as I was concerned, not to mention my administration, students who were *doing* were clearly learning. Not all of my lessons were dependent upon technology, but I did try to incorporate it as much as possible. Then I was presented an opportunity.

At the end of the 2018/2019 school year, my school administration announced a 1:1 pilot program. When they asked for volunteers, I couldn't have been happier to put my name forward. The 1:1 initiative aligned with a new personalized learning program, which I feel is an essential component to good teaching but can often and necessarily place technology at the center of it. When the program began in August 2019, I was fully on board and was eager to re-imagine my lessons and focus on what I perceived to be *good* teaching methodologies. But, over time something didn't seem right.

Frequently, I found myself trouble shooting Google Drive issues, or navigating through Schoology disruptions, or dealing with ill-timed software updates. This enraged me. After a while I wasn't sure what I was actually teaching. Was I teaching the proprietary codex of a

specific technology company or the nuanced objectives of my curriculum? Was I teaching students to think historically and make deep sociological connections, or was I simply training them in digital technologies? This was a point of serious frustration but also deep reflection. Perhaps I was following the technology more so than my natural inclinations as a teacher, but perhaps that's the norm if not the expectation when technology inauspiciously becomes the fulcrum for good teaching.

Brand Loyalty

Ever the theorist, in 1970, Milton Freidman (1970) published an article in The New York Times Magazine, titled, "The Social Responsibility of Business is to Increase Profits." In his typical unapologetic tone, Friedman argued that corporate charitable contributions, "…is one way for a corporation to generate goodwill as a by-product of expenditures that are entirely justified on its own self-interest" (pg. 5). The free market advocate wasn't interested in charity as a natural extension of any public good, but rather in the constructing of a certain perception that was wholly beneficial to the company itself. It's an important notion to think about when imagining the unspoken impact of educational technology – the influence of corporate brands, student dependency and loyalty on the products of private industry, and of course, the ever-closer relationship between the classroom and the marketplace.

It's one thing to be critical but it's another to be realistic. Of course, there are serious issues related to such corporatizing of the classroom, but it seems that today there is almost no alternative. Selwyn (2016) makes this salient argument in his book *Is Technology Good for Education?* In effect, states, districts, and teachers cannot develop these devices on their own like they can other aspects of education. Tablets, laptops, and the varied programs that assist instruction are now necessary components but also out of the range of possibilities for these

institutions to produce on their own without corporate sponsorship or dependency. Therefore, the classroom inevitably becomes a "major commercial market for education" (p. 109). In addition, the classroom then adopts a sort of corporate lingua franca that has its own learning curve in addition to, and independent of, the course material.

In some cases, my students don't even refer to them as laptops nor do they ever "look" things up. Now, as is the case in most places we *Google* things on the *Chromebook*. It's a whole new phraseology that invades the learning space and produces an almost predictable brand loyalty. It's not just a provincial problem either, it's much larger that we may realize. In 2017, Natasha Singer (2017), writing for *The New York Times* extensively reviewed this *googlefication* of the classroom and made the startling assertion that, "Today, more than half the nation's primary- and secondary-school students — more than 30 million children — use Google education apps like Gmail and Docs, the company said. And Chromebooks, Google-powered laptops that initially struggled to find a purpose, are now a powerhouse in America's schools. Today they account for more than half the mobile devices shipped to schools" (para. 6). There's a clear corporate strategy here, it may not be as stark as Friedman asserted in 1970, but it's close.

If students are educated in a setting that is saturated in a specific corporate ideology, their loyalties will naturally abide as they enter the work force. Case in point, my classes in high school and college all necessitated Apple computers and I have remained loyal to the brand. For almost twenty years, I have exclusively used Apple computers even to the point that I have eschewed the use of my work PC for my own personal MacBook. This corporate loyalty wasn't exactly by choice, but it was part of my instruction. The means in which I learned to engage with technology was specifically branded and I have monetarily rewarded Apple over and over. While a more benevolent perspective may argue that Apple is reaping the rewards of a free

market system, they would be missing the larger point as it relates to the purpose and aim of American education.

While Apple made the products that aided in my education, one of the few seemingly extant ideals of that education isn't the content I learned, but rather my brand loyalty. The primacy of Apple over the content I learned is exhibited in the simple act that when I use the skills I learned in film school; I'm often doing so on a branded Apple product. By opening the classroom doors to an increasing dependency on technology necessarily means that education will change. The republican ideals of a Jeffersonian education will be traded in and reinforced by a growing inculcation of market principles and corporate dependency. Educational theorist Henry Giroux explains this point perfectly when he argues, "Central to this agenda is the attempt to transform public education from a public good, benefiting all students, to a private good designed to expand the profits of investors, educate students as consumers, and train young people for the low-paying jobs of the new global marketplace." This invasion of free market principles and the increasing corporate influence in American classrooms will have a lasting effect that we may not be eager to see. While we may not have a choice as individual teachers, we can certainly make sure that our message, our purpose, and our reasons for becoming teachers are not clouded by the growing cacophony of technology, corporatizing agendas, and market demands. The medium cannot become the message and if it does, we may have a larger problem on our hands.

Undermining Our Students

As technology becomes an ever-present reality in my school I have been pressured, or at least encouraged, to use the latest gadgets. While I remain concerned about the corporatizing of the learning space, I'm also concerned about what these devices naturally do to our students'

abilities to think, engage, and manage abstract concepts, especially as technology is introduced at earlier stages of childhood development.

Daniel Kahneman's (2013) work in behavioral economics not only won him the Noble Prize, but also a wide spectrum of fame. As documented in his well-known book *Thinking, Fast and Slow,* he identified and popularized the "machinery of cognition" (p. vi). More specifically, he distinguishes between two modes: System 1 and System 2. These two systems of thinking are not necessarily independent of one another, but rather constantly working together easing the burden of the other even if not for the better.

Kahneman describes System 1 as automatic, perfunctory, and always running in the background. It's the system responsible for taking over the duties of our commutes home when we begin to daydream and suddenly find ourselves at the destination without having realized how we got there. System 1 gives us the assurance that we can engage in the world while also passively thinking of something else. It's an incredibly useful, helpful, and necessary mode of thinking, but not always without fault.

Conversely, System 2 takes a certain amount of mental effort. It's the process that takes the most energy and feels the most taxing. It's the cognitive mode required to figure out a riddle or a word puzzle, or to accurately remember the multistep directions of a specific process. At the same time, System 2 thinking can be further described as an electrical circuit in a home; it requires a certain amount of energy depending upon the activity, but in the case of the brain, there is little control of how effortful a task is for certain individuals. Therefore, when pressed into action at high capacity it can become overloaded and trip the breaker. In essence, we cannot multitask when trying to complete numerous difficult objectives. The real problem can develop when these two systems interact, however.

While System 2 is responsible for deep and abstract thinking, it's also a lazy system, prone to accept the misconceptions and assumptive faults of System 1. In effect, System 1's mistakes are reinforced by System 2 simply because it's easier to accept them than to think them through, which of course creates errors in judgment, false memories, and erroneous assumptions (Kahneman, 2013).

It's important to think for a moment about how these two systems effect students in the classroom. Additionally, it's important to then contextualize those thoughts and imagine how technology may hinder the best while exacerbating the worst outcomes of those innate modes of thinking. Technology has become so ubiquitous that out interaction with it has been ingrained in our system 1 thinking. We're all guilty of aimlessly scrolling through our phones, unaware of what we're looking for. We've all been flipping through television channels hoping for something to strike our fancy only to realize that we're compelled to continue on channel surfing more out of habit than choice – now imagine that same unthinking action taking place in a classroom. If technology has become a part of our System 1 thinking can it really be that helpful in our classroom instruction?

When technology is used in a classroom without the necessary and proper methodologies supporting it, there's a chance that certain requirements can overload a students' System 2 thinking allowing them to appear like they're learning when they're simply just going through the motions. In most cases, System 1 will retain the most basic of functions, which may simply reduce a students' ability to engage by virtue of how much energy a student needs to perform a task, something instructors are not often trained to think about or recognize (Kahneman 2013, p. 36-35). In the worst case, some students may only be learning the means to manage, organize, and access the material necessary for class rather than engaging in authentic

or purposeful ways. Instead of learning the content, they're passively engaged and allowing System 1 thinking to guide them through the steps of this practice that mimics or feigns the process of learning.

Which begs the question, if technology exists in the minds of our students at a System 1 level how we can get students to engage with technology in a system 2 manner that doesn't overload their capacities? The technology can't do the teaching, it can't provide the scaffolding that a teacher can – especially at a personalized level for individual students, and it certainly can't encourage a student to push forward despite the challenges. Very simply put, technology doesn't do the hard work for us, it only amplifies what human forces already exist – good or bad.

There are plenty of arguments about how technology aides in education. But does it provide students with a deep basis of knowledge, or help them think more abstractly, or create a democratic classroom experience? Or does it simply lead them toward a certain level of complacency that corrupts their ability to think and perceive for themselves? If our students are only ever passively engaged, then maybe education is serving a different purpose with technology at its center. Especially when technology merges with our perfunctory senses and we're no longer engaging with the content of the course in meaningful ways but instead only retaining the limited, if not erroneous, information that our System 1 absorbs. Therefore, rather than knowing how to think historically, students can instead navigate the sinews and pathways of Google Drive. Instead of understanding the concepts taught over the course of the school year, students are fully capable of troubleshooting their Chromebooks. In short, the increasing inclusion of technology into our classrooms diminishes the importance of what we are teaching and inadvertently promotes other skills unintended and unrelated to the lessons at hand.

Message Over Medium

Technology can be incredibly attractive and perceived as easy solutions to big problems, yet it can also undermine the entire educational process. It's not a panacea but can often be seen as one. So, we must be diligent and careful to decipher between when technology is a tool and when technology becomes the message. If we allow the computer to corrupt the process and take over the message, we'll no longer be teachers, but trainers. Technology can become a motivating force to create students who are adept at specific tasks, but not entirely engaged in their own thinking and learning. From my perspective, a natural fear arises in which students who are not engaged in the classroom are not going to emerge from their schooling experiences as active citizen eager to participate in our democratic system. Moreover, if they're learning environments were only ever corporatized their critical eye to undemocratic norms and capitalist expansion will never register the effects of such undermining of our republican ideals. While it seems impossible to push back against a monolithic technological adoption model, there may be an immediate solution closer than we realize and just beyond our classroom walls.

In what ways can we mitigate the market forces that have dictated much of American education over the last forty years? How can we start anew?

In an environment where education is increasingly competivized, stress-inducing, commodified, and hyper-focused on a narrowed definition of success there needs to be a concerted effort to re-stimulate the intrinsic curiosities of our students – in other words, we need a hard reset. This certainly isn't an easy goal. Considering that so much of education and our leisure time, is centered around the ubiquity of screens, one important pathway to that hard reset is an often ignored and abundant resource: the outdoors. Students should be re-introduced to the natural world because it so easily provides experiences that require them to explore beyond their

perfunctory senses. Nature is an interconnected domain where cause and effect are on full display every second of the day and every month of the season. To explore the outdoors would afford students a nuanced understanding of their world but also give them an introduction to interdisciplinary learning and provide, a basic impetuous to learn for themselves. This is something our system of education doesn't do very well at the moment.

Defining the outdoors needs a word of clarification, too. The outdoors or the natural world can immediately conjure mental images of snowcapped mountains, timberline hiking paths, or venturing into someplace distant and remote. However, this reengagement with the natural world can be accomplished in your own backyard or even in a town park. Simply thinking about, looking at, or examining the natural world around you invites an instinctive curiosity that can be just as effective as those mountain hikes or scenic vistas. In some cases, it's just a matter of getting the opportunity. So many people now experience the world through ones and zeros. It is a wired, digital, and web-based world that is decidedly indoors, but the outdoors hasn't always been so distant from the lives of American citizens. In fact, the natural world was once a fundamental part of American life as well as a key component to founding of the country.

My thematic concern looks at sustainability in several ways. First, considering my concern's reliance on the American Founding Fathers as a constant touchstone, I see sustainability as a small "r" republican[2] virtue that speaks to how the natural world was embedded in the political foundations of the new republic. Second, I see sustainability, and specifically placed-based and environmental curricula as a means to distance ourselves and our students from a highly competivized educational environment that can riddle students with self-doubt, anxiety, and depression. Third, and perhaps most importantly, I see sustainability as a

[2] The distinction of small "r" values is simply made to avoid confusion with the modern political party, which did not form until 1854 approximately 80 years after the beginning of the country.

means of introducing students, as well as teachers, parents, and administrators to the necessity and relevance of an interdisciplinary approach to education.

The American founders studied and interacted with the natural world regularly as part of their daily lives and decisively implanted those learned lessons into the political foundations of the new republic. By simply reconsidering this point of origin, it not only provides new clues for a redirection of American education but can reemphasize the vital obligation we all have to continue our republican experiment by engaging with our communities; investing in our shared future; and cultivating a more thoughtful and prudent citizenry – simply by going outdoors.

Republican Virtue

One of the underlying considerations for sustainability as an integral part of my thematic concern stems from my consistent inclusion of the American Founding Fathers as a principle frame of reference. The founding generation was directly engaged in a wide array of disciplines from science to agriculture, to of course, politics. However, the modern political, social, and economic demands placed upon education have limited the experiences of today's students and has limited the possibility of students gaining a genuine interest in subjects that speak to their innate curiosities. I argue that many facets of modern education have narrowed academic pursuits and therefore limited student engagement and co-opted the basic concept of what it means be an enlightened democratic citizen and a member of a community – at least in terms of the way the founders thought of it.

In revolutionizing the social order and redefining the limits of authority, the founders created a nation that centered on small "r" republican values. Rather than the subjects of a monarchy where individuals were worth only the value of their bloodlines or the size of their pocketbooks, republics eliminated these arbitrary social advantages and in turn asked something

more of their citizens: a suspension of personal desire for public virtue. In a republic, the citizen, as historian Gordon Wood (1993) describes it, is devoted to the general commonweal at the cost of private desires and interests (p. 104). To a republic, self-sacrifice is tantamount to oxygen for human life. And while private desires are not meant to be eliminated in a republic, they are to remain secondary to the public good.

This commitment to public virtue must remain incorruptible and astutely maintained for the health and future of the republic. Avoiding servile dependency and personal avarice are essential but difficult to come by when the marketplace dictates engagement within a system of natural hierarchy. Therefore, the founders believed it was the independent farmer, whose livelihood was made from the very land he owned and worked, who was without attachments or corrupting influences and therefore the model citizen. In effect, nature, the land, and the soil were the glue that would bind this new republic together as it literally connected the individual with the nation itself. Caring for the land, tending the land, knowing the land, and learning from the land was not only a patriotic activity but it was essential to the republican experiment at hand.

To our modern sensibilities this connection to the natural world may seem a bit odd or weirdly askew from the social order we're more familiar with. However, it was not the drive of the market or the personal accumulation of wealth that the founders were concerned with, but rather the sanctity and continuation of the republic by moral and virtuous people. A direct connection to the land, they believed, provided individuals a certain level of autonomy that induced a disinterested, or unselfish, and independent demeanor and a heightened social morality that would bind society together and subdue personal gain for the public good (Wood, 1993, p. 106). This connection to the land was not theoretical either. While a revolutionary ethos

surrounds the legacy of the Founding Fathers, they were directly concerned with the natural world and agriculture perhaps more than anything else.

In her book *Founding Gardeners*, historian Andrea Wulf (2012) argues that:

> The founding fathers' passion for nature, plants, gardens, and agriculture is woven deeply into the fabric of American and aligned with their political thought, both reflecting and influencing it. In fact, I believe, it's impossible to understand the making of American without looking at the founding fathers as farmers and gardeners. (p. 4)

This preoccupation with the natural world defined the lives of the founders perhaps more so than their popular legacies suggest.

Even in the midst of the American Revolution, Washington took time out of his days to write lengthy letters to his cousin Lund Washington who was overseeing his estate describing in detail his instructions for tree planting, crop sales, gardens, and at the same time expressing his general affection for nature. For Jefferson, the natural world provided the basis for his political beliefs. If the world was naturally ordered so too were humans, specifically around the concepts of freedom and equality. It was also Jefferson's belief that the strength of the American landscape directly reflected what he saw as American's political and social strength a burgeoning republic. But perhaps it is Madison who exemplified the republican spirit of environmentalism more than anyone else. Just after leaving the White House Madison spoke to the Agricultural Society of Albemarle and argued that man needed to maintain and not simply control the natural world. In effect, Madison argued that a balanced approach, a reciprocal relationship with the environment would ensure a lasting relationship that would sustain life but also the essence of the republic. To understand the founders' appreciation for the natural world is to understand their devotion to the republic. Simply put, they're one in the same.

An appreciation for agriculture, subsistence farming, and the natural world was so strongly held by the founders that it almost is an easy argument to make that a clear extension of

that philosophy would be the modern environmental and sustainability movements writ large. But I don't even think we need to be that overt. The founding generation sought to reinforce republican virtues in deep connections to the land which in turn makes virtuous citizens. Therefore, it can be argued that in a republic the abuse of the land, a disconnection from the land, and growing ignorance of its importance in our lives and in our history divorces us from our past and ultimately to our future. If our current education system continues to lack a community sentiment or republican virtue, and remains distinctly attuned to personal achievement and market relevance, to what extent are we proudly and defiantly turning our back on the founders' beliefs and our shared connection to the natural world? If various forms of life in the natural world are dependent upon one another for their survival and success, then by extension the same must be true for us.

Sensory Reset

The sixth graders at my school muddle through the first few weeks of the new academic year in a hardened daze. They're simply overcome by the amount of changes from fifth grade. There are a few tears, a few outbursts, but the kids handle it just fine thanks to our caring administration and staff. It may take a while, but the students begin to easily navigate the halls and feel confident in conquering the circuitous logic of their locker combination. And once the weather changes and the leaves fall, the concerns of the past few weeks are brushed aside without a worry or a care - their parents' take a bit more convincing, however.

Just as the students have found their groove, there's always a group of parents who express their mounting concern, not over the amount of changes to their child's routine, but rather the sudden lack of recess time. For three years the students at my school, have a decidedly indoor educational experience; there's no recess and limited outdoor PE classes. Screens, desks,

laptops, tablets, projectors, smart boards, and fluorescent lighting define their middle school years. Perhaps the parents have a point, but it's assuredly a losing argument. As journalist Richard Louv (2008) suggests in his book, *The Last Child in the Woods*, "[A]s the federal and state government and local school boards have pushed for higher test scores in the first decade of the twenty-first century, nearly forty percent of American elementary schools either eliminated or were considering eliminating recess" (p. 99). The school schedule is so tightly organized around increasing instructional time in the pursuit of higher test grades that the elimination of recess may only be the start of the problem.

With technology a near constant presence in modern schools, it's no surprise that many classes almost exclusively exist online and thus interact with the class through various paid subscription programs my district has found useful in achieving our shared goals. Whether it's Google Drive, Quizlet, Quia, Kahoot, Accelerated Reader, NoRedInk, or ALEKS, students are engaged with technology on a regular, if not constant, basis. In the Fall of 2018, Alia Wong (2018) reported in *The Atlantic Monthly* that "One federal survey found that 70 percent of American teachers assign homework that needs to be done online; 90 percent of high schoolers say they have to do internet-based homework at least a few times a month. Nearly half of all students say they get such assignments daily or almost daily" (para. 1). This of course doesn't even mention their digital usage after school but does provide a window into the near constant interaction students have with technology.

This experience is not unique to my district as technology has become an engrained part of American education. Granted, educational technology certainly attracts praise and faithful acolytes eager to advance their lesson's interactivity but even for luddite-holdouts technology gradually invades their classrooms just the same. The integration of technology is often a top-

down directive from administrators, superintendents, and school boards looking to prepare their district's students for potential careers. In Pennsylvania in particular, a career readiness standard was a new initiative beginning in the 2017-2018 school year and has since reshaped much of how technology is used in the classroom. As districts fuse their instructional outcomes with the standards of career readiness, technology has become a center point of new curricula as it is seen by districts, as well as the Pennsylvania Department of Education as an "essential workplace skill" ("PA Career Standards," 2019).

The addition of a career readiness standard is celebrated in the sense that its existence presages the eventual end to persistent standardized testing - perhaps not soon enough though. Yet, perhaps most importantly, the initiative to increase technology's usage also indicates a preordained future for our students because, as even the students know "computers are where the jobs are" (Louv, 2008, p. 13). There is something sinister about singularly refocusing education to simply prepare students for their eventual careers. It's all seems very premeditated, manipulative, and shortsighted. Preparing students for a static future by limiting their educational scope ensures that there can be no alternative. Conditioning students for their eventual entrance into marketplace diminishes authentic learning, dulls natural curiosity, and supplants broad bases of knowledge by atomizing and narrowing the disciplines. This would of course no longer resemble a liberating system of education but rather a restrictive training center.

In his incredibly insightful book, Louv (2008) uses the term "Containerized Kids" which was coined by professor of kinesiology Jane Clark (p. 35). The term is meant to describe the simple fact that so often children are physically limited. At an early age the limit is defined by safety: strollers, car seats, highchairs, playpens, walkers and any other safety-mandated baby accoutrements. It's easy to see how this concept could be expanded to include the notion of

intellectual containment. In most public schools, students are also limited by the school curriculum as well as their individual school experience. Students have been regularly confined to desks, rows, classrooms, and hallways and of course in recent years they've been held captive to the ever-present glowing screen. Even during their free time, students are contained, held captive by the firm grasp of their digital devices. This reliance on educational technology combined with a narrowed focus of education has certainly remade education from all sides, but to what extent and to what effect?

We don't fully know what this *containment* is doing to kids. We can only assume the eventual effects of focusing a student so singularly on their career at ever younger ages. Moreover, the endless exposure to screens is certainly not estimated to be a healthy habit for developing minds either. Therefore, the question must be asked, what is the larger goal of these initiatives? To what end are we so vigorously pushing kids to attain market relevant skills? If we're simply preparing kids for careers, we need to carefully reflect on the velocity of technological change and realize that perhaps we're too shortsighted and the jobs we're ostensibly preparing students for won't be there in the future. Additionally, if these efforts, along with many others like them, have been designed to increase test scores there is considerable evidence to suggest that these invasive measures are abject failures, too. As Dana Goldstein (2019) argued in December of 2019 in *The New York Times*, these continuous reform measures are not working. Despite spending billions of dollars over the last two decades, student achievement has remained "stagnant" (para. 1). From personal experience there is a clear indication that these external forces on education are creating an experience that is boring, intimidating, and overly burdensome for our students and ultimately setting them up for failure. But its effects might be even more pernicious.

There is an alarming trend that every teacher has seen occur more frequently in the behavior of their students: anxiety. Students feel the pressure to perform and the reorientation of schools to continuously quantify performance only exacerbates that reality. A 2003 survey in the journal *Psychiatric Services* indicated that children are increasingly prescribed anti-depressants and the largest increase - a total of 66% - was among preschool children. The worst part is that that these young children are only just beginning their schooling and already feeling emotionally strained (Louv, 2008, p. 49). So much of a student's life is directed that it's only a matter of time before they're emotionally drained. Yet, we're too eager to prescribe them medications to suppress symptoms of a much larger problem.

In the 1970s, Stephen and Rachel Kaplan, a husband-and-wife psychology researching team identified two types of attention: directed and fascination. Utilizing the Kaplans' research, Richard Louv (2008) indicates too much directed attention leads to something they called "directed-attention fatigue," marked by impulsive behavior, agitation, and inability to concentrate (p. 103). This frightening conclusion accurately describes a chief concern within the American school system. Student behavior is a systemic issue and not just one of impulse control or immaturity. So, what can be done?

Control-Alt-Delete - a simple three key command that nearly every computer user knows to reboot a PC. There are just those moment when the CPU seems to be malfunctioning, acting too slowly to your demands, and it needs a hard reset. As I mention above, the speed, rigidity, and overall anxieties induced by the education system warrants a hard reset for our students. We need something to reinvigorate them, inspire their passions, engender a sense of wonder, stimulate their curiosities, and foster their devotion to a sense of community. Very simply, this hard reset isn't all that far away: in fact, it's just outside. We need students to go outside. Not

briefly, not occasionally, but regularly. Schools need to help rekindle their students' natural instincts by reconnecting with the world around them, not at a prescribed pace, but one that meets their needs and desires.

With that said, I don't think it unreasonable for a critic of this position to ask why must the school facilitate such an outdoor experience for students? The assumption that outdoor experiences should be the responsibility of parents is certainly a myopic point-of-view, but one that doesn't seem all that unreasonable in a world where schools are constantly required to *do* one more thing. As Louv describes it, schools are almost the last bastion for nature experiences so demanding that they become advocates for outdoor experiences is counter to most of our preconceived notions of schooling. However, the outdoors is becoming increasingly marginalized in the lives of our students. In the recent past, local municipalities have criminalized outdoor play. So, the generational "back in my day" indignations regarding modern youths' penchant for indoor activities may be correct but not necessarily in the way they're intended. In Pennsylvania, Mississippi, and California, just to highlight a few, legal codes have now restricted the construction of tree houses, kite flying, and the climbing of trees. Kids are almost mandated to remain indoors confined to their screens thus compounding the issues discussed above (Louv, 2008, p. 29).

This lack of outdoor play and exposure has been identified as "Nature-Deficit Disorder" by Louv. While it's not an official diagnosis, it's an obvious problem that needs to be addressed in a substantive manner. Louv (2008) argues, " We don't have to wait for more, needed, research to act on common sense…" (p. 110). The question remains, however, what are the benefits of outdoor education? How does simply going outside truly provide the hard reset suggested? Simply going outside and reconnecting with nature decreases students' stress levels, it

diminishes their anxiety, and allows them to appreciate where their feet are. This idea is a concept I think we all know and have experienced. We've all felt our mood elevated by a sunny day, warm weather, or a gaze into a flowering pasture. This isn't a foreign emotion to even the most agoraphobic among us – plus, the science backs it up.

The Atlantic has written extensively about the importance of nature from its inception in the 1860s. The first *Atlantic* correspondent to extoll the virtues and write rhapsodically about the emotional benefits of the natural world was Henry David Thoreau in the mid-nineteenth century. In 2015, Olga Khazan (2015) picked up on this theme and wrote an article in *The Atlantic* on this exact topic and published the results of researchers from Stanford University who effectively proved Thoreau correct. The Stanford scholars Gregory N. Bratman, J. Paul Hamilton, Kevin S. Hahn, Gretchen C. Daily, and James J. Gross focused their attention on the effects of constant rumination or the near incessant thinking about an issue or event that has brought on a general depression or feeling of disquiet. The study explained that rumination increases activity in the subgenual prefrontal cortex which regulates negative emotions which speaks to the cyclical effect of depression. To combat the increased activity in this region of the brain, researches asked two groups to take 90-minute walks. One group walked beside a busy urban street and the other group walked along scenic hills lined with shrubs and oak trees. This latter group showed decreased rumination and lessened activity in the subgenual prefrontal cortex while the former saw no change at all. These results indicate that indeed Thoreau was right, there is an emotional benefit as well as ingrained need for people to go outside (para. 6).

We have to start somewhere, and schools are perhaps the best place to help reinforce this simple principle of the benefits of being outdoors. It's also important to accentuate a point that, Louv (2008) argues, "Time in nature is not leisure time; it's an essential investment in our

children's health" (p. 49). This outdoor investment can have immediate and long term benefits, but we first have to be willing to see the possibilities. The Marxian notion of leisure time being transformative is something we may not often think about in our country, but it's a point that can't be ignored. In a fast-paced and hyper-competitive world, nature does not have much value. But, when we highlight the transformative and healthful benefits of the outdoors, we may be able to break away from the grasp of the constant rat-race and give kids a certain ownership over their own learning and help them rediscover a sense of wonder.

Naturally Interdisciplinary

The health benefits of going outdoors are well documented and personally self-evident, but to what extent do these experiences foster authentic learning. This was the question directly asked by the 1998 State and Education and Environmental Roundtable that issued a report entitled: "Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning (EIC) (1998)." EIC is an educational framework that approaches learning by integrating the school's immediate environment to help develop students' personal learning experiences. The report focused on forty schools that successfully implemented EIC programs and despite their differences, each relied upon certain educational strategies including, hands-on activities, team teaching, student adaptations, environmental appreciation, and the breaking down of the traditional boundaries of school disciplines. The report (1998) claims, "Students exposed to programs using EIC approaches often become enthusiastic, self-motivated learners. In addition to traditional subject matter knowledge and basic life skills, EIC students gain a wealth of added educational benefits, including: a comprehensive understanding of the world; advanced thinking skills leading to discovery and real-world problem-solving; and, awareness and

appreciation of the diversity of viewpoints within a democratic society" (Gerald A. Lieberman, Ph.D. & Linda L. Hoody, M.A., 1998, p.2).

By just experiencing nature, students gain a larger view and a deeper understanding of how traditional school disciplines - and life in general - is deeply interconnected. The silo-effect of education certainly has taken its toll and the walls between subjects are more rigid than ever before. As writers Daniel Goleman, Lisa Bennett, and Zenobia Barlow suggest in their recently published book, *Ecoliterate: How Educators are Cultivating Emotional, Social and Ecological Intelligence*, "Life in nature does not survive in isolation." Therefore, the same must be true of education. We cannot teach our students about the world, about the nuances of history, mathematics, language, and science in isolation. To survive, we must educate students in a manner that emphasizes the interconnectedness of our world and the study of nature is naturally interdisciplinary.

A closer educational connection can help undo the effects of educational atomization, but it can also provide students, teachers, parents, and administrators a long-zoom view of their place in the world. The authors of *Ecoliterate* (2012), state that "Ecoliterate people tend to be more aware that systems exist on various levels of scale. In nature, organisms are members of a complex, interconnected web of life and that those members inhabiting a particular place depend upon their interconnectedness for survival" (p. 16). By connecting students to nature, by allowing them to explore, and renew their innate curiosity, they'll quickly begin to realize the world is not disjointed and divided as they've been led to believe. They further support their assertions by citing Fritjof Capra, the cofounder of the Center for Ecoliteracy, who wrote that "nature sustains life by creating and nurturing communities.' To understand how nature sustains life, then, requires the capacity for systems thinking, or the ability to perceive how the different

aspects of a living system exist, both in relationship to one another and relative to the whole that is greater than its parts" (p. 7).

Thinking more globally will assuredly allow students to place more value on the reality that their lives are not lived in isolation and that their actions have impact on the natural world around them. For what effects the natural world certainly affects them and, of course, cycles back again. This level of abstract thinking isn't all that hard to accomplish but does stand in contrast to the market orientation of modern education. When their mindset is altered to be more concerned with their role in a dynamic interdependent system than a presumed life in isolation, they're placing the good of the whole over their individual ambitions – in other words good republican values are natural extensions of an individual's engagement with the natural world.

In Practice

In the Fall 2019, I took part in my schools annual trip to Washington, DC. While exhausting, the trip provided one of the more unique experiences in my entire teaching career. While on a tour of the Capitol grounds, I noticed an American elm tree. Without much forethought, I pointed in its direction and excitedly identified the tree for the students. The small group, including our school principal, gathered round the tree and I explained the American elm tree's role in the early history of the republic. I referenced the famous Liberty Tree elm on Boston Common as well as the Penn Treaty elm near the Lenape village of Shackamaxon in modern-day Philadelphia. The relationship between elm trees and American history captured the students' attention long enough for me to expound even further than I had intended.

As I discussed the historical connections to the tree, the students didn't realize the clear sign of the tree's health. To the trained eye, it was evident that the tree suffered from the effects of Dutch Elm Disease (DED). The young tree's leaves were shriveled and prematurely yellowed

and not autumnally induced. Once they noticed, they were genuinely concerned for the tree. In a matter of moments, they went from have zero connection to the ailing elm but then after a few words of explanation they suddenly had gained an emotional connection with the tree and seemingly felt that the tree's eventual demise was worthy of their mourning. They asked questions about what could be done; they pondered the tree's age; they looked around to gauge the health of other trees in the surrounding area. What amounted to a five-minute exchange fundamentally altered the day. For the remainder of our time in D.C., the conversation routinely circled back to trees, plants, grass, and anything of the sort.

This impromptu teaching moment directly illustrated what Goleman, Bennett, and Barlow articulated so clearly in *Ecoliterate,* "People who are ecoliterate cultivate compassion toward other forms of life. This ability to feel empathy often stems from a deep understanding that humans are part of a broader community that includes all living beings." The emotional investment I saw on the faces of my students was clear and convincing. The connection they made with the diseased tree changed their understanding of their immediate world. And this was only a brief exposure to the natural world. More inspiring perhaps, I had believed that this sort of thing would happen if ever it presented itself but to have witnessed it firsthand altered what as an intellectual hope into a hardened conviction with evidentiary proof. So, how can we make this a sustained experience for all students across public education?

Chapter 4

Design

Purpose

As argued throughout this work, educational policy over the last half century has increasingly competivized our schools. This has been exemplified by a systemic push to expand the market relevance of curricula and student learning. Such efforts reduce the analytical nature of education and narrow learning outcomes and school curricula to sanctioned and pre-approved information. State legislatures reinforce these measures by implementing high stakes testing to ostensibly measure the success of districts, teachers, and students. In light of this reality, my argument is a fairly simple one: when learning is reduced to measurable outcomes and market relevant skills, and we no longer appreciate or defend a liberal educational outlook, we're gradually eroding the democratic values and republican ideals that our nation was founded on. So, how can we push back? How can we begin to return public education to a more democratic and liberal approach to learning and teaching? What efforts and methodologies can be employed to ensure we're successful?

With these questions in mind, I have created a six-part workshop for teachers and current educators to identify the deleterious effects of the marketplace within their own classrooms and schools. Each workshop session is designed to help teachers generate a grassroots campaign aimed at solving or eliminating the specific problems they feel most compelled to address. With a multitude of reform initiatives aimed at controlling the learning process, the market has incrementally stripped teachers of their instructional autonomy and professional agency. Therefore, the aim of this workshop is to help reestablish them as an empowered force within the

larger conversation of educational reform and remake education in a manner that benefits all students.

Goals & Aims

The larger social goal of this work emanates from the fundamental belief that education should be at the forefront of creating a more democratic society. Along with that point is the desire for education to emphasize the American creed and actually adhere to the principle that "all men are created equal." As evidenced by the influence of the market, education is an effective method to inculcate a specific message, yet to be successful in democratizing pedagogy and school curricula, we must reimagine the aim and goals of education as a whole.

As mentioned earlier, the founders believed education would help sustain this county by fostering a belief in the common good and the ideals of republican virtue. However, now that education is aimed at exclusively buttressing the free-market, we've lost of this broader perspective on education. Cornell education professor George J. Posner (2003) argues that, "as societal values have changed throughout history, the intended purpose of an education has followed suit" (p. 76). But that only remains true when you think of education as having limited influence and adhering to the dictates of the larger culture. This explanation seems too simple. Therefore, the question begs to be asked: If society can dictate the aims of education, can education dictate the norms to the larger society? For this program to be successful, I have to believe the answer is, "yes." I have to believe that education can remake society from the inside out.

Since the 1980s, the educational aims of American schools have been increasingly narrowed by a focus on a traditionalist approach to instruction and curriculum. This narrowing has focused on skills and curricula that align with the market, thus defining learning as a means

to a specific end. The *Nation at Risk* helped shape these reform measures into a harden reality and therefore, it is important to explain that the educational aims of the created workshops herein are entirely opposed to the "overwhelming preoccupation with traditional education aims," that the Reagan-era report ushered in (Posner, 2003, p. 78). The argument I'm making is that when our country sees fit to invest in our children's future, it does not quantify the value of its investment on short-term gains or measurable outcomes, but on long-term effectiveness and a dedication to democracy, equality, and justice.

Audience

As a teacher myself, I feel justified in saying that we are not the best audience. Too often professional development is a top-down initiative that demeans the experience of teachers and undermines our pedagogical skill. Thus, "PD" as we derisively call it, becomes something we must endure, something we muddle through rather than take in and learn from - I've made it a top priority for that not to be the case here. In fact, the success of this program depends on the experiences of teachers as well as their pedagogical expertise.

This workshop is designed for teachers by teachers. The hope is that each session can expand to continually meet the needs of its audience and reflect the ever-changing landscape of education. Yet, to be truly successful, this built-in flexibility and inclusion of teacher-led ideas must be a part of the programs general promotion. Teacher need to know that they're the driving force of this program and these meetings are not just some repackaged professional development that they've seen before. By encouraging teacher participation and validating their concerns, this program is trying to frame itself as something different – something that puts teachers at the forefront of much needed change and elicits their attention and action.

Theory & Perspective

I have framed these workshop sessions - perhaps cloaked is a more accurate term - in a very traditionalist mindset. I use the founding of the United States, as well as the educational backgrounds of the founding fathers, to initiate a conversation about, as Posner (2003) suggests, "a set of common values that constitute good citizenship" (p. 65). Now, this point is not meant to inculcate some overbearing or mythologized remembrance of the founders as supernaturally great men, but rather to use their legacy as a means to allure those who may not be so eager to champion or seek out social transformation. Embedding the workshops in a traditionalist viewpoint serves as an educational Trojan horse to a certain extent. What administrator could be fearful of a workshop philosophy grounded in the educational outlook and experiences of the founders?

While structure of the workshop sessions initially feigns toward a traditionalist approach, the heart of the entire program is grounded in an experiential progressive tract. If I am hoping to induce teachers to seek out democratic change to schooling in America, then it only makes sense to ground this workshop in a methodology that lends itself to that outcome. Inherent to this approach is the idea that learning is "based on the needs and interests of students and is subject to constant change and reorganization in order to foster the best possible consequences for the further development of each students' experiences" (Posner, 2003, p. 51). This approach allows to teachers to take control and address specific problems that they've experienced first-hand in ways that speak to their own experience. Additionally, by giving teachers ownership and direction of the workshop, it also helps to refine the program going forward. The sense of ownership that this curriculum perspective offers also lends itself to a more democratizing education that can be utilized in the classroom.

Content

Much of this workshop was designed to allow for teachers to research and identify content that was relative to their own concern. However, that action must be proceeded by some information that would help them identify or expand upon pre-established concerns regarding the marketplace's effects on education. Granted, there is a careful balance to strike – I didn't want to provide too much content that teachers we're unable to produce anything, nor did I want teachers to lack the necessary information or content that would hinder their efforts to create successful campaigns. The hope is that I have found a productive balance. Still, five of the six sessions within this workshop are very content heavy – at least at the front end. Each successive workshop adds another layer of information to help participants refine their campaign and think about their concern holistically.

Each reading is identified and explained at length in the session plans listed below. The readings were selected to help illuminate and buttress each session's theme. In the first session, participants will read about the founders background in interdisciplinary thought as well as how the founders saw education as an important part of the continuation of the American republic. In the second session, teachers will identify the role capitalism has played in the history of education as well as how market-based reform measures have been implemented more strategically in the last forty years. As the session begins to focus on the specific effect of the marketplace, the readings will emphasis the damage that free-market ideas have had on kids' learning and their emotional well-being. In the final two meetings, the group will read about how the market surreptitiously reinforces its place within education, and how teachers, parents, and students, can begin to push back against these powerful forces. Granted, these themes are

rather large, complex, and perhaps not entirely addressed in the list of readings as a whole, but they do help establish a framework for which the teachers can then use to investigate further.

Germain to that last point, as well as the entire program, is the idea that teachers will also be given time to do further independent research during each meeting. Their focus during these free working periods will be to flesh out the detailed points of a grassroots campaign based upon The Midwest Academy Strategy Chart. The Midwest Academy (2015) is an organization founded amid the Civil Rights movement of the 1960s with the specific mission to help in "the creation of democratically governed organizations which win real improvements in people's lives, give people a sense of their own power to improve society, and alter the unequal relations of power to build more democracy and participation for freedom and justice for all" (*Mission and History, para. 3*).

It goes without saying that everything within this workshop is designed to help foster productive and lasting change. Most importantly, the success of these teacher-designed campaigns is directly correlated to the individual teachers level of commitment. A teacher with enough passion, motivation, and drive can ultimately succeed in achieving their campaign's goals.

Organization

As referenced earlier, each session of this workshop builds or adds another layer to the central message presented. Yet, I would argue that the organization of the content is not hierarchical nor linear. The singular objective is the teacher campaigns which rely upon a "mixed" organizational approach to the content. Considering this is a limited amount of time to accomplish a fairly large task, there are a myriad of activities to instruct or highlight key points that will be helpful to the campaigns from session to session.

Additionally, the campaigns these teachers are making derive from a project-centered approach, which is a construct and organizational philosophy emphasized and championed by John Dewey. As Posner (2003) writes, Dewey believed that "education ought to address social issues and 'enhance social insight and interest'" (p. 171). These workshops will not only foster teacher engagement in social and curricular changes but will in turn help them foster similar thinking when designing lessons for their students. To nurture more democratic education in American classroom, this workshop models that exact pedagogical approach – but to what extent that's a true assertion, is ultimately up to the participants themselves.

WORKSHOP SCHEDULE:

SESSION THEME & KEY POINTS:	*SESSIONS DETAILS:*
1. Purpose & History: o Wilkes Barre Question o Education of the Founders o Education and Republicanism o What Should education look like? **Product**: Introducing Campaign & Checklist.	Education isn't specific to America, but America is specific to education. In this introductory session, workshop participants will learn that education is a fundamental part of America's founding and vital to its continuation. Teachers will be given a chance to reflect on modern education and analyze how well it reflects America's origins as well as their own personal values. To conclude the first session, the Midwest Academy Strategy Chart will be introduced as the basis for a campaign proposal each teacher will be creating to address a market induced concern specific to education.
2. Desire versus Reality: o What exemplifies modern public education? o Does modern education look like what our founders imagined? o Has the "system" of education in this country undermined the ideals you had when you first entered teaching? o The market has been a consistent influence in education dating back to the founding of the nation. **Product**: Campaign Long-Term Goals	In this session, teachers will begin to analyze the free market system's influence on education which has necessarily taken place since the country's founding. Participants will also be challenged to think about how those same economic influences may have effectively, albeit surreptitiously, altered the outlooks, ideals, and desires they had when they became teachers in the first place. In short, the reform measures have forced them to comply with a system that demands uniformity, it does not need an empowered teacher to buck the trend. Additionally, this session will examine how the market has become a center point of American schools and highlight it's lingering and persistent effects.
3. The Corrupted Classroom: o The vicious cycle of competition, anxiety, and data analysis. o How does this happen in the classroom? o Ill-conceived pedagogy **Product**: Campaign Short-Term/Immediate Goals	The market's influence in education has had a corrosive effect on the classroom. Learning has become competivized, data driven, and anxiety inducing. While these issues may not be the direct results of teachers, the classroom has become a cog in a much larger machine, wherein teachers, even when they're trying to push back, are always compelled to act according to the mandates. It's a vicious cycle.

4. <u>A Bait & Switch:</u> o What are we actually teaching? content or proprietary information? o A perceived solution seemingly exists but it's a continuation of the same market influence. **Product**: Identify Campaign Opponents	The market's influence wouldn't also include the elements of its own downfall. Therefore, the market has found a means to surreptitiously provide market solutions to market problems, i.e., the issues addressed in session 3.
5. <u>A Hard Reset:</u> o What does all this mean? **Product**: Campaign Tactics: Big & Small	So how can we push back? What can we do? In this last formal session of this workshop, teachers will get a sense of how they can mitigate some of the forces that have corrupted American education. With each session, teachers have fleshed out different aspects of their campaigns; this final session will ask teachers to imagine their own solution to this problem.
6. <u>Who has the Power?</u> **Product**: Campaign Targets: A Person! But Who?	Education reflects the influence of those in power. Therefore, in this last session, teachers will have the ability to complete their campaign charts with a focus on targets. Who does this campaign need to persuade or convince? Where should the teachers set their sights to induce effective change in their classrooms, in the system of education, and in the larger society.

1	*SESSION THEME/SUBTOPIC*

Purpose & History: Education isn't specific to America, but America is specific to education. In this introductory session, workshop participants will learn that education is a fundamental part of America's founding and vital to its continuation. Teachers will be given a chance to reflect on modern education and analyze how well it reflects America's origins as well as their own personal values. To conclude the first session, the Midwest Academy Strategy Chart will be introduced as the basis for a campaign proposal each teacher will be creating to address a market induced concern specific to education.

KEY POINTS

1. The Wilkes Barre Question was posed by historian Joseph Ellis in 2013 and it ponders why the political leadership that sparked the United States was able to coalesce at the exact moment that it needed to. He also contends that no one existing today could potentially rise to their level of leadership. Despite admitting that these men were not "demigods" Ellis' attempt at an explanation does in fact underscore the notion that the founders of the United States were somehow imbued with sensibilities or personality traits that modern Americans do not possess. He concludes that the founders were "the greatest generation of political leadership in American history." His point is easy to understand, indicative of the mythologized history often taught in schools, and harmful to the ways in which students of history identify their roles as active citizens. Perhaps there's a bigger issue here though. Maybe we should think of this question in a different direction.

2. The founders' own educations were diverse but reflected the classic tradition of a liberal approach to learning. This not only played into the way they viewed the world, but also how they viewed the nation they were all a part of creating. They were, by their own admission, no better than anyone else. Therefore, Ellis' assertion that no one with their abilities exists today is wrong. There simply has to be a problem within our culture that hinders their rising to the top.

3. The founders created a republic that relied upon an educated populace. However, this delicate balance is hard to strike and even harder to maintain when external forces try to undermine the process along the way.

4. What Should education look like: At least initially, every teacher and administrator entered teaching with a notion of what education should be. They either had a teacher or a specific learning experience that helped shape the way they viewed education. But does education reflect their initial reasons for entering education, and more specifically does modern education reflect the ideas of what the founders expected of American education.

ESSENTIAL QUESTION

1. As a country founded on Enlightenment ideals what should a democratic education look like?

MATERIALS

- Politics and Prose Joseph Ellis Q & A video.
- Introduction to Invention of Air by Steven Johnson – Appendix A.
- Pgs. 189 - 191 from Gordon Wood's *The Radicalism of the Revolution* – Appendix B.
- Instructional Practice Audit Checklist – Appendix C.
- Midwest Academy Strategy Chart – Appendix D.

LESSON PROCEDURES

PROCEDURES:

1. Introduction of facilitator and participants. This can be done in a variety of ways but may vary dramatically based upon the size of the group and the familiarity within the group.

2. The Workshop will formally begin with a five-minute clip from a Politics and Prose Author Q&A from June of 2013.

   A. After the clip is over, probe the teachers for their general reactions to the Wilkes Barre question presented in the clip. Do they understand it? Do they agree with it? Do they think the premise is absurd? Do they have an answer for it?

   B. Inevitably, the conversation may come around to the point where participants begin to identify that the founders were fallible, occasionally petulant, capricious, and decidedly human. Yet, we're so often taught that their abilities and personalities extended well beyond the *paltry* capabilities of all of us. They're often remembered as otherworldly or they're mythologized beyond human recognition. So, doesn't the Wilkes Barre question have to be false notion just by reason deduction?

3. Give the participants opportunities to share out their ideas about what accounted for the coalescences of political leadership of that caliber at a specific moment in time.

   A. If the facilitator is dubious about their abilities to willingly share out as the precedent has not been fully established in this first meeting, it may be necessary to have them write down their answers on a notecard and then have them share among their tablemates or with those closest to them.

4. Again, after they've discussed at their table ask participants to share with one another.

   A. Call out some of the participants names that openly shared at their table.

5. Presumably there will not be a consensus, but the inability to agree on a specific answer will allow the conversation to transition to the bigger question: Why isn't this type of leadership cultivated by our modern political discourse or nurtured in our nation's schools. Why can't, as Ellis argues, modern American's rise to become the "greatest generation of political leadership?"

    A. Naturally, the teachers will have a variety of answers that may not all align with or resemble one another. The point is, there may not be an exact answer, but hopefully there will be a consensus that the education of the founders was quite different from those of our modern students. If that point isn't emphasized or fully appreciated, the next part of the workshop may help cultivate that notion.

6. After the conversation has come to its natural conclusion identify teams or group of no more than 6 and no less than 4 individuals. Distribute, if not done so beforehand, copies of the following excerpts: Introduction to *The Invention of Air* by Steven Johnson and pages 189 - 191 from Gordon Wood's *The Radicalism of the Revolution*

7. Teachers should read and discuss. The readings emphasize the importance of an interdisciplinary education to the founding of the nation as well as the importance of education as a key component to the continuation of our republic. The point may need to be teased out a bit. The founders were able to coalesce at a specific moment in history because they had the time to luxuriate in their learning, by extension they possessed an unabashed inquisitiveness, and the background of a robust liberal education. So, why can't that happen anymore? If a liberal education was good enough for the founders, why wouldn't it be good enough for our students today? Is our education system reflective of our republican ideals? Why or why not?

8. After a conversation regarding the articles and of education's role in the founding of America, give teachers the instructional practice audit sheet to review the features, practices, and methodologies used in their classrooms to determine if their classrooms are reflective of not only what they had hoped would be their role in education but also the reflective of perpetuating the ideals of the founding and of small "r" republican values.

9. Teachers will reflect on their surveys with the people around them. As a conclusionary point, teachers will then be given time to reflect on the survey. Very often, teachers will indicate that what they do in the classroom does not reflect the role education was supposed to play in the continuation of the republic. So, the question then will be, very simply, why? Teachers will have the option to write down their answer or ruminate over that question until the next session begins.

CLOSURE:

10. To conclude, teachers will be introduced to the main thrust of this workshop: a campaign. As teachers are either discussing the survey with their small groups or continuing to fill them out, the facilitator will pass out copies of the Midwest Academy Strategy Chart. The campaigns will be centered around the idea that teachers are the best arbiters for what should be happening in the classroom. Therefore, teachers will use the checklist to begin thinking about a topic that they can focus their campaign on – something they believe will bring about a much needed change. Hopefully this change will stretch further than their immediate classrooms, but every step – large or small – is an important one. The specific aim or goal of the campaign will be fleshed out in workshops 2 and 3.

2	*SESSION THEME/SUBTOPIC*

Desire versus Reality: In this session, teachers will begin to analyze the free market system's influence on education which has necessarily taken place since the country's founding. Participants will also be challenged to think about how those same economic influences may have effectively, albeit surreptitiously, altered the outlooks, ideals, and desires they had when they became teachers in the first place. In short, the reform measures have forced them to comply with a system that demands uniformity, it does not need an empowered teacher to buck the trend. Additionally, this session will examine how the market has become a center point of American schools and highlight it's lingering and persistent effects.

KEY POINTS

1. What exemplifies modern public education certainly differs from teacher to teacher, but overall, there's most likely some consensus that standardized testing has become a focal point that can serve to undermine the purposes of education
2. Does modern education look like what our founders imagined? It couldn't possibly when we realize that much of what we teach is increasingly dictated by the market.
3. Has the "system" of education in this country undermined the ideals you had when you first entered teaching? Many teachers enter education with a certain idealism that erodes over time as reform measures pushes teachers closer to clerical agents than achieving the lofty goals that they may have set for themselves when they started out in their teaching careers.
4. The market has been a consistent influence in education dating back to the founding of the nation. In many cases, this was a surreptitious influence and in others, curriculum was engineered to help students find jobs in "industrial arts" or related technical fields. However, that was only part of the American education sphere. Now, much of that has changed. Since the late 1950s, the market has slowly taken over the purposes of public education writ large.

ESSENTIAL QUESTION

6. How has the purpose of American education changed over time, specifically as a result of various political, social, and economic forces that influence our body politic?

MATERIALS

1. The Powell Memorandum (1972) by Lewis F. Powell, Jr. – Appendix E.
2. The Role of Government in Education (1955) by Milton Friedman – Appendix F.
3. Pgs. 95 – 127 - The *Manufactured Crisis* – Berliner & Biddle – Appendix G.
4. *Pgs. 469 – 479 from The Empire of Liberty by Gordon Wood** – Appendix H.
5. Introduction to *A Wolf at the School House Door* – Appendix I.

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* *Depending on the length of the workshop or the interest of the participants, the Empire of Liberty reading can used as background information between sessions 1 & 2. The reading can also be utilized as part of session 2 specifically as a way to deepen the answer to "Why" the market has been such an influence in American education. If the facilitator wants to include this information as part of the session but does not have the time, it may be helpful to use some of the details as a means of strengthening the presentation after the first reading. This is all up to the facilitator.*

LESSON PROCEDURES

PROCEDURES:

1. To begin workshop number two, ask the teachers to review their survey checklists and then have the teachers share out their answers from their individual surveys.
2. After the conversation has come to its natural conclusion teachers should assemble into the group they were a part of in session 1. However, depending on the size of the group, the facilitator may want to begin asking teachers to assemble in groups based upon their survey answers.
3. Once assembled into groups, distribute, if not done beforehand, copies of the introduction to *A Wolf at the School House Door* by Jack Schneider & Jennifer Berkshire. Teachers should read in their groups or silently to themselves.
4. This reading will help identify how the practices listed on the survey represent the influence of the marketplace. For example, the idea of pushing kids to work faster, emphasizing performance over authentic learning, or framing lessons around standardized tests are all prove that the market has invaded the classroom. To help quantify the learning process performance measures and standardized testing are put into place to ensure a closer relationship between the marketplace and the classroom. Most teachers will recognize this too. This reading will also give them more of an understanding of how "planned" these market-specific reforms efforts have become in the last half century.
5. As this discussion concludes, the workshop facilitator must ask, Why? Why is there a market influence in the classroom? Especially when we look back on how the founders saw the role of education in the continuation of the republic. Teachers should have plenty to say about this based on the reading from *A Wolf at the School House Door* but there's much more.
6. Before beginning the main activity of this session, remind teachers to begin thinking about

the issue that concerns them the most as potentially identified by their survey responses. Based upon the history of the market's influence, teaching will be identifying the "Goals" of their campaign.

7. Within the same groups from the beginning of the session, distribute to teachers the following readings:
   a. The Powell Memorandum (1972) by Lewis F. Powell, Jr.
   b. The Role of Government in Education (1955) by Milton Friedman
   c. Pgs. 95 – 127 from *A Manufactured Crisis* by David Berliner & Bruce J. Biddle
8. While these readings are all important it may be best to jigsaw these reading among the groups to ensure that everyone also has time to begin formulating their goals.
9. Once the readings have been completed, as teachers if they can review their surveys and identify practices that are rooted in the readings. For example, charter schools certainly have a connection to the Friedman reading. Corporate sponsorship of school curricula is most clearly related to Powell's Memo.
10. After what will assuredly be enlightening conversation, ask teachers to begin to flesh out the specifics of their campaigns goal. What do they want to accomplish? What issue matters to them the most?
11. Now that they understand the market's influence, teachers should use the remaining time of the session to begin writing their campaign goals. Section 1 of the Midwest Academy Chart is related to long term goals. Therefore, teachers, whether individually or in groups, should work to think of what they want to accomplish in the long-term – not tomorrow, not once the campaign kicks off, but, as the chart states, "what constitutes victory?"

<u>CLOSURE:</u>

12. While the latter parts of this session are dedicated to campaign work, the facilitator should help teachers identify their long-term goals. The next session will be dedicated to identifying intermediate and short term goals, so there can naturally be a certain amount of confusion related to the hierarchy of campaign goals.

NOTES: The length of this session may become a concern, therefore, some of the campaign work may need to be completed outside of the session. Additionally, if the facilitator knows that the session won't have enough time, they may need to assign participants some of the readings from session 2 at the conclusion of session 1.

3	*SESSION THEME/SUBTOPIC*

The Corrupted Classroom: The market's influence in education has had a corrosive effect on the classroom. Learning has become competivized, data driven, and anxiety inducing. While these issues may not be the direct results of teachers, the classroom has become a cog in a much larger machine, wherein teachers, even when they're trying to push back, are always compelled to act according to the mandates. It's a vicious cycle.

KEY POINTS

1. The vicious cycle of competition, anxiety, and data analysis are not necessarily ignored as much as they're not understood. Student anxiety and stress is too high a price to pay when our future depends on the youngest among us. We must focus on making learning less stressful and identify means of mitigating these effects on our students.
2. How does this happen in the classroom? Teachers assuredly do not mean to induce stress or anxiety, but the nature of modern schooling necessary means that for teachers to meet the demands placed upon them from observations, state-tests, and accelerated curricula, student pay a particularly heavy price.
3. Ill-conceived pedagogy is a by-product of those points listed above. However, we must do better.

ESSENTIAL QUESTION

1. How does the market influence effect schools in general, but student learning more specifically?

MATERIALS

▪ "The Over Pressured Student" by Richard Weissbourd – Appendix J.

LESSON PROCEDURES

PROCEDURES:

1. As the session begins it's important to let the attendees know that much of this session will allow participants to solidify their long-term, intermediate, and short-term campaign goals for their campaigns. Yet, the first two sessions were more oriented toward helping teachers identify long term campaign goals. So, the first part of this session will bring home the effects of the market's influence in the classroom and on student well-being which will certainly aid in their short term goals.
2. To begin the session, ask participants to review their survey from session 1. Ask for everyone to review the checklist and identify two or three things they imagine may increase

student anxiety or stress. There's a good chance, that many of the teachers will select similar items, however, it's not necessarily what they select that's important but the idea that they're thinking about what may induce these feelings.

3. Once the conversation comes to its natural end, pass out a copy of "The Over Pressured Student" by Richard Weissbourd.

4. Unlike the readings from other sessions, ask teachers to read this short article independently and identify two or more examples that they recognize from their own classrooms or experiences. Teachers should be ready to share out their findings after they've finished reading. The conversation should be used to highlight potential examples that may serve as goals within the teachers' campaigns.

5. For the remainder of the session, allow teachers to work on their campaigns ensuring they each have at least one long-term, intermediate, and short-term campaign goals. Solidifying these goals will help teachers effectively complete the remainder of their chart as schedule in the remaining workshop sessions.

CLOSURE:

6. As the sessions comes to an end, the facilitator should pass out copies of Neil Selwyn's *Is Technology Good for Education?* This reading will add context to session fours focus.

4	SESSION THEME/SUBTOPIC:

A Bait & Switch: The market's influence wouldn't also include the elements of its own downfall. Therefore, the market has found a means to surreptitiously provide market solutions to market problems, i.e., the issues addressed in session 3.

KEY POINTS

1. What are we actually teaching? Content or proprietary information? So much of the modern classroom is defined by the tools we use and therefore much of our content becomes secondary to how we engage with that material. By extension a corporate lingua franca emerges and takes over and makes things increasing difficult to determine what content we're actually teaching our students. The content or the technology?

2. A perceived solution seemingly exists but it's a continuation of the same market influence that we've identified as undermining the larger purposes within the classroom. How can these be identified and removed from the classroom? Or at least, how can there influence be reduced?

ESSENTIAL QUESTION

1. What processes are used to reinforce market involvement within education, whether surreptitiously or overtly?

MATERIALS

- Pgs. 107 – 132 from *Is Technology Good for Education?* By Neil Selwyn – Appendix K.

LESSON PROCEDURES

PROCEDURES:

1. This session highlights how the market necessarily protects itself against criticism from educators. Despite creating a number of issues in the classroom, the market works to offer products that help ameliorate those points of concern. On the surface, these products do seem helpful and we're all attracted to their allure. Yet, these products are moving the classroom ever closer to the marketplace, with a slyness and precision that can be hard to detect.

2. To make this point, ask teachers to think of - and share out - the names of items that are synonymous with a brand name. It may take a few moments but give teachers some examples if necessary. Ex: Popsicle, Kleenex, Bubble Wrap, Chap Stick, Styrofoam, Jet Ski, and Velcro. These names are used generically and without realizing they're proprietary terms. This very point is happening in the classrooms now too.

3. Teachers may not be able to immediately think of classroom equivalents but surely they've used prime examples of them within these sessions, i.e. Using "Google" as a verb instead of simply stating "look things up;" "Chromebook" instead of laptop, "Xerox" instead of "copy," etc. Teachers may not even realize that these terms often used in their schools are a byproduct of proprietary products.

4. As the session warms up and conversation begins to flow a bit easier, the facilitator should ask teachers to reflect on the reading of Neil Selwyn's *Is Technology Good for Education?* Give teachers time to gather their thoughts and also share out their reactions to the reading, particularly how it relates to the ideas presented at the beginning of the session.

5. The facilitator should help push the conversation toward identifying the natural opponents to their campaigns. Clearly, the market is not going to take this fight laying down as they actively market solutions to issue the market creates. Selwyn's argument in the selected reading, is that digital technology is an explicit outlet for market forces to gain entry – and remain – in the classroom. Therefore, as teachers begin to imagine natural opponents of their campaign they should think holistically about their goals.

6. To help the teachers identify their campaigns natural opponents, they must examine their goals from multiple angles. To begin their independent campaign work teachers must identify who and what figures will lose something from their long-term, intermediate, and short-term campaign goals.

7. For the remainder of the session, teachers can work independently or within premade groups.

<u>CLOSURE:</u>

8. Before this session ends, the facilitator must advise the participants that session number 5 will be taking place in another location. This location should be determined and reserved ahead of time as necessary. The reason for this new location should not be explained whatsoever. However, it must be clear that this is a location that will be outdoors, i.e., in a city park, a school playground, an outdoor classroom, or somewhere equivalent, accessible, and large enough for the group to gather.

5	*SESSION THEME/SUBTOPIC:*

A Hard Reset: So how can we push back? What can we do? In this last formal session of this workshop, teachers will get a sense of how they can mitigate some of the forces that have corrupted American education. With each session, teachers have fleshed out different aspects of their campaigns; this final session will ask teachers to imagine their own solution to this problem.

KEY POINTS

1. What does all this mean? We need to find small ways to alter our instruction that gives us flexibility and power to push back against the larger forces that undermine a democratic liberal education. While one teacher doing this alone will have a small impact, every step counts. Eventually, the notion should exist to make this a broader more sustained and organized movement. But where do we begin?

ESSENTIAL QUESTIONS

1. In what ways can we mitigate, if not remove, the market forces that have dictated much of American education over the last forty years? How can we start anew?

MATERIALS

- Pgs. 203 – 226 from *Last Child in the* Woods by Richard Louv – Appendix L.

- ***LESSON PROCEDURES***

PROCEDURES:

1. This penultimate session should be held in an outdoor setting. Not much of the session time will be focused on participant campaigns as a result of working outside, but the setting does play a major role. To give the teachers a sense of where this session is going, ask them to think of what it means to reset something? When is a reset necessary? What would a reset provide?

2. It's always good to get outside, but it's also good to see if participants can guess why the setting has changed. Ask participants to review their surrounds. Give them five to ten minutes, more if it seems appropriate, to walk around and silently examine the new environment.

3. After a sufficient amount of time has lapsed, ask them to gather back together. To induce a conversation, the facilitator can ask the obvious questions: "What did you see?" or "What did

you take away from your walk around the area?" However, it would be best to identify something specific that a few of the teachers did during their time and ask them about it. Meaning, if a teacher looks at a variety of trees for a period of time, ask them about their observations. Ask them to identify what struck their interest. Make the conversation unique to the experience the teachers just had. Through questioning, try to help the teacher identify the strength of these experiences as learning opportunities. The point here is that the outdoors can be a reset for our students learning. Rather than the fast paced, competitive, standardized world of schools, kids can find themselves reengaging in the nature world and ultimately, by extension, with their own learning.

4. This conversation should go as long as it needs to but as it concludes, the facilitator should pass out copies of Pgs. 203 – 226 from *Last Child in the* Woods by Richard Louv and ask teachers to read independently.

5. Once everyone has completed the reading, begin to ask teachers immediate thoughts. Steer the conversation toward teachers individual campaign goals.

6. The point of this exercise is to give teachers ideas as to the tactics that they can use to mitigate the concerns they identified in the initial survey from session 1. Maybe schools need to be less structured, more outdoors, less cloistered and more inclusive of the world around us.

7. As teachers begin to identify specific concerns, ask them to at least commit those ideas to paper before the next session.

6

SESSION THEME/SUBTOPIC:

Who has the Power? Education reflects the influence of those in power. Therefore, in this last session, teachers will have the ability to complete their campaign charts with a focus on targets. Who does this campaign need to persuade or convince? Where should the teachers set their sights to induce effective change in their classrooms, in the system of education, and in the larger society.

ESSENTIAL QUESTIONS

1. Who has the power

MATERIALS

Previous sessions readings if applicable.

LESSON PROCEDURES

PROCEDURES:

1. Considering the natural length of a work week, this sixth session is a bit out of place. Therefore, this last session can be cut off making the whole workshop 5 sessions long, or the last session can be expanded into a full second week. In this scenario, the first five sessions would be heavily focused on the content discussed in each session leaving the second week wholly dedicated to the creation of teacher campaigns. This flexibility will allow the facilitator to adapt the workshop to the situation best suited for the intended audience.
2. Regardless of length, this last part of the workshop will allow teachers to complete their campaign charts with a focus on the targets of their campaigns. Who does this campaign need to persuade or convince to make effective short and long-term change?
3. Assuredly, teachers will be able to help on another during these sessions. In fact, it may even become possible for teachers to merge their plans to helps strengthen their cause or fortify their efforts – particularly if they're in the same school and have identified a similar concern.
4. As these workshops conclude, it's imperative to have the teachers motivated to move forward with these campaigns as soon as possible. This workshop is meant to stimulate movement and action.
5. At the conclusion of this workshop, it's suggested to have teachers present their campaigns in any fashion they feel is sufficient to receive helpful feedback.

Implementation

These workshops seeks to cultivate a more democratic education across an education system that has all but rejected it; therefore, as a model, implementation of these sessions must also be collaborative in nature. As Posner (2003) argues, "the only route to empowering students so that they can and will think for themselves is through teacher empowerment" (p. 214). Empowering teachers to make change necessarily equalizes the playing field which is so often dominated by administrators and legislators who aren't with students on a daily basis. In fact, I'd argue that the implementation of this workshop cannot be successful in any other way.

In line with this approach is the fact that the workshop does not need some expert facilitator. This workshop can be conducted, augmented, and refined by teachers themselves. Not only will this allow the workshop to maintain relevance, but it will give teachers a sense of ownership over the content and a stake in participant success. In short, this workshop belongs to no one and cannot be commodified to meet certain demands other than those of concerned teachers. Even when implemented well, there are external factors that may hinder success.

Frame Factors

Every summer I plan to find time to review certain lessons that I have flagged to be edited, reexamined, or entirely redesigned. However, without fail, and no matter how hard I try, there's never enough time to effectively alter or edit every lesson. This is a perennial problem for teachers – there's never enough time and the same goes for this workshop. One of the biggest hurdles to the successful implementation of this program is finding the amount of time necessary to hold these sessions. At its shortest, the workshop is five days long, and at the longest, it's ten days long. Therefore, the temporal frame factors are proving quite burdensome to organizing this workshop for teachers.

Moreover, there's a cultural framework that may impede the progress discussed herein. I'm thankful to have a district that is emerging from a traditionalist viewpoint and is eager to begin rethinking the purpose of school - yet this isn't every district, every building, or every principal. Schools are often rooted in the culture of their immediate communities and such transformative actions -or teacher led initiatives - may cause serious concerns for those in power. Yet, hesitation only serves to strengthen those in power. Successful campaigns must think differently and be unconstrained by any factor that seemingly could upend their goals.

Chapter 5

Assessment and Evaluation

Much of the argument presented throughout this thesis has centered around the influence and rigidity of testing and evaluation. Admittedly, there is a certain degree of irony in detailing the evaluation of the workshop model explained above, however, there is a key difference. While this work highlights the ills of high-stakes testing on individuals, this section seeks to understand and evaluate the usefulness and effectiveness of these workshops. Unlike a standardized test where a specific score or point value defines success, this program's overall effectiveness is a bit more abstract, specifically because success hinges upon the perspective of individual participants.

The evaluation of this program will take an integrated approach where the assessment is built into the program itself. In effect, the success of each campaign will not be predicated on some arbitrary metric or the limited domains of a rubric. Despite the lack of a specific measurement to define success, there are four points of reference that will help provide the facilitator – as well as outside observers – a sense of a culminated value. The first two points of assessment are particular to the campaigns built by the teachers. The last two are a bit more traditional in the sense that they're germane to the workshop model and can inform further instruction or reflection for future program refinement. Like the workshop as a whole, the assessment can be refined as becomes necessary.

These workshops are designed to help empower teachers to make effective change within their classrooms and districts. Therefore, the first two points of evaluation are summative in nature and dependent upon success of the individual campaigns. As directed by the Midwest Academy Chart, each campaign lists their short, intermediate, and long-term goals. By using

those goals as a benchmark, defining success can be determined by asking a few simple questions: Have the campaigns fully realized their goals; have they induced the change they originally hoped for; have any of their goals been achieved? If a campaign has achieved everything that it had hope to, asking these questions may not even be necessary as their success would be evident to even those uniformed of this workshop. Additionally, it's important to take note, that success should not be measured by a full realization of the campaigns goals. While that is the final aim, success must also be measured by teachers who remain motivated and eager to achieve their campaigns goals well after the conclusion of the workshop.

Immediate success cannot be expected and so, teachers must realize that success can be achieved in incremental ways, too. By reflecting on their campaign holistically, they can help develop a stronger campaign overall. This type of thinking is normal for teachers as reflection is a regular part of good pedagogy; therefore, reflection and campaign refinement is a measure of success in its own right that cannot be overlooked. In committing themselves to constant reflection and analysis, teachers can help their campaigns achieve ultimate success by creating stronger organizational frameworks, identifying new and committed allies, or making use of new tactics that can help manifest the change they seek to build - this isn't a small task, either. The effort necessary to make lasting change may diminish the campaign organizer's desires or motivation. Therefore, even without clear success, a continued motivation and an unassailable determination should also serve as a unique form of success.

The last two points are more formative in nature. This workshop introduces a topic that can be complicated, unfamiliar, and counter to a person's individual politics or belief structure. Therefore, success must also be measured on how effective the workshop sessions help teachers realize this market influence on education.

The first formative evaluation is a reflection based on the "Instructional Practices Survey" used in the introductory session. In a final activity, the survey will help initiate a conversation wherein teachers identify how each point reflects the impact of the market. It is not expected that every teacher will immediately understand how each practice reflects the market's influence, therefore, a group conversation will help elucidate those points for the entire group. By utilizing the knowledge, expertise, and research of the entire group, teachers will be given an opportunity to not only speak to their experiences but also ask questions that help them further understand the influence of the market. This conversation will not only help teachers identify what points of this workshop need to be fleshed but will indicate to the facilitator areas that must be strengthened, reimagined, refocused. This assessment is entirely public and can perhaps allow teachers or participants to withhold criticism, questions, or pointed remakes, therefore, there must be an avenue for participants to fully reflect on their experiences.

Depending on the size of the workshop, the faciliatory should send out a final e-mail or an anonymous survey eliciting the reaction of teachers. The survey should ask participants to fully explain how well the facilitator and the workshop organized and disseminated the information. In effect, did the workshop make the case that the market has entirely re-made the education system of this county. The hope is that teachers would be willing to provide detailed feedback highlighting areas they felt need strengthening, or present questions that would give the workshop organizer an understanding of what parts of the workshop need to be refined to help make the claim to those who do not naturally align with this transformative thinking. This workshop cannot be domineering or demanding of full acceptance of its message. It must be democratic, self-reflective, and eager to adjust when necessary. In a sense, it must reflect the ideals of the entire thrust of this work.

Toward The Future

If this workshop is to be successful, it must adapt and change to meet the specific needs and desires of the teachers who are attracted to the core subject matter. If teachers are going to be leading forces for change, the workshops must reflect what they see as pressing needs to fight back against the reform measures – the sessions, as currently constructed, cannot be static or immobile. The challenges facing education, particularly from market-inspired reform measures, are fast-moving, forceful, and hard to fight against, so we must adapt accordingly.

More to that point, I'd like to see the research expanded beyond what has been accomplished here. Id' be countering my entire argument to suggest that further research isn't needed to strengthen and expand the points made throughout this work. So, as this research and program move forward, it's imperative that it become inclusive of new information. In order to achieve this, I would like to see how the themes discussed can be used to help build deeper relationships with a diverse array of learners. How can we adapt this program to help English language learners or those with learning disabilities – it would be false to assume the market doesn't affect their learning in ways that can permanently place these young people at a disadvantage.

Lastly, I would like to continue this research to identify how the concerns addressed in chapter three were (and are) exacerbated by the near-universal remote instruction plan forced upon students as a result of the Covid-19 pandemic.

In the spring of 2019, the Coronavirus forced millions of students to "learn" from home while their school districts scrambled to provide them access to their new virtual learning environments. Such an unexpected shift in the normal flow of school ostensibly forced districts nation-wide to rely on tech companies to help solve their serious technical and hardware

shortfalls. Now, in order to access their classes, students shuffle through a labyrinth of proprietary portals and communications software just to attend school. I think it's clear just by observing the educational landscape that if we hope to make a serious change, we have a lot of work to do – we might as well get started!

References

Adams, J. (1775, October 29). *Letter to Abigail Adams, 29 October 1775*. http://founders.archives.gov/documents/Adams/04-01-02-0209

Andrew Glass. (1958, September 2). *Eisenhower signs National Defense Education Act, Sept. 2, 1958*. POLITICO. https://politi.co/2LOLIhL

Au, W. (2011). Teaching under the new Taylorism: High-stakes testing and the standardization of the 21st century curriculum. *Journal of Curriculum Studies*, *43*(1), 25–45. https://doi.org/10.1080/00220272.2010.521261

Au, W. (2016). Meritocracy 2.0: High-Stakes, Standardized Testing as a Racial Project of Neoliberal Multiculturalism. *Educational Policy*, *30*(1), 39–62. https://doi.org/10.1177/0895904815614916

Axtell, J. (1976). *The School Upon a Hill: Education and Society in Colonial New England* (Browning of Pages edition). W. W. Norton & Company.

Behar, M. (2008, August 18). Analog Meets Its Match in Red Digital Cinema's Ultrahigh-Res Camera. *Wired*. https://www.wired.com/2008/08/ff-redcamera/

Bellamy, J. F. (2011). Education and the Structural Crisis of Capital. *Monthly Review*. https://monthlyreview.org/2011/07/01/education-and-the-structural-crisis-of-capital/

Berger, J. (1990). *Ways of Seeing: Based on the BBC Television Series* (1 edition). Penguin Books.

Berliner, D. C., & Biddle, B. J. (1996). *The Manufactured Crisis: Myths, Fraud, And The Attack On America's Public Schools*. Basic Books.

Brinkley, D. (1999). *Witness to America: An Illustrated Documentary History of the United States from the Revolution to Today* (1st edition). Harper.

Brookfield, S. D. (1995). *Becoming a Critically Reflective Teacher* (1st edition). Jossey-Bass.

Carlyle, T. (1840). *Thomas Carlyle's Great Man Theory*. http://history.furman.edu/benson/fywbio/carlyle_great_man.htm

Chris Hedges. (2010, February 15). *The Information Super-Sewer*. Truthdig: Expert Reporting, Current News, Provocative Columnists. https://www.truthdig.com/articles/the-information-super-sewer/

Christopher Hitchens vs William Dembski—Debate. (2010, November 18). Presontonwood Baptist Church. https://www.youtube.com/watch?v=_qJRBgQj6ak

Cleary, J. (2017). Neoliberalism inside two American high schools. *British Journal of Sociology of Education*, *38*(3), 325–343. https://doi.org/10.1080/01425692.2015.1081090

Deemer, S. A. (2004). Using Achievement Goal Theory to Translate Psychological Principles into Practice in the Secondary Classroom. *American Secondary Education*, *32*(3), 4–15.

Definition of Educe. (2020). In *Lexico Dictionaries | English*. https://www.lexico.com/en/definition/educe

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE Handbook of Qualitative Research* (3rd edition). Sage Publications, Inc.

Eastman, N. J. (2016). Dropout Factories: The Profitability of "At-Risk" Students. *Philosophical Studies in Education*, *47*, 68–77.

Eisenhower, D. (1958). *Annual Message to the Congress on the State of the Union.* https://www.eisenhower.archives.gov/all_about_ike/speeches/1958_state_of_the_union.pdf

Ellis, J. J. (2002). *Founding Brothers: The Revolutionary Generation*. Vintage.

Espina, E. A., Pavón, I. R., Martori, M. S., Sancho-Gil, J. M., Brunner, J. J., Martin-vide, J., Morales-Olivares, R., & Rivera-Vargas, P. (2017). *Conocimiento para la equidad social. Pensando Chile globalmente*. https://www.academia.edu/32936283/Conocimiento_para_la_equidad_social._Pensando_Chile_globalmente

Freire, P., & Macedo, D. (2018). *Pedagogy of the Oppressed: 50th Anniversary Edition* (4 edition). Bloomsbury Academic.

Friedman, M. (1955). The Role of Government in Education. In R. A. Solo (Ed.), *Economics and the Public Interest.* Rutgers University Press.

Galbraith, J. K. (1973). *Economics and the Public Purpose*. Houghton Mifflin.

Galbraith, J. K. (1998). *The Affluent Society* (40th Anniversary ed. edition). Mariner Books.

Galbraith, J. K. (2010). *Galbraith: The Affluent Society & Other Writings, 1952-1967: American Capitalism / The Great Crash, 1929 / The Affluent Society / The New Industrial State* (James K. Galbraith, Ed.; Revised ed. edition). Library of America.

Gardner, D. P. (1983). *A Nation at Risk: The Imperative for Educational Reform*. https://www.edreform.com/wp-content/uploads/2013/02/A_Nation_At_Risk_1983.pdf

Gerald A. Lieberman, Ph.D., & Linda L. Hoody, M.A. (1998). *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning*. State Education and Environment Roundtable.

Gillihan, S. J. (2018, August 13). *Does Technology in the Classroom Help or Harm Students?* Psychology Today. https://www.psychologytoday.com/blog/think-act-be/201808/does-technology-in-the-classroom-help-or-harm-students

Giroux, H. (2001). *Stealing Innocence: Corporate Culture's War on Children* (2000 edition). Palgrave Macmillan.

Giroux, H. (2004). Public Pedagogy and the Politics of Neo-Liberalism: Making the political more pedagogical. *Policy Futures in Education*, *2*(3 & 4), 494–503.

Giroux, H. A. (2019, May 13). *If Classrooms Are "Free of Politics," the Right Wing Will Grow*. Truthout. https://truthout.org/articles/if-classrooms-are-free-of-politics-the-right-wing-will-grow/

Godsey, M. (2018, March 25). *When the Internet Delivers Its Own Content, What's Left for the Teacher?* The Atlantic. https://www.theatlantic.com/education/archive/2015/03/the-deconstruction-of-the-k-12-teacher/388631/

Goldstein, D. (2015). *The Teacher Wars: A History of America's Most Embattled Profession* (Reprint edition). Anchor.

Goldstein, D. (2019, December 3). 'It Just Isn't Working': PISA Test Scores Cast Doubt on U.S. Education Efforts. *The New York Times*. https://www.nytimes.com/2019/12/03/us/us-students-international-test-scores.html

Goleman, D., Bennett, L., & Barlow, Z. (2012). *Ecoliterate: How Educators Are Cultivating Emotional, Social, and Ecological Intelligence* (1 edition). Jossey-Bass.

Graetz, M. J., & Greenhouse, L. (2016). *The Burger Court and the Rise of the Judicial Right* (Reprint edition). Simon & Schuster.

Grant, A. (2018, December 10). Opinion | What Straight-A Students Get Wrong. *The New York Times*. https://www.nytimes.com/2018/12/08/opinion/college-gpa-career-success.html

Hawkins, B. (2010, November 23). *Dembski, Hitchens debate God's existence*. Baptist Press. http://www.bpnews.net/34148/dembski-hitchens-debate-gods-existence

Herr, K. G., & Anderson, G. (2014). The Continuum of Positionality in Action Research. In *The Action Research Dissertation: A Guide for Students and Faculty* (Second edition). SAGE Publications, Inc.

Hinchey, P. H. (Ed.). (2015). *A Critical Action Research Reader* (New edition edition). Peter Lang Inc., International Academic Publishers.

How Standardized Test Shape and Limit—Student Learning. (2014). *Council Chronicle*, *24*(2), 1–3.

Hursh, D. W., & Ross, E. W. (Eds.). (2000). *Democratic Social Education: Social Studies for Social Change* (1 edition). Routledge.

Jefferson, T. (1785, August 19). *Thomas Jefferson to Peter Carr August 19, 1785* [Text]. https://avalon.law.yale.edu/18th_century/let31.asp

Jefferson, T. (1786, August 13). *From Thomas Jefferson to George Wythe, 13 August 1786*. University of Virginia Press. http://founders.archives.gov/documents/Jefferson/01-10-02-0162

Jefferson, T. (1787, December 31). *Thomas Jefferson to Uriah Forrest, with Enclosure, 31 Dec …*. University of Virginia Press. http://founders.archives.gov/documents/Jefferson/01-12-02-0490

Jefferson, T. (1806). *Jefferson's 6th Report to Congress*. https://avalon.law.yale.edu/19th_century/jeffmes6.asp

Jefferson, T. (1813, August 13). *Letter to Isaac McPherson, 13 August 1813*. http://founders.archives.gov/documents/Jefferson/03-06-02-0322

Jefferson, T. (1816, January 6). *Thomas Jefferson to Charles Yancey, 6 January 1816*. University of Virginia Press. http://founders.archives.gov/documents/Jefferson/03-09-02-0209

Jefferson, T. (1824, June 5). *Letter to John Cartwright, 5 June 1824*. http://founders.archives.gov/documents/Jefferson/98-01-02-4313

Jefferson, T. (1825, May 8). *From Thomas Jefferson to Henry Lee, 8 May 1825*. http://founders.archives.gov/documents/Jefferson/98-01-02-5212

John Adams. (1811, February 9). *From John Adams to Josiah Quincy III*. University of Virginia Press. http://founders.archives.gov/documents/Adams/99-03-02-1904

Johnson, S. (2009). *The Invention of Air: A Story Of Science, Faith, Revolution, And The Birth Of America* (Reprint edition). Riverhead Books.

Johnson, S. (2011). *Where Good Ideas Come From: The Natural History of Innovation* (Reprint edition). Riverhead Books.

Kahneman. (2013). *Thinking, Fast and Slow* (1st edition). FSG Adult.

Khazan, O. (2015, June 30). *How Walking in Nature Prevents Depression*. The Atlantic. https://www.theatlantic.com/health/archive/2015/06/how-walking-in-nature-prevents-depression/397172/

Kozol, J. (2009). *On Being a Teacher* (Revised edition). Oneworld Publications.

Letizia, A. (2013). Battle for the Enlightenment: Neoliberalism, Critical Theory and the Role of Circumvential Education in Fostering a New Phase of the Enlightenment. *Journal for Critical Education Policy Studies*, *11*(3), 164–193.

Levin, H. M., & Belfield, C. R. (2003). The Marketplace in Education. *Review of Research in Education*, *27*, 183–219. JSTOR.

Lewis F. Powell, Jr. (1971). *Powell Memorandum: Attack On American Free Enterprise System*. https://scholarlycommons.law.wlu.edu/powellmemo/1

Lincoln, Y. S. (2005). Revolutions in Qualitative Research: From Just Experience to Experiencing Justice. *Journal of Thought*, *Winter 2005*, 25–40.

Lind, M. (2012). *Land of Promise: An Economic History of the United States* (First Edition-First Printing. edition). Harper.

Locke, T. (n.d.). *Do You Have "Phantom Vibration Syndrome"?* WebMD. Retrieved May 4, 2020, from https://www.webmd.com/a-to-z-guides/news/20160111/phones-phantom-vibration

Longman, M., & Schmitt, M. (2016, August 29). The Myth of the Powell Memo. *Washington Monthly*, *September/October 2016*. https://washingtonmonthly.com/magazine/septemberoctober-2016/the-myth-of-the-powell-memo/

Louv, R. (2008). *Last Child in the Woods: Saving Our Children From Nature-Deficit Disorder* (Updated and Expanded edition). Algonquin Books.

Madison, J. (1793, October 29). *From James Madison to James Monroe, 29 October 1793*. http://founders.archives.gov/documents/Madison/01-15-02-0085

Madison, J. (1818, May 12). *Address to the Agricultural Society of Albemarle, 12 May 1818*. http://founders.archives.gov/documents/Madison/04-01-02-0244

Manfra, M. M. (2009). Action Research: Exploring the Theoretical Divide between Practical and Critical Approaches. *Journal of Curriculum and Instruction*, *3*(1).

Milton Friedman. (1970, September 13). The Social Responsibility of Business is to Increase its Profits. *The New York Times Magazine*. http://umich.edu/~thecore/doc/Friedman.pdf

Mission and History · Midwest Academy. (2020). http://www.midwestacademy.com/about/mission-history/

Noam Chomsky. (1992, April 1). *Chomsky Explores Origins of Language* [Interview]. https://news.mit.edu/1992/chomsky-0401

Noffke, S. E. 1, & Brennan, M. (2005). The Dimensions of Reflection: A Conceptual and Contextual Analysis. *International Journal of Progressive Education*, *1*(3), 58–78.

Obama, B. (2011). *Remarks by the President in State of Union Address*. https://obamawhitehouse.archives.gov/the-press-office/2011/01/25/remarks-president-state-union-address

PA Career Standards. (2020). Department of Education. https://www.education.pa.gov:443/K-12/PACareerStandards/Pages/default.aspx

Parker, R. (2015). *John Kenneth Galbraith: His Life, His Politics, His Economics*. Farrar, Straus and Giroux.

Paul, A. M. (2013). Relax, It's Only a Test. *TIME Magazine*, *181*(5), 42–45.

Phelan, Jr., W. D. (1961, February 15). Galbraith Sees Education From View of Economists | News | The Harvard Crimson. *The Harvard Crimson*. https://www.thecrimson.com/article/1961/2/15/galbraith-sees-education-from-view-of/

Philbrick, N. (2007). *Mayflower: Voyage, Community, War*. Penguin Books.

Politics and Prose. (2013, June 24). *Joseph J. Ellis "Revolutionary Summer."* https://www.youtube.com/watch?v=sjooV7ZuuMw

Posner, G. (2003). *Analyzing The Curriculum* (3rd edition). McGraw-Hill Education.

Posselt, J. R., & Lipson, S. K. (2016). Competition, Anxiety, and Depression in the College Classroom: Variations by Student Identity and Field of Study. *Journal of College Student Development*, *57*(8), 973–989.

Postman, N., & Postman, A. (2005). *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* (Anniversary edition). Penguin Books.

Potter, A., & Emerson, G. B. (1842). *The School and the Schoolmaster: A Manual for the Use of Teachers, Employers, Trustees, Inspectors, &c., &c., of Common Schools. In Two Parts*. Harper & Brothers.

President Reagan on Dr. Friedman and Free To Choose. (1990). https://www.youtube.com/watch?v=um-p3ZhiO60

President Reagan's Radio Address to the Nation on Education—3/12/83. (1983). https://www.youtube.com/watch?v=SJeoYU_6R4s

President Reagan's Radio Address to the Nation on Education—4/30/83. (1983). https://www.youtube.com/watch?v=Odq-L8avVAM

President Reagan's Radio Address to the Nation on Education—8/24/85. (1985). https://www.youtube.com/watch?v=fdWGwO65u_0

Price, D. A. (2007). *Love and Hate in Jamestown: John Smith, Pocahontas, and the Start of a New Nation* (Reprint edition). Vintage.

Quart, A. (2006, July 1). *Extreme Parenting*. The Atlantic. https://www.theatlantic.com/magazine/archive/2006/07/extreme-parenting/304982/

Raines, H. (1981, January 20). Ronald Reagan's Long Political Ascent from Hollywood Actor to Presidency. *The New York Times*. https://www.nytimes.com/1981/01/20/us/ronald-reagan-s-long-political-ascent-from-hollywood-actor-to-presidency.html

Ravitch, D. (2016). *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education* (3 edition). Basic Books.

Reeves, R. (2006). *President Reagan*. Simon & Schuster.

Richtel, M. (2012, November 1). Technology Is Changing How Students Learn, Teachers Say. *The New York Times*. https://www.nytimes.com/2012/11/01/education/technology-is-changing-how-students-learn-teachers-say.html

Rizza, M. G., & Reis, S. M. (2001). Comparing and Contrasting: Stories of Competition. *Gifted Child Quarterly*, *45*(1), 54–62. https://doi.org/10.1177/001698620104500108

Rowland, R. C., & Jones, J. M. (2002). "Until Next Week": The Saturday Radio Addresses of Ronald Reagan. *Presidential Studies Quarterly*, *32*(1), 84–110. JSTOR.

Saunders, D. (2007). The Impact of Neoliberalism on College Students. *Journal of College and Character*, *8*(5), null. https://doi.org/10.2202/1940-1639.1620

Schlesinger, A. M. (1962). *The Vital Center* (First Thus edition). Houghton, Mifflin And Co.

Selingo, J. (2018, May 25). The Two Most Important College-Admissions Criteria Now Mean Less. *The Atlantic*. https://www.theatlantic.com/education/archive/2018/05/college-admissions-gpa-sat-act/561167/

Selwyn, N. (2016). *Is Technology Good for Education?* (1 edition). Polity.

Selwyn, N. (2017). *Digital inclusion: Can we transform education through technology?* https://doi.org/10.31235/osf.io/m5fw7

Shui-fong Lam, Pui-shan Yim, Law, J. S. F., & Cheung, R. W. Y. (2004). The effects of competition on achievement motivation in Chinese classrooms. *British Journal of Educational Psychology*, *74*(2), 281–296. https://doi.org/10.1348/000709904773839888

Singer, N. (2017, May 13). How Google Took Over the Classroom. *The New York Times*. https://www.nytimes.com/2017/05/13/technology/google-education-chromebooks-schools.html

Snapshot. (n.d.). Retrieved February 12, 2020, from https://www.academia.edu/32936283/Conocimiento_para_la_equidad_social._Pensando_Chile_globalmente

Sobel, D. (2017). *Life, Liberty and the Pursuit of Happiness: Reframing our Goals for Education. 13*. http://www.susted.com/wordpress/content/life-liberty-and-the-pursuit-of-happiness-reframing-our-goals-for-education_2017_03/

Spencer, H. (1873). *Herbert Spencer on Great Man Theory.* http://history.furman.edu/benson/fywbio/fywbio_spencer_excerpts.htm

Spring, J. (1993). *Wheels in the Head: Educational Philosophies of Authority, Freedom, and Culture from Socrates to Paulo Freire*. McGraw-Hill College.

Steffes, T. L. (2012). *School, Society, and State: A New Education to Govern Modern America, 1890-1940*. University of Chicago Press.

Strauss, V. (2016, December 21). To Trump's education pick, the U.S. public school system is a 'dead end.' *Washington Post*. https://www.washingtonpost.com/news/answer-sheet/wp/2016/12/21/to-trumps-education-pick-the-u-s-public-school-system-is-a-dead-end/

Strauss, V. (2018, April 23). How anxious are kids about taking standardized tests? This anxious. *Washington Post*. https://www.washingtonpost.com/news/answer-sheet/wp/2014/04/23/how-anxious-are-kids-about-taking-standardized-tests-this-anxious/

Strauss, V. (2018, April 26). 'A Nation at Risk' demanded education reform 35 years ago. Here's how it's been bungled ever since. *Washington Post.* https://www.washingtonpost.com/news/answer-sheet/wp/2018/04/26/the-landmark-a-nation-at-risk-called-for-education-reform-35-years-ago-heres-how-it-was-bungled/

Suciu, P. (2019, October 11). *More Americans Are Getting Their News From Social Media*. Forbes. https://www.forbes.com/sites/petersuciu/2019/10/11/more-americans-are-getting-their-news-from-social-media/

Takacs, D. (2003). How Does Your Positionality Bias Your Epistemology? *The NEA Higher Education Journal*, *19*(1), 27–38.

The Intellectual Provocateur. (1969, December 19). *TIME Magazine*. http://content.time.com/time/magazine/article/0,9171,941753,00.html

Thomas Jefferson. (1787, May 21). *From Thomas Jefferson to Martha Jefferson, 21 May 1787*. http://founders.archives.gov/documents/Jefferson/01-11-02-0350

Thomas Jefferson. (1816, August 1). *To John Adams from Thomas Jefferson, 1 August 1816*. University of Virginia Press. http://founders.archives.gov/documents/Adams/99-02-02-6618

Tienken, C. H. (2013). Neoliberalism, Social Darwinism, and Consumerism Masquerading as School Reform. *Interchange: A Quarterly Review of Education*, *43*(4), 295–316.

Times, B. W. S. to T. N. Y. (1976, December 14). Friedman, in Nobel Lecture, Challenges a Tradition. *The New York Times*. https://www.nytimes.com/1976/12/14/archives/friedman-in-nobel-lecture-challenges-a-tradition-friedman.html

Toyama, K. (2015, June 3). *Why Technology Alone Won't Fix Schools*. The Atlantic. https://www.theatlantic.com/education/archive/2015/06/why-technology-alone-wont-fix-schools/394727/

Turkle, S. (2012). *Alone Together: Why We Expect More from Technology and Less from Each Other* (1 edition). Basic Books.

Urban, W. J., & Jr, J. L. W. (2008). *American Education: A History* (4 edition). Routledge.

Vaughn, J., & Diserens, C. M. (1938). The Experimental Psychology of Competition. *The Journal of Experimental Education*, *7*(1), 76–97. JSTOR.

Washington, G. (1776, August 19). *From George Washington to Lund Washington, 19 August 1776*. http://founders.archives.gov/documents/Washington/03-06-02-0078

Washington, G. (1788, April 25). *Letter to John Armstrong, 25 April 1788*. http://founders.archives.gov/documents/Washington/04-06-02-0201

Weissbourd, R. (2011). The Over Pressured Student. *Educational Leadership*, *68*(8), 22–27.

Wong, A. (2018, October 30). *Why Millions of Teens Can't Finish Their Homework*. The Atlantic. https://www.theatlantic.com/education/archive/2018/10/lacking-internet-millions-teens-cant-do-homework/574402/

Wood, G. S. (1993). *The Radicalism of the American Revolution* (Reprint edition). Vintage.

Wood, G. S. (2011). *Empire of Liberty: A History of the Early Republic, 1789-1815* (Reprint edition). Oxford University Press.

Wulf, A. (2012). *Founding Gardeners: The Revolutionary Generation, Nature, and the Shaping of the American Nation* (Reprint edition). Vintage.

APPENDIX

<u>Appendix A</u>
Introduction to *Invention of Air*

RIVERHEAD BOOKS
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THE INVENTION OF AIR

A STORY OF SCIENCE, FAITH, REVOLUTION, AND THE BIRTH OF AMERICA

STEVEN JOHNSON

AUTHOR'S NOTE

A few days before I started writing this book, a leading candidate for the presidency of the United States was asked on national television whether he believed in the theory of evolution. He shrugged off the question with a dismissive jab of humor. "It's interesting that that question would even be asked of someone running for president," he said. "I'm not planning on writing the curriculum for an eighth-grade science book. I'm asking for the opportunity to be president of the United States."

It was a funny line, but the joke only worked in a specific intellectual context. For the statement to make sense, the speaker had to share one basic assumption with his audience: that "science" was some kind of specialized intellectual field, about which political leaders needn't know anything to do their business. Imagine a candidate dismissing a question

about his foreign policy experience by saying he was running for president and not writing a textbook on international affairs. The joke wouldn't make sense, because we assume that foreign policy expertise is a central qualification for the chief executive. But science? That's for the guys in lab coats.

That line has stayed with me since, because the web of events at the center of this book suggests that its basic assumptions are fundamentally flawed. If there is an overarching moral to this story, it is that vital fields of intellectual achievement cannot be cordoned off from one another and relegated to the specialists, that politics can and should be usefully informed by the insights of science. The protagonists of this story lived in a climate where ideas flowed easily between the realms of politics, philosophy, religion, and science. The closest thing to a hero in this book—the chemist, theologian, and political theorist Joseph Priestley—spent his whole career in the space that connects those different fields. But the other figures central to this story—Ben Franklin, John Adams, Thomas Jefferson—suggest one additional reading of the "eighth-grade science" remark. It was anti-intellectual, to be sure, but it was something even more incendiary in the context of a presidential race. It was positively un-American.

In their legendary fourteen-year final correspondence, reflecting back on their collaborations and their feuds, Thomas Jefferson and John Adams wrote 165 letters to each other. In that corpus, Benjamin Franklin is mentioned by name five times, while George Washington is mentioned three times. Their mutual nemesis Alexander Hamilton warrants only two references. By contrast, Priestley, an Englishman who spent only the last decade of his life in the United States, is mentioned fifty-two times. That statistic alone gives some sense of how important Priestley was to the founders, in part because he would play a defining role in the rift and ultimate reconciliation between Jefferson and Adams, and in part because his distinctive worldview had a profound impact on both men, just as it had on Franklin three decades before. Yet today, Priestley is barely more than a footnote in most popular accounts of the revolutionary generation. This book is an attempt to understand how Priestley became so central to the great minds of this period—in the fledgling United States, but also in England and France. It is not so much a biography as it is the biography of one man's ideas, the links of association and influence that connect him to epic changes in science, belief, and society—as well as to some of the darkest episodes of mob violence and political repression in the history of Britain and the United States.

One of the things that makes the story of Priestley and his peers so fascinating to us now is that they were active participants in revolutions in multiple fields: in politics, chemistry, physics, education, and religion. And so part of my intent with this book is to grapple with the question of why these revolutions happen when they do, and why some rare individuals end up having a hand in many of them simultaneously. My assumption is that this question cannot be answered on a single scale of experience, that a purely

biographical approach, centered on the individual life of the Great Man and his fellow travelers, will not do it justice; nor will a collectivist account that explains intellectual change in terms of broad social movements. My approach, instead, is to cross multiple scales and disciplines—just as Priestley and his fellow travelers did in their own careers. So this is a history book about the Enlightenment and the American Revolution that travels from the carbon cycle of the planet itself, to the chemistry of gunpowder, to the emergence of the coffeehouse in European culture, to the emotional dynamics of two friends compelled by history to betray each other. To answer the question of why some ideas change the world, you have to borrow tools from chemistry, social history, media theory, ecosystem science, geology. That connective sensibility runs against the grain of our specialized intellectual culture, but it would have been second nature to Priestley, Franklin, Jefferson, Adams, and their peers. Those are our roots. This book is an attempt to return to them.

THE INVENTION OF AIR

Appendix B

Pgs. 189 - 191 from *The Radicalism of the Revolution*

ALSO BY GORDON S. WOOD

The Creation of the American Republic, 1776–1787

GORDON S. WOOD

The Radicalism of THE AMERICAN REVOLUTION

VINTAGE BOOKS
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NEW YORK

munity. "Government," said the New Hampshire constitution, was "instituted for the common benefits, protection, and security of the whole community, and not for the private interest or emolument of any one man, family, or class of men." The North Carolina constitution stated that "perpetuities and monopolies are contrary to the genius of a State, and ought not to be allowed."

Consequently, the republican state governments sought to assert their newly enhanced public power in direct and unprecedented ways—doing for themselves what they had earlier commissioned private persons to do. They carved out exclusively public spheres of action and responsibility where none had existed before. They now drew up plans for improving everything from trade and commerce to roads and waterworks and helped to create a science of political economy for Americans. And they formed their own public organizations with paid professional staffs supported by tax money, not private labor. For many Americans the Revolution had made the "self-management of self-concerns . . . the vital part of government."[44] The city of New York, for example, working under the authority of the state legislature, set up its own public work force to clean its streets and wharves instead of relying, as in the past, on the private residents to do these tasks. By the early nineteenth century the city of New York had become a public institution financed primarily by public taxation and concerned with particularly public concerns. It acquired what it had not had before—the power of eminent domain—and the authority to make decisions without worrying about "whose property is benefited . . . or is not benefited." The power of the state to take private property was now viewed as virtually unlimited—as long as the property was taken for exclusively public purposes.[45]

Many concluded that the state legislatures could now do for the public whatever the people entrusted them to do. "A community must always remain competent to the superintendence of its concerns," wrote James Cheetham in 1802. "These general powers of superintendence must be entrusted somewhere. They can be no where more safely deposited than with the legislature. Subject to the constitution, all the rights and privileges of the citizen are entrusted with them."[46] The people under monarchy, of course, had possessed long-standing rights and privileges immune from tampering by the prerogative powers and privileges of the king. But under republicanism could such popular rights continue to be set against the government? In the new republics, where there were no more crown powers and no more prerogative rights, it

was questionable whether the people's personal rights could meaningfully exist apart from the people's sovereign power—the general will—expressed in their assemblies. In other words, did it any longer make sense to speak of negative liberty where the people's positive liberty was complete and supreme? To be sure, as the Pennsylvania constitution together with other revolutionary constitutions declared, "no part of man's property can be justly taken from him, or applied to public uses, without his own consent," but this consent, in 1776 at least, meant "that of his legal representatives."[47]

Such assertions that all power to superintend and improve the society belonged to the people and was embodied in the popular state legislatures flowed naturally from republican doctrine. But well before 1800 many Americans had come to challenge the belief that such a monopoly of public power ought to be entrusted to any governmental institution whatsoever, however representative and popularly elected. Indeed, limiting popular government and protecting private property and minority rights without at the same time denying the sovereign public power of the people became the great dilemma of political leaders in the new republic; indeed, it remains the great dilemma of America's constitutional democracy.

II. *Enlightenment*

Destroying the ligaments of patronage and kinship that had held the old monarchical society together was only half the radicalism of the republican revolution. Something else would have to be put in place of these ancient social ties, or American society would simply fall apart. The first steps in constructing a new republican society were to enlighten the people and to change the nature of authority. Not only would the culture have to be republicanized, but all superior-subordinate relationships would necessarily change. If parents and masters were kind and caring, children and servants would naturally obey. If the political rulers were men of merit and talent and governed only in the public interest, they would naturally command the affection and respect of the people, and the crises of authority bedeviling American society would end. Love and gratitude would replace fear and favor as social adhesives.

The vision of the revolutionary leaders is breathtaking. As hard-headed and practical as they were, they knew that by becoming republican they were expressing nothing less than a utopian hope for a new

moral and social order led by enlightened and virtuous men. Their soaring dreams and eventual disappointments make them the most extraordinary generation of political leaders in American history.

In many respects this revolutionary generation was very modern. They were optimistic, forward-looking, and utterly convinced that they had the future in their own hands. They told themselves that they had the ability, like no people before in modern times, to shape their politics and society as they saw fit. Can America be happy becoming independent? asked Thomas Paine. "As happy as she pleases," he answered for all American leaders; "she hath a blank sheet to write upon."[1] The American revolutionary leaders had a very modern understanding of culture. For the first time in American history they saw that their culture was exclusively man-made. They alone were responsible for what they thought and believed and for what would be thought and believed in the future by those they often called the "millions unborn."

It was an awesome responsibility, and they assumed it with a sense of excitement and anxious expectancy. They knew—it was the basic premise of all their thinking—that people were not born to be what they might become. Lockean sensationalism told the revolutionaries that human personalities were unformed, impressionable things that could be molded and manipulated by controlling people's sensations. The mind, said John Adams, could be cultivated like a garden, with barbarous weeds eliminated and enlightened fruits raised, "the savages destroyed, . . . the civil People increased." The revolutionaries believed with Samuel Stanhope Smith, soon to be president of Princeton, that new habitual principles, "the constant authoritative guardians of virtue," could be created and nurtured by republican laws, and that these principles, together with the power of the mind, could give man's "ideas and motives a new direction." By the repeated exertion of reason, by "recalling the lost images of virtue: contemplating them, and using them as motives of action, till they overcome those of vice again and again until after repeated struggles, and many foils they at length acquire the habitual superiority"—by such exertions it seemed possible for man to recover his lost innocence and form a society of "habitual virtue." Virtue, said Ezra Stiles, was an art to be learned as other arts were learned.[2]

From these premises flowed the revolutionaries' preoccupation with education—not just their interest in formal schooling but their concern with a variety of means to create new attitudes and to remake their culture. These comprised everything from the histories they wrote and

the advice manuals they read to the icons they created—including Jefferson's Virginia capitol, John Trumbull's paintings, and the design of the Great Seal. With the Lockean premises they had about how knowledge was acquired, everything suddenly seemed possible. The revolutionary leaders were faced with the awesome task of creating their own world.

Changing the culture meant pushing back the boundaries of darkness and barbarism and spreading light and knowledge. For the revolutionary generation America became the Enlightenment fulfilled. The settlement of America, said John Adams in 1765, was "the opening of a grand scene and design in Providence for the illumination of the ignorant, and the emancipation of the slavish part of mankind all over the earth."[3] The Revolution was simply the climax of this grand historic drama. Enlightenment was spreading everywhere in the Western world, but nowhere more promisingly than in America. It was an astonishing claim: that these obscure provinces only recently rescued from wilderness, surrounded by "savages," and perched precariously on the very edges of Christendom, should presume to be in the vanguard of the Enlightenment was enough to boggle the mind. Americans, Thomas Paine told them in 1782, had thrown off the "prejudices" of the Old World ("prejudice, that poisonous bane and pernicious pest of society," representing everything the Enlightenment hated) and had adopted new liberal, enlightened, and rational ideas. "We see with other eyes; we hear with other ears; and think with other thoughts, than those we formerly used." Ignorance was being expelled and could not return. "The mind once enlightened cannot again become dark."[4]

This pushing back of darkness and what was called Gothic barbarism occurred on many fronts. Some saw the central struggle taking place in natural science and in the increasing understanding of nature. Even the invention of a water pump for ships sent Benjamin Rush into raptures over the hope it promised "that the time will come when, comparatively speaking, 'evil there shall be none' upon the surface of the globe."[5] Others saw it occurring mostly in religion with the tempering of enthusiasm and the elimination of superstition. Still others saw it taking place mainly in politics—in driving back the forces of tyranny and in the creating of new free governments. For many Americans this political struggle became the focus of their revolution, the republican prerequisite for all other kinds of enlightenment. But for many other enlightened Americans of the eighteenth century these were just aspects

of a larger struggle. For the Enlightenment represented not just the spread of science, or liberty, or republican government—important as these were—but also the spread of what came to be called civilization.

Everywhere in the Western world people were making tiny, piecemeal assaults on the ignorance and barbarism of the past. Everywhere in small, seemingly insignificant ways life was being made easier, more comfortable, more enjoyable. Decrease the pain and increase the pleasure of people: that was the Enlightenment. It seemed at times to be a mere matter of counting, of adding pleasures and subtracting pains. So William Wollaston in his *Religion of Nature Delineated* set out with mathematical exactness the way to calculate human happiness: "the man who enjoys three degrees of such pleasure as will bring upon him nine degrees of pain, when three degrees of pain are set off to balance and sink the three of pleasure, can have remaining to him only six degrees of pain; and with these therefore is his pleasure finally resolved. And so the three degrees of pain, which anyone endures to obtain nine of pleasure end in six of the latter."[6]

Such mathematical exercises were possible because the increments of happiness, the quantities of pleasure and pain, seemed small and measurable. Sometimes they were quite palpable and material—"conveniences" or "decencies" or "comforts" as they were called. Did people eat with knives and forks instead of with their hands? Did they sleep on feather mattresses instead of straw? Did they drink out of china cups instead of wooden vessels? These were signs of prosperity, of happiness, of civilization. Jefferson said that to know the real state of a society's enlightenment one "must ferret the people out of their hovels, . . . look into their kettle, eat their bread, loll on their beds under pretence of resting yourself, but in fact to find out if they are soft."[7]

But enlightenment was not simply a matter of material prosperity, of having Wedgwood dishes and finely pruned gardens. It was above all a matter of personal and social morality, of the ways in which men and women treated each other, their children, their dependents, even their animals. Such enlightened morality lay at the heart of republicanism. Americans thought themselves more civilized and humane than the British precisely because they had adopted republican governments, which, as Benjamin Rush said, were "peaceful and benevolent forms of government" requiring "mild and benevolent principles." With the Revolution they sought to express these mild and benevolent principles in a variety of reforms—most notably perhaps in their new systems of criminal punishment.

Many of the revolutionary state constitutions had promised in Beccarian fashion to end punishments that were "cruel and unusual" and to make them "less sanguinary, and in general more proportionate to the crimes." Jefferson and other leaders drew up plans for liberalizing the harsh penal codes of the colonial period, which had relied on bodily punishments of whipping, mutilation, and especially execution. Although most states did something, Pennsylvania led the way in the 1780s and 1790s in the enlightened effort, as its legislation put it, "to reclaim rather than destroy," "to correct and reform the offenders" rather than simply to mark or eliminate them. Pennsylvania abolished all bodily punishments such as "burning in the hand" and "cutting off the ears" and ended the death penalty for all crimes except murder. In their places the state proposed a scale of punishments based on fines and years of imprisonment. In the larger and less intimate worlds in which people now lived, public punishments based on shame seemed less meaningful. Instead, the criminals should be made to feel their individual guilt, by being confined in prisons apart from the excited environment of the outside world, in solitude where the "calm contemplation of mind which brings on penitence" could take place. Out of such assumptions was created the penitentiary, which turned the prison into what Philadelphia officials called "a school of reformation." By 1805 New York, New Jersey, Connecticut, Virginia, and Massachusetts had followed Pennsylvania in constructing penitentiaries based on the principle of solitary confinement. Nowhere else in the Western world, as enlightened philosophes recognized, had such reforms been carried as far as they had in America.[8]

But these penal reforms were only one manifestation of what Rush called the "gentle and forgiving spirit" that lay at the heart of the Enlightenment. The eighteenth century seemed to many to be civilized and enlightened not simply because reformers were seeking to end the barbarity of criminal punishments, but, more important, because people in general were more benevolent, conversations were more polite, manners were more gracious than they had been in the past. Everywhere there were more courtesies, amenities, civilities—all designed to add to the sum of human happiness. Not talking loudly in company, not interrupting others' conversation, not cleaning one's teeth at the table, were small matters perhaps, but in the aggregate they seemed to be what made human sociability possible. We are apt to regard the eighteenth century's preoccupation with proper social behavior—its concern for manners and decorum—as superficial and frivolous. But the enlight-

Appendix C
Instructional Practice Audit Checklist

INSTRUCTIONAL PRACTICE AUDIT

DIRECTIONS: Check either "Yes" or "No" to indicate which of the following practices you have employed in your classroom. A "Yes" does not mean you regularly or often use these practices, it simply means that at some point in your career you've used this method of teaching, preparation, or management. Then, regardless of your answer – but preferably you will select one where you checked "yes" – rank the practices from 1-23 where number 1 is a practice that concerns you greatly and where 23 is something that does not concern you very much at all. Also, BE HONEST

#	PRACTICE	YES	NO	RANK
1	Given a timed quiz.			
2	Refused student late work.			
3	Written letter of recommendation for a student to attend a private/charter school.			
4	Failed a student.			
5	Proctored a state-mandated test.			
6	Used proprietary technology in a lesson.			
7	Taught a licensed, subscription based, or paid service/program as an entire lesson.			
8	Taught a lesson with the goal of aiding testing outcomes exclusively.			
9	Induced competition into the classroom, Kahoot, or Accelerated Reader.			
10	Taught directly from a textbook, particularly one published with the dictates of one state.			
11	Taught from scripted curricula regardless of student comprehension or difficulty.			
12	Emphasized degree levels with salary increases.			
13	Proctored PSAT/SAT tests.			
14	Made technology a focal point of your instruction.			
15	Increased pacing to ensure all of the content is covered despite a lack of comprehension.			
16	Implemented a zero-tolerance policy of any kind.			
17	Publicly ranked students based upon their grades or score on a particular assignment.			
18	Emphasized the importance of a state-test			
19	Lectured an entire class.			
20	Argued the importance of "core" classes of any other.			
21	Participated in a career day.			
22	Question the importance of lunch.			
23	Asked a student to complete work during a lunch period.			

Appendix D
Midwest Academy Strategy Chart

Midwest Academy Strategy Chart

After choosing your issue, fill in this chart as a guide to developing strategy. Be specific. List all the possibilities.

Goals	Organizational Considerations	Constituents, Allies, and Opponents	Targets	Tactics
1. List the long-term objectives of your campaign. 2. State the intermediate goals for this issue campaign. What constitutes victory? *How will the campaign* • Win concrete improvement in people's lives? • Give people a sense of their own power? • Alter the relations of power? 3. What short-term or partial victories can you win as steps toward your long-term goal?	1. List the resources that your organization brings to the campaign. Include money, number of staff, facilities, reputation, canvass, etc. What is the budget, including in-kind contributions, for this campaign? 2. List the specific ways in which you want your organization to be strengthened by this campaign. Fill in numbers for each: • Expand leadership group • Increase experience of existing leadership • Build membership base • Expand into new constituencies • Raise more money 3. List internal problems that have to be considered if the campaign is to succeed.	1. Who cares about this issue enough to join in or help the organization? • Whose problem is it? • What do they gain if they win? • What risks are they taking? • What power do they have over the target? • Into what groups are they organized? 2. Who are your opponents? • What will your victory cost them? • What will they do/spend to oppose you? • How strong are they? • How are they organized?	1. Primary Targets A target is always a person. It is never an institution or elected body. • Who has the power to give you what you want? • What power do you have over them? 2. Secondary Targets • Who has power over the people with the power to give you what you want? • What power do you have over them?	For each target, list the tactics that each constituent group can best use to make its power felt. Tactics must be • In context. • Flexible and creative. • Directed at a specific target. • Make sense to the membership. • Be backed up by a specific form of power. Tactics include • Media events • Actions for information and demands • Public hearings • Strikes • Voter registration and voter education • Lawsuits • Accountability sessions • Elections • Negotiations

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28 E. Jackson Blvd. #605, Chicago, IL 60604

(312) 427-2304 mwacademy1@aol.com   www.midwestacademy.com

Appendix E
The Powell Memorandum

THE POWELL MEMORANDUM

51/167 4cc 8/23/71

CONFIDENTIAL MEMORANDUM

ATTACK ON AMERICAN FREE ENTERPRISE SYSTEM

TO: Mr. Eugene B. Sydnor, Jr.
Chairman
Education Committee
U.S. Chamber of Commerce

DATE: August 23, 1971

FROM: Lewis F. Powell, Jr.

This memorandu[m]

basis for the discussion on

at the U.S. Chamber of Co[m]

problem, and suggest possib[l]

consideration.

Di[m]

No thoughtful

economic system is under br[o]

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There always

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*Variously called: the "free enterpri[se]
and the "profit system". The Americ[an]
democracy under the rule of law is a[...]
the same individuals and organization[s]
the enterprise system.

BACKGROUND—

The Powell Memorandum: When National Chamber Director Eugene B. Sydnor, Jr., became chairman of our Education Committee, he discussed with his neighbor and long-time friend, Lewis F. Powell, Richmond attorney, ways to provide the public a more balanced view of the country's economic system.

At Mr. Sydnor's request, Mr. Powell, based on his broad experience as chairman of the Richmond City School Board, as well as the Virginia State Board of Education, prepared a memorandum in which he incorporated a number of possible approaches. The memorandum covered a broad range of educational and other activities for study and consideration by the National Chamber.

The memorandum was dated August 23, 1971, two months before Mr. Powell was nominated to become a member justice of the Supreme Court of the United States.

It has been under study and evaluation by Chamber officers and staff members. Several of its approaches have been put into practice. Others would require substantial new resources to carry out.

Recently, Jack Anderson, the syndicated columnist, wrote several columns discussing the memorandum. Mr. Anderson obtained a copy of the memorandum without the knowledge or permission of the National Chamber.

Anyone reading the Powell memorandum will easily conclude that it objectively and fairly deals with a very real problem facing the free enterprise system.

To give all members of the National Chamber an opportunity to read the memorandum and to allow each to evaluate all the points raised, WASHINGTON REPORT presents the document in its entirety.

ATTACK ON AMERICAN FREE ENTERPRISE SYSTEM

CONFIDENTIAL MEMORANDUM
ATTACK OF AMERICAN FREE ENTERPRISE SYSTEM

DATE: August 23, 1971

TO: Mr. Eugene B. Sydnor, Jr.
Chairman
Education Committee
U.S. Chamber of Commerce

FROM: Lewis F. Powell, Jr.

This memorandum is submitted at your request as a basis for the discussion on August 24 with Mr. Booth (executive vice president) and others at the U.S. Chamber of Commerce. The purpose is to identify the problem, and suggest possible avenues of action for further consideration.

Dimensions of the Attack

No thoughtful person can question that the American economic system is under broad attack.[1] This varies in scope, intensity, in the techniques employed, and in the level of visibility.

There always have been some who opposed the American system, and preferred socialism or some form of statism (communism or fascism). Also, there always have been critics of the system, whose criticism has been wholesome and constructive so long as the objective was to improve rather than to subvert or destroy.

But what now concerns us is quite new in the history of America. We are not dealing with sporadic or isolated attacks from a relatively few extremists or even from the minority socialist cadre. Rather, the assault on the enterprise system is broadly based and consistently pursued. It is gaining momentum and converts.

Sources of the Attack

The sources are varied and diffused. They include, not unexpectedly, the Communists, New Leftists and other revolutionaries who would destroy the entire system, both political and economic. These extremists of the left are far more numerous, better financed, and increasingly are more welcomed and encouraged by other elements of society, than ever before in our history. But they remain a small minority, and are not yet the principal cause for concern.

The most disquieting voices joining the chorus of criticism, come from perfectly respectable elements of society: from the college campus, the pulpit, the media, the intellectual and literary journals, the arts and sciences, and from politicians. In most of these groups the movement against the system is participated in only by minorities. Yet, these often are the most articulate, the most vocal, the most prolific in their writing and speaking.

Moreover, much of the media—for varying motives and in varying degrees—either voluntarily accords unique publicity to these "attackers," or at least allows them to exploit the media for their purposes. This is especially true of television, which now plays such a predominant role in shaping the thinking, attitudes and emotions of our people.

One of the bewildering paradoxes of our time is the extent to which the enterprise system tolerates, if not participates in, its own destruction.

The campuses from which much of the criticism emanates are supported by (i) tax funds generated largely from American business, and (ii) contributions from capital funds controlled or generated by American business. The boards of trustees of our universities overwhelmingly are composed of men and women who are leaders in the system.

Most of the media, including the national TV systems, are owned and theoretically controlled by corporations which depend upon profits, and the enterprise system to survive.

Tone of the Attack

This memorandum is not the place to document in detail the tone, character, or intensity of the attack. The following quotations will suffice to give one a general idea:

William Kunstler, warmly welcomed on campuses and listed in a recent student poll as the "American lawyer most admired," incites audiences as follows:

> "You must learn to fight in the streets, to revolt, to shoot guns. We will learn to do all of the things that property owners fear."[2]

The New Leftists who heed Kunstler's advice increasingly are beginning to act—not just against military recruiting offices and manufacturers of munitions, but against a variety of businesses:

> "Since February, 1970, branches (of Bank of America) have been attacked 39 times, 22 times with explosive devices and 17 times with fire bombs or by arsonists."[3]

Although New Leftist spokesmen are succeeding in radicalizing thousands of the young, the greater cause for concern is the hostility of respectable liberals and social reformers. It is the sum total of their views and influence which could indeed fatally weaken or destroy the system.

A chilling description of what is being taught on many of our campuses was written by Stewart Alsop:

> "Yale, like every other major college, is graduating scores of bright young men who are practitioners of 'the politics of despair.' These young men despise the American political and economic system . . . (their) minds seem to be wholly closed. They live, not by rational discussion, but by mindless slogans."[4]

1.) Variously called: the "free enterprise system," "capitalism," and the "profit system." The American political system of democracy under the rule of law is also under attack, often by the same individuals and organizations who seek to undermine the enterprise system.

2.) Richmond News Leader, June 8, 1970. Column of William F. Buckley, Jr.

3.) N.Y. Times Service article, reprinted Richmond Times-Dispatch, May 17, 1971.

4.) Stewart Alsop, Yale and the Deadly Danger, Newsweek, May 18, 1970.

A recent poll of students on 12 representative campuses reported that:

> "Almost half the students favored socialization of basic U.S. industries." [5]

A visiting professor from England at Rockford College gave a series of lectures entitled "The Ideological War Against Western Society," in which he documents the extent to which members of the intellectual community are waging ideological warfare against the enterprise system and the values of western society. In a foreword to these lectures, famed Dr. Milton Friedman of Chicago warned:

> "It (is) crystal clear that the foundations of our free society are under wide-ranging and powerful attack— not by Communist or any other conspiracy but by misguided individuals parroting one another and unwittingly serving ends they would never intentionally promote." [6]

Perhaps the single most effective antagonist of American business is Ralph Nader who—thanks largely to the media—has become a legend in his own time and an idol of millions of Americans. A recent article in Fortune speaks of Nader as follows:

> "The passion that rules in him—and he is a passionate man—is aimed at smashing utterly the target of his hatred, which is corporate power. He thinks, and says quite bluntly, that a great many corporate executives belong in prison—for defrauding the consumer with shoddy merchandise, poisoning the food supply with chemical additives, and willfully manufacturing unsafe products that will maim or kill the buyer. . . . He emphasizes that he is not talking just about 'fly-by-night hucksters' but the top management of blue-chip business." [7]

A frontal assault was made on our government, our system of justice, and the free enterprise system by Yale Professor Charles Reich in his widely-publicized book: "The Greening of America," published last winter.

The foregoing references illustrate the broad, shotgun attack on the system itself. There are countless examples of rifle shots which undermine confidence and confuse the public. Favorite current targets are proposals for tax incentives through changes in depreciation rates and investment credits. These are usually described in the media as "tax breaks," "loop holes" or "tax benefits" *for the benefit of business.** As viewed by a columnist in the Post, such tax measures would benefit "only the rich, the owners of big companies." [8]

It is dismaying that many politicians make the same argument that tax measures of this kind benefit only "business," without benefit to "the poor." The fact that this is either political demagoguery or economic illiteracy, is of slight comfort. This setting of the "rich" against the "poor," of business against the people, is the cheapest and most dangerous kind of politics.

The Apathy and Default of Business

What has been the response of business to this massive assault upon its fundamental economics, upon its philosophy, upon its right to continue to manage its own affairs, and indeed upon its integrity?

The painfully sad truth is that business, including the boards of directors and the top executives of corporations great and small and business organizations at all levels, often have responded—if at all—by appeasement, ineptitude and ignoring the problem. There are, of course, many exceptions to this sweeping generalization. But the net effect of such response as has been made is scarcely visible.

In all fairness, it must be recognized that businessmen have not been trained or equipped to conduct guerrilla warfare with those who propagandize against the system, seeking insidiously and constantly to sabotage it. The traditional role of business executives has been to manage, to produce, to sell, to create jobs, to make profits, to improve the standard of living, to be community leaders, to serve on charitable and educational boards, and generally to be good citizens. They have performed these tasks very well indeed.

But they have shown little stomach for hard-nose contest with their critics, and little skill in effective intellectual and philosophical debate.

A column recently carried by the Wall Street Journal was entitled: *"Memo to GM: Why Not Fight Back?"* [9] Although addressed to GM by name, the article was a warning to all American business. Columnist St. John said:

> "General Motors, like American business in general, is 'plainly in trouble' because intellectual bromides have been substituted for a sound intellectual exposition of its point of view."

Mr. St. John then commented on the tendency of business leaders to compromise with and appease critics. He cited the concessions which Nader wins from management, and spoke of "the fallacious view many businessmen take toward their critics." He drew a parallel to the mistaken tactics of many college administrators:

> "College administrators learned too late that such appeasement serves to destroy free speech, academic freedom and genuine scholarship. One campus radical

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5.) Editorial, Richmond Times-Dispatch, July 7, 1971.

6.) Dr. Milton Friedman, Prof. of Economics, U. of Chicago, writing a foreword to Dr. Arthur A. Shenfield's Rockford College lectures entitled "The Ideological War Against Western Society," copyrighted 1970 by Rockford College.

7.) *Fortune*, May, 1971, p. 145. This *Fortune* analysis of the Nader influence includes a reference to Nader's visit to a college where he was paid a lecture fee of $2,500 for "denouncing America's big corporations in venemous language . . . bringing (rousing and spontaneous) bursts of applause" when he was asked when he planned to run for President.

8.) The Washington Post, Column of William Raspberry, June 28, 1971.

9.) Jeffrey St. John, The Wall Street Journal, May 21, 1971.

* Italic emphasis added by Mr. Powell.

demand was conceded by university heads only to be followed by a fresh crop which soon escalated to what amounted to a demand for outright surrender."

One need not agree entirely with Mr. St. John's analysis. But most observers of the American scene will agree that the essence of his message is sound. American business "plainly in trouble"; the response to the wide range of critics has been ineffective, and has included appeasement; the time has come—indeed, it is long overdue—for the wisdom, ingenuity and resources of American business to be marshalled against those who would destroy it.

Responsibility of Business Executives

What specifically should be done? The first essential—a prerequisite to any effective action—is for businessmen to confront this problem as a primary responsibility of corporate management.

The overriding first need is for businessmen to recognize that the ultimate issue may be *survival*—survival of what we call the free enterprise system, and all that this means for the strength and prosperity of America and the freedom of our people.

The day is long past when the chief executive officer of a major corporation discharges his responsibility by maintaining a satisfactory growth of profits, with due regard to the corporation's public and social responsibilities. If our system is to survive, top management must be equally concerned with protecting and preserving the system itself. This involves far more than an increased emphasis on "public relations" or "governmental affairs"—two areas in which corporations long have invested substantial sums.

A significant first step by individual corporations could well be the designation of an executive vice president (ranking with other executive VP's) whose responsibility is to counter—on the broadest front—the attack on the enterprise system. The public relations department could be one of the foundations assigned to this executive, but his responsibilities should encompass some of the types of activities referred to subsequently in this memorandum. His budget and staff should be adequate to the task.

Possible Role of the Chamber of Commerce

But independent and uncoordinate activity by individual corporations, as important as this is, will not be sufficient. Strength lies in organization, in careful long-range planning and implementation, in consistency of action over an indefinite period of years, in the scale of financing available only through joint effort, and in the political power available only through united action and national organizations.

Moreover, there is the quite understandable reluctance on the part of any one corporation to get too far out in front and to make itself too visible a target.

The role of the National Chamber of Commerce is therefore vital. Other national organizations (especially those of various industrial and commercial groups) should join in the effort, but no other organizations appear to be as well situated as the Chamber. It enjoys a strategic position, with a fine reputation and a broad base of support. Also—and this is of immeasurable merit—there are hundreds of local Chambers of Commerce which can play a vital supportive role.

It hardly need be said that before embarking upon any program, the Chamber should study and analyze possible courses of action and activities, weighing risks against probable effectiveness and feasibility of each. Considerations of cost, the assurance of financial and other support from members, adequacy of staffing and similar problems will all require the most thoughtful consideration.

The Campus

The assault on the enterprise system was not mounted in a few months. It has gradually evolved over the past two decades, barely perceptible in its origins and benefitting from a gradualism that provoked little awareness much less any real reaction.

Although origins, sources and causes are complex and interrelated, and obviously difficult to identify without careful qualification, there is reason to believe that the campus is the single most dynamic source. The social science faculties usually include members who are unsympathetic to the enterprise system. They may range from a Herbert Marcuse, Marxist faculty member at the University of California at San Diego, and convinced socialists, to the ambivalent liberal critic who finds more to condemn than to commend. Such faculty members need not be in a majority. They are often personally attractive and magnetic; they are stimulating teachers, and their controversy attracts student following; they are prolific writers and lecturers; they author many of the textbooks, and they exert enormous influence—far out of proportion to their numbers—on their colleagues and in the academic world.

Social science faculties (the political scientist, economist, sociologist and many of the historians) tend to be liberally oriented, even when leftists are not present. This is not a criticism *per se*, as the need for liberal thought is essential to a balanced viewpoint. The difficulty is that "balance" is conspicuous by its absence on many campuses, with relatively few members being of conservative or moderate persuasion and even the relatively few often being less articulate and aggressive than their crusading colleagues.

This situation extending back many years and with the imbalance gradually worsening, has had an enormous impact on millions of young American students. In an article in Barron's Weekly, seeking an answer to why so many young people are disaffected even to the point of being revolutionaries, it was said:

"Because they were *taught* that way." [10]

Or, as noted by columnist Stewart Alsop, writing about his alma mater:

"Yale, like every other major college, is graduating scores of bright young men . . . who despise the American political and economic system."

As these "bright young men," from campuses across the

10.) Barron's National Business and Financial Weekly, "The Total Break with America, The Fifth Annual Conference of Socialist Scholars," Sept. 15, 1969.

country, seek opportunities to change a system which they have been taught to distrust—if not, indeed "despise"—they seek employment in the centers of the real power and influence in our country, namely: (i) with the news media, especially television; (ii) in government, as "staffers" and consultants at various levels; (iii) in elective politics; (iv) as lecturers and writers, and (v) on the faculties at various levels of education.

Many do enter the enterprise system—in business and the professions—and for the most part they quickly discover the fallacies of what they have been taught. But those who eschew the mainstream of the system, often remain in key positions of influence where they mold public opinion and often shape governmental action. In many instances, these "intellectuals" end up in regulatory agencies or governmental departments with large authority over the business system they do not believe in.

If the foregoing analysis is approximately sound, a priority task of business—and organizations such as the Chamber—is to address the campus origin of this hostility.

Few things are more sanctified in American life than academic freedom. It would be fatal to attack this as a principle. But if academic freedom is to retain the qualities of "openness," "fairness" and "balance"—which are essential to its intellectual significance—there is a great opportunity for constructive action. The thrust of such action must be to restore the qualities just mentioned to the academic communities.

What Can Be Done About the Campus

The ultimate responsibility for intellectual integrity on the campus must remain on the administrations and faculties of our colleges and universities. But organizations such as the Chamber can assist and activate constructive change in many ways, including the following:

Staff of Scholars

The Chamber should consider establishing a staff of highly qualified scholars in the social sciences who do believe in the system. It should include several of national reputation whose authorship would be widely respected—even when disagreed with.

Staff of Speakers

There also should be a staff of speakers of the highest competency. These might include the scholars, and certainly those who speak for the Chamber would have to articulate the product of the scholars.

Speaker's Bureau

In addition to full-time staff personnel, the Chamber should have a Speaker's Bureau which should include the ablest and most effective advocates from the top echelons of American business.

Evaluation of Textbooks

The staff of scholars (or preferably a panel of independent scholars) should evaluate social science textbooks, especially in economics, political science and sociology. This should be a continuing program.

The objective of such evaluation should be oriented toward restoring the balance essential to genuine academic freedom. This would include assurance of fair and factual treatment of our system of government and our enterprise system, its accomplishments, its basic relationship to individual rights and freedoms, and comparisons with the systems of socialism, fascism and communism. Most of the existing textbooks have some sort of comparisons, but many are superficial, biased and unfair.

We have seen the civil rights movement insist on rewriting many of the textbooks in our universities and schools. The labor unions likewise insist that textbooks be fair to the viewpoints of organized labor. Other interested citizens groups have not hesitated to review, analyze and criticize textbooks and teaching materials. In a democratic society, this can be a constructive process and should be regarded as an aid to genuine academic freedom and not as an intrusion upon it.

If the authors, publishers and users of textbooks know that they will be subjected—honestly, fairly and thoroughly—to review and critique by eminent scholars who believe in the American system, a return to a more rational balance can be expected.

Equal Time on the Campus

The Chamber should insist upon equal time on the college speaking circuit. The FBI publishes each year a list of speeches made on college campuses by avowed Communists. The number in 1970 exceeded 100. There were, of course, many hundreds of appearances by leftists and ultra liberals who urge the types of viewpoints indicated earlier in this memorandum. There was no corresponding representation of American business, or indeed by individuals or organizations who appeared in support of the American system of government and business.

Every campus has its formal and informal groups which invite speakers. Each law school does the same thing. Many universities and colleges officially sponsor lecture and speaking programs. We all know the inadequacy of the representation of business in the programs.

It will be said that few invitations would be extended to Chamber speakers.[11] This undoubtedly would be true unless the Chamber aggressively insisted upon the right to be heard—in effect, insisted upon "equal time." University administrators and the great majority of student groups and committees would not welcome being put in the position publicly of refusing a forum to diverse views. Indeed, this is the classic excuse for allowing Communists to speak.

The two essential ingredients are (i) to have attractive, articulate and well-informed speakers; and (ii) to exert whatever degree of pressure—publicly and privately—may be necessary to assure opportunities to speak. The objective always must be to inform and enlighten, and not merely to propagandize.

Balancing of Faculties

Perhaps the most fundamental problem is the imbalance of many faculties. Correcting this is indeed a long-range

11.) On many campuses freedom of speech has been denied to all who express moderate or conservative viewpoints.

and difficult project. Yet, it should be undertaken as a part of an overall program. This would mean the urging of the need for faculty balance upon university administrators and boards of trustees.

The methods to be employed require careful thought, and the obvious pitfalls must be avoided. Improper pressure would be counterproductive. But the basic concepts of balance, fairness and truth are difficult to resist, if properly presented to boards of trustees, by writing and speaking, and by appeals to alumni associations and groups.

This is a long road and not one for the fainthearted. But if pursued with integrity and conviction it could lead to a strengthening of both academic freedom on the campus and of the values which have made America the most productive of all societies.

Graduate Schools of Business

The Chamber should enjoy a particular rapport with the increasingly influential graduate schools of business. Much that has been suggested above applies to such schools.

Should not the Chamber also request specific courses in such schools dealing with the entire scope of the problem addressed by this memorandum? This is now essential training for the executives of the future.

Secondary Education

While the first priority should be at the college level, the trends mentioned above are increasingly evidenced in the high schools. Action programs, tailored to the high schools and similar to those mentioned, should be considered. The implementation thereof could become a major program for local chambers of commerce, although the control and direction—especially the quality control—should be retained by the National Chamber.

What Can Be Done About the Public?

Reaching the campus and the secondary schools is vital for the long-term. Reaching the public generally may be more important for the shorter term. The first essential is to establish the staffs of eminent scholars, writers and speakers, who will do the thinking, the analysis, the writing and the speaking. It will also be essential to have staff personnel who are thoroughly familiar with the media, and how most effectively to communicate with the public. Among the more obvious means are the following:

Television

The national television networks should be monitored in the same way that textbooks should be kept under constant surveillance. This applies not merely to so-called educational programs (such as "Selling of the Pentagon"), but to the daily "news analysis" which so often includes the most insidious type of criticism of the enterprise system.[12] Whether this criticism results from hostility or economic ignorance, the result is the gradual erosion of confidence in "business" and free enterprise.

This monitoring, to be effective, would require constant examination of the texts of adequate samples of programs. Complaints—to the media and to the Federal Communications Commission—should be made promptly and strongly when programs are unfair or inaccurate.

Equal time should be demanded when appropriate. Effort should be made to see that the forum-type programs (the Today Show, Meet the Press, etc.) afford at least as much opportunity for supporters of the American system to participate as these programs do for those who attack it.

Other Media

Radio and the press are also important, and every available means should be employed to challenge and refute unfair attacks, as well as to present the affirmative case through these media.

The Scholarly Journals

It is especially important for the Chamber's "faculty of scholars" to publish. One of the keys to the success of the liberal and leftist faculty members has been their passion for "publication" and "lecturing." A similar passion must exist among the Chamber's scholars.

Incentives might be devised to induce more "publishing" by independent scholars who do believe in the system.

There should be a fairly steady flow of scholarly articles presented to a broad spectrum of magazines and periodicals—ranging from the popular magazines (*Life, Look, Reader's Digest*, etc.) to the more intellectual ones (*Atlantic, Harper's, Saturday Review, New York*, etc.)[13] and to the various professional journals.

Books, Paperbacks and Pamphlets

The news stands—at airports, drugstores, and elsewhere—are filled with paperbacks and pamphlets advocating everything from revolution to erotic free love. One finds almost no attractive, well-written paperbacks or pamphlets on "our side." It will be difficult to compete with an Eldridge Cleaver or even a Charles Reich for reader attention, but unless the effort is made—on a large enough scale and with appropriate imagination to assure some success—this opportunity for educating the public will be irretrievably lost.

Paid Advertisements

Business pays hundreds of millions of dollars to the media for advertisements. Most of this supports specific products; much of it supports institutional image making; and some fraction of it does support the system. But the latter has been more or less tangential, and rarely part of a sustained, major effort to inform and enlighten the American people.

If American business devoted only 10% of its total annual advertising budget to this overall purpose, it would be a statesman-like expenditure.

12.) It has been estimated that the evening half-hour news programs of the networks reach daily some 50,000,000 Americans.

13.) One illustration of the type of article which should not go unanswered appeared in tbe popular *"The New York"* of July 19, 1971. This was entitled "A Populist Manifesto" by ultra liberal Jack Newfield—who argued that "the root need in our country is 'to redistribute wealth'."

The Neglected Political Arena

In the final analysis, the payoff—short of revolution—is what government does. Business has been the favorite whipping-boy of many politicians for many years. But the measure of how far this has gone is perhaps best found in the anti-business views now being expressed by several leading candidates for President of the United States.

It is still Marxist doctrine that the "capitalist" countries are controlled by big business. This doctrine, consistently a part of leftist propaganda all over the world, has a wide public following among Americans.

Yet, as every business executive knows, few elements of American society today have as little influence in government as the American businessman, the corporation, or even the millions of corporate stockholders. If one doubts this, let him undertake the role of "lobbyist" for the business point of view before Congressional committees. The same situation obtains in the legislative halls of most states and major cities. One does not exaggerate to say that, in terms of political influence with respect to the course of legislation and government action, the American business executive is truly the "forgotten man."

Current examples of the impotency of business, and of the near-contempt with which businessmen's views are held, are the stampedes by politicians to support almost any legislation related to consumerism" or to the "environment."

Politicians reflect what they believe to be majority views of their constituents. It is thus evident that most politicians are making the judgment that the public has little sympathy for the businessman or his viewpoint.

The educational programs suggested above would be designed to enlighten public thinking—not so much about the businessman and his individual role as about the system which he administers, and which provides the goods, services and jobs on which our country depends.

But one should not postpone more direct political action, while awaiting the gradual change in public opinion to be effected through education and information. Business must learn the lesson, long ago learned by labor and other self-interest groups. This is the lesson that political power is necessary; that such power must be assidously cultivated; and that when necessary, it must be used aggressively and with determination—without embarrassment and without the reluctance which has been so characteristic of American business.

As unwelcome as it may be to the Chamber, it should consider assuming a broader and more vigorous role in the political arena.

Neglected Opportunity in the Courts

American business and the enterprise system have been affected as much by the courts as by the executive and legislative branches of government. Under our constitutional system, especially with an activist-minded Supreme Court, the judiciary may be the most important instrument for social, economic and political change.

Other organizations and groups, recognizing this, have been far more astute in exploiting judicial action than American business. Perhaps the most active exploiters of the judicial system have been groups ranging in political orientation from "liberal" to the far left.

The American Civil Liberties Union is one example. It initiates or intervenes in scores of cases each year, and it files briefs *amicus curiae* in the Supreme Court in a number of cases during each term of that court. Labor unions, civil rights groups and now the public interest law firms are extremely active in the judicial arena. Their success, often at business' expense, has not been inconsequential.

This is a vast area of opportunity for the Chamber, if it is willing to undertake the role of spokesman for American business and if, in turn, business is willing to provide the funds.

As with respect to scholars and speakers, the Chamber would need a highly competent staff of lawyers. In special situations it should be authorized to engage, to appear as counsel *amicus* in the Supreme Court, lawyers of national standing and reputation. The greatest care should be exercised in selecting the cases in which to participate, or the suits to institute. But the opportunity merits the necessary effort.

Neglected Stockholder Power

The average member of the public thinks of "business" as an impersonal corporate entity, owned by the very rich and managed by over-paid executives. There is an almost total failure to appreciate that "business" actually embraces—in one way or another—most Americans. Those for whom business provides jobs, constitute a fairly obvious class. But the 20 million stockholders—most of whom are of modest means—are the real owners, the real entrepreneurs, the real capitalists under our system. They provide the capital which fuels the economic system which has produced the highest standard of living in all history. Yet, stockholders have been as ineffectual as business executives in promoting a genuine understanding of our system or in exercising political influence.

The question which merits the most thorough examination is how can the weight and influence of stockholders—*20 million voters*—be mobilized to support (i) an educational program and (ii) a political action program.

Individual corporations are now required to make numerous reports to shareholders. Many corporations also have expensive "news" magazines which go to employees and stockholders. These opportunities to communicate can be used far more effectively as educational media.

The corporation itself must exercise restraint in undertaking political action and must, of course, comply with applicable laws. But is it not feasible—through an affiliate of the Chamber or otherwise—to establish a national organization of American stockholders and give it enough muscle to be influential?

A More Aggressive Attitude

Business interests—especially big business and their national trade organizations—have tried to maintain low profiles, especially with respect to political action.

As suggested in the Wall Street Journal article, it has been fairly characteristic of the average business executive

to be tolerant—at least in public—of those who attack his corporation and the system. Very few businessmen or business organizations respond in kind. There has been a disposition to appease; to regard the opposition as willing to compromise, or as likely to fade away in due time.

Business has shunted confrontation politics. Business, quite understandably, has been repelled by the multiplicity of non-negotiable "demands" made constantly by self-interest groups of all kinds.

While neither responsible business interests, nor the United States Chamber of Commerce, would engage in the irresponsible tactics of some pressure groups, it is essential that spokesmen for the enterprise system—at all levels and at every opportunity—be far more aggressive than in the past.

There should be no hesitation to attack the Naders, the Marcuses and others who openly seek destruction of the system. There should not be the slightest hesitation to press vigorously in all political arenas for support of the enterprise system. Nor should there be reluctance to penalize politically those who oppose it.

Lessons can be learned from organized labor in this respect. The head of the AFL-CIO may not appeal to businessmen as the most endearing or public-minded of citizens. Yet, over many years the heads of national labor organizations have done what they were paid to do very effectively. They may not have been beloved, but they have been respected—where it counts the most—by politicians, on the campus, and among the media.

It is time for American business—which has demonstrated the greatest capacity in all history to produce and to influence consumer decisions—to apply their great talents vigorously to the preservation of the system itself.

The Cost

The type of program described above (which includes a broadly based combination of education and political action), if undertaken long term and adequately staffed, would require far more generous financial support from American corporations than the Chamber has ever received in the past. High level management participation in Chamber affairs also would be required.

The staff of the Chamber would have to be significantly increased, with the highest quality established and maintained. Salaries would have to be at levels fully comparable to those paid key business executives and the most prestigious faculty members. Professionals of the great skill in advertising and in working with the media, speakers, lawyers and other specialists would have to be recruited.

It is possible that the organization of the Chamber itself would benefit from restructuring. For example, as suggested by union experience, the office of President of the Chamber might well be a full-time career position. To assure maximum effectiveness and continuity, the chief executive officer of the Chamber should not be changed each year. The functions now largely performed by the President could be transferred to a Chairman of the Board, annually elected by the membership. The Board, of course, would continue to exercise policy control.

Quality Control is Essential

Essential ingredients of the entire program must be responsibility and "quality control." The publications, the articles, the speeches, the media programs, the advertising, the briefs filed in courts, and the appearances before legislative committees—all must meet the most exacting standards of accuracy and professional excellence. They must merit respect for their level of public responsibility and scholarship, whether one agrees with the viewpoints expressed or not.

Relationship to Freedom

The threat to the enterprise system is not merely a matter of economics. It also is a threat to individual freedom.

It is this great truth—now so submerged by the rhetoric of the New Left and of many liberals—that must be reaffirmed if this program is to be meaningful.

There seems to be little awareness that the only alternatives to free enterprise are varying degrees of bureaucratic regulation of individual freedom—ranging from that under moderate socialism to the iron heel of the leftist or rightist dictatorship.

We in America already have moved very far indeed toward some aspects of state socialism, as the needs and complexities of a vast urban society require types of regulation and control that were quite unnecessary in earlier times. In some areas, such regulation and control already have seriously impaired the freedom of both business and labor, and indeed of the public generally. But most of the essential freedoms remain: private ownership, private profit, labor unions, collective bargaining, consumer choice, and a market economy in which competition largely determines price, quality and variety of the goods and services provided the consumer.

In addition to the ideological attack on the system itself (discussed in this memorandum), its essentials also are threatened by inequitable taxation, and—more recently—by an inflation which has seemed uncontrollable.[14] But whatever the causes of diminishing economic freedom may be, the truth is that freedom as a concept is indivisible. As the experience of the socialist and totalitarian states demonstrates, the contraction and denial of economic freedom is followed inevitably by governmental restrictions on other cherished rights. It is this message, above all others, that must be carried home to the American people.

Conclusion

It hardly need be said that the views expressed above are tentative and suggestive. The first step should be a thorough study. But this would be an exercise in futility unless the Board of Directors of the Chamber accepts the fundamental premise of this paper, namely, that business and the enterprise system are in deep trouble, and the hour is late.

14.) The recent "freeze" of prices and wages may well be justified by the current inflationary crisis. But if imposed as a permanent measure the enterprise system will have sustained a near fatal blow.

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Appendix F
The Role of Government in Education

The Role of Government in Education*

by
Milton Friedman
(1955)

The general trend in our times toward increasing intervention by the state in economic affairs has led to a concentration of attention and dispute on the areas where new intervention is proposed and to an acceptance of whatever intervention has so far occurred as natural and unchangeable. The current pause, perhaps reversal, in the trend toward collectivism offers an opportunity to reexamine the existing activities of government and to make a fresh assessment of the activities that are and those that are not justified. This paper attempts such a re-examination for education.

Education is today largely paid for and almost entirely administered by governmental bodies or non-profit institutions. This situation has developed gradually and is now taken so much for granted that little explicit attention is any longer directed to the reasons for the special treatment of education even in countries that are predominantly free enterprise in organization and philosophy. The result has been an indiscriminate extension of governmental responsibility.

The role assigned to government in any particular field depends, of course, on the principles accepted for the organization of society in general. In what follows, I shall assume a society that takes freedom of the individual, or more realistically the family, as its ultimate objective, and seeks to further this objective by relying primarily on voluntary exchange among individuals for the organization of economic activity. In such a free private enterprise exchange economy, government's primary role is to preserve the rules of the game by enforcing contracts, preventing coercion, and keeping markets free. Beyond this, there are only three major grounds on which government intervention is to be justified. One is "natural monopoly" or similar market imperfection which makes effective competition (and therefore thoroughly voluntary ex change) impossible. A second is the existence of substantial "neighborhood effects," i.e., the action of one individual imposes significant costs on other individuals for which it is not feasible to make him compensate them or yields significant gains to them for which it is not feasible to make them compensate him--circumstances that again make voluntary exchange impossible. The third derives from an ambiguity in the ultimate objective rather than from the difficulty of achieving it by voluntary exchange, namely, paternalistic concern for children and other irresponsible individuals. The belief in freedom is for "responsible" units, among whom we include neither children nor insane people. In general, this problem is avoided by regarding the family as the basic unit and therefore parents as responsible for their children; in considerable measure, however, such a procedure rests on expediency rather than principle. The problem of drawing a reasonable line between action justified on these paternalistic grounds and action that conflicts with the freedom of responsible individuals is clearly one to which no satisfactory answer can be given.

In applying these general principles to education, we shall find it helpful to deal separately with (1) general education for citizen ship, and (2) specialized vocational education, although it may be difficult to draw a sharp line between

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them in practice. The grounds for government intervention are widely different in these two areas and justify very different types of action.

General Education for Citizenship

A stable and democratic society is impossible without widespread acceptance of some common set of values and without a minimum degree of literacy and knowledge on the part of most citizens. Education contributes to both. In consequence, the gain from the education of a child accrues not only to the child or to his parents but to other members of the society; the education of my child contributes to other people's welfare by promoting a stable and democratic society. Yet it is not feasible to identify the particular individuals (or families) benefited or the money value of the benefit and so to charge for the services rendered. There is therefore a significant "neighborhood effect."

What kind of governmental action is justified by this particular neighborhood effect? The most obvious is to require that each child receive a minimum amount of education of a specified kind. Such a requirement could be imposed upon the parents without further government action, just as owners of buildings, and frequently of automobiles, are required to adhere to specified standards to protect the safety of others. There is, however, a difference between the two cases. In the latter, individuals who cannot pay the costs of meeting the required standards can generally divest themselves of the property in question by selling it to others who can, so the requirement can readily be enforced without government subsidy--though even here, if the cost of making the property safe exceeds its market value, and the owner is without resources, the government may be driven to paying for the demolition of a dangerous building or the disposal of an abandoned automobile. The separation of a child from a parent who cannot pay for the minimum required education is clearly inconsistent with our reliance on the family as the basic social unit and our belief in the freedom of the individual.

Yet, even so, if the financial burden imposed by such an educational requirement could readily be met by the great bulk of the families in a community, it might be both feasible and desirable to require the parents to meet the cost directly. Extreme cases could be handled by special provisions in much the same way as is done now for housing and automobiles. An even closer analogy is pro vided by present arrangements for children who are mistreated by their parents. The advantage of imposing the costs on the parents is that it would tend to equalize the social and private costs of having children and so promote a better distribution of families by size.[1]

Differences among families in resources and in number of children--both a reason for and a result of the different policy that has been followed--plus the imposition of a standard of education involving very sizable costs have, however, made such a policy hardly feasible. Instead, government has assumed the financial costs of providing the education. In doing so, it has paid not only for the minimum amount of education required of all but also for additional education at higher levels available to youngsters but not required of them--as for example in State and municipal colleges and universities. Both steps can be justified by the "neighborhood effect" discussed above--the payment of the costs

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[1] It is by no means so fantastic as may at first appear that such a step would noticeably affect the size of families. For example, one explanation of the lower birth rate among higher than among lower socio-economic groups may well be that children are relatively more expensive to the former, thanks in considerable measure to the higher standards of education they maintain and the costs of which they bear.

as the only feasible means of enforcing the required minimum; and the financing of additional education, on the grounds that other people benefit from the education of those of greater ability and interest since this is a way of providing better social and political leadership.

Government subsidy of only certain kinds of education can be justified on these grounds. To anticipate, they do not justify subsidizing purely vocational education which increases the economic productivity of the student but does not train him for either citizen ship or leadership. It is clearly extremely difficult to draw a sharp line between these two types of education. Most general education adds to the economic value of the student--indeed it is only in modern times and in a few countries that literacy has ceased to have a marketable value. And much vocational education broadens the student's outlook. Yet it is equally clear that the distinction is a meaningful one. For example, subsidizing the training of veterinarians, beauticians, dentists, and a host of other specialized skills--as is widely done in the United States in governmentally supported educational institutions--cannot be justified on the same grounds as subsidizing elementary education or, at a higher level, liberal education. Whether it can be justified on quite different grounds is a question that will be discussed later in this paper.

The qualitative argument from the "neighborhood effect" does not, of course, determine the specific kinds of education that should be subsidized or by how much they should be subsidized. The social gain from education is presumably greatest for the very lowest levels of education, where there is the nearest approach to unanimity about the content of the education, and declines continuously as the level of education rises. But even this statement cannot be taken completely for granted--many governments subsidized universities long before they subsidized lower education. What forms of education have the greatest social advantage and how much of the community's limited resources should be spent on them are questions to be decided by the judgment of the community expressed through its accepted political channels. The role of an economist is not to decide these questions for the community but rather to clarify the issues to be judged by the community in making a choice, in particular, whether the choice is one that it is appropriate or necessary to make on a communal rather than individual basis.

We have seen that both the imposition of a minimum required level of education and the financing of education by the state can be justified by the "neighborhood effects" of education. It is more difficult to justify in these terms a third step that has generally been taken, namely, the actual administration of educational institutions by the government, the "nationalization," as it were, of the bulk of the "education industry." The desirability of such nationalization has seldom been faced explicitly because governments have in the main financed education by paying directly the costs of running educational institutions, so that this step has seemed required by the decision to subsidize education. Yet the two steps could readily be separated. Governments could require a minimum level of education which they could finance by giving parents vouchers redeemable for a specified maximum sum per child per year if spent on "approved" educational services. Parents would then be free to spend this sum and any additional sum on purchasing educational services from an "approved" institution of their own choice. The educational services could be rendered by private enterprises operated for profit, or by non-profit institutions of various kinds. The role of the government would be limited to assuring that the schools met certain minimum standards such as the inclusion of a minimum common content in their programs, much as it now inspects restaurants to assure that they maintain minimum sanitary standards. An excellent example of a program of this sort is

the United States educational program for veterans after World War II. Each veteran who qualified was given a maximum sum per year that could be spent at any institution of his choice, provided it met certain minimum standards. A more limited example is the provision in Britain whereby local authorities pay the fees of some students attending non-state schools (the so-called "public schools"). Another is the arrangement in France whereby the state pays part of the costs for students attending non- state schools.

One argument from the "neighborhood effect" for nationalizing education is that it might otherwise be impossible to provide the common core of values deemed requisite for social stability. The imposition of minimum standards on privately conducted schools, as suggested above, might not be enough to achieve this result. The issue can be illustrated concretely in terms of schools run by religious groups. Schools run by different religious groups will, it can be argued, instill sets of values that are inconsistent with one an other and with those instilled in other schools; in this way they convert education into a divisive rather than a unifying force.

Carried to its extreme, this argument would call not only for governmentally administered schools, but also for compulsory attendance at such schools. Existing arrangements in the United States and most other Western countries are a halfway house. Governmentally administered schools are available but not required. However, the link between the financing of education and its ad ministration places other schools at a disadvantage: they get the benefit of little or none of the governmental funds spent on education--a situation that has been the source of much political dispute, particularly, of course, in France. The elimination of this disadvantage might, it is feared, greatly strengthen the parochial schools and so render the problem of achieving a common core of values even more difficult.

This argument has considerable force. But it is by no means clear either that it is valid or that the denationalizing of education would have the effects suggested. On grounds of principle, it conflicts with the preservation of freedom itself; indeed, this conflict was a major factor retarding the development of state education in England. How draw a line between providing for the common social values required for a stable society on the one hand, and indoctrination inhibiting freedom of thought and belief on the other? Here is an other of those vague boundaries that it is easier to mention than to define.

In terms of effects, the denationalization of education would widen the range of choice available to parents. Given, as at present, that parents can send their children to government schools with out special payment, very few can or will send them to other schools unless they too are subsidized. Parochial schools are at a disadvantage in not getting any of the public funds devoted to education; but they have the compensating advantage of being run by institutions that are willing to subsidize them and can raise funds to do so, whereas there are few other sources of subsidies for schools. Let the subsidy be made available to parents regardless where they send their children--provided only that it be to schools that satisfy specified minimum standards--and a wide variety of schools will spring up to meet the demand. Parents could express their views about schools directly, by withdrawing their children from one school and sending them to another, to a much greater extent than is now possible. In general, they can now take this step only by simultaneously changing their place of residence. For the rest, they can express their views only through cumbrous political channels. Perhaps a somewhat greater degree of freedom to choose schools could be made available also in a governmentally administered system, but it is

hard to see how it could be carried very far in view of the obligation to provide every child with a place. Here, as in other fields, competitive private enterprise is likely to be far more efficient in meeting consumer demands than either nationalized enterprises or enterprises run to serve other purposes. The final result may therefore well be less rather than more parochial education.

Another special case of the argument that governmentally con ducted schools are necessary to keep education a unifying force is that private schools would tend to exacerbate class distinctions. Given greater freedom about where to send their children, parents of a kind would flock together and so prevent a healthy intermingling of children from decidedly different backgrounds. Again, whether or not this argument is valid in principle, it is not at all clear that the stated results would follow. Under present arrangements, particular schools tend to be peopled by children with similar backgrounds thanks to the stratification of residential areas. In addition, parents are not now prevented from sending their children to private schools. Only a highly limited class can or does do so, parochial schools aside, in the process producing further stratification. The widening of the range of choice under a private system would operate to reduce both kinds of stratification.

Another argument for nationalizing education is "natural monopoly." In small communities and rural areas, the number of children may be too small to justify more than one school of reasonable size, so that competition cannot be relied on to protect the interests of parents and children. As in other cases of natural monopoly, the alternatives are unrestricted private monopoly, state-controlled private monopoly, and public operation--a choice among evils. This argument is clearly valid and significant, although its force has been greatly weakened in recent decades by improvements in transportation and increasing concentration of the population in urban communities.

The arrangement that perhaps comes closest to being justified by these considerations--at least for primary and secondary education--is a mixed one under which governments would continue to administer some schools but parents who chose to send their children to other schools would be paid a sum equal to the estimated cost of educating a child in a government school, provided that at least this sum was spent on education in an approved school. This arrangement would meet the valid features of the "natural monopoly" argument, while at the same time it would permit competition to develop where it could. It would meet the just complaints of parents that if they send their children to private nonsubsidized schools they are required to pay twice for education--once in the form of general taxes and once directly--and in this way stimulate the development and improvement of such schools. The interjection of competition would do much to promote a healthy variety of schools. It would do much, also, to introduce flexibility into school systems. Not least of its benefits would be to make the salaries of school teachers responsive to market forces. It would thereby give governmental educational authorities an independent standard against which to judge salary scales and promote a more rapid adjustment to changes in conditions of demand or supply.[2]

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[2] Essentially this proposal--public financing but private operation of education-- has recently been suggested in several southern states as a means of evading the Supreme Court ruling against segregation. This fact came to my attention after this paper was essentially in its present form. My initial reaction--and I venture to predict, that of most readers--was that this possible use of the proposal was a count against it, that it was a particularly striking case of the possible defect--the exacerbating of class distinctions--referred to in the second paragraph preceding the one to which this note is attached.

Why is it that our educational system has not developed along these lines? A full answer would require a much more detailed knowledge of educational history than I possess, and the most I can do is to offer a conjecture. For one thing, the "natural monopoly" argument was much stronger at an earlier date. But I suspect that a much more important factor was the combination of the general disrepute of cash grants to individuals ("handouts") with the absence of an efficient administrative machinery to handle the distribution of vouchers and to check their use. The development of such machinery is a phenomenon of modern times that has come to full flower only with the enormous extension of personal taxation and of social security programs. In its absence, the administration of schools was regarded as the only possible way to finance education. Of course, as some of the examples cited above suggest, some features of the proposed arrangements are present in existing educational systems. And there has been strong and I believe increasing pressure for arrangements of this general kind in most Western countries, which is perhaps to be explained by the modern developments in governmental administrative machinery that facilitate such arrangements.

Many detailed administrative problems would arise in changing over from the present to the proposed system and in administering the proposed system. But these seem neither insoluble nor unique. As in the denationalization of other activities, existing premises and equipment could be sold to private enterprises

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Further thought has led me to reverse my initial reaction. Principles can be tested most clearly by extreme cases. Willingness to permit free speech to people with whom one agrees is hardly evidence of devotion to the principle of free speech; the relevant test is willingness to permit free speech to people with whom one thoroughly disagrees. Similarly, the relevant test of the belief in individual freedom is the willingness to oppose state intervention even when it is designed to prevent individual activity of a kind one thoroughly dislikes. I deplore segregation and racial prejudice; pursuant to the principles set forth at the outset of the paper, it is clearly an appropriate function of the state to prevent the use of violence and physical coercion by one group on another; equally clearly, it is not an appropriate function of the state to try to force individuals to act in accordance with my--or anyone else's--views, whether about racial prejudice or the party to vote for, so long as the action of any one individual affects mostly himself. These are the grounds on which I oppose the proposed Fair Employment Practices Commissions; and they lead me equally to oppose forced nonsegregation. However, the same grounds also lead me to oppose forced segregation. Yet, so long as the schools are publicly operated, the only choice is between forced nonsegregation and forced segregation; and if I must choose between these evils, I would choose the former as the lesser. The fact that I must make this choice is a reflection of the basic weakness of a publicly operated school system. Privately conducted schools can resolve the dilemma. They make unnecessary either choice. Under such a system, there can develop exclusively white schools, exclusively colored schools, and mixed schools. Parents can choose which to send their children to. The appropriate activity for those who oppose segregation and racial prejudice is to try to persuade others of their views; if and as they succeed, the mixed schools will grow at the expense of the nonmixed, and a gradual transition will take place. So long as the school system is publicly operated, only drastic change is possible; one must go from one extreme to the other; it is a great virtue of the private arrangement that it permits a gradual transition.

An example that comes to mind as illustrating the preceding argument is summer camps for children. Is there any objection to the simultaneous existence of some camps that are wholly Jewish, some wholly non-Jewish, and some mixed? One can--though many who would react quite differently to negro-white segregation would not--deplore the existence of attitudes that lead to the three types: one can seek to propagate views that would tend to the growth of the mixed school at the expense of the extremes; but is it an appropriate function of the state to prohibit the unmixed camps?

The establishment of private schools does not of itself guarantee the desirable freedom of choice on the part of parents. The public funds could be made available subject to the condition that parents use them solely in segregated schools; and it may be that some such condition is contained in the proposals now under consideration by southern states. Similarly, the public funds could be made available for use solely in nonsegregated schools. The proposed plan is not therefore inconsistent with forced segregation or forced nonsegregation. The point is that it makes available a third alternative.

that wanted to enter the field, so there would be no waste of capital in the transition. The fact that governmental units, at least in some areas, were going to continue to administer schools would permit a gradual and easy transition. The localized administration of education in the United States and some other countries would similarly facilitate the transition, since it would encourage experimentation on a small scale and with alternative methods of handling both these and other problems. Difficulties would doubtless arise in determining eligibility for grants from a particular governmental unit, but this is identical with the existing problem of determining which unit is obligated to provide educational facilities for a particular child. Differences in size of grants would make one area more attractive than another just as differences in the quality of education now have the same effect. The only additional complication is a possibly greater opportunity for abuse because of the greater freedom to decide where to educate children. Supposed difficulty of administration is a standard defense of the *status quo* against any proposed changes; in this particular case, it is an even weaker defense than usual be cause existing arrangements must master not only the major problems raised by the proposed arrangements but also the additional problems raised by the administration of the schools as a govern mental function.

The preceding discussion is concerned mostly with primary and secondary education. For higher education, the case for nationalization on grounds either of neighborhood effects or of natural monopoly is even weaker than for primary and secondary education. For the lowest levels of education, there is considerable agreement, approximating unanimity, on the appropriate content of an educational program for citizens of a democracy--the three R's cover most of the ground. At successively higher levels of education, there is less and less agreement. Surely, well below the level of the American college, one can expect insufficient agreement to justify imposing the views of a majority, much less a plurality, on all. The lack of agreement may, indeed, extend so far as to cast doubts on the appropriateness of even subsidizing education at this level; it surely goes far enough to undermine any case for nationalization on the grounds of providing a common core of values. Similarly, there can hardly be any question of "natural monopoly" at this level, in view of the distances that individuals can and do go to at tend institutions of higher learning.

Governmental institutions in fact play a smaller role in the United States in higher education than at lower levels. Yet they grew greatly in importance until at least the 1920'S and now ac count for more than half the students attending colleges and universities.[3] One of the main reasons for their growth was their relative cheapness: most State and municipal colleges and universities charge much lower tuition fees than private universities can afford to. Private universities have in consequence had serious financial problems, and have quite properly complained of "unfair" competition. They have wanted to maintain their independence from government, yet at the same time have felt driven by financial pressure to seek government aid.

The preceding analysis suggests the lines along which a satisfactory solution can be found. Public expenditure on higher education can be justified as a means of training youngsters for citizenship and for community leadership--though I hasten to add that the large fraction of current expenditure that goes for strictly vocational training cannot be justified in this way or, indeed, as we shall see, in any other. Restricting the subsidy to education obtained at a state-administered

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[3] See George J. Stigler, Employment and Compensation in Education, (National Bureau of Economic Research, Occasional Paper 33, 1950), p. 33.

institution cannot be justified on these grounds, or on any other that I can derive from the basic principles outlined at the outset. Any subsidy should be granted to individuals to be spent at institutions of their own choosing, provided only that the education is of a kind that it is desired to subsidize. Any government schools that are retained should charge fees covering the cost of educating students and so compete on an equal level with non-government-supported schools. The retention of state schools themselves would, however, have to be justified on grounds other than those we have so far considered.[4] The resulting system would follow in its broad outlines the arrangements adopted in the United States after World War II for financing the education of veterans, except that the funds would presumably come from the States rather than the Federal government.

The adoption of such arrangements would make for more effective competition among various types of schools and for a more efficient utilization of their resources. It would eliminate the pressure for direct government assistance to private colleges and universities and thus preserve their full independence and diversity at the same time that it enabled them to grow relatively to State institutions. It might also have the ancillary advantage of causing a closer scrutiny of the purposes for which subsidies are granted. The subsidization of institutions rather than of people has led to an indiscriminate subsidization of whatever activities it is appropriate for such institutions to undertake, rather than of the activities it is appropriate for the state to subsidize. Even cursory examination suggests that while the two classes of activities over lap, they are far from identical.

Vocational or Professional Education

As noted above, vocational or professional education has no neighborhood effects of the kind attributed above to general education. It is a form of investment in human capital precisely analogous to investment in machinery, buildings, or other forms of non human capital. Its function is to raise the economic productivity of the human being. If it does so, the individual is rewarded in a free enterprise society by receiving a higher return for his services than he would otherwise be able to command.[5] This difference is the economic incentive to acquire the specialized training, just as the extra return that can be obtained with an extra machine is the economic incentive to invest capital in the machine. In both cases, extra returns must be balanced against the costs of acquiring them. For vocational education, the major costs are the income foregone during the period of training, interest lost by postponing the beginning of the earning period, and special expenses of acquiring the training such as tuition fees and expenditures on books and equipment. For physical capital, the major costs are the expenses of constructing the capital equipment and the interest during construction. In both cases, an individual presumably regards the investment as desirable if the extra returns, as he views them, exceed the extra costs, as he views them.[6] In both cases, if the individual undertakes the investment and if the state neither subsidizes the investment nor taxes the return,

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[4] The subsidizing of basic research for example. I have interpreted education narrowly so as to exclude considerations of this type which would open up an unduly wide field.

[5] The increased return may be only partly in a monetary form; it may also consist of non-pecuniary advantages attached to the occupation for which the vocational training fits the individual. Similarly, the occupation may have non-pecuniary disadvantages, which would have to be reckoned among the costs of the investment.

[6] For a more detailed and precise statement of the considerations entering into the choice of an occupation, see Milton Friedman and Simon Kuznets, *Income from Independent Professional Practice*, (National Bureau of Economic Research, N.Y., 194w pp. 81--94, st8--37.

the individual (or his parent, sponsor, or benefactor) in general bears all the extra cost and receives all the extra returns: there are no obvious unborne costs or unappropriable returns that tend to make private incentives diverge systematically from those that are socially appropriate.

If capital were as readily available for investment in human beings as for investment in physical assets, whether through the market or through direct investment by the individuals concerned or their parents or benefactors, the rate of return on capital would tend to be roughly equal in the two fields: if it were higher on non-human capital, parents would have an incentive to buy such capital for their children instead of investing a corresponding sum in vocational training, and conversely. In fact, however, there is considerable empirical evidence that the rate of return on investment in training is very much higher than the rate of return on investment in physical capital. According to estimates that Simon Kuznets and I have made elsewhere, professionally trained workers in the United States would have had to earn during the 1930's at most 70 per cent more than other workers to cover the extra costs of their training, including interest at roughly the market rate on non-human capital. In fact, they earned on the average between two and three times as much.[7] Some part of this difference may well be attributable to greater natural ability on the part of those who entered the professions: it may be that they would have earned more than the average non-professional worker if they had not gone into the professions. Kuznets and I concluded, however, that such differences in ability could not explain anything like the whole of the extra return of the professional workers.[8] Apparently, there was sizable underinvestment in human beings. The postwar period has doubtless brought changes in the relative earnings in different occupations. It seems extremely doubtful, however, that they have been sufficiently great to reverse this conclusion.

It is not certain at what level this underinvestment sets in. It clearly applies to professions requiring a long period of training, such as medicine, law, dentistry, and the like, and probably to all occupations requiring a college training. At one time, it almost certainly extended to many occupations requiring much less training but probably no longer does, although the opposite has some times been maintained.[9]

This underinvestment in human capital presumably reflects an imperfection in the capital market: investment in human beings cannot be financed on the same terms or with the same ease as investment in physical capital. It is easy to see why there would be such a difference. If a fixed money loan is made to finance investment in physical capital, the lender can get some security for his loan in the form of a mortgage or residual claim to the physical asset itself, and he can count on realizing at least part of his investment in case of necessity by selling the physical asset. If he makes a comparable loan to increase the earning power of a human being, he clearly cannot get any comparable security; in a non-slave state, the individual embodying the investment cannot be bought and sold. But even if he could, the security would not be comparable. The productivity of the physical capital does not--or at least generally does not--depend on the co-operativeness of the original borrower. The productivity of the human capital quite obviously does--which is, of course, why, all ethical considerations aside, slavery is economically inefficient. A loan to finance the training of an

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[7] *Ibid.*, pp. 68--69, 84, 148--51.
[8] *Ibid.*, pp. 88--94.
[9] *Education and Economic Well-Being in American Democracy*, (Educational Policies Commission, National Education Association of United States and American Association of School Administrators, 1940).

individual who has no security to offer other than his future earnings is therefore a much less attractive proposition than a loan to finance, say, the erection of a building: the security is less, and the cost of subsequent collection of interest and principal is very much greater.

A further complication is introduced by the inappropriateness of fixed money loans to finance investment in training. Such an investment necessarily involves much risk. The average expected return may be high, but there is wide variation about the average. Death or physical incapacity is one obvious source of variation but is probably much less important than differences in ability, energy, and good fortune. The result is that if fixed money loans were made, and were secured only by expected future earnings, a considerable fraction would never be repaid. In order to make such loans attractive to lenders, the nominal interest rate charged on all loans would have to be sufficiently high to compensate for the capital losses on the defaulted loans. The high nominal interest rate would both conflict with usury laws and make the loans unattractive to borrowers, especially to borrowers who have or expect to have other assets on which they cannot currently borrow but which they might have to realize or dispose of to pay the interest and principal of the loan.[10] The device adopted to meet the corresponding problem for other risky investments is equity investment plus limited liability on the part of shareholders. The counterpart for education would be to "buy" a share in an individual's earning prospects: to advance him the funds needed to finance his training on condition that he agree to pay the lender a specified fraction of his future earnings. In this way, a lender would get back more than his initial investment from relatively successful individuals, which would compensate for the failure to recoup his original investment from the unsuccessful.

There seems no legal obstacle to private contracts of this kind, even though they are economically equivalent to the purchase of a share in an individual's earning capacity and thus to partial slavery. One reason why such contracts have not become common, despite their potential profitability to both lenders and borrowers, is presumably the high costs of administering them, given the freedom of individuals to move from one place to another, the need for getting accurate income statements, and the long period over which the contracts would run. These costs would presumably be particularly high for investment on a small scale with a resultant wide geographical spread of the individuals financed in this way. Such costs may well be the primary reason why this type of investment has never developed under private auspices. But I have never been able to persuade myself that a major role has not also been played by the cumulative effect of such factors as the novelty of the idea, the reluctance to think of investment in human beings as strictly comparable to investment in physical assets, the resultant likelihood of irrational public condemnation of such contracts, even if voluntarily entered into, and legal and conventional limitation on the kind of investments that may be made by the financial intermediaries that would be best suited to engage in such investments, namely,

[10] Despite these obstacles to fixed money loans, I am told that they have been a very common means of financing university education in Sweden, where they have apparently been available at moderate rates of interest. Presumably a proximate explanation is a smaller dispersion of income among university graduates than in the United States. But this is no ultimate explanation and may not be the only or major reason for the difference in practice. Further study of Swedish and similar experience is highly desirable to test whether the reasons given above are adequate to explain the absence in the United States and other countries of a highly developed market in loans to finance vocational education, or whether there may not be other obstacles that could be removed more easily.

life insurance companies. The potential gains, particularly to early entrants, are so great that it would be worth incurring extremely heavy administrative costs.[11]

But whatever the reason, there is clearly here an imperfection of the market that has led to underinvestment in human capital and that justifies government intervention on grounds both of "natural monopoly," insofar as the obstacle to the development of such investment has been administrative costs, and of improving the operation of the market, insofar as it has been simply market frictions and rigidities.

What form should government intervention take? One obvious form, and the only form that it has so far taken, is outright government subsidy of vocational or professional education financed out of general revenues. Yet this form seems clearly inappropriate. Investment should be carried to the point at which the extra return repays the investment and yields the market rate of interest on it. If the investment is in a human being, the extra return takes the form of a higher payment for the individual's services than he could otherwise command. In a private market economy, the individual would get this return as his personal income, yet if the investment were subsidized, he would have borne none of the costs. In consequence, if subsidies were given to all who wished to get the training, and could meet minimum quality standards, there would tend to be overinvestment in human beings, for individuals would have an incentive to get the training so long as it yielded any extra return over private costs, even if the return were insufficient to repay the capital invested, let alone yield any interest on it. To avoid such overinvestment, government would have to restrict the subsidies. Even apart from the difficulty of calculating the "correct" amount of investment, this would involve rationing in some essentially arbitrary way the limited amount of investment among more claimants than could be financed, and would mean that those fortunate enough to get their training subsidized would receive all the returns from the investment whereas the costs would be borne by the taxpayers in general. This seems an entirely arbitrary, if not perverse, redistribution of income.

The desideratum is not to redistribute income but to make capital available for investment in human beings on terms comparable to those on which it is available for physical investment. Individuals should bear the costs of investment in themselves and receive the rewards, and they should not be prevented by market imperfections from making the investment when they are willing to bear the costs. One way to do this is to have government engage in equity investment in human beings of the kind described above. A governmental body could offer to finance or help finance the training of any individual who could meet minimum quality standards by making available not more than a limited sum per year for not more than a specified number of years, provided it was spent on securing training at a recognized institution. The individual would agree in return to pay to the government in each future year x per cent of his earnings in excess of y dollars for each $1,000 that he gets in this way. This payment could easily be combined with payment of income tax and so involve a minimum of additional administrative expense. The base sum, $y, should be set

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[11] It is amusing to speculate on how the business could be done and on some ancillary methods of profiting from it. The initial entrants would be able to choose the very best investments, by imposing very high quality standards on the individuals they were willing to finance, if they did so, they could increase the profitability of their investment by getting public recognition of the superior quality of the individuals they financed: the legend, "Training financed by XYZ Insurance Company" could be made into an assurance of quality (like "Approved by Good Housekeeping") that would attract custom. All sorts of other common services might he rendered by the XYZ company to "its" physicians, lawyers, dentists, and so oil.

equal to estimated average --or perhaps modal--earnings without the specialized training; the fraction of earnings paid, x, should be calculated so as to make the whole project self-financing. In this way the individuals who received the training would in effect bear the whole cost. The amount invested could then be left to be determined by individual choice. Provided this was the only way in which government financed vocational or professional training, and provided the calculated earnings reflected all relevant returns and costs, the free choice of individuals would tend to produce the optimum amount of in vestment.

The second proviso is unfortunately not likely to be fully satisfied. In practice, therefore, investment under the plan would still be somewhat too small and would not be distributed in the optimum manner. To illustrate the point at issue, suppose that a particular skill acquired by education can be used in two different ways; for example, medical skill in research or in private practice. Suppose that, if money earnings were the same, individuals would generally prefer research. The non-pecuniary advantages of research would then tend to be offset by higher money earnings in private practice. These higher earnings would be included in the sum to which the fraction x was applied whereas the monetary equivalent of the non-pecuniary advantages of research would not be. In consequence, the earnings differential would have to be higher under the plan than if individuals could finance themselves, since it is the net monetary differential, not the gross, that individuals would balance against the non-pecuniary advantages of research in deciding how to use their skill. This result would be produced by a larger than optimum fraction of individuals going into research necessitating a higher value of x to make the scheme self-financing than if the value of the non-pecuniary advantages could be included in calculated earnings. The inappropriate use of human capital financed under the plan would in this way lead to a less than optimum incentive to invest and so to a less than optimum amount of investment.[12][12]

Estimation of the values of x and y clearly offers considerable difficulties, especially in the early years of operation of the plan, and the danger would always be present that they would become political footballs. Information on existing earnings in various occupations is relevant but would hardly permit anything more than a rough approximation to the values that would render the project self-financing. In addition, the values should in principle vary from individual to individual in accordance with any differences in expected earning capacity that can be predicted in advance--the problem is similar to that of varying life insurance premia among groups that have different life expectancy. For such reasons as these it would be preferable if similar arrangements could be developed on a private basis by financial institutions in search of outlets for investing their funds, non-profit institutions such as private foundations, or individual universities and colleges.

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[12] The point in question is familiar in connection with the disincentive effects of income taxation. An example that perhaps makes this clearer than the example in the text is to suppose that the individual can earn $5 say, by some extra work and would just be willing to do so if he could keep the whole $5--that is, he values the non- pecuniary costs of the extra work at just under $5. If x is, say, 0.10, he only keeps $4.50 and this will not be enough to induce him to do the extra work. It should be noted that a plan involving fixed money loans to individuals might be less seriously affected by differences among various uses of skills in non-pecuniary re turns and costs than the plan for equity investment under consideration. It would not however be unaffected by them; such differences would tend to produce different frequencies of default depending on the use made of the skill and so unduly favor uses yielding relatively high non-pecuniary returns or involving relatively low non pecuniary costs. I am indebted to Harry G. Johnson and Paul W. Cook, Jr., for suggesting the inclusion of this qualification. For a fuller discussion of the role of nonpecuniary advantages and disadvantages in determining earnings in different pursuits, see Friedman and Kuznets, *loc. cit*.

Insofar as administrative expense is the obstacle to the development of such arrangements on a private basis, the appropriate unit of government to make funds available is the Federal government in the United States rather than smaller units. Any one State would have the same costs as an insurance company, say, in keeping track of the people whom it had financed. These would be minimized for the Federal government. Even so, they would not be completely eliminated. An individual who migrated to another country, for example, might still be legally or morally obligated to pay the agreed-on share of his earnings, yet it might be difficult and expensive to enforce the obligation. Highly successful people might therefore have an incentive to migrate. A similar problem arises, of course, also under the income tax, and to a very much greater extent. This and other administrative problems of conducting the scheme on a Federal level, while doubtless troublesome in detail, do not seem serious. The really serious problem is the political one already mentioned: how to prevent the scheme from becoming a political football and in the process being converted from a self- financing project to a means of subsidizing vocational education.

But if the danger is real, so is the opportunity. Existing imperfections in the capital market tend to restrict the more expensive vocational and professional training to individuals whose parents or benefactors can finance the training required. They make such individuals a "non-competing" group sheltered from competition by the unavailability of the necessary capital to many individuals, among whom must be large numbers with equal ability. The result is to perpetuate inequalities in wealth and status. The development of arrangements such as those outlined above would make capital more widely available and would thereby do much to make equality of opportunity a reality, to diminish inequalities of in come and wealth, and to promote the full use of our human resources. And it would do so not, like the outright redistribution of income, by impeding competition, destroying incentive, and dealing with symptoms, but by strengthening competition, making incentives effective, and eliminating the causes of inequality.

Conclusion

This re-examination of the role of government in education suggests that the growth of governmental responsibility in this area has been unbalanced. Government has appropriately financed general education for citizenship, but in the process it has been led also to administer most of the schools that provide such education. Yet, as we have seen, the administration of schools is neither required by the financing of education, nor justifiable in its own right in a predominantly free enterprise society. Government has appropriately been concerned with widening the opportunity of young men and women to get professional and technical training, but it has sought to further this objective by the inappropriate means of subsidizing such education, largely in the form of making it available free or at a low price at governmentally operated schools.

The lack of balance in governmental activity reflects primarily the failure to separate sharply the question what activities it is appropriate for government to *finance* from the question what activities it is appropriate for government to *administer*--a distinction that is important in other areas of government activity as well. Because the financing of general education by government is widely accepted, the provision of general education directly by govern mental bodies has also been accepted. But institutions that provide general education are especially well suited also to provide some kinds of vocational and professional education, so the acceptance of direct government provision of general education has led to the direct provision of vocational education. To complete

the circle, the provision of vocational education has, in turn, meant that it too was financed by government, since financing has been predominantly of educational institutions not of particular kinds of educational services.

The alternative arrangements whose broad outlines are sketched in this paper distinguish sharply between the financing of education and the operation of educational institutions, and between education for citizenship or leadership and for greater economic productivity. Throughout, they center attention on the person rather than the institution. Government, preferably local governmental units, would give each child, through his parents, a specified sum to be used solely in paying for his general education; the parents would be free to spend this sum at a school of their own choice, provided it met certain minimum standards laid down by the appropriate governmental unit. Such schools would be conducted under a variety of auspices: by private enterprises operated for profit, non profit institutions established by private endowment, religious bodies, and some even by governmental units.

For vocational education, the government, this time however the central government, might likewise deal directly with the individual seeking such education. If it did so, it would make funds available to him to finance his education, not as a subsidy but as "equity" capital. In return, he would obligate himself to pay the state a specified fraction of his earnings above some minimum, the fraction and minimum being determined to make the program self-financing. Such a program would eliminate existing imperfections in the capital market and so widen the opportunity of individuals to make productive investments in themselves while at the same time assuring that the costs are borne by those who benefit most directly rather than by the population at large. An alternative, and a highly desirable one if it is feasible, is to stimulate private arrangements directed toward the same end.

The result of these measures would be a sizable reduction in the direct activities of government, yet a great widening in the educational opportunities open to our children. They would bring a healthy increase in the variety of educational institutions available and in competition among them. Private initiative and enterprise would quicken the pace of progress in this area as it has in so many others. Government would serve its proper function of improving the operation of the invisible hand without substituting the dead hand of bureaucracy.

Note: I am indebted to P. T. Bauer, A. R. Prest, and H. G. Johnson for helpful comments on an earlier draft of this paper.

Appendix G

Pgs. 95 – 127 from The *Manufactured Crisis*

The Manufactured Crisis

Myths, Fraud, and the Attack on America's Public Schools

David C. Berliner • Bruce J. Biddle

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force. In *no* case were skills of the labor force a factor in the productivity of an industry, while *in every case* the behavior of managers was a major factor determining industry's productivity. (So much for the argument that worker skills are crucial. Actually, the evidence suggests that *managerial* skills make the most difference.)

Moreover, the tale of American productivity goes on. According to *Newsweek*, in 1991, a recession year for the United States, 18 million workers in our country produced *twice* as much in manufactured goods as 19.2 million workers did in 1966.[53] Since 1982 the per-unit costs of factory output have *fallen* in our nation while they *rose* by 48 percent in France, 67 percent in Japan, and 76 percent in Germany. And in 1993 Harvard economist Dale Jorgenson estimated that American productivity was 10 to 15 percent higher than productivity in Japan and that it was growing just as fast as the latter.[54]

Thus, a decade ago, industrial critics were arguing that American industry was in trouble because our workers were nonproductive, and they claimed that the schools were responsible because they were turning out such deficient workers. Neither notion has ever been backed by a shred of evidence. Now that American business productivity is shooting ahead, we would like to see the critics who made these arguments turn around and compliment American workers and their schools. But we won't hold our breaths.

Curiously, the amazing productivity of America's highly skilled work force has also caused our country to lose a number of high-wage jobs. High levels of worker efficiency also appear to be a major factor holding back job growth in our country.[55] We are eliminating our own sources of livelihood by our extraordinary increases in productivity. How on earth would those who expect high-level skills to translate into high-wage jobs interpret this phenomenon?

Myth: Because of Inadequate Schooling, American Industries Must Spend Vast Amounts for Remedial Training of their Workers. *A Nation at Risk* also asserted that business leaders "are required to spend millions of dollars on costly remedial education and training programs in such basic skills as reading, writing, spelling and computation,"[56] and that claim was subsequently repeated by various business leaders. This myth also flies in the face of evidence.

The facts are quite simple. Industry does, indeed, spend billions of dollars on training. By one estimate, the industrial-training bill for 1990 was a staggering 45 billion dollars. Other estimates place the bill at somewhere between 30 to 60 billion dollars and suggest that actual expenditures could easily be twice that amount if informal on-the-job training were taken into account.[57] But these huge sums are typically *not* spent for the remediation of deficient skills among an unprepared work force. *The Sandia Report* noted that *two-thirds* of industrial training dollars go to college-educated employees—salespeople, first-line supervisors, professionals, white-collar managers, and the like.[58] Most of the rest of the training dollars go to upgrade the skills of technicians and craftspeople—tool makers and machine operators, for example. Less than *ten* percent of all dollars that business spends on training goes to blue-collar, entry-level people, and even then most of that money is not spent on remediation of deficient skills but on orientation to the firm or on motivational training programs.

How much, then, does industry actually spend on remediation? Sandia analysts estimated that remedial training, the stuff of which the myth is made, accounts for only two to four percent of training dollars. And, they reported that remedial training in the three Rs is virtually nonexistent among the eighty million or so workers employed in businesses with less than 100 employees. So much for the myth that American industry must provide remedial training for hordes of uneducated, incompetent workers!

Summary. We've now examined several myths that are promoted by critics who would like to blame education for problems that are supposedly faced by or are looming for American industry. And we have learned that not one scintilla of evidence supports these myths. Indeed, most of the supposed problems cited in the myths turn out to be fictions, while the few problems that are real have been generated by poor federal policies and managerial incompetence. No evidence can be found that would tie *any* of these (supposed) problems to America's schools.

All of which raises interesting questions. Why have Americans been so willing to embrace these myths? Why have they not greeted the nonsense these myths represent with disbelief and laughter? We suspect that the answers to these questions reflect Americans' long-standing acceptance of the ideas that education *can* and *should* serve the needs of industry, that businesses must have an educated work force, and that investments in public education are needed to fuel the American economy. These ideas may reflect grains of truth, but they are too often oversold. In their worst form, they suggest the philistine notion that the existence of public schools is *only* justified because of their contributions to industry. But even when Americans recognize that education contributes in other ways to quality of life, they often think that industrial concerns take precedence when making policy decisions about schools.

It is time to embrace a more balanced view of the contributions of public education. Schools in our country serve *many* needs and institutions, and their contributions to industry are only part of the picture. Indeed, as our work force is restructured and the population is provided more leisure, *other* contributions of education become more and more important.

MYTH . . . *American Education Doesn't Produce Enough Scientists, Mathematicians, and Engineers*

Education in America is broadly viewed as a system in crisis. Helping students to develop competence in mathematics and science is of particular concern because of

the predicted catastrophic shortfalls by the turn of the century with regard to the number of scientists, engineers, and technicians needed to "run the country" and keep America economically competitive.

—Charles Spielberger, writing as Former President of the American Psychological Association (1993, p. xi)

Of all the nonsense associated with the Manufactured Crisis, the notion that America doesn't produce enough scientists, mathematicians, and engineers seems to have created the most mischief among academics and politicians. The myth has been asserted, repeated, and elaborated on in countless scholarly articles, professional books, and speeches by leaders of the academic community. Moreover, it has stimulated actions in Congress that have increased substantially the production of technically trained persons and is often cited today by educational leaders who want to cozy up to industry or to improve mathematics and science education.

Why has this myth proved so popular? To begin with, it feeds on a broader set of ideas that Americans have embraced since World War II; Americans view science as a form of magic that can "save" not only our society but Western civilization. The myth also fits with one of the core commitments of higher education—that American society will be better off if we educate more and more of our citizens to high standards in core subjects. Further, it serves specific business concerns, since key industrialists have argued for at least a decade that America needs more scientific leadership if it is to remain competitive in the world market. (Moreover, as a cynic would see it, when the supply of scientists, mathematicians, and engineers is increased, industry benefits because it can hire people with these skills for lower wages.)

These reasons help us to understand why the myth is so readily embraced, but they don't explain why belief in it flowered so strikingly a decade ago. Actually, this is no mystery. The myth was SOLD to the American people by a major federal agency that normally prides itself on its honesty and respect for evidence.

In 1985 the National Science Foundation (NSF), no less, began an energetic campaign to sell the myth, basing its actions on a seriously flawed study that had been conducted by one of its own staff members. The study in question argued that *supplies* of scientists and engineers would shortly decline in America and that this meant we had to increase production of people with these skills. This thesis was dubious at best, but, worse, the study made no estimates of job-market *demands* for scientists and engineers. Thus, the researcher completely forgot to worry about whether these people were likely to find jobs.

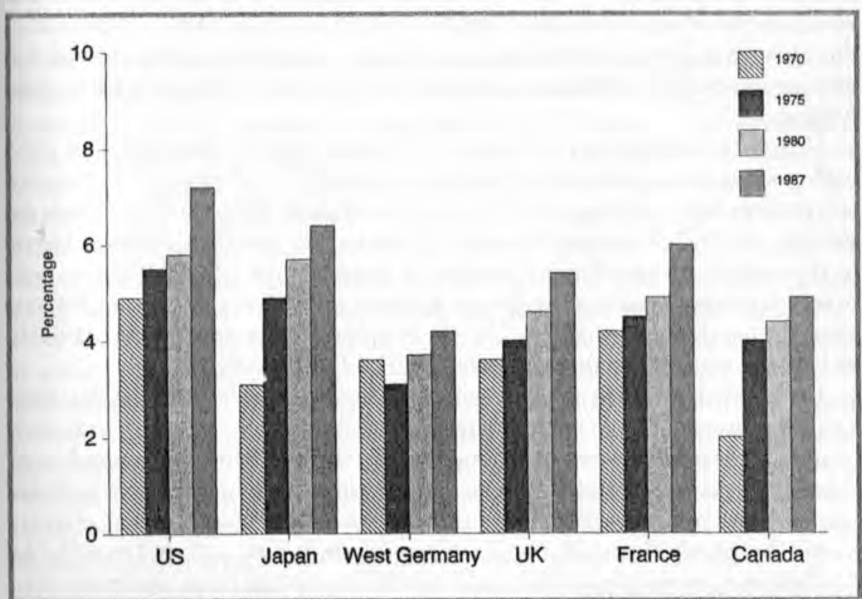
Endless versions of this flawed study were prepared and distributed by the NSF, outside peer reviews of the issue were avoided, and contradicting data were ignored or suppressed. Many, many speeches on the topic were delivered by the Director of the NSF, Erich Bloch, who argued that the nation faced

a serious "crisis" and *had* to step up its production of scientists and engineers. This myth-selling campaign lasted for at least five years. Indeed, the NSF efforts were not completely squelched until April of 1992, when they were whistled to a stop by an angry Congressional committee.

Supply. The trouble with this myth is that it is contradicted by *all* available evidence. Despite claims from the NSF, evidence indicates that the *supply* of young scientists and engineers is *not* declining in America. *The Sandia Report*[59] summarized data from the National Center for Education Statistics that showed not only that America leads the world in the percentage of its college graduates who obtain degrees in science and engineering, but that since 1970 this percentage has been climbing steadily (see Exhibit 3.11).

Additional evidence from the National Center for Education Statistics extends the Sandia case. In the two decades from 1971 to 1991, America either maintained or enlarged its production of young people with bachelor's, master's, and doctor's degrees in most fields of science and engineering.[60] We should note, too, that in 1990 alone, 120,000 students received Associate of Arts degrees in science and technology from junior and technical colleges.[61]

Exhibit 3.11 Percentage of 22-Year-Olds Obtaining a Bachelor's Degree in Science or Engineering



—Source: *The Sandia Report* (Carson et al., 1991, p. 103).
—Statistical Source: National Center for Education Statistics.

Moreover, it appears that the number of minority and women students who take bachelor's, master's, and doctor's degrees in these technical areas is climbing. For example, in America 35 percent of new scientists are women, as compared with only 10 percent in Japan.[62] Apart from the greater equity this comparison reveals, if such trends continue, America will be drawing from a *much* larger pool of talent for its next generation of scientists. (We can only hope that these trends will not be reversed by recent reductions in federal support of higher education for poor and minority students. That support has withered while costs for post-secondary education have increased sharply all over America.)

Demand. So much for supply. What about the *demand* for scientists, mathematicians, and engineers? The evidence indicates that supply is *far exceeding* demand. First of all, America now exceeds or is at parity with *all* of our economic competitors in terms of the technical competence of our work force—as measured, for example, in the number of engineers and physical scientists in the work force per hundred workers.[63] So if America is actually losing its economic edge in the world marketplace, as some industrialists claim, this is certainly *not* due to the lack of a technically skilled work force.

Characteristics of our present work force aside, the fact is many young scientists and engineers who are now trying to enter the job market *cannot* find work. Pascal Zachary, writing in the *Wall Street Journal,* notes that *hundreds* of America's young scientists and engineers cannot find jobs for which they are trained and describes their plight as a "black hole."[64] Similarly, the *New York Times* reports that a mere *813* scientists recently applied for one junior-faculty position in physics advertised by Amherst College (see Exhibit 3.12).

This is not a transitory problem. *The Sandia Report* estimated that even with *no* increase in the rate of supply of scientists and engineers, America will accumulate a surplus of about *1 million* of these trained professionals by the year 2010.[65] But this may actually underestimate the problem. Given further reduction in military spending in America, the failure of senior academics to retire as early as predicted, and an influx of scientists from Eastern Europe and the former Soviet Union, the glut of trained scientists is likely to be even worse than that estimated in *The Sandia Report.*

Yet another problem plagues young scientists who are looking for jobs. The 1980s were a decade of federal irresponsibility, corporate greed and quick profits, business takeovers, and junk bonds. These activities generated huge debts for many of America's major corporations, and one tragic way those corporations have met their debts is by the closing of their research departments. An illustrative story appeared recently in the *New York Times.*[66] The Phillips petroleum research laboratory in Oklahoma had employed more than one thousand research workers in the early 1980s, generating more patents for Phillips than for any other oil company in our country. The laboratory

■ **EXHIBIT 3.12**

On the Need for Scientists

Even as leading scientists warn that America's educational system is failing to produce scientists fast enough to fill a glaring projected shortage, many young physicists contend that universities are already turning out far more physicists than there are permanent jobs.

Permanent research jobs for young physicists have virtually dried up, partly because the recession has dramatically undercut the resources of universities and commercial research institutions. In addition, physicists in senior faculty and research positions who had been expected to retire in large numbers . . . have not done so. At the same time, a growing tide of physicists emigrating from the former Soviet Union and Eastern Europe has begun to exacerbate the glut of American physicists.

The situation was underscored last month when [the] chairman of the physics department at Amherst College disclosed that 813 physicists had applied for a single job on the college's faculty. About three-quarters were recent recipients of doctoral degrees. . . .

In 1990 . . . 12 percent of all physicists with recent doctorates seeking positions received no job offers at all, and fifty percent received only one.

—Source: Browne (1992).

studied how to develop new products from gas and oil and explored the uses of new technologies, such as the use of nuclear fusion for the production of electricity. In 1984, however, a corporate raider, T. Boone Pickens, mounted a hostile takeover on Phillips. To protect itself the company went billions of dollars into debt to buy back its own stock. When the scare was over, they cut their research facility in half—they could no longer afford it. (The *Times* article also described how, when the General Electric Corporation (GE) bought out the Radio Corporation of America (RCA), one of the first things it did was to jettison RCA's prestigious David Sarnoff Research Center.)

As America's industrial research closed down, it not only threw thousands of scientists and engineers out of work, it also cut into the production of new inventions in our country. As a result, patents awarded to American companies have also declined sharply. Believe it or not, in 1991, the three companies awarded the most patents in the *United States* were Japanese: Toshiba, with 1,014, Mitsubishi, with 936, and Hitachi, with 927. Eastman Kodak ranked fourth, Canon (also a Japanese company) placed fifth, and General Electric, which once was number one in the world, had moved to sixth place. Some critics have cited this loss in the patent race as yet another example of the failure of our schools to provide technically able people who can create jobs for the future. But blame for this loss in the patent race should

not be laid at the doors of America's schools; rather, it belongs at the doors of the federal government and of the board rooms of American industry. Unwise governmental policies and industrial shortsightedness have combined to create low demands for industrial research and workers trained in science and technology.

Shifts in the Job Market. Finally, demands for scientists and other highly educated people are also declining because of evolving shifts in the job market. Lawrence Mishel and Ruy Teixeira of the Economic Policy Institute estimate that the occupations requiring the most highly skilled workers will make up only *6* percent of the job pool by the year 2000.[67] On the other hand, service jobs, requiring the least technical skill, will grow rapidly in the next few years and should constitute about *17* percent of the job pool by the year 2000.

Robert Reich also recently reviewed the job market.[68] Reich estimated that one-fourth of new jobs in the last decade fell into "routine production services," which can be successfully filled by individuals with only basic literacy and numeracy. A second set of new jobs constituted "in-person services" such as clerking in retail stores, waiting on tables, and clerking in banks. These jobs require a high school diploma, some vocational training, and a good demeanor since they involve contact with the public. Reich estimated that 30 percent of new jobs in 1990 fell into this category, and that the proportion was growing rapidly. A third type of new job consisted of "symbolic analysts," the computer designers and programmers, financial planners and architects, marketing managers and chemists of America. Jobs in this last category command the highest salaries, status, and power, of course, and require four or more years of college; but Reich estimated that they constituted only 20 percent of the total number of new jobs available in 1990. (By way of contrast, America is now awarding bachelor's degrees to about *30* percent of its young people!)

In a recent article, Richard Rothstein noted that "the Bureau of Labor Statistics expects 'paralegals' to be the nation's fastest-growing occupation, with employment increasing from the years 1988 to 2000 by 75 percent. But this growth means just 62,000 new jobs."[69] By way of contrast, the growth rate for jobs as custodians and housekeepers will only be 19 percent, but that will generate 556,000 new jobs over the same time period, and 4 percent of *all* job growth in the U.S. by the year 2000 should be in one category—retail sales.[70] Further, columnist Edward Fiske noted that in 1989 the economy was creating *nine* new cashier jobs for every computer-programming job.[71] Moreover, the United States now has 1.5 times as many janitors as it has lawyers, accountants, investment bankers, stockbrokers, and computer programmers combined.[72]

What the country's job market needs most, then, are not physicists, mathematicians, engineers, and other people with high-level technical skills but rather a whole lot of people to work at jobs that are not intellectually challenging—driving vehicles of various types; doing typing, word processing, and data entry; cleaning; selling in retail stores; waiting on tables; and providing services for others in need. However, most of these jobs do not pay well. So if these low-level jobs are to constitute, let us say, 80 percent of the job market in the near future, America must also find ways to pay decent wages to those who hold these jobs. If not, and if more and more people with college degrees must take on these jobs, we can expect a good deal of turmoil in our country.

What, then, is the future for the many technically trained, ambitious college graduates whom parents, politicians, the press, and business leaders want us to have? There are those who say we need not worry about this problem, that higher average levels of education will help to generate high-status, high-paying jobs. That is the thesis of Marc Tucker and Ray Marshall, who argue that the reform of schooling should lead to the production of many more people capable of high-level symbolic analysis, and that those people can help to create the sophisticated jobs of the future.[73] Some people in the Clinton administration also appear to have this same mind-set, promoting federally supported training programs as a way to insure that America will have a highly educated populace and therefore a high-status work force.

But evidence suggests that we already have *too many* college graduates for the high-status jobs that are available. Richard Rothstein claimed that 20 percent of those earning a college degree in 1990 took work in jobs that did not require such a degree or found no work at all. And that rate is up sharply from 1968, when it was 11 percent.[74] Thus, when American education produced more people with high levels of qualification, this did *not* lead to equivalent numbers of high-wage jobs. Moreover, Rothstein noted that there are now 644,000 college graduates working as retail sales clerks, 83,000 laboring as housekeepers or custodians, and 166,000 driving trucks and buses. Blue-collar workers now include among their number some 1.3 million college graduates, which is double the rate of fifteen years ago. And despite their college degrees, four hundred thousand college graduates were unemployed before the 1989–1992 recession began.

Thus, the evidence does *not* suggest that high levels of education automatically translate into high-status jobs. Rather, it seems more likely that the creation of more high-status jobs would translate into greater demands for education. All of which implies that at least one educational commitment of the Clinton administration is seriously flawed.

Perhaps, in our collective zeal to promote higher education, Americans have overstressed the tie between qualifications and employment. It is one thing to point out that undergraduate and postgraduate degrees increase the individual's chances of landing a good job; it is another thing entirely to claim that good jobs are guaranteed for all those with high-level qualifications. In an era of increasing unemployment and high demand for low-status work, perhaps we should be stressing the other benefits of higher education—its

ability to develop an appreciation of the arts and humanities, to encourage awareness of social problems and the need for moral political conduct, to instill fascination with the mysteries of the biological and physical world, to promote the joy of learning for its own sake. Such benefits can enrich the lives of both those who do and those who do not succeed in finding high-status jobs.

Summary. Despite claims you may have heard or read, America today does *not* have a shortfall of scientists, mathematicians, and engineers. Instead, our country currently has a *surplus* of people with high-level technical qualifications. Moreover, it seems unlikely that the economy of the future will require large increases in the numbers of jobs for these and other highly qualified people. But that does *not* mean that America should shut down its production of highly educated, able people. Far from it! Our nation *needs* a highly educated population. We *need* a citizenry that knows enough mathematics and science, history and philosophy, psychology, sociology, political science, and economics to understand and evaluate solutions that are proposed for the complicated problems of our perplexing world. And we need a citizenry that appreciates and participates in many types of artistic, creative, and recreational enterprises, for these are the tools from which meaningful lives can be built—whether or not one holds a high-status job.

Building broad competency in science and other fields of higher education is absolutely necessary if our nation is to thrive and if our citizens are to lead meaningful lives. In saying this, we are again noting that education is associated with important goals that extend far beyond the work place. Americans have too often justified higher education by its association with high-status jobs. Such associations are not only philistine but are also becoming less tenable in a world where qualifications no longer guarantee employment. It is time to remember that there are *many* reasons for higher education, among them those associated with the complex demands of democratic citizenship and with learning how to live a good and fulfilling life. These benefits have always been there, of course, but they should now be looming larger in debates about the future of education in a post-industrial society.

MYTH . . . Those Who Enter Teaching Have Little Ability and Receive a Poor Academic Education

The worst of the ed schools are certification mills where the minimally qualified instruct the barely literate in a parody of learning.

—Rita Kramer (Reciting the sins of a "professional education industry," 1991)

For many years some critics have argued that the average teacher in America is hopeless. Those who choose to teach are portrayed as representing the bottom of the academic barrel. In addition, colleges of education are considered to be at best mediocre and at worst hopelessly inadequate institutions. As we shall see, the truth is far more complex and flattering to education than the myth would have it.

Our country places high value on the possession of material goods and social status, and thoughtful high school students surely know that teaching is not the royal road to high income and prestige. Moreover, the prospect for teachers has worsened in the past generation, an issue discussed cogently by Derek Bok, former president of Harvard University (see Exhibit 3.13). As Bok notes, "while our leading private-sector professionals and managers receive *several times* the compensation of their counterparts in other leading democracies, schoolteachers and government officials are modestly paid by international standards." At least in part as a result, teaching is *not* the chosen occupation for many of our most talented and ambitious students. In fact, the 1991 SAT scores of high school seniors who intended to be teachers were, on average, forty-nine points below the national average for total SAT scores.[75] This is surely not desirable.

In the United States, teachers make roughly 1.67 times the average per capita income of the nation, while people working in other professions requiring a college degree make considerably more than that. In Japan, teachers make 2.43 times the average per capita income of their country.[76] The average teacher in Japan earns just about the same as the average engineer, while in our country the average teacher earns only about 60 percent as much. Donna Kerr eloquently explains how this poses a problem for our nation.

> [By] design and by default, this society has chosen to promote pathology-based medicine, to encourage litigious forms of conflict resolution, and to engineer technologies for an ever increasing military capability. The relatively lucrative, upward-bound professional careers in medicine, law, and engineering clearly reflect these values. That is, by design and by default this country has chosen to turn disease, disputes, and war into profitable career fields. At the same time, it has made most unattractive the activity of educating our young. The question is not whether resources should be dedicated to the maintenance of health, domestic tranquility and international peace. Rather, the question is whether any society can afford to make their opposites profitable and to do so at the expense of education. . . . Health and tranquility depend at least as much upon education of the general populace as upon expertise in medicine, law and engineering. The task is to attract a reasonable portion of our brightest, most capable young people into teaching careers.[77]

It is hardly surprising, then, that the average SAT scores of those who intend to teach are less than the best. Indeed, this is likely to be the case for *any* field perceived to be low in salary and prestige. Moreover, the problem has recently become worse. In earlier years teaching was often the *most* prestigious

profession open to young women. Now women have access to many other professions, and education has lost its ability to attract the most talented women with but modest salaries.

This does not mean, however, that education now attracts only "the dregs." Between 1981 and 1991 the average SAT verbal score for those intending to teach went up thirteen points and the average mathematics score climbed twenty-four points, suggesting that the caliber of high school seniors thinking

■ EXHIBIT 3.13
Salaries and Career Choices

When I graduated from law school 40 years ago, I could go to work for a Wall Street firm for $4,200 a year, take a job with the Justice Department for about the same pay or change careers and begin teaching in a public school for just a few hundred dollars less. By the end of the 1980s, the outlook for graduating Harvard law students had changed drastically. Now, they could teach at a public school for $18,000 to $20,000, begin work in the Justice Department for $28,000 or accept a position with a major Wall Street law firm for $83,000.

For young people, many with heavy educational loans to repay, career choices must seem very different from those I faced in 1954. Of course, *lifetime* earnings for professionals have always been much greater in the private sector than for public servants and schoolteachers. But the differences have grown much more significant in the last 20 years.

During the 1970s and 1980s, Federal civil servants saw their pay decline by 25 percent, while schoolteachers barely held their own. In contrast, the earnings of leading managers and professionals soared. By 1990, chief executives of the top 200 companies were receiving almost $3 million each in total compensation, while partners in elite law firms and cardiovascular surgeons averaged several hundred thousand dollars apiece.

Some of these changes may be driven by competitive forces, but most are not. In fact, there is little real price competition for top professional talent. No one shops around for the lowest-priced brain surgeon or the cheapest chief executive. . . .

Public officials and schoolteachers face a radically different situation. Unlike their counterparts in the private sector, they have little control over their pay. Instead, their salaries are limited by political forces generated by voters hostile to new taxes. As a result, while our leading private-sector professionals and managers receive *several times* the compensation of their counterparts in other leading democracies, schoolteachers and government officials are modestly paid by international standards.

What is wrong with all this?

To begin with, it is hard to justify the pay earned by leading American lawyers, doctors, and executives, since market competition does not account for their compensation or explain why they are paid so much more than their opposite numbers overseas. . . . Growing differences in pay between the public and private sectors are cutting into the fair share of talent needed by our government agencies and public schools. No longer can we expand the nation's supply of exceptional talent simply by building new universities and increasing student loans; almost all of our intellectually ablest young people are already graduating from college. As the need for such talent continues to grow, therefore, the way in which it is distributed among sectors and professions will become more and more important.

While money is not the only factor determining students' career choices, it is an important consideration. Small wonder, then, that as the gap in pay between the public and private sectors has widened, the number of Phi Beta Kappas entering teaching and public service has declined sharply. And all this is happening just as the nation has become vitally concerned about improving the effectiveness of public education and government. . . .

It is naive to hope that society can ever devise a system that will automatically produce justifiable levels of compensation for its most educated, successful members. That is why compensation must ultimately represent an issue of personal values, a moral challenge for all who determine or receive the compensation given to the most talented people in the society. It is no accident that the pay of top executives rose substantially faster than the earnings of workers as a whole only in two decades since World War I—the 1920s and the 1980s. Both of these decades were periods in which America's values moved sharply toward the celebration of material rewards. Fortunately, this is not the inevitable state of affairs. From 1940 to 1965, for example, the after-tax earnings of top executives rose less rapidly than average blue-collar earnings even though our economy moved upward quite briskly.

It is not too much to hope, therefore, that society will shift back again to a more mature, responsible view of appropriate compensation. Such a change could bolster the quality of public education and government, strengthen social morale and cause private enterprise and the leading professions to rise in public esteem. Who knows? It could even help some highly paid professionals and executives. After all, as an old saying goes, "it behooves us to be careful of what we are worshipping, for what we are worshipping, we are becoming."

—Source: Derek Bok, Former President of Harvard University, writing in the *New York Times* (1993).

about careers in education has climbed over the last decade.[78] In other words, while the average total SAT score for those planning to teach was seventy-seven points below the national average in 1981, the gap is now twenty-eight points less. In addition, these figures for "average" SAT scores mask an interesting effect. As in past years, those intending to teach represent a *wide* range of both gifted and less-gifted students. Over 10 percent of those entering teacher-education programs come from the highest fifth of the SAT

distribution; these students have aptitude scores that would presumably allow them to succeed in many other fields of study at the college or university level. Thus, a good many people with strong academic qualifications are continuing to opt for careers as teachers.

But, as our earlier arguments suggest, one should not use SAT scores as the sole indicator of competency for America's teachers. As Linda Darling-Hammond puts it:

> Test scores are not clear evidence of quality. What we mean by teacher quality should be more influenced by what teacher candidates learn after they enter college than by the entrance examination scores they presented at matriculation. The likeliest interpretation of the test score trends during the 1970s is that teaching became a less attractive career option to many college students facing alternative opportunities.[79]

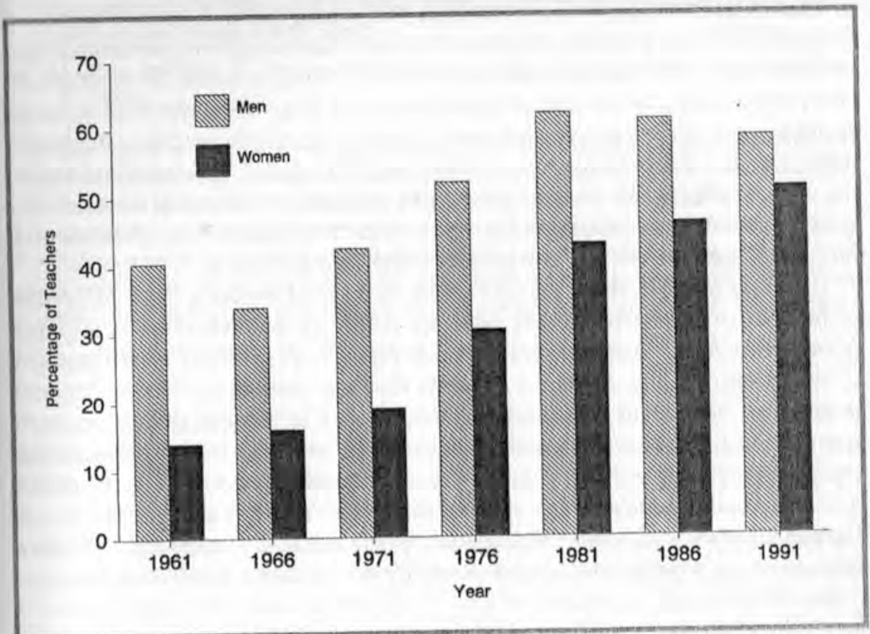
It turns out that SAT scores are extremely weak predictors for success in teaching. SAT scores actually predict job success poorly for *most* fields, but the problem is worse for teaching. In fact, neither test scores—such as those from the SAT, the ACT, or the National Teachers Exam—nor grade-point averages in college are useful for predicting on-the-job ratings of success as a teacher.[80] So let's look at other characteristics of America's teachers.

To begin, if one hundred children start first grade, about thirty of them will ultimately obtain a four-year college degree. But such a degree is now *required* of most people who will enter teaching. Thus, teachers represent an educated *elite*, since about 70 percent of their agemates have not completed college. Moreover, the proportion of teachers holding advanced qualifications is climbing. In 1961 about 15 percent of the teaching force held less than a four-year degree, but by 1991 this figure had dropped to only 0.6 percent.[81] And during the past thirty years, the percentage of teachers holding a master's or a doctoral degree increased dramatically and now hovers at about 50 percent (see Exhibit 3.14). Moreover, women are gaining parity with men in the attainment of these advanced degrees. Given that teaching represents by far the largest profession in the nation, this is a remarkable record.

In 1991 about 35 percent of teachers in the U.S. had to take academic competency tests to be certified to teach, and throughout their student teaching their moral character was assessed as well. (We sometimes wonder how our country would fare if its legislators and politicians had to meet the same kinds of standards for competency and moral character that these same legislators now impose on America's teachers.)

The point of all this is that teachers, as a group, have impressive academic credentials and are increasingly subjected to quality-control standards. Does this mean that teachers are well educated? Some critics would continue to say "no," would claim that teacher-education programs are a "joke." Such claims might actually be tenable *if* teacher-trainees actually took the bulk of

Exhibit 3.14 Percentage of Male and Female Teachers Holding M.A. Degree or Higher, 1961–1991



—Source: National Education Association (*Status of the American Teacher 1990–1991*, 1992, p. 24, Fig. 1).

their course work in colleges of education and if the offerings of those colleges were seriously deficient. But neither of these charges is true.

First, teachers do not train exclusively in colleges of education. In fact, students typically declare an education major only *after* successfully completing about two years of course work in other colleges on the campus, and most continue to take courses in other fields while completing their requirements in education. The typical candidate for elementary teaching takes about 70 percent of his or her course work *outside* the school or college of education, and candidates for high school teaching take about 80 percent of their work in other colleges.[82] Furthermore, an increasing percentage of those who start to teach do so after having already completed a bachelor's or master's degree in a subject other than education.[83]

But what about that remaining 20 or 30 percent of courses that are taken in schools of education? The quality of these programs is more difficult to assess. Although we suspect that some of it was once quite mediocre, informal evidence suggests that the quality of education programs has been improving in recent decades. First, about 70 percent of all teacher-education programs now have minimum grade requirements that must be met before a student

is admitted to the program, and those minimum grade requirements seem to be going up across the nation. In addition, about 50 percent of all students in teacher education now have to pass a proficiency exam in order to get their degrees.[84] Second, teacher-education curricula have improved substantially in recent years. Most students in education colleges are required, for example, to complete a course in educational psychology. A generation ago these courses provided very little content that was directly relevant to teaching. In recent years, however, significant research has been completed on classroom teaching and its effects. As a result, textbooks and other curricular materials for courses on educational psychology now draw extensively from this research base, and the focus of the course has shifted dramatically.

It should be clear, then, that the teaching force of America does *not* consist of bottom-of-the-barrel people who are deficient in intellectual ability and poorly trained by their colleges and universities. Despite the enormous size of the teaching force, evidence suggests that the average teacher in America is talented, high achieving, and well educated. To be sure, dull and poorly trained teachers may be found, and it would be good to get them out of the classroom. But untalented and poorly trained physicians, CPAs, clerics, insurance counselors, engineers, lawyers, and the like may also be found—although they are often not highlighted in the press. By contrast, education takes place in a *public* arena, and therefore its personnel problems are more often visible.

To illustrate this issue, the public does not ordinarily hear about the incompetence of the medical profession, yet a 1991 Harvard University medical-practice study group found that roughly 80,000 people die every year—and at least 150,000 more are injured annually—from medical negligence in hospitals. This makes medical malpractice the third leading cause of preventable death in the U.S., right after cigarettes and alcohol, causing more deaths per year than automobiles and firearms combined.[85] In addition, the vast majority of the 10,289 physicians disciplined by state or federal agencies in 1992 are still practicing, and the damage they do each year is, *literally*, killing Americans.[86]

In short, incompetence, and the removal of incompetents, are problems every profession faces. Few professions (including education) handle that problem well. But we know of *no* persuasive evidence that would confirm the charge that America's teachers are particularly incompetent, untalented, or poorly trained by comparison with other professions.

MYTH . . . *American Public Schools and Textbooks No Longer Promote Moral Values*

Up until 1962, the values [of the Judeo-Christian ethic] were unquestioned as a positive influence in public education. Kids were taught to recognize the moral and historical value of their inalienable rights. The precepts embodied in the Ten Commandments

were the mortar that held our laws together, gave them weight, and that fueled individual self-government . . . [but this is no longer true.] We have allowed moral values and a creator to be kicked out of public schools, and because most kids attend public school, we are paying a high price.

—Rep. William E. Dannemeyer (remarks to the U.S. House of Representatives, 1991)

Public school textbooks commonly exclude the history, heritage, beliefs, and values of millions of Americans. Those who believe in the traditional family are not represented. Those who believe in free enterprise are not represented. Those whose politics are conservative are almost unrepresented. Above all, those who are committed to their religious tradition—at the very least as an important part of the historical record—are not represented. Even those who uphold the classic or republican virtues of discipline, public duty, hard work, patriotism, and concern for others are scarcely represented.

—Paul Vitz (*Censorship: Evidence of Bias in Our Nation's Textbooks*, 1986, p. 77)

Some critics charge that today's public schools and textbooks are amoral, that they no longer promote (appropriate) values for students. Frankly, it is difficult to tell whether today's schools are less concerned with moral values than at other times in history. To assess this charge would require conducting a difficult study, one that compares evidence showing how values are presented in today's classrooms with how values were presented in classrooms of earlier years. We know of no study that has taken on this task.

We suspect, however, that this charge is groundless. Most teachers in our country subscribe to mainstream, middle-class, American values—sharing and caring, neatness and punctuality, rewards for effort, sanctions against bragging, punishment for fighting, the legitimacy of pursuing money, and the like—and these commitments are often expressed in their classroom practices. Recent criticism by those who do not want the schools to teach values explicitly have probably made more teachers cautious about what they say and do, but studies of classroom teaching suggest that these values are communicated nevertheless.

Various critics have also claimed that today's textbooks display a lack of traditional American values,[87] and this charge can easily be assessed with evidence. Patricia Sharp and Randy Wood, of the Baylor University Center for Christian Education, examined this charge by conducting a content analysis of reading and social studies texts that are approved for third- and fifth-grade classrooms in Texas.[88] Their sample of textbooks included twenty-four different basal readers, grade-level texts, and texts that were parts of a series from leading publishers. The books they studied are commonly used throughout the nation.

In their study the authors examined whether these texts expressed three kinds of values: (1) *religious values* (religious conformity, belief in God, traditional beliefs associated with religion, respect for religious symbols, questions on the meaning, purpose, and value of life); (2) *individual values* (independent

decision making, attitudes toward nonstereotypical life styles, virtuous behavior, accountability for one's own actions, and the need to take action); and (3) *social-secular values* (reflection on societal standards, focus on positive family values, vicarious experience of societal mores, alternative moral perspectives, explicit statements of personal moral values).

What these authors found flatly contradicted charges that had been made by the critics. For example, the average third-grade social studies text expressed over *80* percent of the values that the authors sought. The average fifth-grade social studies text displayed over *90* percent of the values believed by the authors to be desirable. The authors commented,

> social studies texts were replete with commentary on religious freedom, the fact that the church has been the center of community life in many nations, that people from many different backgrounds came to the U.S. and had to establish friendships to survive in this new land, that freedom has to be fought for, that courage is needed by our citizens, and so forth.[89]

Reading texts had fewer expressions of values, but even these were not value-free. The authors found that the typical third- and fifth-grade text reflected over 55 percent of the values they had sought. For reading texts, the authors noted,

> Many examples of honesty, courage, compassion, persistence, bravery, and other positive values were [found]. . . . Literature chosen for these textbooks is replete with characters who embody . . . moral values, . . . and the books provide models that children can understand and accept.[90]

The authors conclude that "charges of lack of positive values presented in social studies and reading textbooks would appear to be unfounded."[91] So, when expressing charges about amoral textbooks, the critics seem to have been more concerned with attacking America's public schools than with the facts of the matter. From McGuffey's Reader to today's texts, our school books have been repositories of moral messages that encourage unity in our nation.

Surprisingly, some critics of textbooks seem to be less concerned with moral values than with the promotion of docility and ignorance. One well-known leader of the religious right, Norma Gabler, whose words the press has regularly reported, seemed to see nothing wrong in saying,

> Too many of today's textbooks leave students to make up their own minds. Now, that's just not fair to our children. What some textbooks are doing is giving students ideas, and ideas will never do them as much good as facts.[92]

(We find it marvelously amusing to learn that texts should be "guilty" of giving students "ideas." God help America if its citizens should ever begin to get "ideas" from books such as the one you are now reading!) Perhaps Mrs. Gabler would like to model our schools after *Jeopardy!* on television or the game of *Trivial Pursuit,* for both are filled with undigested "facts." In contrast, most Americans seem to conceive of public schools as places where

students learn to think about challenging notions such as evolution, relativity, social class, moral behavior, the unconscious, Marxism, Big Bang theory, environmental degradation, manifest destiny, isolationism, consumerism, and a thousand other "ideas" that Mrs. Gabler cannot see any value in discussing. Textbook publishers need to hear that most Americans prefer meaty, interesting, idea-filled books that stretch our children's intellect, rather than simple-minded, fact-filled texts that bore our young people and tax only their memory.

In summary then, we know of no evidence to support the myth that values have disappeared from America's public schools or from textbooks. Instead, the evidence available suggests just the opposite. America's public schools were originally conceived, in part, as institutions where social integration was promoted by introducing students to shared moral values. It appears that they still perform this function.

MYTH . . . *American Citizens Are Unhappy With Their Schools*

> There is . . . nearly universal agreement that our schools are in desperate trouble and must be "restructured"—which is to say, redesigned from the ground up.
>
> —Denis P. Doyle (*Voices From the Field,* 1991, pp. 5–6)

> We . . . know from numerous surveys on education that most Americans, and especially parents, were misinformed and self-satisfied [about their schools].
>
> —Diane Ravitch, Former Assistant Secretary of Education (Launching a revolution in standards and assessment, 1993)

Many critics have stated that Americans, particularly American parents, are now dissatisfied with public schools. The press frequently quotes these statements, and they are regularly cited on radio and television talk shows. In one sense, these charges seem actually to be supported by evidence. Recently, the National Opinion Research Center (NORC) at the University of Chicago reported that public confidence in education had declined significantly from 1973 to 1990,[93] so at first blush the critics' charge might seem realistic.

But there is more to the story. The same NORC study also examined confidence in other institutions and professions in society and found that *most* received less favorable ratings today than they did twenty years ago. For example, the number of people expressing "a good deal of confidence" in medicine had gone down 9 percentage points from 1973 to 1990. Over the same period, confidence in religion was down 12 percent, confidence in banking was down 15 percent, and confidence in the press was down 8 percent. Confidence in business, in the executive branch of government, in television, in Congress, and in labor was also down sharply. This suggests that we live

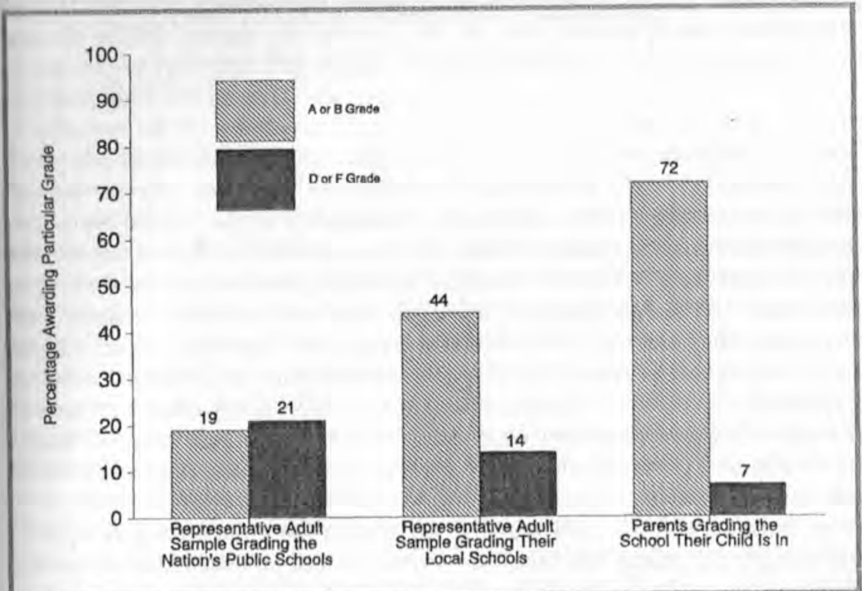
in a time of *broadly* eroding confidence in America's institutions and professions, so it is hardly surprising that confidence in education has also declined.

In addition, let us look in detail, however, at how opinions about education fare in this time of general cynicism. In order to do this, we should make two distinctions. First, we should distinguish between public opinion about "schools in general" and public opinion concerning local public schools. Opinion about the former are likely to be stereotypic, to reflect rumors and portrayals of education in the popular press. And since American schools have been under attack since the beginning of the Manufactured Crisis, it should not surprise us to learn that our schools have also received a bad portrayal in the press in recent years.[94] And this means that stereotypic opinion about public schools should be somewhat negative. In contrast, public opinion about the public schools in our own, local communities are more likely to reflect personal experience, direct observation, informed judgment, and discussions with others who are familiar with the actual strengths and weaknesses of those schools. So public opinion about those schools should be more realistic and positive in tone.

Second, we should distinguish between two groups of adult citizens: parents of school-age children, and the rest of the population. The former are more likely to have first-hand, direct knowledge of the schools that serve their children. The latter may also include concerned people, but they are less likely to have had recent, personal experience with schools. Thus, by comparison, the opinions of parents are also more likely to reflect reality rather than stereotypic judgment.

Now, let's see how these distinctions play out in opinions about America's public schools. In 1993 the *Phi Delta Kappan*, a widely read journal in education, reported the twenty-fifth annual Gallup poll on the public's perception of the public schools.[95] A representative sample of American adults were asked to give letter grades (A, B, C, D, or F) to indicate their ratings of schools (see Exhibit 3.15). Not surprisingly, when they were asked to give their general opinion about "The Nation's Public Schools," respondents gave answers that reflected the negative, stereotypic views recently promulgated by the critics and the press. Only 19 percent of respondents gave the nation's schools a grade of A or B, while 21 percent gave them grades of D or F. But when these same people rated their local schools, a different picture emerged. Forty-four percent of respondents gave their local schools a grade of A or B, and only 14 percent gave them grades of D or F. Moreover, when *parents* were asked about the local school that served their children, a whopping 72 percent gave that school an A or B—while only 7 percent graded it D or F! These last figures, in particular, seem amazing given the generally negative images of public schools recently promulgated. And what is more amazing, this high level of parental satisfaction with their local schools is growing and is actually *higher* today than it was seven years ago. So much for the canard that American parents are generally dissatisfied with public schools.

Exhibit 3.15 Grades Given to Public Schools



—Source: Elam, Rose, & Gallup (*The 25th Annual Phi Delta Kappa/Gallup Poll,* 1993).

How do the critics interpret this remarkable degree of consumer satisfaction? When Denis Doyle of the Hudson Institute, a leading advocate for private-school vouchers, attended a meeting where these data were presented, he remarked, "This is scientific proof that ignorance is bliss."[96] Diane Ravitch declared that Americans were "misinformed" about their schools. Similar views were expressed by Former Assistant Secretary of Education Chester Finn, who suggested that ordinary parents of the nation are not to be trusted with their opinions about public education. Since their standards are not rigorous, Finn suggested, their judgments about the quality of schools their children attend are suspect.[97] And Harold Stevenson, who studies schools in Asia, apparently regards American satisfaction with their local schools as a form of pathology. In one of his studies, Stevenson found that about three-quarters of American fifth-grade mothers were very satisfied with their local school, whereas only half of the mothers sampled in Taipei, Taiwan gave such high ratings to their local school, and in Sendai, Japan only about a third of mothers sampled were so satisfied. But Stevenson also found that students from the Taiwanese and Japanese schools out-performed those from America on comparative tests of subject-matter achievement, so he condemned the American mothers' opinions as "pathological."[98]

When critics such as Doyle, Ravitch, Finn, and Stevenson are confronted with evidence indicating that Americans hold their local schools in high re-

gard, then, they decide that the public is unable to make intelligent judgments about public schools. This scares us. In effect, these critics have proclaimed themselves part of an elite who, for the good of the nation, will be pleased to tell other Americans what they are to believe and how they are to act.

We, on the other hand, would rather put our faith in the judgments of those Americans who are most familiar with their schools. If the majority of parents with children in school say that their local schools are pretty good, who are Doyle, Ravitch, Finn, and Stevenson to tell them they are wrong? The evidence we reviewed in Chapter 2 suggests that the typical American school generates a lot more student achievement than recent critics and the press would have us believe. Perhaps American parents are responding to this reality when they give high marks to their local schools. Perhaps, also, they are reflecting the many other strengths of American public education—strengths based on the ability of American schools to respond to needs expressed in their local communities. And perhaps, just perhaps, parents in Taiwan and Japan also know what they are doing when they give low marks to *their* local schools. Could it be that their schools are *less* responsive to the needs of the students and parents whom they are supposed to serve?

In summary, those who say that Americans are fed up with the public schools should qualify what they say. Public esteem for *many* institutions has declined recently, and those who know the least about the public schools—those whose knowledge about the schools has been gained largely from listening to the critics and from the mass media—do indeed give low marks to the schools. But those who know the most about public schools—parents who are in regular contact with and receive service from those institutions—rate them highly. In fact, the biggest complaint that American parents indicated in the 1993 Gallup poll was that their local schools were not supported adequately. This complaint took precedence over their concerns about drug abuse, lack of discipline, fighting, violence, gangs, and a host of other real and imagined problems. So not only are American parents well satisfied with their public schools, but they would presumably be willing to pay more for them than they do now. The major problem they face is trying to persuade those who do not have children in the schools to agree to pay their share of school taxes. But this seems unlikely to happen as long as Americans are bamboozled by the myths and lies of the Manufactured Crisis. Perhaps it is time for citizens without children to join parents and go into the schools to see for themselves what is actually happening there.

MYTH . . . *Private Schools Are Inherently Better Than Public Schools*

When all else is equal, autonomy, organization, and achievement are significantly better in private schools than in public. But while our research [was] the first to demonstrate just how far-reaching the differences between politics and markets can be, it [was] hardly the first to indicate that private schools outperform public schools academically when the two kinds of schools are working with similar students.

—John Chubb and Terry Moe (Educational choice: Why it is needed and how it will work, 1992, pp. 46–47)

Finally, we turn to one last myth that reflects the critics' hostility to public education—the myth that private schools are inherently superior to their public counterparts. For years many Americans have thought that private schools are generally superior to public schools and that this superiority is confirmed by studies showing the higher achievement of students who attend the former. Moreover, this belief is a major reason why those who can afford the tuition are willing to shell out extra money for private education.

But if it is true that private-school students outperform public-school students, why should such differences occur? Is it because those private schools offer stronger programs or because they recruit more advantaged students? This question clearly matters. If private schools have stronger programs, then either those programs should be examined for hints about how to improve *all* schools, or perhaps public schools are inherently flawed. But if private schools merely recruit "better" students, their supposed achievement advantage is ephemeral, and all we need to do to improve public schools is make sure that *they* enroll the "better" students too.

Given the importance of these questions, it is small wonder that in April 1981 newspapers across the country picked up the following story from the *Washington Post:*

> *Private High Schools Are Better Than Public, Study Concludes.* A major study by sociologist James S. Coleman concludes that Catholic and other private high schools provide a better education than public ones do. . . . [Supporters of public schools] fear that the findings could strengthen the case for tax credits to families paying tuition for private schools.[99]

The study reported in these stories had been conducted by the same James Coleman we met earlier in the chapter. In this new study he was assisted by Thomas Hoffer and Sally Kilgore, and the study itself would shortly appear in a report to the National Center for Education Statistics[100] and as a book entitled *High School Achievement: Public, Catholic, and Private Schools Compared.*[101] Moreover, for once the newspapers had it right. In their study Coleman and his colleagues *had* concluded that private high schools enjoy an edge in achievement over public high schools, that this edge is substantial, and that it persists even when controls are entered for student background characteristics—thus, by implication, private schools are *inherently* superior to public schools.

As had occurred earlier with the Coleman Report, these controversial conclusions were released with great fanfare and created a furor before details

of the study that generated them became known. As a result, news stories reporting them became the first salvo in a public controversy that has recently beset public education. On one side of the debate, critics of public schools quickly embraced the conclusions of Coleman and company because they appeared to offer evidence confirming long-held suspicions that public schools were inherently flawed. On the other side, defenders of public schools were threatened by the conclusions and began defensive actions designed to blunt their impact. Unfortunately, much of this debate took place without examining the evidence offered by Coleman and his colleagues. That evidence has now been studied carefully, however, and the more one looks at it, the weaker that evidence appears to be. Let us unpack some of the issues.[102]

High School and Beyond. The study reported by Coleman, Hoffer, and Kilgore was, in fact, the first reported analysis of the "High School and Beyond" (HSB) data set we discussed earlier in the chapter. You may recall that HSB had been funded by the National Center for Education Statistics and that it concerned the achievement of roughly sixty thousand students in more than one thousand public and private high schools sampled across the nation. HSB data included achievement tests (composed of multiple-choice items) administered to students and questionnaires that students filled out reporting their personal and family characteristics.

HSB data were first collected in 1980 and dealt with the achievements of both sophomores and seniors from the sampled schools. The study reported by Coleman and colleagues in 1981 was based only on the 1980 data and thus used a *cross-sectional* (rather than a *longitudinal*) design. Nevertheless, this initial data set allowed Coleman et al. to compare the achievement of students in the sampled schools, and after conducting complex analyses, the authors concluded: (1) that average student achievement *was* greater in private schools; (2) that the average student in private schools *did* have a more advantaged background; and (3) that, when controls were entered for student background characteristics, achievement in private schools was still roughly "one grade level" above achievement in public schools.[103]

Only the last of these claims was truly controversial, of course, and in time other investigators also looked at the HSB data, using differing analysis strategies, to see whether this sensational last claim was justified.[104] In general, these other researchers have concluded that private schools either had a *much smaller net edge* or *no net edge at all* over public schools in the 1980 HSB data. But Coleman et al. had been first off the mark, and it was their conclusions that continued to generate press stories and public debate which assumed that inherent private school "superiority" had been confirmed by evidence.

Then, in 1982, additional HSB data were collected from those students who had been sophomores two years earlier, and subsequent analyses of HSB were able to examine the growth of student achievement in *longitudinal*

designs. These analyses have also been subject to controversy. For example, in 1985 the research team of Hoffer, Greeley, and Coleman published analyses of student-achievement growth from HSB data which, they asserted, confirmed a "substantial" net edge for private schools. But two years later, two researchers, Karl Alexander and Aaron Pallas, and, separately, Douglas Willms, looked at the same growth data, and these authors found that the effects of private school were a lot smaller than those estimated by Coleman et al. In fact, they judged that the private-school net edge (if any) was "trivial."[105]

Problems with HSB. Why did these various people come to such different conclusions about HSB findings? In part, the investigators had used a variety of analysis strategies, and this helped to muddy the waters, but part of the issue reflected problems with the HSB data. First, only about 10 percent of the schools sampled in HSB came from the private sector. This means that HSB data provided better estimates for achievement in public schools than in private schools. Worse, only a tiny group of non-Catholic private schools appeared in HSB, so most reputable analyses of HSB data have made comparisons only between public and *Catholic* schools. (In their original 1981 and 1982 reports, Coleman and associates also reported findings for non-Catholic private schools but later conceded that such findings were questionable.) Comparisons between public and Catholic schools are valuable, of course, but Catholic schools are only a part of the private-school story. When many Americans talk about "private schools," they have in mind not only Catholic schools but also parochial schools representing other religions, specialty schools offering a specific curriculum (such as Montessori schools), schools that cater to students from a specific race or ethnic group, and elite academies that serve the rich. HSB data are *not* useful for studying any of these types of schools.

Second, in their 1981 analyses, Coleman and his colleagues used a single, composite index to estimate student achievement. This index summed responses from three subtests designed to measure reading, vocabulary, and general mathematics skills that were administered to both sophomores and seniors in 1980. When using this index, the investigators assumed that it was a valid measure of high school achievement and that its three subtests would reflect differences among schools in parallel ways. How reasonable were these assumptions?

Actually, subsequent events suggest that they *weren't* reasonable at all. In 1980 HSB had actually assessed sophomores' knowledge of *seven* different topics—reading, vocabulary, general mathematics, writing, civics, advanced mathematics, and science—and these same seven topics were reassessed with identical questions in 1982, when those students were seniors. Thus, later scholars were able to study responses to each of these seven achievement tests in subsequent longitudinal analyses. When this was done, they found that differences between Catholic and public schools in net achievement growth

varied depending on the topic chosen! (In brief, after controlling for student characteristics, Catholic schools were found to have a *slight* net edge in achievement growth for vocabulary, general mathematics, and writing; but when it came to reading, civics, advanced mathematics, and science, neither type of school had a net edge.)[106]

Worse, serious questions were subsequently raised about the achievement tests that were used in HSB. Such questions arose when it was discovered that those tests revealed *very* little growth in student knowledge over the two years of the full study. Student scores from these tests varied a lot, but little of that variability was associated with achievement growth—or, for that matter, with differences between Catholic and public schools. Moreover, additional work with these tests has shown that students who dropped out of school at the end of their sophomore year *also* gained in measured achievement; in fact, they had gained about half as much as those who had remained in school.

What does one make of such findings? One possibility is that American students actually learn very little academic subject matter between their sophomore and senior years, and if this should be the case, then, as Alexander and Pallas suggested, "not only would it not matter which [school] sector one attended, it seemingly would not matter much whether one stayed in school at all!"[107] To provide some perspective for this point, Douglas Willms prepared estimates comparing the greater net achievement gains of Catholic schools in the HSB data with gains reported for other types of educational interventions.[108] According to these estimates, the typical American student attending a public school might gain slightly in achievement by transferring to a Catholic school, but he or she would gain *twenty-to-thirty times as much* by being exposed to cross-age tutoring or involvement in cooperative learning experiences! In short, if one decides that the HSB tests were actually valid for measuring student growth, one must also conclude that HSB differences in achievement between Catholic and public schools were minuscule.

Alternatively, it also seems possible that the HSB tests were simply poor tests for measuring what was taught, or at least what upper-division students learned, in American high schools between 1980 and 1982. And this would mean that HSB had erred in its measuring techniques or in what it chose to measure. Perhaps it should have used essay-type questions rather than multiple-choice items; or, instead of assessing broad academic topics that are largely taught in the lower grades, it should have assessed materials more relevant to *senior* high school—topics such as the evolving, specialized knowledge of high school students or aspects of their emotional and social growth. But if one concludes that the HSB tests were not valid measures for high school student growth, one must also question whether they can be used for judging differences in that growth between Catholic and public schools. Indeed, had HSB used other, more appropriate, indicators, it seems quite possible that public schools would have been given the edge.

Whichever way one interprets the HSB tests, then, it is difficult to understand how evidence from those tests could possibly confirm a "substantial" net Catholic-public school difference in achievement growth. HSB data *do* suggest that the average Catholic high school generates slightly higher levels of student achievement in basic skills and that it enrolls more advantaged students than does the average public high school. However, when one controls for student characteristics, HSB evidence for a net Catholic school edge becomes weak, topic dependent, and questionable.

Thus, careful analyses of HSB evidence do *not* support the claim that private schools have a substantial, inherent edge over public schools. Moreover, we know of *no* other systematic evidence that supports such a claim. But lack of evidence has not troubled the critics, of course. Mischief had again been created when James Coleman (and colleagues) trumpeted a controversial conclusion with but flimsy evidence, and it may take some years for the general public to discover that, when it comes to claims about the inherent advantages of private schools in fostering academic achievement growth, *the emperor truly has no clothes.*

Chubb and Moe (Again). Unfortunately, beliefs about the putative advantages of private schools were recently bolstered by the appearance of Chubb and Moe's controversial book, *Politics, Markets, and America's Schools.*[109] We discussed this work earlier in the chapter, and you may recall that it was also based, in part, on HSB data. In their work, however, Chubb and Moe used not only HSB but also data from a supplementary survey that had been gathered from teachers and principals in a subsample of HSB schools in 1984. This meant that Chubb and Moe were able to study relations between student achievement and characteristics of schools' *programs,* and earlier in the chapter we praised their work for uncovering a net association between school academic climate and growth in student achievement.

Now come the questionable bits. Chubb and Moe's book was written to advance a controversial thesis. That thesis began by asserting that American public schools are now in deep trouble, that efforts to reform them have failed, and that the superiority of private-school programs had been well established by previous research. Why should public schools be so inferior to private schools? Clearly, according to Chubb and Moe, it has to do with the way these two types of schools are governed. They write,

> America's public schools are governed by institutions of direct democratic control, and their organizations should be expected to bear the indelible stamp of those institutions. They should tend to be highly bureaucratic and systematically lacking in the requisites of effective performance. Private schools, on the other hand, operate in a very different institutional setting distinguished by the basic features of markets—decentralization, competition, and choice—and their organizations should be expected to bear a very different stamp as a result. They should tend

> to possess autonomy, clarity of mission, strong leadership, teacher professionalism, and team cooperation that public schools want but . . . are unlikely to have.[110]

Since the major premises of this thesis are factually in error, as we have shown, it is not surprising that Chubb and Moe had difficulty defending their argument. They covered their tracks quite well, however, with vigorous rhetoric, extensive but slanted reviews of historical and comparative materials, and—crucially—by drawing artful but questionable conclusions from analyses of HSB data. So well did they draw those conclusions, in fact, that most reviewers have not understood that Chubb and Moe's evidence did *not* support their argument. Let's see how they performed this trick.

As indicated earlier, Chubb and Moe began their analyses by demonstrating that school academic climate (which they called "school organization") had a positive net effect on growth in student achievement, even when controls were entered for the socioeconomic status (SES) of students' families and the average SES of students in the school. They then reasoned that schools high in academic climate ("school organization") were, ipso facto, "effective," and they set out to determine what made for "effective schools."

Chubb and Moe tackled this task in two steps. First, they sought to uncover the structural factors associated with good or poor academic climate. Since their thesis suggested that those factors would be associated with bureaucracy, they conceived three bureaucratic factors: (1) "administrative constraint," which was concerned with the authority of *central office* administrators; (2) "personnel constraint," which focused on *union* authority over personnel issues; and (3) "school board influence," which dealt with *school board* authority. They then conducted statistical analyses in which these factors and others concerned with school characteristics were used to predict school academic climate and found that "administrative constraint" and "personnel constraint" had negative net effects on academic climate. (They found no substantial effect for "school board influence.") This means that, net of the other school factors examined, schools subject to high levels of central office and union authority tended to have poorer academic climates.

Second, they conducted additional analyses that focused on the determinants of "administrative constraint" and "personnel constraint." They found that, net of other school factors examined, private schools and schools in suburban (rather than urban) settings were subject to less authority from central office administrators and unions.

The problem with this multistep analysis strategy is that nowhere did Chubb and Moe put all of these factors together. Their analyses showed that, with other factors controlled:

- public schools (A) are more subject to external authority (B);
- high levels of external authority (B) are associated with depressed academic climate (C); and

- good academic climate (C) is tied to growth in student achievement (D).

However, they provided no evidence indicating that public schools (A) are inherently associated with depressed academic climate (C) or that public school status and high levels of external authority (A and B) inherently depress student achievement (D). Although Chubb and Moe did not exactly claim they had tied all of these factors together in their text, they certainly claimed that their analyses supported their general thesis, and many reviewers and newspaper accounts jumped to the conclusion that their work "explains why private schools have better effects." This is nonsense.

Why didn't Chubb and Moe conduct and display the proper analysis, which would have nailed down their thesis? Could it be they did not know how to do the proper analysis or were afraid of what that analysis might reveal?

On balance, we are quite prepared to accept Chubb and Moe's evidence that, on average, public schools are more subject to external authority, excessive external authority is detrimental to academic climate in American schools, and American high schools with better academic climates have higher levels of student achievement. But this does *not* mean that these three propositions can be bundled together in a single, causal chain.

This issue has, in fact, recently been addressed in a clever study by Sandra Glass.[111] Glass studied relations between administrative style and student achievement in highly successful high schools from both the public and private sectors. She collected several kinds of data, among them lengthy interviews with administrators and others in those schools concerned with various topics, including the nature of constraints faced by those schools and the degree of their administrative autonomy. Her data indicated that schools from the public and private sectors actually experienced *quite similar* kinds of constraints. All the schools had to deal with the same state and federal laws, limited funds, the demands of parents, college admission requirements, the same College Board examinations, and so forth. Moreover, both the public and private schools exhibited high levels of administrative autonomy and high levels of student achievement.

At a minimum, then, this suggests that Chubb and Moe were writing nonsense when they claimed that private schools enjoy inherent freedom from external constraints and that high levels of administrative autonomy and student achievement are unlikely to co-occur in public schools. In addition, Chubb and Moe argued that administrative autonomy leads to high levels of student achievement, but Glass's data suggest that they may have confused the cart with the horse. Her interviews implied that these schools were granted autonomy *because* the students in these schools were high achievers. And if her informants were right, this might help to explain why so much constraint is imposed on poor urban schools where average student achievements are low.

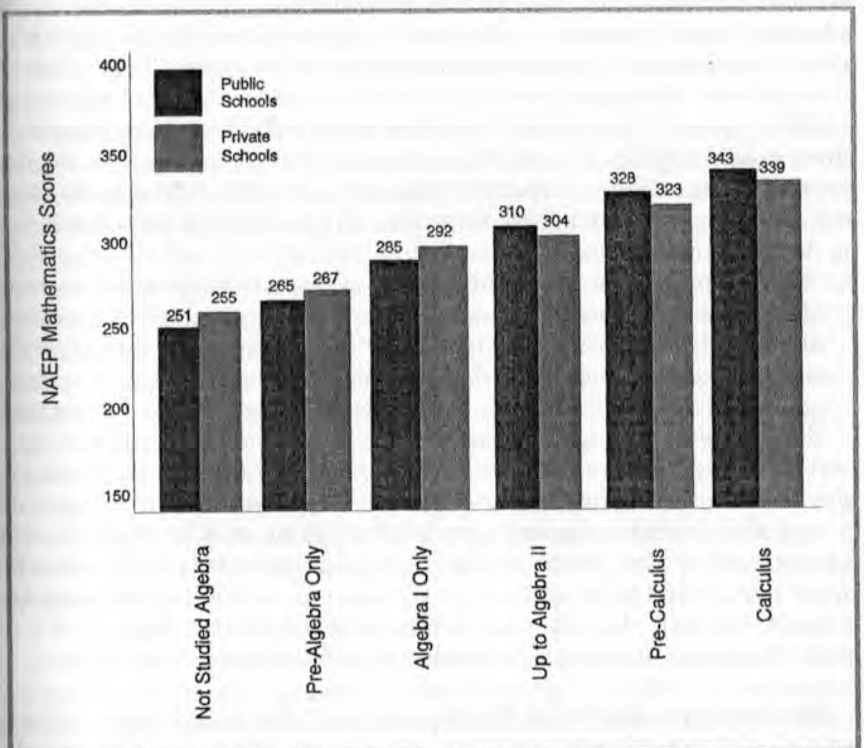
In sum, Chubb and Moe's analyses do *not* confirm their thesis, nor do those analyses explain why private schools might possibly have programmatic advantages over public schools. Moreover, they do *not* confirm that private schools even *have* such an advantage. And it follows that their analyses do *not* support their recommendation that Americans should abolish public-school systems—a topic to which we return in the next chapter.

NAEP and the Public-Private Controversy. At this point, some readers may still be having difficulty with the public-private controversy. Despite what we have written, isn't it true that, all things considered, students in the typical private school outperform students in the typical public school in most subjects? Actually, as a general finding, it *isn't* true. To illustrate this point, let's examine recent data from the National Assessment of Educational Progress (NAEP). As we noted in chapter 2, the National Center for Education Statistics conducts regular NAEP surveys of student achievement in American high schools. In 1991 it released a report from such a study that was focused on mathematics.[112] These data were gathered in both public and private schools, and they offer opportunities to compare average student achievement for students in these two settings. Let's examine the results.

The graph we have reproduced as Exhibit 3.16 was assembled by Albert Shanker and Bella Rosenberg. It compares average mathematics proficiency scores from NAEP data for grade twelve students who had been exposed to various levels of mathematics instruction.[113] Not surprisingly, those students who had taken higher-level mathematics courses scored a lot higher in mathematics knowledge than those who had taken only lower-level courses—but note the results for public and private high schools. If anything, public high schools had a slight edge for students who had taken higher-level courses, while private high schools generated slightly greater scores for students who had taken only lower-level courses. But the basic pattern revealed *no sizable difference* in students' average mathematics achievement between the public and private sectors.

Nor are these the only data one can tap to assess gross differences between achievement levels of students in public and private schools. Shanker and Rosenberg also looked at recent NAEP data for science achievement and found the same pattern of findings.[114] Similarly, Chester Finn was at one time U.S. Assistant Secretary of Education and has been a strong advocate for private schools over the years. Nevertheless, when he looked at 1986 NAEP data, he found only *small* differences between public- and private-schools in students' achievements for reading, history, and literature. Surprised about these results, he commented, "it is conceivable that there is no private school effect showing up here at all."[115] Thus, evidence from the NAEP provides little support for the notion that private (or public) schools have a broad, substantial edge in average student achievement.

Exhibit 3.16 Average Overall Mathematics Proficiency of High School Seniors Taking Similar Courses in Public and Private Schools



—Source: Shanker & Rosenberg (Do Private Schools Outperform Public Schools?, 1992, p. 136).
—Statistical Sources: National Center for Education Statistics (1991b) and American Federation of Teachers.

All of which raises an interesting issue. Several reasons may be cited for why students in private schools *ought* to outperform those in public schools, on average, on tests of achievement in core subjects. Private schools are able to select students whom they will enroll and expel; and this control should give them more opportunity to choose talented students, to enforce disciplinary standards, and to create a sense of "community." By contrast, public schools must cope with all comers. In addition, private schools enroll mainly students whose parents can afford to pay tuition, whereas public schools must enroll students from impoverished families that cannot afford to provide home support for education. And many private schools focus their academic efforts on core subjects, whereas public-school curricula often reflect a broader range of interests.

Why, then, are average public-private differences in academic achievement so *small?* We suspect that the answer to this question may also be found in

the preceding graph (Exhibit 3.16). As these results suggest, it seems to make little difference whether the student attends a public or private school. What matters in mathematics achievement is whether or not the student takes advanced courses in mathematics. Thus, the biggest factor determining mathematics achievement is *opportunity to learn,* and it matters little whether students have that opportunity in a public or private school. (*Berliner and Biddle's Student Achievement Law* strikes again!) To the extent, then, that some private schools generate high levels of achievement, they do this by providing better-than-average opportunities to learn. But such opportunities can also be provided in the public sector—indeed, they are provided today in America's best public high schools.

To summarize then, evidence from various sources suggests that *average* public-private differences in student achievement are minimal in America. This does not mean that certain types of private schools don't do well. HSB data suggested that students in Catholic schools have a slight achievement edge over those in public schools; but this seems largely due to the fact that Catholic schools restrict student enrollment, create a sense of "community," and stress slightly more rigorous course work.[116] Elite academies that serve rich students undoubtedly enjoy additional advantages. But other types of private schools offer programs that are *inferior* to those of the typical public school, and the best public schools in America generate truly magnificent achievement levels for their students. We know of *no* evidence that confirms a broad, inherent edge in student achievement for private schools, and it is time for the critics to stop pretending that such evidence exists.

Elite Schools and Their Effects. Although the *average* private school may provide little inherent advantage for students, elite academies certainly do, and we should also look at their programs. While such institutions constitute only a small minority of schools in America, they have an importance that far outweighs their numbers. This is because elite schools serve children of the rich and powerful. Attendance at such schools constitutes an important part of the process through which the upper class in our country reproduces itself, and this means that graduates of elite academies are likely to end up in positions of power. President Bush came from a wealthy family, of course, but he also attended Phillips Academy in Andover, Massachusetts, which, in turn, helped him to enter Yale. Studies of those who, like President Bush, attended the elite academies have also appeared, and we turn to these now.

Attendance at elite academies is associated with higher income in later life,[117] and most research on the effects of those schools has investigated the mechanisms generating this advantage. As a rule, it appears that those who graduate from elite schools are more likely than graduates of other high schools to gain entrance into high-status, highly selective, four-year undergraduate colleges (e.g., Ivy League colleges, Oberlin, Stanford, and the like). This, in turn, promotes subsequent entry into high-status graduate programs

and into careers providing wealth and power.[118] Moreover, evidence for the greater ability of elite-academy graduates to enter high-status colleges persists, even when controls are entered for family background and students' senior-year SAT scores.[119] And although this elite private-school advantage in admissions declined somewhat in the early years of this century, it remains substantial to this day.[120]

Why should students who attend elite schools be more able to enter high-status colleges? In part, those students are exposed to programs that stress leadership and encourage them to apply to such colleges; in part, they are required to take a focused curriculum suitable for college entry; in part, the high-status colleges discriminate in their admissions decisions in favor of graduates from those elite schools; and in part, elite schools actively negotiate with high-status colleges for the admission of their graduates.[121] In short, students from elite academies are more often given both curricular and extracurricular experiences, and they more often enjoy prejudicial assistance, which helps them "get ahead" in life.

Is this "fair"? The answer to this question depends on one's standard of fairness. Our own values suggest that *all* American students deserve equal encouragement and opportunities to "get ahead"; but Americans have always been willing to tolerate a lot of inequality, and allowing the rich to buy extra educational advantages for their children seems to be only an extension of this principle.

Summary. The evidence to date does *not* support the conclusion that, on average, private schools have an inherent programmatic edge over public schools. On the other hand, one group of private schools—the elite academies—clearly has such an edge, although it can be debated whether the public schools can or should emulate the techniques by which their advantages are gained.

Conclusion

We have no reason to be complacent about schools' performance. . . . But when schools are doing better than ever before, the best way to encourage continued improvement is not a concerted attack on school governance and organization. A more effective approach would be praise for accomplishment, provision of additional resources to programs whose results justify support, and reforms on the margin to correct programs and curricula shown to be ineffective.

—Richard Rothstein (The Myth of Public School Failure, 1993, p. 34)

This chapter completes a long journey. It began in Chapter 2, where we examined evidence about aptitude and achievement. Although critics central

to the Manufactured Crisis have claimed repeatedly that America's schools have fallen on evil days, when we look at the evidence of student aptitude and achievement, we discover that America's schools have *not* recently declined. In fact, some evidence suggests that American schools are now generating *higher* levels of achievement than ever before and that such achievement is now spread *more widely* in the population. And though the critics have also claimed that American schools look terrible by comparison with schools from other industrialized countries, support for this claim has also proved to be illusory.

In this chapter we have taken on other charges the critics have made, many of them designed to degrade the image of America's public schools. Some of these charges have focused on money. Critics have said that America spends more than other countries on its schools, but this turns out to be untrue. Others have claimed that the level of financial support for schools is not related to student achievement, but this absurd notion is also contradicted by the evidence. And critics have railed against recent increases in the costs of education, but we now know that these increases were not associated with wasteful bureaucracy or rises in basic instructional costs but rather with expanding services for students with special needs, auxiliary programs, social problems originating in the larger society, and increased costs of keeping the schoolhouse door open.

Critics have also claimed that American schools are performing so poorly that they hurt business, but this claim also flies in the face of evidence. Nor can evidence be found supporting the charge that our schools do not produce enough technically trained workers. Indeed, what America's industries seem to need is more workers with supportive attitudes and good work habits, but these problems are more associated with changes in working environments than with education. And no evidence supports the charge that businesses are stuck for billions of dollars to train a work force that is deficient in basic skills. Despite what critics have claimed, America's schools are *not* generating unproductive workers; indeed, America's work force actually leads the world in productivity! And despite hysteria generated by the National Science Foundation and hundreds of academics and opinion leaders, American education is *not* generating too few scientists, mathematicians, and engineers for our nation's economy. Rather, the country now enjoys a *surplus* of well-educated and technically able workers.

Critics have also charged that America's teachers are untalented and poorly educated, but the vast majority of those teachers have completed undergraduate degrees, and about half of them now have postgraduate degrees. Moreover, academic standards are rising in colleges of education, and most of the course work taken by education majors is taken in other academic subjects. Despite charges to the contrary, it appears that American classrooms and texts still convey firm, conservative, moral values to students. And, contradicting what you may have heard from critics or read in the press, American parents are *not* dissatisfied with their local schools; rather their satisfaction seems to be

greater than for parents in other countries. Finally—as if these charges weren't sufficient—critics have also argued that private schools have inherent advantages over public schools and that they are able to educate equivalently talented students to a higher standard than are public schools. But this charge is again unsupported by evidence.

Despite incessant claims to the contrary from critics and an ill-informed press, in aggregate the public schools of America look pretty good. And given the evidence we've reviewed, it appears that the reason so many American parents are satisfied with their schools is because, on average, those schools tend to meet their own and their children's needs. It's that simple.

This does not mean, of course, that American schools do not face serious problems, that educational opportunities are equitable in our country, or that our schools cannot be improved. Indeed, later in this book we take up some of these real, all-too-pressing problems and consider workable ideas for improving American education. But a major tenet of the Manufactured Crisis has always been that the average American school is failing our nation, and this tenet is clearly a fabrication. The idea that American schools are now failing the nation is a Big Lie. And like all Big Lies, it has created a great deal of mischief and unhappiness for hard-working citizens and educators who deserved better from America's political leaders, industrialists, media figures, and others responsible for creating and spreading the Manufactured Crisis.

Appendix H.

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The Oxford History of the United States

David M. Kennedy, *General Editor*

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EMPIRE OF LIBERTY

A History of the Early Republic, 1789–1815

GORDON S. WOOD

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Republican Reforms

Despite all the increased violence and rioting, despite all the anxiety over America's climate, despite all the hand-wringing over so much licentiousness spreading everywhere, by the early nineteenth century most Americans continued to remain extraordinarily confident and optimistic about the future. They could readily respond to the overweening enthusiasm of poet and diplomat Joel Barlow in his Fourth of July oration of 1809. Public speakers on such memorable occasions, said Barlow, were called upon "to give utterance to the feelings of their fellow citizens," and that he intended to do. America, he said, had passed its infancy and was now looking forward confidently to its adolescence and its manhood. Providence had assigned Americans a special destiny, a theme iterated over and over in these years. The country was not only new to its own people, "but new also to the world." America required thoughts and principles different from those of the Old World. "There has been no nation either ancient or modern that could have presented human nature in the same character as ours does and will present it; because there has existed no nation whose government has resembled ours . . . a representative democracy on a large scale, with a fixed constitution." The United States, said Barlow, was "the greatest political phenomenon, and probably will be considered as the greatest advancement in the science of government that all modern ages have produced."

But, Barlow added, Americans could not rest on their future promise; they had to work to achieve it. "Nations are educated like individual infants. They are what they are taught to be." Monarchies could exist with a corrupt and ignorant people, but republics could not. In order to sustain their republic, Americans had realized from the outset of the Revolution that they would have to throw off their older monarchical habits and thoughts and make themselves over. But they had every reason to believe that they were equipped to do so.[1]

1. Joel Barlow, *Oration, Delivered at Washington, July Fourth, 1809; at the Request of the Democratic Citizens of the District of Columbia* (Washington, DC, 1809), 3–6, 9.

They knew—their modern assumption lying at the heart of the Enlightenment told them so—that culture was something constructed, something made by people; and thus they could solve any problem by remaking what they thought and believed. If they could remake something in the physical world as intractable as the climate, then reforming something as man-made as their culture seemed much less challenging. Since free and republican America was "in a plastic state," where "everything is new & yielding," the country, said Benjamin Rush, "seems destined by heaven to exhibit to the world the perfection which the mind of man is capable of receiving from the combined operation of liberty, learning, and the gospel upon it."[2]

At the heart of the Revolution lay the assumption that people were not born to be what they might become. By exploiting the epistemology of John Locke, Americans had concluded that a child's mind was a blank slate, or, as one Quaker schoolmaster in 1793 called it, "soft wax." And since "the mind of the child is like soft wax, which will take the least stamp you put on it, so let it be your care, who teach, to make the stamp good, that the wax be not hurt."[3] Since, as Locke had democratically concluded, all knowledge came from the senses, and since, unlike reason, everyone was equally capable of receiving impressions through his or her senses, all young people could be molded to be whatever the teacher wanted them to be.[4]

And so Americans in the years following their Revolution set about reforming and republicanizing their society and culture. They aimed to continue the enlightened developments of the eighteenth century—to push back ignorance and barbarism and increase politeness and civilization. Indeed, as citizens of a popular-based republic, they needed more enlightenment than ever before. All aspects of life had to be republicanized—not only the society but also the literature, arts, law, religion, medicine, and even the family. One American even proposed the creation of a republican system of mathematics.

Many Americans, of course, had their hopes for the future mingled with doubts over their ability to become truly republican. Many of their

2. Donald J. D'Elia, "Dr. Benjamin Rush and the American Medical Revolution," American Philosophical Society, *Proc.*, 110 (1966), 70, 101.
3. Jacqueline S. Reinier, "Rearing the Republican Child: Attitudes and Practices in Post-Revolutionary Philadelphia," *WMQ*, 39 (1982), 155.
4. In a number of extraordinary novels written in the 1790s the writer Charles Brockden Brown explored what the unreliability of sense impressions could mean for the spread of "falsehood and dissimulation" in America. Colin Jeffery Morris, "To 'Shut Out the World': Political Alienation and the Privatized Self in the Early Life and Works of Charles Brockden Brown, 1776–1794," *JER*, 24 (2004), 624.

hopes went unfulfilled; many of their reforms were foiled or compromised. Still, what is most impressive is the confidence that so many Revolutionary leaders expressed in their capacity to make over their society. The result was an outburst of reform sentiment that has been rarely duplicated in American history.

Americans knew "that the mode of government in any nation will always be moulded by the state of education. The throne of tyranny," they told themselves, "is founded on ignorance. Literature and liberty go hand in hand."[5] It was the want of education that kept the mass of mankind in darkness and prejudice, in idleness and poverty, in paganism and barbarism. As the Massachusetts constitution of 1780 had stated, "Wisdom and knowledge, as well as virtue diffused generally among the people . . . [are] necessary for the preservation of their rights and liberties." But more was needed. If Americans were to sustain their republican experiment and remain a free and independent people, they must be taught not just their rights but also their duties as citizens. They must be educated in their moral obligations to the community.

The consequence of these attitudes was an unprecedented post-Revolutionary spate of speeches and writings on the importance of education. On the eve of the Revolution none of the colonies except those in New England had publicly supported schools. Even in New England the support had not been uniform: many of the towns had failed to meet their obligations to erect common or petty schools, and many more had refused to maintain the Latin grammar schools that prepared young boys for college. Many towns, such as Worcester, Massachusetts, in 1767, had urged their representative in the legislature "to relieve the people of the Province from the great burden of supporting so many Latin grammar schools."[6] And, of course, no parents in Massachusetts were required to send their children to school: the compulsion, such as it was, applied only to the towns to maintain petty or grammar schools.

Elsewhere in the colonies education had been very spotty. In New York, Philadelphia, and other coastal towns religious charity schools were the common institutions of elementary learning. Although a minister or some other patron could sponsor the education of a bright child, in all the colonies outside of New England education still remained solely the responsibility of parents. Sometimes parents hired itinerant freelance teachers or,

5. Simeon Doggett, *A Discourse on Education* (1797), in Frederick Rudolph, ed., *Essays on Education in the Early Republic* (Cambridge, MA, 1965), 155–56.

6. James Axtell, *The School upon a Hill: Education and Society in Colonial New England* (New Haven, 1974), 184.

like many of the Southern planters, employed Northern college graduates or indentured servants to tutor their children. Few children received any formal education beyond learning to read and write.

Nine colleges had existed on the eve of the Revolution, and some of them struggled to survive. Few Americans, in fact, attended college; only about half of the members of the First Congress in 1789 had gone to college. The nine colleges together awarded fewer than two hundred B.A. degrees a year, which is why Benjamin Rush called them the "true nurseries of power and influence." At Columbia College's commencement in May 1789 only ten students received B.A. degrees.[7]

Following the Revolution Americans began adding more colleges to the original nine, and by 1815 they had created twenty-four more. Soon colleges—mostly religiously inspired and short-lived—began to be created by the dozens.[8] Everybody now wanted colleges, including the first six presidents who repeatedly urged the creation of a national university.

But colleges were supposed to train only gentlemen—a tiny proportion of the society. Many leaders believed that it was the general populace above all that needed to be educated and at the state's expense. The Northwest Ordinance of 1787, organizing the territory north of the Ohio River, expressed the general Revolutionary commitment to education. It decreed that "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." Six of the sixteen state constitutions formed before 1800 called explicitly for public aid to education. In 1784 New York created a board of regents to oversee a single comprehensive system of schools, pledging support for Columbia College and such other schools as the regents might create. Massachusetts made similar plans for a comprehensive three-tiered system of education building on its earlier colonial legislation.[9]

Of all the Founders, Jefferson worked out the most detailed plans for reforming the government and society of his state. Through extensive changes in inheritance, landowning, religion, administration, and law, he hoped to involve the people of Virginia personally in the affairs of

7. William Smith, *The History of the Province of New York*, ed. Michael Kammen (Cambridge, MA, 1972), 194.

8. Donald Tewksbury, *The Founding of American Colleges and Universities Before the Civil War* (New York, 1932).

9. BR, "Education Agreeable to a Republican Form of Government" (1786), in Dagobert D. Runes, ed., *The Selected Writings of Benjamin Rush* (New York, 1947), 98–99, 92; Lawrence A. Cremin, *American Education: The National Experience, 1783–1876* (New York, 1980), 116–17.

government. But nothing was more important to him than his plans for a state-supported system of education.[10] In his 1779 Virginia Bill for the More General Diffusion of Knowledge he, like Rush, proposed a three-tiered pyramid of local education. At the base would be three years of free elementary schools for all white children, boys and girls. The next level offered twenty regional academies with free tuition for selected boys "raked from the rubbish annually." Finally, the state would support the best ten needy academic students at the university level, the aristocracy of talent that he described as "the most precious gift of nature."[11]

Everywhere intellectual leaders drew up liberal plans for educating the American people. Unlike in England, where conservative aristocrats opposed educating the masses out of fear of promoting dissatisfied employees and social instability, American elites generally endorsed education for all white males.[12] In a republic that depended on the intelligence and virtue of all citizens, the diffusion of knowledge had to be widespread. Indeed, said Noah Webster, education had to be "the most important business in civil society."[13]

Most of the educational reformers in these years were less interested in releasing the talents of individuals than, as Benjamin Rush put it, in rendering "the mass of the people more homogeneous" in order to "fit them more easily for uniform and peaceable government." Pupils should be taught that they did not belong to themselves but were "public property." It was even "possible," said Rush, "to convert men into republican machines."[14] Even Jefferson, despite his emphasis on guarding the freedom and happiness of individuals, was more interested in promoting social unity and the public good.

Yet in the decades immediately following the Revolution, few of these elaborate educational plans came to fruition. Virginia repeatedly tried to erect a comprehensive school system along Jeffersonian lines, but the expense of such a system and the dispersed population prevented legislative adoption. In 1796 the Virginia legislature at least approved the creation of a system of elementary schools but left it to each county court to implement, in Jefferson's opinion, effectively allowing the county courts to emasculate what the legislature had promised.

10. TJ said as much in a letter to George Wythe, 13 Aug. 1786, *Papers of Jefferson*, 10: 244.
11. Dumas Malone, *Jefferson the Virginian* (Boston, 1948), 282–83.
12. Carl F. Kaestle, *Pillars of the Republic: Common Schools and American Society, 1780–1860* (New York, 1983), 33–35.
13. Noah Webster, *On the Education of Youth in America* (1790), in Rudolph, ed., *Essays on Education*, 59.
14. BR, "Of the Mode of Education Proper in a Republic" (1798), in Runes, ed., *Selected Writings of Rush*, 90, 88.

Elsewhere religious jealousies and popular opposition to tax increases for schools that still seemed to benefit only elites undermined support for comprehensive school systems. Too many ordinary farmers and artisans did not want their children compelled to go to school all day; they needed their labor at home. When little happened as a result of the 1784 act in New York, the state legislature tried again in 1795 and in 1805 to encourage the establishment of a comprehensive school system. Although many gentry leaders urged the need for public education, the public remained skeptical. Consequently, schooling continued in nearly all the states to be largely a private matter. In place of the elaborate plans for publicly supported education, reformers had to make do with privately supported charity schools, Sunday schools, and infant schools.

Even in New England, with its long tradition of public education, privately supported academies sprang up in the post-Revolutionary years to replace the older town-supported grammar schools that had existed in the colonial period. These academies, designed separately for both young men and women, became very important vehicles of education. As a Federalist complained in 1806, even "the middling class of society" was finding it "fashionable" to send their sons and daughters to these academies, often because the ambitious young people themselves pressed their parents to allow them to attend the schools.[15] Because the modern distinction between public and private was not yet clear, legislatures continued to grant public money periodically to some of these essentially private charity schools and academies.

Despite the spread of private education, however, the republican ideal of single, comprehensive, publicly supported systems of schooling did not die. Even though they were never adequately implemented, a series of legislative acts in states like New York and Massachusetts kept alive the republican idea of a three-tiered public-supported system for all people. A successful publicly funded modern educational system would come only in the common school movement of the second quarter of the nineteenth century.[16]

FORMAL SCHOOLING, OF COURSE, was never all that the Revolutionaries meant by education. Although many thought the Revolution was over in 1783 with the British recognition of American independence, Dr. Benjamin Rush knew better. "We have changed our forms of government," he said in 1786, "but it remains yet to effect a revolution in

15. J. M. Opal, *Beyond the Farm: National Ambitions in Rural New England* (Philadelphia, 2008), 97, 104–9.

16. Daniel Walker Howe, "Church, State, and Education in the Young American Republic," *JER*, 22 (2002), 1–24.

our principles, opinions, and manners so as to accommodate them to the forms of government that we have adopted."[17]

Rush was born in Philadelphia in 1745, and, like so many of the other Revolutionaries, he had no distinguished lineage: his father was an ordinary farmer and gunsmith. When Rush was five his father died, so his mother began running a grocery store to support the family. At the age of eight Rush was sent to live with a clergyman-uncle who saw to it that he received an education. After graduating from the College of New Jersey (Princeton) in 1760, Rush apprenticed as a physician in Philadelphia before leaving for further medical training at the University of Edinburgh. After returning to America in 1769, he became professor of chemistry at the College of Philadelphia and a participant in the Revolution both as a political leader and as a physician.

Since Rush came to believe that "the science of medicine was related to everything," he considered everything within his intellectual domain and had something to say about everything. In the decades following the Revolution Rush carried on what one historian has called "a one-man crusade to remake America."[18] "Mr. Great Heart," Jeremy Belknap called him, after the character in John Bunyan's *Pilgrim's Progress* who attacked all the giants and hobgoblins that stood in the way of getting to the Celestial City. Believing that he "was acting for the benefit of the whole world, and of future ages," Rush campaigned for every conceivable reform—for a national university, churches for blacks, temperance, healthy diets, the emancipation of the slaves, prison reform, free postage for newspapers, enlightened treatment of the insane, the education of women, animal rights, and the abolition of hunting weapons, oaths, dueling, and corporal and capital punishment. He even hoped eventually to eliminate all courts of law and all diseases. He was not so utopian, he said in 1786, as to think that man could become immortal, but he did believe that "it is possible to produce such a change in his moral character, as shall raise him to a resemblance of angels—nay, more, to the likeness of God himself."[19]

As republicans, Americans shared at least some of Rush's enthusiasm for reform, and their leaders enlisted every kind of media to change people's opinions, prejudices, and habits. Of these media the spoken and written word was most important. Every occasion demanded a lengthy speech, and

17. BR to Richard Price, 25 May 1786, *Letters of Rush*, 1: 388–90.
18. Editorial Note, *Letters of Rush*, 1: lxvii.
19. George W. Corner, ed., *The Autobiography of Benjamin Rush* (1948; Westport, CT, 1970), 161; D'Elia, "Rush and the American Medical Revolution," 101–2; BR, "The Influence of Physical Causes upon the Moral Faculty" (1786), in Runes, ed., *Selected Writings of Rush*, 209.

republican oratory was now celebrated as a peculiarly American form of communication. Groups sponsored public lectures on all sorts of topics and laid the foundations for the later lyceum movement. But it was printed matter, with its republican capacity to reach the greatest numbers of people, which came to be valued most. Private conversation and the private exchange of literary manuscripts among a genteel few might be suitable for a monarchy, but a republic required that politeness and learning be made more public.[20]

As republican citizens, many Americans, especially among the middling sort, became ever more anxious about acquiring gentility. People wanted more advice and etiquette manuals for every occasion or subject—from how to write letters to friends to how to control and clean their bodies. People, even gentry, who during their entire lives had never been wet all over now engaged in occasional bathing. In the 1790s public bathhouses were erected in some American cities as people began responding to the appeals for more cleanliness contained in scores of conduct manuals.[21]

All the various efforts to become more polite that had characterized eighteenth-century colonial society took on greater urgency under the new Republic. During the entire eighteenth century Americans published 218 spelling books designed to improve the writing of the English language, two-thirds of them in the final seventeen years of the century, between 1783 and 1800.[22] By the early nineteenth century Noah Webster's comprehensive speller, first published in 1783, had sold three million copies.[23] Although writing and spelling were important, they were not as important as reading. The few private libraries that had existed in the large cities in the colonial period were now supplemented by publicly supported libraries, which in turn sponsored increasing numbers of reading clubs, lectures, and debating societies.[24]

Most Americans now believed that anything that helped the spread of learning was good for their republic, for an informed citizenry was the source of republican freedom and security.[25] Although Americans could

20. David S. Shields, *Civil Tongues and Polite Letters in British America* (Chapel Hill, 1997), 316–17.
21. Richard L. Bushman, "The Early History of Cleanliness in America," *JAH*, 74 (1988), 1215–17; Kathleen M. Brown, *Foul Bodies: Cleanliness in Early America* (New Haven, 2009).
22. Russell B. Nye, *The Cultural Life of the New Nation, 1776–1830* (New York, 1960), 134; Konstantin Dierks, "Letter Writing, Gender, and Class in America, 1750–1800" (Ph.D. diss., Brown University, 1999), ch. 7.
23. Andrew Burstein, *Sentimental Democracy: The Evolution of America's Romantic Self-Image* (New York, 1999), 169.
24. Shields, *Civil Tongues and Polite Letters*, 322–23.
25. Richard D. Brown, *The Strength of a People: The Idea of an Informed Citizenry in America, 1650–1870* (Chapel Hill, 1996), 85–118.

not agree on what the citizenry should be informed about, they created new organizations for the collecting and conveying of knowledge at remarkable rates. Beginning with the reorganization of the American Philosophical Society in 1780, Americans began establishing many new learned academies and scientific societies. John Adams helped to form the American Academy of Arts and Sciences in Massachusetts. In 1799 the Connecticut Academy was created, and soon other states were establishing similar institutions.

In 1791 Congregational clergyman and historian Jeremy Belknap, concerned about the lack of any repository for historical documents in the United States, founded the Massachusetts Historical Society. The society was designed to preserve the materials that would "mark the genius, delineate the manners, and trace the progress of society in the United States."[26] It became the model for the New-York Historical Society (1804), the American Antiquarian Society (1812), and dozens of other historical societies created in other states in the early nineteenth century.

Everywhere institutions and organizations were burdened with the responsibility of imparting virtue and knowledge to the citizenry. Freemasonry, for example, came to see itself principally as an educational instrument for promoting morality. "Every character, figure, and emblem, depicted in a Lodge," declared a Masonic handbook, "has a moral tendency to, and inculcates the practice of virtue." But Masonry was not content with educating only its members; it sought to reach out and affect the whole society. Masonic brothers were involved in a multitude of public ceremonies and dedications—anointing bridges, canals, universities, monuments, and buildings. In 1793 President Washington himself, wearing a Masonic apron and sash, laid the cornerstone of the new United States Capitol in the planned Federal City. Masons, many of whom were artisans, architects, and painters, placed the fraternity's emblems, signs, and symbols on a wide variety of objects, including ceramics, pitchers, handkerchiefs, liquor flasks, and wallpaper—with the didactic hope of teaching virtue through the simple and expressive visual language of Masonry.[27]

26. Louis L. Tucker, *Clio's Consort: Jeremy Belknap and the Founding of the Massachusetts Historical Society* (Boston, 1990), 95.

27. Len Travers, "'In the Greatest Solemn Dignity': The Capitol Cornerstone and Ceremony in the Early Republic," Steven C. Bullock, "'Sensible Signs': The Emblematic Education of the Post-Revolutionary Freemasonry," and James Steven Curl, "The Capitol in Washington, D.C., and Its Freemason Connections," all in Donald R. Kennon, ed., A *Republic for the Ages: The United States Capitol and the Political Culture of the Early Republic* (Charlottesville, 1999), 155–76, 177–213, 214–67.

Printed matter flooded the new Republic. Three-quarters of all the books and pamphlets published in America between 1637 and 1800 appeared in the last thirty-five years of the eighteenth century. Few periodicals had appeared during the colonial period, and these had been frail and unstable, blossoming for a moment and dying like exotic plants. As late as 1785 only one American magazine existed, and it struggled to survive.[28]

Suddenly, this all changed. Between 1786 and 1795 twenty-eight learned and gentlemanly magazines were established, six more in these few years than in the entire colonial period. These magazines contained a rich mixture of subjects, including poetry, descriptions of new fossils, and directions for expelling noxious vapors from wells; and for the first time some of the magazines were aimed at female readers.

Although the Confederation had not done much to accelerate the movement of information throughout the country, the newly invigorated federal government was eager to change things. In 1788 there had been only sixty-nine post offices and less than two thousand miles of post roads to service four million people over half a continent. Congress's establishment of a national post office in 1792 created new routes and led to a proliferation of post offices throughout the country. By 1800 the number of post offices had grown to 903; by 1815 there were over three thousand post offices. Every little American town or hamlet wanted one. Since a post office was "the soul of commerce," a group of South Carolinians in 1793 naturally had petitioned for one. Without "such a direct, regular, and immediate communication by posts," the petitioners said, we are "kept in ignorance" and "know not anything which concerns us, either as men or as planters." To some observers the postal system seemed to be the most useful and rapidly improving feature of American life. "The mail has become the channel of remittance for the commercial interests of the country," said Jefferson's postmaster general, Gideon Granger, "and in some measure for the government." The postal system was helping to annihilate time and distances everywhere.[29]

Americans would soon make their postal system larger than the postal systems of either Britain or France. By 1816 the postal system had over thirty-three hundred offices, employing nearly 70 percent of the entire federal civilian workforce. The amount of mail increased just as quickly. In the year 1790 the postal system had carried only three hundred

28. Frank Luther Mott, *A History of American Magazines 1741–1850* (New York, 1930), 28–38.

29. Richard R. John, *Spreading the News: The American Postal System from Franklin to Morse* (Cambridge, MA, 1995), 50, 8, 54, 17–18.

thousand letters, one for about every fifteen persons in the country. By 1815 it transmitted nearly seven and a half million letters during the year, which was about one for every person. The post office was, as Benjamin Rush urged in 1787, the "only means" of "conveying light and heat to every individual in the federal commonwealth." And, unlike the situation in Great Britain and other European nations, the mail was transmitted without government surveillance or control.[30]

All these developments helped to speed up the rate at which information was communicated from one place to another. In 1790 it had taken more than a month for news to travel from Pittsburgh to Philadelphia; by 1794 that had been cut to ten days. In 1790 it had taken forty days to receive a reply to a letter sent from Portland, Maine, to Savannah, Georgia; by 1810 that time had been reduced to twenty-seven days.[31]

The postal system had its greatest effect on the circulation of newspapers. Congress's Post Office Act of 1792 allowed all newspapers, and not just those close to the centers of power, to be sent by mail at very low rates; in effect, newspaper circulation was subsidized by letter-writers. This act allowed for the dispersal of newspapers to the most remote areas of the country and nationalized the spread of information. In 1800 the postal system transmitted 1.9 million newspapers a year; by 1820 it was transmitting 6 million a year.[32]

In 1790 the country contained only 92 newspapers, only eight of them dailies. By 1800 this number had more than doubled, to 235, twenty-four of which were dailies. By 1810 Americans were buying over twenty-two million copies of 376 newspapers annually—even though half the population was under the age of sixteen and one-fifth was enslaved and generally prevented from reading. This was the largest aggregate circulation of newspapers of any country in the world.[33]

ALL THIS CIRCULATION of information could not have been achieved without the building of new postal roads and turnpikes. The need was obvious, Samuel Henshaw of Northampton, Massachusetts,

30. John, *Spreading the News*, 3, 4, 25–63.

31. Allen R. Pred, *Urban Growth and the Circulation of Information: The United States System of Cities, 1790–1840* (Cambridge, MA, 1975), 36–42; John, *Spreading the News*, 17–18; Brown, *Strength of a People*, 85–118.

32. John, *Spreading the News*, 36–42.

33. Alfred M. Lee, *The Daily Newspaper in America* (New York, 1937), 715–17; Frank Luther Mott, *American Journalism: A History of American Newspapers in the United States Through 250 Years, 1690–1940* (New York, 1941), 159, 167; Merle Curti, *The Growth of American Thought*, 3rd ed. (New York, 1964), 209; Donald H. Stewart, *The Opposition Press of the Federalist Period* (Albany, 1969), 15, 624.

Appendix I.

Introduction to *A Wolf at the School House Door*

A WOLF AT THE SCHOOLHOUSE DOOR

INTRODUCTION

When Secretary of Education Betsy DeVos was asked in an interview whether she saw the coronavirus pandemic as an opportunity to advance the cause of private school choice, she responded without hesitation. "Yes, absolutely."[1]

As schools across the country confronted the crisis and its unprecedented financial consequences, DeVos remained single-mindedly focused on the agenda that made her Donald Trump's most controversial cabinet pick. In the weeks after schools shut down, DeVos encouraged states to use federal funds to help parents pay private school tuition, and demanded that school districts share millions of aid dollars with wealthy private schools.

Initially, DeVos was treated as more of a joke than a threat—an impression solidified by a series of clumsy media appearances. Yet DeVos was no political naïf. Upon taking office, she immediately made clear her disinterest in the public schools—though they are attended by the vast majority of American children—using her

policy perch to advocate for breaking up what she derisively calls "the system."

Close observers have been struck by DeVos's radical agenda. But as we argue in this book, the agenda is not hers alone. While DeVos has been the most prominent public face of the recent push to dismantle public education, she is not its architect. The movement has been steadily gaining power and notching progress for decades—building financial support, erecting a policy infrastructure, and constructing a finely honed public message.

In recent years, bestsellers like *Dark Money* by journalist Jane Mayer and *Democracy in Chains* by historian Nancy MacLean have examined efforts by the radical right to fundamentally alter the American political system. Yet these works have largely overlooked public education in their accounts. The billionaires populating the pages of these books—the Bradleys, the DeVoses, the Kochs—have long been fixated upon the nation's system of public schools, and have slowly laid the groundwork for its unraveling. Now, in our post–*Citizens United* era, conservative elites are increasingly able to translate their animus against public education into state-level policy.

When the Koch network held its annual retreat in 2018 at a resort outside of Palm Springs, the seven hundred attendees—among the richest people in America—were instructed to go "all in" on efforts to transform the education system. "We can change the trajectory of the country," Charles Koch told donors during a cocktail reception.[2] Among the network's priorities: replacing brick-and-mortar schools with a voucher program that would allow parents to purchase education products for their children in an Amazon-like marketplace.

That K-12 education is in the sights of conservative plutocrats shouldn't come as a surprise. Public schools are the biggest ticket

item in many state budgets, making them a prime target for anti-tax crusaders. Then there's the fact that the country's teaching force, some 3 million strong, remains overwhelmingly unionized—the single largest body of union members in the country. But there is something more fundamental at stake here beyond just an ideological commitment to small government or a deep-seated loathing of unions. As political economist Gordon Lafer notes, "education is the one remaining public good to which most Americans still believe we are entitled to by right of citizenship."[3]

Back to the Future

This book began in response to a puzzling question: Why had conservative policy ideas, hatched decades ago and once languishing due to a lack of public and political support, suddenly roared back to life in the last five or so years? Take, for example, the idea of private school vouchers, the ignominious origins of which can be traced to the backlash against court-ordered desegregation—when state and local governments across the South paid for white citizens to send their children to private schools. With the exception of a brief and ill-fated push by the Reagan administration, vouchers had slowly faded from the conservative policy agenda. So what explained their return as a "disruptive innovation"?

In the spring of 2019, DeVos unveiled an ambitious new school choice initiative. At the center of the effort was a proposed $5 billion fund, providing individuals and corporate donors with a dollar-for-dollar tax credit for giving to scholarship programs that help families pay for tuition at private schools, homeschooling expenses, and other education services. But while the hashtag #educationfreedom was new, the rest of DeVos's agenda was a ripped-from-the-eighties retread. More than three decades earlier,

her predecessor, Ronald Reagan's controversial secretary of education William Bennett, also pitched tax-credit scholarships, along with school vouchers for low-income parents. Even education savings accounts, which let parents spend state education dollars on an array of what DeVos terms "education options," date back to the Reagan era.

As we began to explore other policies favored by conservative hard-liners—market-based school choice, for-profit schools, virtual schooling, and the rollback of regulations—we noticed a similar pattern. Schemes that had first emerged as policy pipe dreams had been carefully stripped of their ideological underpinnings. Repackaged as new ideas, and accompanied by high-minded rhetoric, they've taken on new life. The ideological origins of these proposals have been largely forgotten, as have the battles fought over them. Meanwhile, the true believers have been building donor networks, cultivating political alliances, developing policy infrastructure, and crafting road-ready legislation.

Today's target is the "system," a catchall intended to conjure up waste, red tape, and soul-crushing bureaucracy. Yet the aim goes much deeper—striking at the core principles animating taxpayer-supported education. Indeed, the very idea of public education as a common good is depicted as an impingement on the freedom of individual students and their parents. "You can't have a one-size-fits-all system for every child's particular needs," said Mary Fallin, the former governor of Oklahoma, in a promotional video for the conservative Heritage Foundation touting education savings accounts.[4] We need to "break down the system so each kid is treated as a unique entity," pronounced Frank Edelblut, New Hampshire's education commissioner.[5]

Lawmakers, state officials, think tanks, and advocacy groups endlessly repeat such claims about the shortcomings of the existing system, hiding their radically conservative vision of schooling beneath banally familiar language. Listen closely, though, and the sharp ideological edge is hard to miss. At a 2017 appearance before the American Legislative Exchange Council, Betsy DeVos gleefully repurposed Margaret Thatcher's infamous claim that "there is no such thing as society." There is no education "system," DeVos told the corporate lobby group. "This is about individual parents, students, and families."[6]

The current sales pitch for pulling apart public schools even comes with an invented history. Schools, we are told, were modeled on factories, which trained students to work on the assembly line. Even as the U.S. economy has transformed, schools have continued to "batch process" students for jobs that no longer exist. None of this is really true, of course. Schools were not modeled on factories; student experiences in school are not uniform; and most of today's jobs will, according to predictions, still exist a generation from now.[7] But the conservatives' aim here isn't to offer a history lesson. Instead, this fabricated version of the past is designed to leverage anxiety among parents about the economic prospects of their children. Falling wages, fears of automation, the so-called skills gap—all of this can be used to make the case for a radical overhaul of public education, driven by a conservative agenda.

The Reagan-era push to implement school vouchers produced an avalanche of backlash. Democrats, and even many Republicans, argued that making education funding "portable"—even if the program were limited to low-income families—would devastate public schools. Teachers' unions, which held considerable sway within the Democratic Party, warned of privatization. And the public was decidedly cool to the idea of sending taxpayer funds to private religious schools. The proposal was dead on arrival.

Fast forward to the present, and Reagan's vision has not only

come back to life, but its original radicalism is far harder to detect. Instead, it is rooted in the standard school-bashing that has become commonplace on both sides of the aisle. Innovation, no matter how dubious, is touted as a panacea for the ostensible shortcomings of public education.

This Time It's Different

The tradition of trashing public education has deep roots. Claims that schools were failing and required drastic intervention date back to the 1820s, with complaints from school reformers about poor teachers, low standards, and incompetent school boards.[8] Policy elites have long made their case for change by slamming the status quo.

During the past several decades, however, the rhetorical assault on America's public schools has intensified. The 1983 publication of the *A Nation at Risk* report, with its dire talk of a "rising tide of mediocrity," is credited by scholars and policy makers as a watershed moment, ushering in a newly strident discourse about public education. Since then, a national discussion about "failing schools"—increasing in intensity, but abstract in focus—has shaped public understanding about the state of education in the United States. As polling has documented, Americans have developed more and more negative views of the nation's schools, even while continuing to feel positively about the education their own children are receiving.[9]

Of course, even the fiercest critics have generally found *something* redeemable in the broad contours of American public education. Consider, for example, the free-market economist Milton Friedman, who first proposed the idea of taxpayer-funded school vouchers. Even as Friedman made the case for an approach that,

as he argued, would gradually replace public schools with private ones, he still insisted on the idea of public education as a public good. "The gain from the education of a child accrues not only to the child or to his parents but other members of society," wrote Friedman in his seminal 1955 article about vouchers. "A stable and democratic society is impossible without widespread acceptance of some common set of values and without a minimum degree of literacy and knowledge on the part of most citizens."[10]

Likewise, the unlikely assemblage of billionaire philanthropists, charter school proponents, big-city mayors, and civil rights groups—a coalition instrumental in shaping the discourse about what's wrong with public schools—remains committed to public education in *some* form. While "education reform" is a baggy, ill-defined concept that means both everything and nothing, it mostly focuses on transforming the governance structures of schools. Market advocates and their close cousins, the neoliberals, push for privately run schools with merit pay for teachers because they maintain that the private sector is a more efficient delivery mechanism. The Silicon Valley–style "disruptors" want to move education online and free it from what they call "friction"—the myriad rules and regulations that govern schooling. Meanwhile, the successors of a long tradition of progressive reform believe that making schools more democratic can empower both teachers and students.

But as we argue in the chapters that follow, the present assault on public education represents a fundamentally new threat, driven by a new kind of pressure group. Put simply, the overarching vision entails unmaking public education as an institution. An increasingly potent network of conservative state and federal elected officials, advocacy groups, and think tanks, all backed by deep-pocketed funders, has aligned behind a vision of a radical reinvention.

As DeVos proclaimed during her 2018 "Rethink School" tour: "There's no more time for tinkering around the edges."[11]

What exactly does the agenda look like? There are four main principles:

1. **Education is a personal good, not a collective one.** It is more like private property than like a public park. Consumers should be able to shop for education as they do any other product.
2. **Schools belong in the domain of the free market, not the government.** They should be under the purview of personal preference and choice, not regulation and oversight. The role of the state should be as minimal as possible.
3. **To the extent that they are able, "consumers" of education should pay for it themselves.** The cost of schooling should not be distributed across society, except to provide a rudimentary education for those in poverty.
4. **Unions and other forms of collective power are economically inefficient and politically problematic.** They represent an ideological and practical obstacle to a radical free-market agenda. Their power should be limited or challenged, and when possible, they should be prevented from forming in the first place.

In state after state, these principles are being enacted into law and policy, often behind closed doors and away from public scrutiny. Some degree of secrecy or opacity is key, because Americans have consistently supported public education over the decades. Even in

the wild west of Arizona, where the dismantling agenda has taken deep hold, the public has proved unwilling to give up the idea of locally controlled, taxpayer-supported, open-access schools. After the Republican-dominated legislature passed a law in April 2017 making all 1.1 million of Arizona's public schoolchildren eligible for private school vouchers, a parent group managed to collect more than one hundred thousand signatures in a matter of weeks, forcing the issue onto the ballot as a referendum measure, where it went down to overwhelming defeat.[12] Similarly, public sympathy for striking teachers—first in "red" states where deep cuts to school spending and the expansion of school choice have imperiled public schools, then in "blue" cities where the growth of charter schools has meant less money for students and teachers in traditional district schools—has demonstrated the deep support for public education that still exists.

The Battles to Come

A wolf is lurking at the door of America's public schools—prowling, biding its time, and waiting for the pack to assemble. Support for public education may be strong, but it is fragmented, variable, and voluntary—challenges familiar to any true grassroots affair. Those seeking to dismantle the system, meanwhile, are unified, patient, and well resourced.

In the battles to come, supporters of public schools will need three kinds of knowledge, and this book is organized accordingly. In the first section, we examine the dogma that underlies the dismantling agenda. Public consideration demands a clear presentation of aims and objectives. Yet the drive to unmake public education has been masked by linguistic feints and purposeful abstraction, designed to hide the principles at its core. In service of reasoned debate and

deliberation, then, we trace these ideas from their roots, clarifying the ideology at the heart of this movement.

The second part of this book looks closely at the changes already in motion. Being broadly familiar with the animating spirit and aims of this movement is one thing; knowing how it takes form in public policy and the law is another. In order to advance public understanding of the dismantling agenda, the center section of the book examines the core policies of the dismantlers' effort.

In the third and final section of the book, we explore possible futures. A prospective view is essential for evaluating present policy, as policy is inherently the work of future-making. Following these efforts to their logical conclusion, we survey the landscape of a system dismantled.

Our intention in writing this book is not a subtle one. We are sounding an alarm. The diagnosis we issue is not in service of our own policy aims; we are not peddling a treatment. Our goal, instead, is to incite a public reckoning—on behalf of the millions of families presently served by the American educational system, and the many more who stand to suffer from its unmaking.

After all, what does it take to frighten away a wolf? Shouting, making noise, and standing tall.

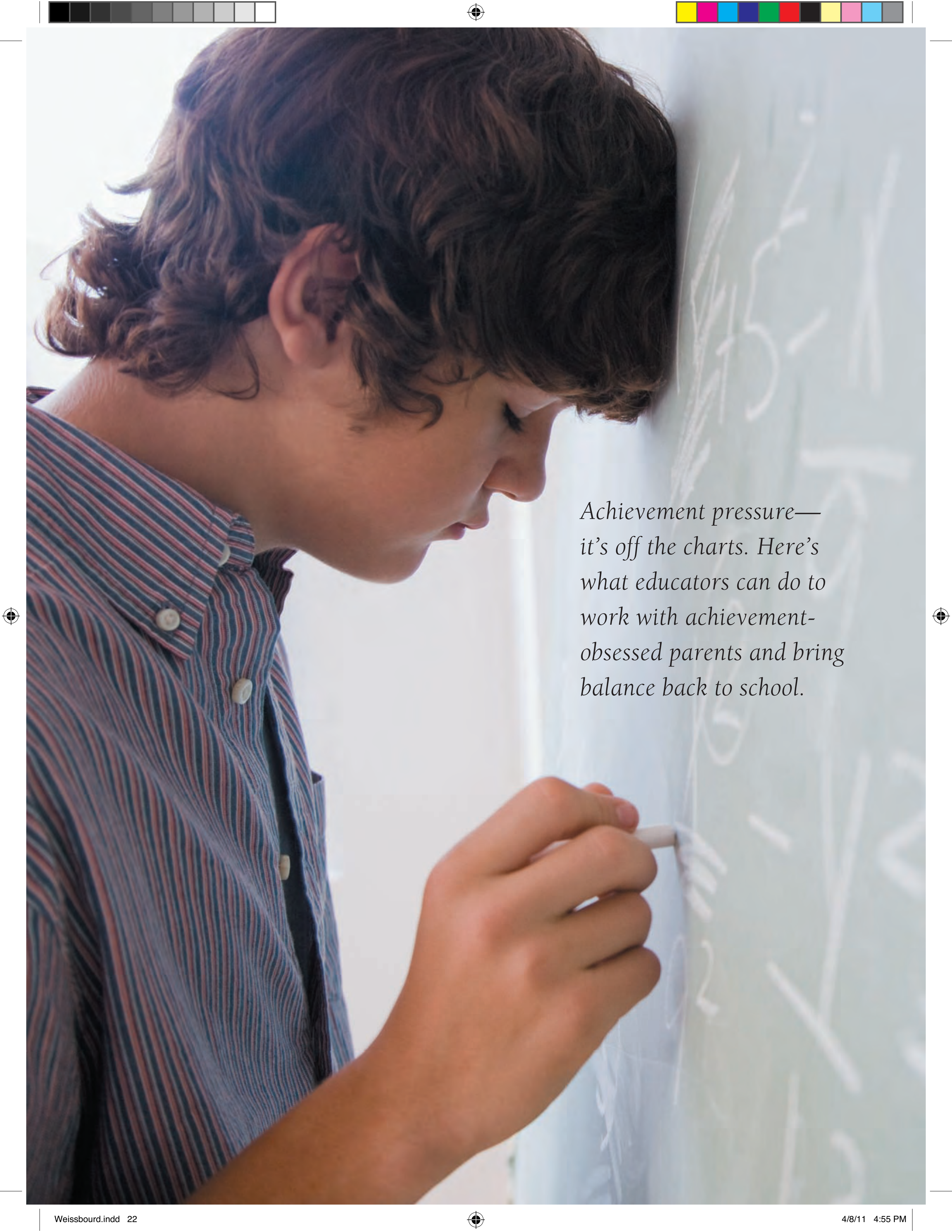
1
Private Values

Private school. The very words evoke distinction—elegant, ivy-covered buildings dotted among quiet woodlands and lush green playing fields. Scenes like these speak to our most romantic notions about education. And when one glances at the colleges attended by graduates of America's top private schools—prestigious institutions that so often capture the popular imagination—it can be easy to conclude that public education is a pitiable alternative.

When Americans think of private schools, they often envision a place like Phillips Academy in Andover, Massachusetts, which has a billion-dollar endowment and annual tuition of close to $50,000. They picture public schools, but better—stronger students, statelier facilities, and superior academics. The more representative image, however, might be a small school run out of the basement of a church or occupying a strip-mall storefront.[1]

As for the Dead Poets Society–style depiction of a distinguished educator engaging his blazer-clad charges in a mansion-like

Appendix J
The Over Pressured Student



Achievement pressure—it's off the charts. Here's what educators can do to work with achievement-obsessed parents and bring balance back to school.

The Overpressured Student

Richard Weissbourd

It's early evening, and I'm speaking to a group of about 40 parents at a high-powered independent school with a stunning record for sending students to prestigious colleges. The topic is moral development. One reason I've been asked to speak is concern among both faculty members and parents that the school's intense focus on academic achievement has squeezed out attention to other crucial aspects of kids' lives.

About 15 minutes into my talk, a hand shoots up, and a parent says, "I agree with you that it's important for kids to be good people, but, realistically, that won't help my child get into a place like Harvard." Another parent quips, "Can you change Harvard so that being a good person counts in the application?" Many parents in the audience laugh nervously. But other parents are on the edge of their seats. How much *should* they focus on their child being good? And will it help their child get accepted at a prestigious school?

Overboard on Achievement

Increasingly in recent years I've heard stories about students in independent schools and wealthy suburban schools who are strung-out achievement junkies and about parents who drive them relentlessly. Wealthy parents are, of course, easy targets. They seem to have no excuses and few defenders.

In fact, I've found many parents in these schools who have entirely healthy attitudes about their children's achievements—parents who are simply trying to fathom the mystery of what will help their children thrive. And I've met many kind, emotionally healthy, and well-grounded children in these schools. Images in popular culture of rich kids as morally imbecilic, trust fund–pampered, Porsche-driving vipers are as wildly off target as are stereotypes of marauding, gun-toting, crack-addled poor black and Latino kids.

But the fact remains: When it comes to academic achievement, many parents in upper- and middle-class communities have gone overboard. Parents are now going to legendary lengths to prime the mental engines of infants and toddlers—one-third of U.S. children have seen a Baby Einstein video (Quart, 2006). Some parents not only become paramilitary when it comes to securing selective preschool slots, but also procure tutors for their preschool children (Fuchs, 2002). And when college looms on the horizon, the true madness begins. As an *Atlantic Monthly* article observed, "*Millions* of families are now in a state of nervous collapse regarding college admissions," and large numbers of kids are in terror that if they don't get into a high-profile college, their life is "ruined" (Easterbrook, 2004, p. 128).

In a study that my research team conducted at an independent school, more than one-third of the 40 juniors surveyed identified "getting into a good college" as more important than "being a good person," and nearly one-half of students said that it was more important to their parents that they get into a good college than that they be good people. When I shared these data with the school, a few teachers protested vehemently. They thought the numbers were far too low.

But the trouble is not simply parents. Many schools—independent and suburban schools especially—stoke achievement pressure. I recently spoke to a group of independent school teachers and administrators, and one teacher said,

> Every particle of our schools is now devoted to students achieving at a high level and getting into one of these prestigious schools. It's crazy! We should blow ourselves up and start all over again.

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Numerous heads nodded in assent.

The point is not, of course, that parents or teachers should stop putting pressure on children to achieve. It's entirely possible for children to achieve stratospherically and, at the same time, lead full, gratifying, and moral lives.

The point is that we're out of balance. Achievement has, in many cases, become the chief goal of child-raising—and this intense focus threatens to make children both less happy and less moral. The point is also that parents, schools, and communities all have vital roles to play in curbing destructive forms of achievement pressure and in cultivating healthy notions of achievement.

The Emotional and Moral Toll

Take 22-year-old Sara, who was, according to her therapist, "a performance machine." Her parents were afraid of what would happen if she didn't do well in everything she did. The therapist told me,

> I don't think she was ever able to figure out what she wanted. She was angry, adrift, and empty, and she didn't know why. The work of therapy is very slowly helping her start over and figure out what she wants, who she is. She's having to go back and create a self.

Research by Columbia University psychologists Suniya Luthar and Shawn Latendresse (2005) suggests something striking and troubling: Even though poor children face many hardships, teenagers in affluent families suffer emotional and moral problems at roughly the same rates. The causes of these troubles clearly differ in rich and poor communities, as do the consequences. Yet affluent children suffer high rates of behavioral problems; delinquency; drug use (including hard drugs); anxiety; and depression (Luthar & Becker, 2002; Luthar & Latendresse, 2005). One study of 144 girls in an affluent northeastern high school revealed that these girls were two to three times more likely to report clinical levels of depression than the general population of teens (Luthar & D'Avanzo, 1999). Although there are, to be sure, many complex causes of behavioral and emotional problems, researchers point to a strong association between these troubles and achievement pressures.

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Children with "very high perfectionist strivings—those who saw achievement failures as personal failures" (Luthar & Latendresse, 2005) are more at risk, as are children whose parents value their accomplishments more than aspects of their character. Ironically, this pressure is not even likely to achieve what it's intended to achieve. Research suggests that children who are subjected to intense achievement pressure by their parents don't outperform other students (Luthar & Becker, 2002).

Overpressured . . .

Children often feel the most heat to achieve—and, more important, develop their understandings of what high achievement is and why it's important—from their parents. The damage wrought by a small but not trivial fraction of parents is obvious.

Some parents fail to model a basic sense of fairness. It's not rare in some affluent communities for parents to get a psychiatrist to falsely diagnose their child as having attention deficit disorder so he or she can petition for extended time on the SATs.

Some parents fuel a community service olympics, a race to see which parent can secure the most high-profile community service opportunity for their child. We interviewed the parents of one high school junior who had set up a vocational school in an African country so their daughter could say in her college application that she had started a school in a developing country.

I've heard about parents paying jaw-dropping amounts of money—several thousand dollars a year—for SAT tutors, beginning when their children are *in 5th grade*. At least one private college counselor in New York rakes in as much as $40,000 per child for helping students secure slots in selective colleges (Berfield & Tergesen, 2007).

And Undervalued

Yet this damage is far less pervasive than the harm done to children by parents who intensely promote their children's achievements in more quiet and often unexamined ways. When parents treat children like performance machines or place their children's academic achievement above other values—for example, regularly pressing their children to take courses and participate in extracurricular activities in which they have no interest because it will help them get into good colleges, constantly arranging achievement-boosting activities, or pushing them to apply to prestigious colleges where they are unlikely to fit in and thrive—children not only are stressed but also may feel that their best personal qualities are not valued by others.

A child who is socially skilled, deeply loyal, funny, feisty, caring, and imagi-

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native may never come to value these qualities or see them as anywhere near the core of his or her being. In these circumstances, children are also more likely to view others in terms of their achievements and see them as competitors or threats. They suffer both a diminished sense of others and a diminished sense of themselves.

As Alice Miller (1981) describes in her classic book on achievement pressures, *The Drama of the Gifted Child*, children may also learn to closet their feelings, convinced that their parents cannot tolerate anxiety, anger, or sadness because these feelings might impede their performance. Some children find themselves ashamed and angry at their parents without knowing why and ashamed of this shame and anger. Charles Ducey, a psychologist who was the head of a counseling clinic at Harvard University, told me that he "saw students all the time who just hated themselves for not succeeding, for not getting a great grade in a course, and they had no idea why they were so hard on themselves."

Conflicting Messages

Many parents and teachers send contradictory messages about achievement. Some students complain that school staff members frequently, as one suburban high school student put it, "give lip service" to character, "but when it comes down to it, all they really care about is our grades."

Some young people see their parents as simply fooling themselves about how much achievement really matters to them. Students pick up on the contradiction when parents say they don't care whether their kids go to prestigious colleges as long as they're happy—but then pay staggering amounts of money for SAT tutors, send them to independent schools where getting into high-status colleges is the holy grail, or visibly glow when talking about certain top schools. When parents or teachers say that students should go to prestigious schools so they'll have the option of becoming a doctor, lawyer, or corporate leader, some students sense the contradiction. They're not really being given options to enter a whole array of lower-status careers—whether in teaching, forestry, carpentry, or firefighting—that may be more aligned with their own passions.

Further, although some children flourish under intense competitive pressure, in our research in the independent school many children poignantly described their stresses and struggles to be honest, generous, and caring when achievement pressure and competition became fierce.

Research suggests that children subjected to intense achievement pressure by their parents don't outperform other students.

For example, one student with a low grade point average noted that he felt he had to lie about it so students wouldn't look down on him. Another admitted to behaving like "a jerk" because of the intense stress. Added another, "Kids here get obsessed with grades and forget about friends."

How Schools Can Work with Parents

There's no single, healthy approach to promoting children's achievement—largely because how parents and teachers think about achievement may be rooted in widely different values concerning money, status, and accomplishment. Yet schools can work to curb destructive forms of achievement pressure and help parents interact more constructively with their children around achievement.

Send Red Flags

Schools might send home guidelines or "red flags" that make parents aware of specific feelings or actions that may signal that parental achievement pressure is out of control. When parents' self-esteem plummets when a child does poorly on a big test or is rejected by an elite private school, when interactions with a child are consumed by achievement talk, when parents assess their child's competition by asking who in the cohort gets the best grades or is applying to what colleges—these are red flags.

It should also be a red flag when parents find themselves popping vocabulary flash cards at the dinner table, saying "*we* are applying" to a college, or peppering college-admissions officers with questions while their child stands sullenly by as though facing incarceration. It should certainly be a red flag when children show signs of debilitating stress, such as not eating or sleeping well, as a result of academic pressure (Abeles & Congdon, 2009).

In her lectures, psychologist and author Wendy Mogel urges parents to stick to a 20-minute rule (see Bazelon, 2006)—spend no more than 20 minutes a day "thinking about your child's education or worrying about your child, period." Except in those cases in which a child is having a significant academic or emotional problem, that's a good rule.

Encourage Honest Conversations

Schools might guide parents in having honest, constructive conversations with their kids about achievement. Large numbers of parents may underestimate what a relief it would be to their children—and how much it would support their children's maturity and secure their respect and trust—if they

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stopped bobbing and weaving and had more honest talk.

If parents are miserable when a child doesn't get into a prestigious school, they might say to their child quite openly that, in their more mature moments, they know that one can flourish in many colleges and that their disappointment is their own problem, something *they* need to work on. Parents might tell their own stories about the positive and negative ways their own families handled achievement.

Prompt Parents to Reflect

It will not be easy for many parents to convey to children that academic achievement is only one theme in the large composition of a life or to be vigilant about the many troubling signals they send their children about achievement. It may mean wading into the muck of themselves and coming to terms with their own feelings about achievement.

Legions of parents have never thought about how their own views about their children's achievements are connected to the ways their parents handled achievement. Nor have they recognized the many irrational forces that drive them to push their children academically. These forces include the hope that their children will live out the parents' dreams or compensate for their own shortcomings; the belief that their children's achievements are a public reflection of their success as parents; their status concerns and feelings of competitiveness with other parents; the unconscious script in their heads, written in their childhoods, that says that achievement is the only way to secure love—a kind of tragic condition that can be passed from generation to generation with consequences worthy of the ancient Greeks. In her book *Hothouse Kids: The Dilemma of the Gifted Child*, author Alissa Quart points out that some parents are simply terrified of their children being "ordinary" (see Tsing Loh, 2006, p. 116).

Schools might prompt parents to reflect on all these forces. In the end, some parents simply need "to grieve," as one parent put it, that their children will not go to high-status colleges, land prestigious fellowships, or have turbo-charged careers.

How Schools Can Find Balance

Although almost all schools claim they promote not only students' achievement but also their social, emotional, and moral growth, schools could do a great deal more to match their rhetoric with reality. Some schools, like Beaver Country Day School outside Boston, have set out, as Peter Gow, the head of college counseling, puts it, to "defang" achievement pressure by creating a counteridentity (Smith, 2011). Unlike nearby independent schools, Beaver advertises itself as a school that gives equal weight to social, emotional, and ethical development and aligns its practices with these priorities. Beaver has, for example, created an upper-school schedule that is far less frenetic for students than the schedule in most high-powered high schools, allowing for longer class periods to stimulate deeper exploration of materials as well as significant time in the day for students to relax and reflect.

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More modestly, schools might limit the number of advanced placement (AP) and honors courses students can take and strongly encourage students to limit extracurricular activities to those that really interest them. Schools might focus both on reducing homework and on making homework more meaningful, especially given research indicating that homework typically has little value (Kohn, 2006).

They could also far more forcefully elevate the value of a range of careers. School guidance counselors and teachers should emphasize choosing a college on the basis of whether it's the right fit rather than on the basis of status. They might also encourage students to take a gap year before college as a way of discovering their passions.

Just as important, schools should make high achievement only one of many ways of measuring how students value themselves, if for no other reason than that many students will never achieve at a high level in comparison with their peers. That means not only providing students with various opportunities in the arts, sports, and community service. It also means taking on the deep work of cultivating in the school a rich and nuanced view of human nature and finding ways to value students for their many qualities: their contributions to the community; their ability to tune in to others; their excitement about learning; and how deeply they value those who differ from themselves in race, class, or gender.

Schools, along with parents, can take

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on the vital and delicate task of helping children uncover what's meaningful to them so they're not just achieving to achieve or to please their parents or teachers. Psychologist Charles Ducey told me that when college students who are wound up about achievement discover what's meaningful to them, the anguish around achievement often disappears.

Before children's lives become jam-packed with résumé-building activities, parents, guidance counselors, and teachers can engage in the complex choreography of leading and following with children. They can guide children toward potentially meaningful activities and experiences and pay careful attention to what resonates with them. They can listen to children in a relaxed way without an agenda, reflect back their understandings, and share their knowledge of the world.

It Takes a Village

Ultimately, decelerating achievement pressure may require a collective response. Achievement pressure is an escalating contagion: Schools often compete and ramp one another up, and parents feed off one another. If a neighbor's child has an SAT tutor in 8th grade, a parent might feel he's cheating his 8th grader if he doesn't get her a tutor. As one parent I spoke with put it, "It's incredibly competitive out there, and I don't want my child left in the dust." It is, in a sense, a public health problem.

That means it's hard for any one parent or school to act solo. Parents and schools need to regulate and police one another. Parents in a community could, for instance, make a pact that they won't hire SAT tutors until their children are in high school. A group of nearby independent schools could band together and agree to prohibit students from taking more than three AP courses or jointly lobby nearby colleges to revise admissions practices that unduly jack up achievement pressure.

Achievement pressure is an escalating contagion. It is, in a sense, a public health problem.

Journalist Sandra Tsing Loh (2006) suggests that college students themselves may soon rebel against all this pressure: "This era's needed cultural statement may well be kids joyously burning *U.S. News and World Report* college rankings" (p. 118). But wouldn't it be better if we adults took serious action first?

As parents and teachers, we have been fantastically successful at getting children to buy into our achievement ethic. It's an awesome tribute to our power. But is this really the way we want to use our power? If we're serious about both our children's happiness and their moral growth, then we'll have to see that too many of us have caught a fever. We can wait for children to end this contagion, or we can seek to heal ourselves. EL

Author's note: Alexis Brooke-Redding assisted with this article, which was adapted from my book *The Parents We Mean to Be: How Well-Intentioned Adults Undermine Children's Moral and Emotional Development* (Houghton Mifflin Harcourt, 2009).

References

Abeles, V. (Producer and codirector), & Congdon, J. (Codirector). (2009). *Race to nowhere* [Film]. Lafayatte, CA: Reel Link Films.

Bazelon, E. (2006, October 1). So the Torah is a parenting guide? *New York Times Magazine*. Retrieved from www.nytimes.com/2006/10/01/magazine/01parenting.html

Berfield, S., & Tergesen, A. (2007, October 22). I can get your kid into an Ivy. *Bloomberg Business Week*. Retrieved from www.businessweek.com/magazine/content/07_43/b4055063.htm

Easterbrook, G. (2004, October). Who needs Harvard? *Atlantic Monthly*. Retrieved from www.theatlantic.com/magazine/archive/2004/10/who-needs-harvard/3521

Fuchs, M. (2002, July 31). Tutoring gives pupils an edge . . . for preschool. *New York Times*. Retrieved from www.nytimes.com/2002/07/31/nyregion/tutoring-gives-pupils-an-edge-for-preschool.html

Kohn, A. (2006, September 6). The truth about homework: Needless assignments persist because of widespread misconceptions about learning. *Education Week*. Retrieved from www.alfiekohn.org/teaching/edweek/homework.htm

Luthar, S. S., & Becker, B. E. (2002). Privileged but pressured? A study of affluent youth. *Child Development*, 73(5), 1593–1610.

Luthar, S. S., & D'Avanzo, K. (1999). Contextual factors in substance abuse: A study of suburban and inner-city adolescents. *Development and Psychopathology, 11*(4), 845–867.

Luthar, S. S., & Latendresse, S. J. (2005). Children of the affluent: Challenges to well-being. *Current Directions in Psychological Science, 14*(1), 49–53. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1948879

Miller, A. (1981). *The drama of the gifted child.* New York: Basic Books.

Quart, A. (2006, July/August). Extreme parenting: Does the baby genius edutainment complex enrich your child's mind—or stifle it? *Atlantic Monthly*. Retrieved from www.theatlantic.com/magazine/archive/2006/07/extreme-parenting/4982

Smith, T. (2011, January 3). What's new in high school? Stress reduction 101. *All Things Considered.* Retrieved from National Public Radio at www.npr.org/2011/01/03/132630439/whats-new-in-high-school-stress-reduction-101

Tsing Loh, S. (2006, Oct. 24). The drama of the gifted parent. *Atlantic Monthly*. Retrieved from www.powells.com/review/2006_10_24

Richard Weissbourd is lecturer in education at the Harvard Graduate School of Education and at the Kennedy School of Government. He is the author of *The Parents We Mean to Be: How Well-Intentioned Adults Undermine Children's Moral and Emotional Development* (Houghton Mifflin Harcourt, 2009); weissbri@gse.harvard.edu.

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Appendix K

Pgs. 107 – 132 from *Is Technology Good for Education?*

there is a big difference between 'solving problems through coding' and 'solving problems then coding the solution'.[37] The danger, of course, lies in seeing data and coding as an absolute rather than relative source of guidance and support. Education is far too complex to be reduced solely to data analyses and algorithms. As with digital technologies in general, digital data do not offer a neat technical fix to educational dilemmas – no matter how compelling the output might be.

As such, there is little sense in judging the presence of data in education as a simple case of 'good' or 'bad'. Instead, we are perhaps better off seeing data systems, algorithms and analytics as 'various shades of grey' rather than a black-and-white issue. As Rob Kitchin concludes:

> It is not a case . . . that data are used simply in either good or bad ways; it is more complex than that. Often seemingly opposing outcomes are bound together so that people can be both liberated and coerced simultaneously – they gain personal benefit at the same time as they become enmeshed in a system that seeks to gain from their participation.[38]

FIVE

Making Education More Commercial?

Introduction

This chapter considers the argument that digital technology has proven a 'good' means of extending the interests of business and commerce into education. Of course, education has always had its commercial aspects. Schooling in the 1700s and 1800s was provided largely through private fee-paying institutions. Then, throughout the twentieth century, school systems were influenced considerably by the multi-billion-dollar textbook industry that grew up around them. Now, however, digital technologies are extending the commercialization of education into new realms. In short, digital technologies have positioned the private sector at the centre of how public education is funded, organized and delivered in ways that would have been hard to imagine a few years ago.

In one sense, the commercial nature of digital education is wholly understandable. Unlike many other aspects of education, the ability to design,

develop, manufacture and implement digital technology is well beyond the capacity of national governments, official agencies or educators. Even though it constitutes a sizeable market for IT products and services, the education sector holds little sway over the production of digital technology. Put simply, commercial interests inevitably hold the upper hand when it comes to developing and producing the devices, software systems and applications that make up 'digital education'. Education therefore constitutes a major commercial market for technology.

This gives the private sector considerable leverage over the use of digital technologies in education. Indeed, commercial influences on digital education now take a variety of forms. For instance, corporations such as Microsoft, Apple and Google have extensive 'Education Divisions' dedicated to shaping how their products are used in educational settings. Other multinational corporations are also busy developing digital products and services for the education market. These range from publishing firms such as Pearson to toy manufacturers such as Lego, all keen to diversify their businesses away from traditional products and customer bases. Increasingly, digital education also attracts large-scale multinational

corporations with little prior involvement in education. Rupert Murdoch's News Corporation, for example, has invested heavily in educational technology firms and services to the point of now marketing its own school-specific Amplify tablet computer. Conversely, at the lower end of the corporate food chain, education has become the focus for a thriving 'start-up' sector. Here, thousands of wannabe high-tech entrepreneurs with nascent 'ed-tech' ideas compete each year for funding from venture capital firms. All of these 'new' entrants into the education sector have their own particular ideas and agendas of what education could – and should – be.

This variety of enterprise reflects the fact that digital education is now very big business. One cautious estimate from the US Department of Education reckoned the global marketplace for education currently to exceed \$5 trillion.[1] Within this ballpark figure, the market for higher education 'e-learning' products alone is worth \$91 billion.[2] Similarly, sales of educational software and digital content to elementary and high schools in the United States neared \$8 billion in 2011–12.[3] Venture capital investment in US ed-tech companies stood at \$2.51 billion for the first half of 2015 – a figure that had already exceeded the whole of the previous record-breaking

seek funding for what are sometimes niche and left-field ideas. While the large majority of these ventures quickly 'pivot' or fold altogether, every so often a speculative pitch will proceed into large-scale development. The hundreds of millions of dollars currently being invested in ed-tech start-up companies are driven by the logic of letting 'a hundred flowers bloom' in a way not usually tolerated in other areas of education.

All told, it is understandable that high-tech firms and entrepreneurs feel qualified to challenge and reform public education through the development of digital products and digitally driven practices. Digital technology and technology-driven business approaches certainly offer an alternative to the established status quo and the vested interests that some observers outside education suspect of impeding the emergence of 'twenty-first-century' education. It therefore makes sense that education stands its best chance of being 'fixed' through the outsider intervention and 'outside the box' innovation of commercial interests which can conjure the ingenuity and imagination that led to the development of Facebook, Google et al. As Sebastian Thrun (co-founder of online learning company Udacity Inc.) boldly reasoned: 'Education is broken. Face it . . . it

is so broken at so many ends, it requires a little bit of Silicon Valley magic.'[8]

Digital education and the rise of 'Californian capitalism'

This evocation of 'Silicon Valley magic' merits closer scrutiny. What exactly is this 'magic', and why might it be associated so closely with a small region of Northern California? In fact, the idea of 'Silicon Valley magic' alludes neatly to the set of business practices and approaches that underpin the new high-tech economy and its increased interest in education. This mentality was detailed neatly by the British economist Will Hutton in a passionate account of a visit to Palo Alto during the early 2010s. After only a few days in the San Francisco Bay Area, Hutton wrote of his realization of the global significance of the strain of 'Californian capitalism' that characterizes Silicon Valley institutions such as Google, Oracle and even Stanford University. As he put it, we are increasingly living in a world where economics, politics, culture and society are being shaped by West Coast ideals of the power of computing, entrepreneurialism and a risk-taking approach to investment.[9]

The ways that Silicon Valley firms and their

followers look to do business, according to Hutton, are shaped profoundly by the programming and hacking backgrounds of their main protagonists. He argued that an ability to write computer code (and preferably a familiarity with university-level computer science) is now a prerequisite to any aspiring entrepreneur becoming wealthy and influential, let alone 'enabling something momentous to happen'. This logic is certainly borne out by the likes of Mark Zuckerberg, Larry Page, Sergey Brin, Larry Ellison, Peter Thiel, Jack Dorsey, et al. All of these high-tech billionaires remain steeped in a programmer mindset where a faith in computational power and an 'always on' networked way of life fuel a relentless focus on invention and innovation. This is a culture of all-night coding sessions and a succession of ambitious start-ups (most of which quickly fail), accompanied by a mass of similarly computer-savvy venture capitalists and 'angel investors' eager to take a punt on the next 'next big thing'.

While Californian capitalism is clearly motivated by an old-fashioned pursuit of profit, by framing its origins in cultures of coding and programming, Hutton saw it as driven by a distinctly new attitude towards doing business. These are ventures that are based on big ideas, solving computational problems,

entrepreneurialism, openness, collaboration, learning through failure and relentless self-belief and optimism. Also evident is a necessary sense of precariousness and a need to keep moving and experimenting – most evident in the constant reinvestment of profits from past successes into new business propositions. This is a mindset that revels in the power of individuals rather than institutions, and the creative potential of manageable amounts of renewal and disruption.[10]

Perhaps most tellingly, Hutton's article picked up on the desire amongst many high-tech industry protagonists to 'make a difference' while also ensuring healthy returns for shareholders. Hutton enthused over Silicon Valley's 'nobility of intent' and value-driven desire to engage with 'immense' societal challenges such as world health and global poverty. Beneath the speculative investments and well-publicized stock market launches, his report from this supposedly new frontier also evoked a spirit of the counter-cultural hippie mentality that fuelled the 'home-brew' development of computing during the 1970s, '[where] successful entrepreneurship is about using frontier technologies to address human need and ambition. It understands it is part of society and owes a debt to the culture and public infrastructure that create it.'[11]

Thinking big, spending bigger – recognizing the extent of commercial influence on digital education

If we go along with this idea of 'Californian capitalism', then the turn towards education that many high-tech firms and technology entrepreneurs have recently taken makes good sense. Education is certainly an area of society where high-tech interests can be seen to 'make a difference' while also turning in a profit. This moves us beyond issues of education as a commercial market for technology, and into the more fundamental commercial reshaping of education. Thus while less high profile than its attempts to eradicate malaria or develop driverless cars, the involvement of the digital industry in education is understandably expanding. One obvious instance of this are the well-established and vast educational programmes run by all of the large multinational IT companies – often under the aegis of philanthropic programmes and 'corporate social responsibility'. These activities range from the physical design and construction of 'Schools of the Future'[12] to the development of teacher training programmes, alternative curricula and (of course) the provision of computer hardware, software and infrastructure to educational institutions.

Beyond such public-facing corporate programmes,

however, lie a range of far more ambitious and audacious interventions and initiatives in education also stemming from IT industry interests. Take, for example, the educational efforts made by Peter Thiel (founder of PayPal) through his 'Thiel Fellowship'. This involves young people being awarded $100,000 to drop out of college education and pursue their dreams by developing world-changing businesses rather than 'wasting their time at school and being burdened by incredible amounts of debt'.[13] Other entrepreneurial interventions in education have displayed even greater largesse. For example, one of Mark Zuckerberg's first personal projects outside of Facebook was 'Start-up: Education'. This non-profit foundation oversees a number of educational interventions, not least Zuckerberg's personal donations making good his promise to do 'something big' in education.[14] This has included donations of $100 million to the Newark school district and $120 million to schools in the San Francisco Bay Area. While only constituting a fraction of these school districts' billion dollar annual commitments, grand gestures of this sort are certainly not common in the otherwise under-funded world of public education.

These interventions illustrate clearly the power that the financial clout of the IT industry can wield

in education. These are increasingly strong voices in conversations about education reform, setting the tone for how education is being imagined in the 'digital age' in a number of subtle (and often not so subtle) ways. Take, for example, the philanthropic efforts of Bill Gates, who has pursued a long-running interest in education reform since moving on from the day-to-day running of Microsoft. The Bill & Melinda Gates Foundation boasts an extensive educational programme. This includes the Gates Foundation's key role in driving recent US school reforms around standardized testing and the common core curriculum. Similarly, it has spent over $470 million on US higher education reform, commissioning research, funding projects and generally creating what the *Chronicle of Higher Education* called 'an echo chamber of like-minded ideas'.[15] As Diane Ravitch observed, 'It is difficult to find education organizations that have *not* been funded by the Gates Foundation.'[16] Throughout these efforts there has been a clear desire to reform public education around technology-driven innovation. According to Bill Gates: 'The education we're currently providing, or the way we're providing it, just isn't sustainable. Instead we have to ask, "How can we use technology as a tool to recreate the entire college experience?

How can we provide a better education to more people for less money?"'[17]

Of course, the commercial grip on education and digital technology is not exercised solely through grand philanthropic gestures and high-profile foundations. We should not overlook the considerable 'soft power' of major high-tech corporations in education decision-making. Take, for example, the renewed interest in the teaching of coding and programming throughout elementary and high schools. The fact that so many people in education have recently come to see this as a 'good idea' resulted in no small part from sustained lobbying by what has been described as 'a who's who of tech industry elite'.[18] Thus much of the speech-making, funding of pilot programmes and behind-the-scenes appeals to government regarding the imperative to get coding into schools was driven (and continues to be driven) by key players from the computer games industry, internet firms and software developers as well as business employers and investors.

One especially active spokesperson in this coding push was the executive chairman of Google, Eric Schmidt. During the first few years of the 2010s, Schmidt made great efforts to get coding and computational skills onto the educational agenda of

different countries. In what turned out to be a landmark speech to the UK media industry, Schmidt advised emotively that 'your IT curriculum focuses on teaching how to use software, but gives no insight into how it's made. That is just throwing away your great computing heritage.'[19] Schmidt's advice, backed by powerful IT industry interests, has been used repeatedly by government ministers, education officials and administrators as evidence that 'something needs to be done'. When a powerful figure such as the head of Google deigns to take an interest in their education system, public officials have tended to take his pronouncements very seriously indeed.

As these activities suggest, corporate involvement in digital education is sometimes submerged in complex (and often tangled) networks of influence and power. This was evident, for example, in the rise to prominence during the 2010s of massive open online courses. The rapid growth of MOOCs was driven by the formation of three large 'spin-off' companies seeking to act as brokers for mass online university tuition. One of the largest of these was Coursera – a self-styled 'social entrepreneurial' for-profit company. While popularly perceived to be driven by a couple of Stanford professors, Coursera was bolstered by $85 million of venture capital

funding. This investment came from the likes of Laureate Education Inc. (the investment arm of the World Bank), LearnCapital Venture Partners (with Pearson as their largest limited partner) and the powerful Russian venture capitalist Yuri Milner. Even in the case of MOOCs – usually celebrated for bringing free learning opportunities to the world's masses – digital education is distinctly commercial in its origins, intentions and sustenance.

In one way or another, commercial influences have a hand in most of the recent high-tech education reforms and initiatives. Indeed, if one takes time to 'follow the money', then high-tech firms are involved as supporters and promoters of most – if not all – recent educational technology developments and big ideas. This includes seemingly innocuous ideas such as 'digital badges', the 'flipped classroom', the 'gamification' of high school curricula or the concept of 'twenty-first-century skills'. All of these have been supported and sustained by the likes of Mozilla, the Gates and MacArthur foundations, Pearson, Cisco, Intel, Microsoft, Apple and a host of smaller IT corporate-associated names. Altogether, this industry activity is generating substantial pressure to reshape and redirect public education. In all these guises, then, the breadth and depth of commercial involvement

in contemporary education reform should not be underestimated. As Kevin Carey observes, the biggest would-be movers and shakers in education are no longer educators or academics, but programmers, hackers and, of course, the trillion dollar industry that has grown up around them.[20]

Challenging the benefits of commercial involvement

The key question that now needs to be asked of everything so far covered in this chapter is 'So what?' So what does it mean that education is driven increasingly by technology-based commercial interests, ideas and investment? On the face of it, none of these commercially driven interventions into the world of education should be seen as especially problematic. Many people would consider it only proper that billionaire entrepreneurs plough some of their wealth back into needy communities. What is wrong with exploring technically efficient ways to make use of new technologies and techniques? Similarly, the conduct of these firms, foundations and their leaders is hardly out of the ordinary. After all, companies looking to make a profit are always going to act as efficiently as the market will allow

them. Similarly, most businesses are accepting of the need to monetize seemingly 'free' products and services. None of the examples just outlined are particularly contentious ways of doing business with education and technology.

Yet many of these seemingly straightforward interventions have proven to be ineffectual and/or controversial. Despite the grand claims, most of the educational problems and crises being addressed through these corporate interventions continue to persist and perpetuate. In short, commercial reforms of education along digital lines have promised much but delivered far less. This highlights the problems implicit in the coming together of commercial interests, digital technologies and education. These problems are not necessarily caused by an educational establishment that is resistant to change and reform. Neither do they result from self-interested resistance amongst school districts, teaching unions or misguided parent groups. Rather than being instances of education 'not getting' the high-tech corporate world, many of the examples just outlined could be seen as instances where the high-tech industry has simply failed fully to 'get' education. Indeed, many of these problems could be said to stem largely from the private sector values that underpin much of what is

blithely seen as the inevitable digital reform of public education.

In particular, innovations such as Coursera, Thiel Fellowships et al. could be seen as conforming to many of the core values of what was described earlier on in this chapter as Californian capitalism. All of these interventions convey a sense (at least implicitly) of 'education' being a discrete computational project: that is, a set of variables that can be manipulated and programmed in ways that avoid any 'bugs' or inefficiencies. As with most computational projects, there is a distinct preference for experimentation and learning through failure. As with many IT industry ventures, a great deal is expected to result from directing large sums of money towards specific problems. This knowing subversion of traditional business methods is coupled with traces of the emphasis placed within programming cultures on openness, the inefficiencies of institutions and 'experts', as well as a libertarian belief in the values of personal freedoms and the individualization of action.

All in all, this mindset makes for a markedly different approach to change and reform than is usually applied to education. To any education insider, ideas such as these are surely as terrifying as they might be thrilling. These are certainly different times for

everyone involved in education. Indeed, given the novelty of such thinking, it is little wonder that commercially driven attempts to 'reboot' education have been welcomed in many circles. Ideas such as the MOOC and 'flipped classrooms' could well be seen as refreshingly imaginative attempts to move beyond inefficiencies and inequalities within public education systems. That said, there are certainly a few reasons for caution.

One obvious issue is an (in)compatibility of values and interests. While Bill Gates might like to talk of a 'virtuous cycle' between technology entrepreneurs and classroom teachers,[21] these relationships are not completely benign or altruistic. Any private sector involvement in public education takes place for a number of different reasons. These include the pursuit of profit, raising brand awareness and the 'up-skilling' of future workers. Whatever their specific motivations, firms and entrepreneurs are usually interested in imbuing education with different values and outcomes. A key question to consider is the extent to which these 'new' values and sensibilities are compatible with the traditional values and sensibilities of 'public' education.

In this sense, some values implicit in how the high-tech sector operates might not translate easily

into education contexts. First and foremost is a potential misreckoning of the profitability of education markets and education consumers. Most of the forms of commercially driven 'change' and 'disruption' outlined in this chapter have been underpinned by lavish funding from outside of education in the (often unspecified) hope of future profitability or reward. Thus, much of what has been described in this chapter follows a model of financing that is familiar to the technology industry but largely unfamiliar to the education sector. As Audrey Watters observes:

> While education technology startups have become increasingly successful at landing (early stage) investment, the path to profitability hasn't been as clear. . . . It's a fairly common practice these days: release your [ed-tech] product for free. Gain users. Monetize later. If that doesn't work out, if you need more time to figure a business model out, simply raise more funding.[22]

Perhaps more fundamental than a lack of sustainable business models is a misreckoning of what commercial approaches are capable of achieving within education on the basis of previous successes outside of education. There is a tendency for high-tech

'There is a distinct naïvety – if not arrogance – in the ways that many commercial high-tech interests approach education change and reform.'

firms and entrepreneurs to rely on simply 'scaling up' models and approaches that have previously proved successful in commercial arenas. On one hand, this sees a privileging of big, audacious ideas and the ambitious application of business ethics to public settings. On the other hand, however, there is a lack of consideration for the contexts in which these ideas are to be enacted. Indeed, in his analysis of why none of the large ed-tech investments of the first 'dot.com' boom 'emerged as sustainable successes', Christopher Nyren pinpointed Silicon Valley's tendency to focus on 'shrink-wrapped' and 'over-engineered product' while ignoring the 'real market problems' faced by its education customers.[23] All told, there is a distinct naïvety – if not arrogance – in the ways that many commercial high-tech interests approach education change and reform.

Returning to concerns raised in the previous chapter, questions can also be asked of the commercial tendency to approach education as a system of variables that can be manipulated and modelled like a particularly complex computer-coding problem. This is inevitably a reductive approach to what is an obviously complex and chaotic social situation. For example, issues relating to social and moral relations are inevitably left out of any equation or algorithm

– however sophisticated – being used to model 'education' or 'learning'. These are not neat, bounded and quantifiable processes and systems. Education rarely contains variables that can be adjusted and recalibrated to achieve optimal cause and effect.

Furthermore, many of these commercial interventions are built around achieving success through multiple failures. This clearly is an efficient approach to high-tech business. For example, it is expected that the vast majority of start-up firms will fail while only a handful of 'game-changing' examples will eventually emerge. Yet this 'fail fast, fail often' approach does not necessarily translate easily over into gambling with the fortunes of school districts, schools or individual students. Such an approach certainly clashes with the traditional educational philosophy of supporting all learners to succeed. As a society, are we happy to treat education as an experiment that runs the risk of jeopardizing the life-chances of current learners in the hope of later eventual success? As Bill Gates reflected of his Foundation's forays into education reform, 'It would be great if our education stuff worked, but that we won't know for probably a decade.'[24]

Serious questions therefore need to be asked of the forms of 'education' being advanced under the

banner of commercially driven 'innovation', 'disruption' and 'magic'. In particular, it could be argued that there are a number of public values that risk being lost within the brave new world of digital education reform. Take, for example, ideals of social cohesion, community, communal responsibility, collective good rather than individual gain. Also at risk are ideals of equality of opportunity and/or equality of outcomes. All told, we need to consider what is being lost – as well as what is being gained – in the rush towards the rearranging and reshaping of public education in the image of commercial high-tech interests, Silicon Valley entrepreneurs and their followers.

Finally, there is a need to question the extent to which commercial involvement might be undermining democratic processes of governance of education. The involvement and interest of major multinational, multi-billion-dollar companies clearly brings a touch of glamour and charisma to the otherwise dull backwaters of education administration and policy-making. High-tech firms and their leaders therefore play a large part in setting the agendas for contemporary education – especially when pointing out educational 'problems' and their attendant 'solutions'. Put simply, politicians and policy-makers will

always be eager to listen when the likes of Bill Gates, Eric Schmidt, Mark Zuckerberg and colleagues have something to say on the subject of education. Yet the increased prominence of these interests in education reform comes at a cost. Digital education in countries such as the United States has become driven by what Anthony Picciano and Joel Spring termed a 'Swiss-cheese' style of government.[25] Put simply, it could be argued that state and federal authorities are incapable of regulating (or even keeping abreast of) what are now essentially 'privatized government services'. Instead, companies such as Google, Microsoft and their ilk can be seen as shadow education ministries – holding sway over what goes on within classrooms and schoolhouses, but with none of the accountability required of public officials.

Conclusions

Whether one agrees or not with the concerns laid out in this chapter, many of the 'new' forms of digital education being driven by commercial interests are based around decidedly different agendas and ideologies than we are used to encountering in public education. These shifts in tone and emphasis may, or may not, be

a 'good thing'. Yet these are issues that require more recognition, debate and scrutiny from within the educational establishment. In particular, a number of difficult discussions need to take place. Do public education professionals want to be working with – or working against – these new forms of education? Are these reforms an either/or option, or can mutually beneficial compromises be reached? Do any plausible alternatives exist, and how might they be developed? Regardless of possible answers to such tricky questions, these reforms cannot be simply ignored or assumed to be insignificant or unthreatening. On the contrary, these commercially driven forms of digital education pose a significant challenge to the current public provision of education. This is something that all 'stakeholders' in education need to acknowledge and address as a matter of urgency.

SIX

'Good' Education and the Digital – So What Needs to Change?

Introduction

Regardless of how 'good' it is, technology is undoubtedly an integral aspect of contemporary education. With so many aspects of education now taking place with and/or through technology, it feels increasingly unnecessary to talk about 'digital education' or 'technology-based education' as distinct from 'education' in general. Yet, as this book has highlighted, the significance of recent digitizations of education lies in the potentially substantial changes and reforms that accompany them. The past five chapters have detailed some profound shifts in the ways in which education is beginning to be provided, arranged and engaged with. Digital technology is clearly reconfiguring the ways in which information and knowledge are created, accessed and used. It is undoubtedly altering the ways in which people communicate, interact and get together with others to learn. For better and worse, digital technology means that many of the cornerstones of education are altering rapidly.

Appendix L
Pgs. 203 – 226 from *Last Child in the* Woods

ALSO BY RICHARD LOUV

Fly-Fishing for Sharks: An American Journey

The Web of Life

FatherLove

101 Things You Can Do for Our Children's Future

Childhood's Future

America II

LAST CHILD IN THE WOODS

Saving Our Children from Nature-Deficit Disorder

Updated and Expanded

RICHARD LOUV

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2008

16. Natural School Reform

Teaching children about the natural world should be treated as one of the most important events in their lives.

—Thomas Berry

The concept of environment-based education—known by a number of names—is at least a century old. In *The School and Society*, John Dewey advocated immersing students in the local environment: "Experience [outside the school] has its geographical aspect, its artistic and its literary, its scientific and its historical sides. All studies arise from aspects of the one earth and the one life lived upon it." Far from radical, experiential education is at the very core of this older educational theory, an approach developed long before videotapes presented ring-necked snakes to the classroom. While environmental education focuses on how to live correctly in the world, experiential education teaches through the senses in the natural world.

Support for nature in education was given an added boost by Howard Gardner, professor of education at Harvard University, who in 1983 developed the powerful theory of multiple intelligences. As described in an earlier chapter, Gardner proposed seven different intelligences in children and adults, including linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, interpersonal intelligence, and intrapersonal intelligence. More recently, he added naturalist intelligence ("nature smart") to his list.

Fueled by this theory, and others, a nascent movement for what might be called natural school reform grows steadily—and, though still relatively small, is long overdue.

In America, software companies hawk computer-learning programs to parents of two-year-olds. By the second grade, most American children have already spent years in preschool and have been introduced to the rigors of testing. Lora Cicalo—a well-educated, hard-driving professional—is appalled at the stress felt by her daughter and her classmates, as their elementary teacher prepares them for California's STAR (Standardized Testing and Reporting) program. "The teacher must teach everything from how to properly fill in the answer bubbles (i.e., don't put an X through them or make a mark outside the outline of the circle) to how to keep pace with the rest of the class in the timed test," she said. "The kids worry about how they will look to the adults placing so much emphasis on this test. Remember, these children are only seven years old. Why are we putting all this pressure on them?" To improve schools, right? Maybe.

While Americans push kids to the competitive edge, Finland's educational system is headed in exactly the opposite direction. In a 2003 review by the Organization of Economic Cooperation and Development, Finland outscored thirty-one other countries, including the United States. Finland scored first in literacy and placed in the top five in math and science. The United States placed in the middle of the pack. "Finland's recipe is both complex and unabashedly basic," the *New York Times* reports. "Some of the ingredients can be exported (its flexibility in the classroom, for example) and some cannot (the nation's small, homogenous population and the relative prosperity of most Finns, to name two)."

By the standards of some American educators and policymakers, Finland's approach seems counterintuitive. Finnish students don't enter any school until they are seven years old—practically senior citizens in America. Finland offers no special programs for the gifted student, and

spends less per student on education than the United States. While requiring educators to meet national curriculum requirements, Finland gives them wide leeway in how they teach. And Finnish educators believe in the power of—get this—play. In the United States, meanwhile, the trend is toward dropping recess. But at a typical school in the Suutarila district of Helsinki, students "pad about in their socks. After every 45-minute lesson, they are let loose outside for 15 minutes so they can burn off steam," according to the *Times*. Finland also encourages environment-based education and has moved a substantial amount of classroom experience into natural settings or the surrounding community. "The core of learning is not in the information . . . being predigested from the outside, but in the interaction between a child and the environment," states Finland's Ministry of Social Affairs and Health. I'm sure American educators could teach Finland a thing or two about education. But what if we adopted at least two Finnish traits—greater social respect for teachers and an enthusiasm for environment-based education?

Lauren Scheehan, founder and faculty chair of the Swallowtail School in Hillsboro, Oregon, believes many people—including techies from deep in the Silicon Forest—are looking for more balance in both their own and their children's lives.

"We believe computer skills should be postponed in the classroom until high school," she says. "They can still use computers at home or play video games at their friends' houses; that world isn't closed to them." But Swallowtail gives students a break from "the electronic impulses coming at them all the time, so their sensory abilities are more open to what's happening naturally around them." The point, Scheehan says, is to create "a moral foundation of freedom of choice, instead of being totally dependent on electronic media." Several Intel employees send their children to the school. These parents value technology, says Scheehan, "but they understand that there are aspects of being a human that aren't inside a computer."

So far, Swallowtail is the exceptional school. But that could change. Bucking the status quo, an increasing number of educators are committed to an approach that infuses education with direct experience, especially of nature. The definitions and nomenclature of this movement are tricky. In recent decades, the approach has gone by many names: community-oriented schooling, bioregional education, experiential education, and, most recently, place-based or environment-based education. By any name, environment-based education can surely be one of the antidotes to nature-deficit disorder. The basic idea is to use the surrounding community, including nature, as the preferred classroom.

Real World Learning

For more effective education reform, teachers should free kids from the classroom. That's the message from Gerald Lieberman, director of the State Education and Environmental Roundtable, a national effort to study environment-based education.

"Since the ecosystems surrounding schools and their communities vary as dramatically as the nation's landscape, the term 'environment' may mean different things at every school; it may be a river, a city park, or a garden carved out of an asphalt playground," according to the Roundtable's report, "Closing the Achievement Gap." The report was issued in 2002, but has been largely ignored by the education establishment. The Roundtable worked with 150 schools in sixteen states for ten years, identifying model environment-based programs and examining how the students fared on standardized tests. The findings are stunning: environment-based education produces student gains in social studies, science, language arts, and math; improves standardized test scores and grade-point averages; and develops skills in problem-solving, critical thinking, and decision-making.

- In Florida, Taylor County High School teachers and students use the nearby Econfina River to team-teach math, science, language arts, biology, chemistry, and the economics of the county.

- In San Bernardino, California, students at Kimbark Elementary School study botany and investigate microscopic organisms and aquatic insects in an on-campus pond and vegetable garden, and in a nearby greenhouse and a native plant arboretum.
- In Glenwood Springs, Colorado, high school students planned and supervised the creation of an urban pocket park, and city planners asked them to help develop a pedestrian mall and park along the Colorado River.
- At Huntingdon Area Middle School in Pennsylvania, students collect data at a stream near the school. Teacher Mike Simpson uses that data to teach fractions, percentages, and statistics, as well as to interpret charts and graphs. "I don't have to worry about coming up with themes for application problems anymore. The students make their own," says Simpson.

David Sobel, who describes place-based education as a focus on "learning directly within the local community of a student," did an independent review of such studies, including one by the National Environmental Education and Training Foundation, which reported findings similar to Lieberman's. When it comes to reading skills, "the Holy Grail of education reform," says Sobel, place-based or environment-based education should be considered "one of the knights in shining armor." Students in these programs typically outperform their peers in traditional classrooms.

For example, at Hotchkiss Elementary School in Dallas, passing rates of fourth-graders in an environment-based program surpassed by 13 percent those of students in an earlier, traditional class. The Texas Education Agency's Division of Student Assessment called Hotchkiss's gains "extremely significant" when compared to the statewide average gain of 1 percent during the same period. Achievements in math are similar. In Portland, Environmental Middle School teachers employ a curriculum using local rivers, mountains, and forests; among other activities, they plant native species and study the Willamette River. At that

school, 96 percent of students meet or exceed state standards for math problem-solving—compared to only 65 percent of eighth-graders at comparable middle schools. Environment-based education can amplify more typical school reform efforts. In North Carolina, raising standards produced a 15 percent increase in the proportion of fourth-graders scoring at the "proficient" level in statewide math scores. But fourth-graders at an environment-based school in Asheville, North Carolina, did even better—with a 31 percent increase in the number of students performing at the proficient level.

As an added bonus, the students in these programs demonstrate better attendance and behavior than students in traditional classrooms. Little Falls High School in Little Falls, Minnesota, reported that students in the environment-based program had 54 percent fewer suspensions than other ninth-graders. At Hotchkiss Elementary, teachers had once made 560 disciplinary referrals to the principal's office in a single year. Two years later, as the environment-based program kicked into gear, the number dropped to 50.

More recently, in 2005, the American Institutes for Research released a report on its study of 255 at-risk sixth-grade students from four elementary schools who attended three outdoor education programs over a period of several months. The study compared the impact on students who experienced the outdoor education program versus those in a control group who had not had the outdoor learning experience. Major findings, submitted to the California Department of Education, included: a 27 percent increase in measured mastery of science concepts; enhanced cooperation and conflict resolution skills; gains in self-esteem, problem-solving, motivation to learn, and classroom behavior. Elementary school teachers and outdoor school staff "repeatedly emphasized how outdoor science school provides a 'fresh start' for students," according to the report.

Sobel tells a charming story of a physics teacher at one school who was teaching mechanical principles "by involving students in the re-

construction of a neighborhood trail where they had to use pulleys, levers, and fulcrums to accomplish the task." On what the school calls Senior Skip Day, when seniors are free to skip any classes they want, one of the students told the physics teacher, "I want you to know, Mr. Church, that I skipped all the rest of my classes today, but I just couldn't miss this class. I'm too committed to what we're doing to skip this." With such indications that this kind of school reform works, why aren't more school districts considering it? Why have so many districts cut outdoor experiential learning as well as classroom environmental education, or, when making funding decisions, pitted one against the other—when both are so clearly needed? These questions are unlikely to appear on any standardized test.

For decades, Montessori and Waldorf schools have, in different ways, advocated experiential learning. In recent years, newer proponents of experiential or environment-based education established the Association for Experiential Education to support professional development, theoretical advancement, and evaluation of experiential education worldwide. The association now has approximately thirteen hundred members in over thirty countries. A handful of organizations have made the leap from words to action. Among the oldest and best known is Foxfire, headquartered in Mountain City, Georgia. Its Foxfire Approach to Teaching and Learning originated in a program intended to teach basic English skills to high school freshmen in rural Georgia. These classroom experiences led to the student-produced *Foxfire Magazine* and a series of books on Appalachian life and folkways. Now three decades old, Foxfire offers teacher and student programs focusing on culture more than nature—but nature permeates the work, which offers information on everything from snake lore to wild plant foods to bear hunting.

Other active organizations include the venerable National Wildlife Federation and the Roger Tory Peterson Institute of Natural History in Jamestown, New York. Teachers at schools using the Peterson Institute's curriculum attend summer training. Upon their return to the

classrooms, Peterson-trained teachers lead their students in a study of the square kilometer surrounding their building.

After a decade of publishing such writers as Gary Paul Nabhan and Robert Michael Pyle in *Orion* magazine, the Orion Society, a Massachusetts-headquartered nonprofit, "decided to help put some of these words into practice," says environmental writer and frequent *Orion* contributor Will Nixon. Orion now gives nature education fellowships to teachers, including a summer workshop and grants to pay for field trips, sketchbooks, day packs, "or other items that schools with tight budgets can't afford."

Nixon quotes one Orion fellowship recipient, Bonnie Dankert, an English teacher at Santa Cruz High School: "I used to take student groups on trips to the California deserts or the High Sierras. We read literature about these places and studied the flora and fauna. We had some wonderful experiences." But, she confessed, she had never considered taking shorter excursions to the coastal mountains and Monterey Bay close to the school. She had assumed that her students knew and loved the area; she was wrong. Her students told her that they didn't feel connected to the place in which they lived; on a field trip to a state forest close to the school, Dankert discovered that 90 percent of the class had never been there. "They knew about it, but they had never been up there, sitting under a redwood tree and imagining what the scene looked like one hundred years ago," she told Nixon.

Dankert dropped the road trips and began teaching more locally, at Monterey Bay. She emphasized local authors. For example, while reading John Steinbeck's novel *Cannery Row*, Dankert asked a local marine biologist to lead the students on a field trip to the tide pools in Monterey Bay, which Steinbeck had explored. In addition to helping the students learn about natural science, she led discussions about the meaning of "community"—because one of Steinbeck's characters had described a tide pool as a metaphor for the community of life. And, wrote Nixon, the trip helped the class form its own community. "One

kid had never taken off his baseball cap," Dankert remembered. "His eyes were always in shadow. Afterwards, he took off his cap and started interacting."

Another Orion fellow, a teacher at the junior high school in Homer, Alaska, helped organize a program that allowed eighth-graders to finish regular classes three weeks early; during that time, students studied a nearby glacier, learning glaciology, marine biology, botany, and cultural history. "This isn't memorizing information for a test," the teacher told Nixon. "When you sit in silence in front of a glacier and see the glacial pond, the dirt of the glacial moraine, the succession of plants from the lichens to the climax forest, and you write and sketch what you see, you make a bond with that moment. This experience becomes part of you."

James and the Giant Turnip

An increasing number of parents and a few good schools are realizing the importance and the magic of providing hands-on, intimate contact between children and nature as a larger part of a child's education. Some teachers come to interdisciplinary place-based education on their own, with no institutional support besides a sympathetic principal. Most current progress in education, in fact, comes from iconoclastic individuals, including the principals, teachers, parents, and community volunteers who chart their own courses. Committed individuals and service organizations can accomplish a great deal.

One creative elementary school teacher, Jackie Grobarek, describes what she called her "butterfly theory" of teaching, based loosely on meteorologist Edward Lorenz's theory that very small inputs at the beginning of a system's evolution are amplified through feedback and have major consequences throughout the system. (One interpreter popularized Lorenz's theory by calling it the "butterfly effect," wondering if the flap of a butterfly wing in Brazil could set off a tornado in Texas.) Grobarek describes the kind of hands-on experience with a payoff not always immediately visible:

> Schools are nonlinear systems, and small inputs can lead to dramatically large consequences. Our students this summer have raised earthworms, plants, and caterpillars and released the emerged butterflies. Because the students' "babies" needed food, they also learned that the worms would eat garbage, the plants would thrive on worm castings, and that the butterflies required specific plants to eat, and other plants on which to lay their eggs. Many of these things were identified on our school grounds and in our canyon. They realized that our canyon, which had become an unattractive nuisance and trash pit in the neighborhood, was actually a wonderful habitat. It is filled with wild fennel, which is the host as well as food plant for the giant swallowtail butterfly. We are now working as class teams, and this week alone have hauled almost four Dumpsters of trash out of the area. Will this improve their reading and math scores? Maybe, but I feel that this experience will change them in ways that tests may not be able to measure.

Sometimes, the catalyst is a principal with vision. At Torrey Pines Elementary School, near where I live, a committed young principal and his students adopted a nearby canyon. "We get the classes down here touching, tasting, smelling, tracking. It's hard to get twenty-six kids to be quiet, but we do it," said Dennis Doyle, the principal. He believes that encouraging more hands-on experience with nature is a better way to introduce children to science than relying just on textbooks. In fact, he explained, during the nineteenth century, nature study, as it was called, dominated elementary school science teaching. Now that nature study has been largely shoved aside by the technological advances of the twentieth century, an increasing number of educators have come to believe that technically oriented, textbook-based science education is failing.

At Torrey Pines Elementary, sixth-grade classes were scoring poorly on the hands-on portion of a science test given nationwide by the National Teachers Association. So Doyle and his staff decided on a radical tactic. They would restore the canyon behind the school to its

natural state to create an outdoor classroom and nature trail. The idea was to help kids experience the kind of intimacy with nature that many of their parents enjoyed, and to improve science education—to make it immediate and personal.

On their forays into the canyon, work teams of kids, teachers, and parents ripped out the plants not native to the area, including pampas grass and Hottentot fig (commonly known as ice plant). Spanish sailors probably brought Hottentot fig to California. It is an edible and hardy plant rich in vitamin C, useful in the prevention of scurvy, explained a docent from nearby Torrey Pines State Park, who had teamed up with the school. Many people believe the Hottentot fig, a ground cover, prevents soil erosion, but, because of weighty water content in finger-like leaves, the plant can pull down a steep embankment. In this canyon, for this fig, the jig was up. The students returned the canyon habitat to native plants, including Torrey pines, yucca, cacti, and chaparral. The schoolchildren grew seedlings in their classes for later replanting.

One weekend, thirty parents worked in the canyon alongside the kids. Half of the parents were from wealthy nearby neighborhoods, the other half from the less affluent neighborhoods from which some of the students were bused. They hacked away at the pampas grass with machetes, all pushing and pulling together. "That kind of experience binds people together more than any formal integration program," Doyle said.

Doyle tries to keep the kids' canyon forays as relaxed as possible, and his adult view of nature minimized. As we walked through the canyon behind the school one day, he asked the kids questions, but didn't give the answers.

"Look at these twigs," said a boy named Darren. "It looks like one twig is dead, but one is alive."

"Why do you say that?" asked Doyle.

Darren launched into an elaborate and erroneous theory.

"That's an interesting theory."

Darren trailed after Doyle, excitedly checking other twigs. In this special classroom, imagination was more important than technical precision.

In 1999, I met a remarkable woman named Joan Stoliar. She lived in Greenwich Village with her husband, appeared to be in her sixties, had battled two types of cancer, and often traveled the streets of New York, with her high heels and fish-shaped earrings, astride her Lambretta motor scooter. A few months before cancer finally claimed her life, I accompanied her on a visit to a classroom at Intermediate School 318 in Brooklyn, where a cluster of seventh-graders attended four hundred trout fingerlings. The students hovered over the aquarium, set up to replicate a piece of trout stream.

For decades, Stoliar was one of the grande dames of the tweedy, traditional New York fly-fishing culture. She was probably the first woman to join the old, distinguished Theodore Gordon Flyfishers club. She talked the club into sponsoring New York State's trout-in-the-classroom program—with the help of Trout Unlimited, the National Fish and Wildlife Foundation, Hudson River Foundation, and Catskill Watershed Corporation.

Such programs—which began in California—have been springing up around the nation over the past decade. Their goal: to enliven biology and to connect kids to nature. The New York effort matches city kids with country kids, in what Stoliar called "a social experiment in creating sensitivity at both ends of the water tunnel." Several hundred students in ten inner-city New York schools and eight upstate schools work together to raise the trout and replant streams.

"This program gives city kids an appreciation for nature, but also teaches them about the source of their drinking water. They become watershed children," she said. In October, each school received several hundred fertilized brown trout eggs from the state's Department of Environmental Conservation; the hatchery director even gave the kids his

home number in case anything went wrong. Students placed the eggs in tanks designed to re-create the habitat of a trout stream.

In Brooklyn's eight-foot piece of stream, a pump pushed water over rounded rocks and aquatic plants, and routed it through a chiller to keep it at a steady forty-nine degrees. Above the water, in a canopy of screening, insects hatched, rose, and fell. A "trout-cam" sent magnified images of the fish to an adjacent TV. The students cared for the trout and checked water temperature and pH level and other factors that can kill the eggs or fish. Stoliar called what the kids were learning "instant parenting."

In January of that year, the kids reported their progress on their class Web page: "We saw caddis fly larvae eating a dead trout [and] we found a large fry with a trout tail sticking out of its mouth—it probably ate a smaller fish. Lot of dining action! About 42 fish have died in 1999 but we still have over 400 fish." As the trout grew, the rural and urban kids traded letters and e-mail about their progress. "We hope they remain friends for years, and maybe even fish in the same streams together someday," Stoliar said.

Each year, if the delicate trout survive until spring, the kids are bused north to a stream in the Catskills, where they meet the rural students, and together they release the fish into the wild. An eighth-grader named LaToya told me, "Up there you don't smell anything like toxic waste. I never saw a reservoir before. It was so beautiful, so clean."

One morning I visited the private Children's School in La Jolla, where teachers, parents, and kids were hard at work on a garden, following the guidelines of a famous expert on gardening who would visit shortly. As the students waited for Mel Bartholomew's arrival, I asked the fourth-, fifth-, and sixth-graders in teacher Tina Kafka's class what they thought of gardening.

"I think the lettuce you buy at the store tastes better than the lettuce

you get from a garden," said James, a skeptical eleven-year-old. "At the store they wash it real well. They've got those spray nozzles going all the time." James is new to gardening; the school's is his first. Matt, ten, offered his own critique of gardening. "The problem I have with gardening is it's not improving, not like technology, not like TVs and computers. All these old wood gardening tools haven't changed in decades." Speaking like a true child of the twenty-first century, he added, "Tools should improve." James and Matt are typical of many youngsters today, particularly the ones who live in Southern California housing tracts with their square-foot backyards. It's tough for a garden to get a kid's attention, unless the experience is digital.

In an effort to change that, Kafka and her co-teacher, Chip Edwards, helped their students create a garden based on Bartholomew's approach. Bartholomew, now a retired civil engineer and efficiency expert, wrote *Square Foot Gardening* several decades ago. The best-selling book was the basis for a long-running Discovery Channel series on cable TV. People who use his system eschew traditional rows, which made sense for plowing, in favor of square-foot blocks, which lend themselves to more personal care. Gardeners can easily reach the plants in each cluster for planting or weeding. This approach also seems to make more sense for kids, whose arms and reach are shorter. It reduces gardening to a more manageable scale and increases the chance for success. "I ate some lettuce from our school garden," said Brandon, ten. "I washed it and put some salad dressing on it, and it tasted better than the lettuce you get from the store."

A classmate, Ben, eleven, added, "I like the radishes out of our garden a lot better. The ones from the store are too spicy." And Ariana, ten, reported how a gopher attacked a turnip she grew in the school garden. "He hollowed it out!"

I turned to James. "Would any turnip that touched a gopher's lips touch yours?" "No!" he answered in horror.

Just then, Bartholomew arrived. Bartholomew, who lives in Old Field, New York, is a tall, lanky man with a mustache, thinning hair, and

the kindest of eyes; he was accompanied by his sister, Althea Mott, of Huntington Beach. The two of them founded the Square Foot Gardening Foundation, which promotes the therapeutic value of gardening. They visit libraries, nursing homes, churches, and schools.

"Our goal is to have gardening included in every school curriculum," he explained. "We're writing programs for all grade levels and all seasons. We want kids to communicate with other gardening kids around the country, first by letter, but eventually through the Internet. We also hope they'll take gardening home and involve their families." Wearing jeans and ready to garden, Bartholomew headed out back to the class garden. The kids (including James and Matt, who now seemed particularly eager) moved confidently to their tasks, to weeding and watering. Bartholomew hovered over them, smiling, asking them gently about their crops.

Kafka, who stood to one side, said, "For us, the garden has been much more than simply planting vegetables and taking care of them. It's been a bonding experience. When we go to the garden as a class at the end of the day, there is a strong feeling of shared joy and peace no matter how hard the day has been." She described how, one drizzly Monday morning, the students arrived to find that skateboarders had vandalized their garden. "We decided to focus on renewing our garden rather than on whodunit," said Kafka. After the vandalism, the students named their garden "Eve's Garden," after one of their fellow students, who had left the school and whom they missed.

Bartholomew looked proudly at the students working together. "It's so important for kids to understand where their food comes from," he said. Suddenly James announced, "My turnip is ready. It's a *big* one."

"James and the Giant Turnip," someone said.

"Drum roll!"

James grunted and pulled on the turnip until it came loose from the soil. He held it up proudly for all to see, and brushed the dirt from it. Then he held the turnip close to his ear. He knocked on it to see if it was hollow. And he grinned.

Ecoschools

Ideally, school nature programs will go beyond curriculum or field trips: they will involve the initial, physical design of a new school; or the retrofitting of an old school with playscapes that incorporate nature into the central design principle; or, as described earlier, the use of nature preserves by environment-based schools.

The schoolyard habitat movement began in the 1970s, stimulated by environmental education programs, such as Project Learning Tree and Project WILD, and a successful national program in Great Britain called Learning through Landscapes. At least one-third of Britain's thirty thousand schoolyards have been improved by this program, inspiring a similar program in Canada called Learning Grounds, and a major Swedish program, Skolans Uterum. By 1996, more than forty organizations were involved in natural school-grounds enhancement, according to a survey by the U.S. Fish and Wildlife Service, one of several major agencies with traditional wildlife conservation missions working in this area. Some organizations, which originated in environmental education, have also forged links with science and education departments of universities, museums, and conservation organizations. The National Wildlife Federation, with its Schoolyard Habitats certification program, is a leader in encouraging the creation of hands-on, outdoor learning opportunities that cannot be duplicated in the traditional classroom setting.

Mary Rivkin, a professor of early childhood education at the University of Maryland, Baltimore County, and one of the most thoughtful and prolific academics working in this arena, cites the biophilia hypothesis, as well as the work of attention-restoration researchers Stephen and Rachel Kaplan, particularly their work on "nearby nature" and its wide range of benefits for children and adults. Many preschools "have excellent outdoor play spaces because early childhood teachers have a long and sturdy tradition of having plants and animals accessible to children and incorporating outdoor play into their daily activities," according to Rivkin. She describes the typical greening efforts and the ideal: "Schools usually start with small projects, although some schools do major work, especially in new construction." They might begin with butterfly gardens, bird feeders and baths, tree planting, or native plant gardens. Moving on to larger projects, they can create ponds, nature trails, or restore streams. Ecologically valuable projects are valued over beautification. Pump-operated or natural streams can offer water play. "Dirt and sand must be for digging as well as planting; clay can often be found for making things. Some plants must be for picking," she advises. "Seeing such things is only part of learning about them. Touching, tasting, smelling, and pulling apart are also vital. Shrubs and trees for climbing are the real thing . . ." Assuming a secure perimeter around the schoolyard, children also need private spaces: bushes, tall grass, a cluster of rocks. "A circle of 6-foot pines is a forest to young children."

As Rivkin points out, the task of helping the 108,000 schools in the United States "green their grounds" is daunting, even with the widening web of institutional support, including conferences sponsored by the American Horticulture Society, the North American Association for Environmental Education, the Society for Ecological Research, the Brooklyn and Cleveland Botanical Gardens, and others. Increasingly, preschools and child-care facilities are housed in office buildings, a trend that undermines the burgeoning schoolyard habitat movement. And in public-school settings, "the bleakness of asphalt and close-mown grass in outdoor areas presents a major challenge to outdoor nature experiences." Nonetheless, the schoolyard habitats movement "is literally gaining ground."

Numerous studies document the benefits to students from school grounds that are ecologically diverse and include free-play areas, habitat for wildlife, walking trails, and gardens. Two major studies, "Gaining Ground" and "Grounds for Action," were conducted in Canada, one in the Toronto school district, the other in British Columbia, Alberta, Manitoba, Ontario, Quebec, and Nova Scotia. Researchers there found

that children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another, and more creative. The greening of school grounds resulted in increased involvement by adults and members of the nearby community. The Canadian researchers also found that green school grounds enhanced learning, compared with conventional turf and asphalt school grounds; that the more varied green play spaces suited a wider array of students and promoted social inclusion, regardless of gender, race, class, or intellectual ability; and they were safer.

Another benefit of the green school grounds is their impact on teachers. The Canadian researchers found that teachers expressed renewed enthusiasm for teaching. "When I am teaching outside, I feel excited again. . . . I realize that I still have a lot of passion for teaching," said one teacher. In an era of increased teacher burnout, the impact of green schools and outdoor education on teachers should not be underestimated. Teachers, too, deserve exposure to the restorative qualities of nature.

There is another movement that tends to ebb and flow during bad and good economic times: the ecoschool, which is a school initially designed for and dedicated to using nature studies as a touchstone in its curriculum. The concept has been popular for decades in Europe. There are 2,800 ecoschools in the United Kingdom and Scotland. The concept attracts Dave Massey, regional coordinator of the California Regional Environmental Education Community, a new state office. Massey says school districts should protect every square inch of natural landscape adjacent to schools, not only for environmental reasons, but also for educational gain. He recommends, "We [need to] put some thought into the planning of every new school so that the surrounding nature is available and used." As an elementary-school principal, Massey prized a stream near his school as an outdoor lab: "I had kids out there twice a week, studying the cottonwoods, planting native plants."

At the cutting edge of ecoschool thinking are foundation-to-roof

"green" schools, constructed with, say, compacted straw bales and plaster, an increasingly popular low-cost alternative for building highly insulated walls. The school itself becomes a lesson in ecology.

Schools, zoos, botanical gardens, natural history museums, and other educational facilities may lack the space or staffing to become ecoschools, but they could farm out the job. What if farms and ranches were to become the new schoolyards, offering lessons and hands-on experience in ecology, culture, and agriculture? The Montessori education movement has revived the idea of "farm schools" by tapping into the founder's original vision of adolescent students spending part of their year operating a working farm. A government-sponsored program in Norway suggests the potential of a larger-scale approach. Since 1996, Norwegian farmers and public school teachers have worked together to create new curricula taught in classrooms and on farms. "Our purpose has been mainly to get children out of the classrooms and into the experience of caring for nature. Norway is a land of incredible, unspoiled natural beauty, but the children aren't out there," says Linda Jolly, an educational researcher at the Norwegian Lifescience University, associated with the national Living School and regional projects called the Farm as a Pedagogical Resource. "Our other main purpose is to maintain living farms." Working with children gives Norwegian farmers "new purpose, connection with the community, respect and some income." Progress has been slow, but impressive, she adds. "At one school, 93 percent of the parents voted to have their children taught on a farm one day a week, for the entire year."

As in Norway, U.S. farmers and ranchers, to stay solvent and to preserve the cultures of farming and ranching, are looking for new sources of income; some already rent time and space for hunting and other recreational activities. They could do the same, or better, for schoolchildren. If, at times, as a form of subsidy, government can pay farmers not to plant crops, surely it could pay them to plant the seeds of nature in the next generation.

Fortunately, even in the face of economic hard times and trends that move children away from nature, many individual teachers, parents, and organizations around the world—particularly in Canada, Great Britain, the Scandinavian countries, and the United States—continue to work for more nature in the classroom, more focus on "nearby nature," greener school grounds, and even new designs for ecoschools. In addition, the experiential learning movement and its ancillaries are working to better document the relationship between environmental education in schools and stewardship behavior.

What else would help? Schools could begin to build sronger, more significant relationships with agricultural associations, nature centers, environmental organizations, and bird sanctuaries, rather than using them for one-shot visits. Instead of waiting for a turnaround in school spending, such organizations could band together to hire part-time environmental educators to work in classrooms, organize parent/teacher/student activities, and help teachers learn how to integrate school grounds and nearby parks, woods, fields, or canyons into the core curriculum. Ultimately, such efforts lead to more effective education.

Higher Education, Ecological Literacy, and the Resurrection of Natural History

Even in the face of draconian budget cuts and test-centric education reform, many individual teachers are fighting to bring nature back to education. In addition to more support from parents—and most importantly, students—these teachers need a public movement to leave no child inside. Such a movement should be grounded in regional networks of committed businesses, conservation organizations, civic groups, even garden clubs. These networks could work for increased funding, and just as importantly, become directly involved. They could organize and support volunteer programs and the greening of schoolyards; they could pay for field trip transportation to woods, fields,

streams, parks, nature centers, bird sanctuaries, farms, and ranches; they could help create *ongoing* outdoor education programs, rather than the one-time visits more common in the past. And they could help educate the public.

A significant push is under way to further document the connection between outdoor learning, classroom-based environmental education, and academic achievement and stewardship behavior. "'Behavior leads to behavior' is one of our maxims," says Lieberman. "For a long time we talked about knowledge leading to behavior; instead, we believe that behavior leads to behavior." What about the pure joy of being in nature? "Pure joy? Not in the curriculum," he says, laughing. "We advocate for joy, but certainly haven't tried to measure it." As "happy and proud" as Lieberman is about the findings of his study of experiential education, such research is "not enough," he adds. "We need other people doing more studies."

But an expansion of academic knowledge, as well as more nature in our primary and secondary schools, will require dramatic change in higher education. David Orr, professor of environmental studies at Oberlin College and founder of the Meadowcreek Project, a conservation education center, calls for a new environmental literacy requirement at the college level. Orr argues that the ecological crisis is rooted in the way we educate future generations. The dominant form of education today "alienates us from life in the name of human domination, fragments instead of unifies, overemphasizes success and careers, separates feeling from intellect and the practical from the theoretical, and unleashes on the world minds ignorant of their ignorance." In other words, today's practices help create the know-it-all state of mind, and the accompanying loss of wonder.

Orr calls for a new approach to education to promote "ecological design intelligence" that could, in turn, create "healthy, durable, resilient, just, and prosperous communities." He asks educators and students this

elemental question: Does four years in college make "graduates better planetary citizens or does it make them, in Wendell Berry's words, 'itinerant professional vandals'? Does this college contribute to the development of a sustainable regional economy or, in the name of efficiency, to the processes of destruction?" He envisions the kind of education reform—or reformation—that would fully acknowledge the social and biological alienation from the natural world, and the necessity of the healing of that division to the survival of the human race.

Orr proposes that colleges set a goal of ecological literacy for all students, so that no student would graduate without a basic comprehension of:

- the laws of thermodynamics
- the basic principles of ecology
- carrying capacity
- energetics
- least-cost, end-use analysis
- how to live well in a place
- limits of technology
- appropriate scale
- sustainable agriculture and forestry
- steady-state economics
- environmental ethics

Such a focus on ecological reality is essential at the college and every other educational level, but its implementation carries the risk of promoting joyless ideology. A sense of wonder and joy in nature should be at the very center of ecological literacy.

For this type of reform to take place in a meaningful way, there will need to be a rebirth of natural history in the academy. In an earlier chapter, Paul Dayton offered his obituary for natural history. The professor of marine ecology argues that natural history has been "expelled from the ivory tower," and that biology undergraduates at many universities are not taught classic botany or zoology. The prevailing

patent-or-perish approach in the sciences has left many first-year graduate students with little or no knowledge of major phyla, or of the life-history biology of the very organisms they study.

In a scathing paper for the journal *Scientia Marina*, Dayton and associate professor Enric Sala argue that some students are taught ecology using textbooks based almost entirely on molecular biology and theoretical population biology. "This prevailing attitude denies students the sense of wonder and sense of the place fundamental to the discipline. Worse, there are ecologists who have never seen the communities or populations they model or speculate about, and who could not identify the species composing these communities. This is like having the illusion of conducting heart surgery without knowing what a real heart looks like." The study of ecology has moved from the descriptive to the mechanistic, and research support has shifted from "individualized small science to very large integrated research programs where the players have small roles well defined by the group," rewarding "group mentalities more than individual creativity." They write:

> Without a sound formation on natural history, we risk producing narrow-minded ecologists. Naturalists are closer to poets than to engineers, and it is the intuition based on first-hand experience and common sense that produces the better leaps of thought. We should imprint on our students the importance of intuition, imagination, creativity, and iconoclasm, and prevent restricting them with the brain-cuffs of rigid assumption frames and techniques, if we are to revitalize an ecological science that is more than ever becoming a stronghold of fundamentalism.

By that, Dayton and Sala mean the fundamentally narrow vision of science. When I asked Dayton how such a revolution—or counter-revolution—might be organized, he said, "I am sure that there are some wonderful naturalists who are also molecular biologists. I am not sure I have met many, but they are there. And for sure that is true of

taxonomists." Still, he worries that his fellow natural historians do not understand the stakes involved. Universities cannot find teachers to teach such classes because so few now know the fundamentals of biology and natural history. How do we reverse this trend? I again urge parents, primary and secondary educators, environmental organizations, and policy-makers to weigh the meaning of this loss to education, to creativity, and to the natural environment. The associations of remaining natural historians must help lead the crusade. The survival of their own profession is linked to a larger cause: the reconnection of the young with nature.

An environment-based education movement—at all levels of education—will help students realize that school isn't supposed to be a polite form of incarceration, but a portal to the wider world.

17. Camp Revival

For decades in San Diego, the school district has operated a sixth-grade camp in the nearby mountains. Generations of kids have spent a week during the school year among the pines. Over the years, however, this camp's central purpose has shifted from a pure nature experience; it has become, primarily, a race-relations retreat with nature used as backdrop. Still, this camp continues to give some children their first or best experience in nature. Myra, a ninth-grader, describes her time at sixth-grade camp:

> I haven't truly experienced nature much. My family is not one that believes in camping or spending time in the outside world, even though my parents were brought up in a rural society. For the most part, I spend my time at home. The only time I can remember having lived in nature, in the open, was in sixth grade on the camping trip to Palomar. There, I felt truly comfortable, being among few people and walking down paths that weren't paved. . . . Sure, the food was bad and the cabins were uncomfortable, but the walks and hikes were interesting and fun. I truly belonged somewhere in the scheme of things. . . . Sometimes, I feel like I just want to get away from the world, so I dwell in nature through my thoughts and memories.

As with so many young people, the modern world is sometimes too much with Myra. How can we overestimate children's need for respite