Review Essay

Ever Since Plato:
The Corporatization of Curriculum

Books Discussed:

Antonio Gramsci.  
*Selections from the Prison Notebooks.*  

Harry Braverman.  

David F. Noble.  

By Howard A. Doughty

Ever since Plato, education has been a subject of controversy. The enduring questions remain. What is the purpose of education? Who should teach? What should be taught? Who should learn? How should things be taught? And, whose interest should education serve? These and related questions are not easily “unpacked.”

For the purposes of this essay, the emphasis will be weighted toward the last question, which necessarily involves a discussion of the political economy of education. The three books selected for comment deal with different issues. They were written at different times and in decidedly different places. Yet, they are deeply linked. Each one addresses an important theme in the development of education as a cultural process intimately related to the distribution of power and wealth in society. They are, in order, the relationship between curriculum and social class; the organization of teaching and learning practices; and, the relationship between technology and education.

Behind these specifics, however, is the connecting question of the basic purpose of education. Is it to help us examine our own lives in order to make them worth living (cf. *The Apology* 38a), or to indoctrinate young people and gull them into accepting the “noble lies” that ensure social stability (cf. *The Republic* 412c–417b [5])?. Is education properly to be directed toward individual enlightenment or social control?
The Critique of Alexander Inglis

To open these ruminations, I am indebted to the cheerfully entrepreneurial American educational “reformer” John Taylor Gatto for bringing to my attention the words of classicist Alexander Inglis. In his book *Principles of Secondary Education*, published in 1918, Inglis, then a professor of education at Harvard, enunciated six primary functions of education¹:

1. to establish fixed habits of obedience to authority, completely precluding critical judgment;
2. to impose conformity by making children as alike and therefore as predictable as possible, resulting in a disciplined work force;
3. to determine children’s proper social role, by logging anecdotal and mathematical evidence of performance on cumulative records;
4. to sort children according to their future roles, and train them as far as their final destination in the social machine, and no further;
5. to select out the unfit with poor grades, remedial placement and other punishments to “wash the dirt down the drain”;
6. to select and train an elite cadre of “caretakers,” to be taught to monitor and control a deliberately dumbed down and declawed population so that government might proceed unchallenged and corporations might never want for obedient labour.

Inglis clearly viewed education as an instrument of social control which had as its main task the creation of a compliant, productive, tightly organized and docile citizenry. He recognized but did not approve of this system. His assessment was severely critical and he urged extensive change. By developing the study of English, German, Latin and Greek into the high school curriculum, he hoped to help develop a widely read and therefore well-informed public. He undertook “extraordinary efforts … to achieve a pragmatic synthesis of classical pedagogy and principles of progressive education.”² He pretty much failed.

The fact that Inglis’ intentions did not find favour with the authorities ought not to surprise. Inglis had in mind a generation of scholar-citizens, whose independent and rigorous thought would stand civilization in good stead during trying times. Apart from any concerns about feasibility, an abundance of hyper-logical, aesthetically aware young critics well schooled in the canons of Western Civilization was not a priority. Returning to something approach normalcy as World War I drew to a close seemed a more important social goal.

We should keep in mind that formal schooling has always been linked to a conservative project of replicating social relations and supporting existing ideologies. Therefore, it has always been at least partly dedicated to graduating students who would behave themselves, take up responsible social positions, maintain the values of their cultures, perform useful services and assume leadership roles.

The medieval churches turned out priests. The early modern universities produced scholars, statesmen and an occasional scientist. Ordinary workers were, not surprisingly, excluded, for their occupations required more brawn than brains, and however many artisans might be needed could be trained as apprentices to master craftsmen through their own guilds. Literacy
and what we now call “numeracy” were rarely required skills in the bulk of the population, and were generally discouraged as corrosive of social stability.

Educational Reform in the Industrial Era

Urbanization, mercantilism and, eventually, the industrial revolution changed all that. Armies of clerks were needed in offices. Larger armies of factory workers with the ability to read a work order and correctly set the dials on machines were essential. Thus, mass education was born. There was resistance, of course. Aristocrats and their sycophants feared what might happen if “loose and disorderly people” were taught to read. It would, they reasoned, be difficult to control what they read and, as a result, they might become exposed to immoral or, worse, radical ideas.

Workers, too, were often opposed to compulsory education, reckoning perhaps that their plebian culture would be compromised, and—more importantly—that their children would be removed as sources of income, and placed in schools where their time would be wasted with unnecessary book learning. In time, standardized mass education was imposed in any jurisdiction with the potential to embrace modernity, although working class parental ambivalence toward the value of schooling remains.

As public schools were constructed and compulsory education was mandated, certain problems arose. Educational reformers, of course, saw the potential and the necessity for public education. Practical training in the industrial arts could be combined with moral instruction in the importance of the “work ethic” to create a productive and politically compliant population. At the same time, the effects of Enlightenment philosophy, notions of democratic governance, a yeasty egalitarianism and inchoate ideal of individual human rights promoted early thoughts of liberal education.

Gradually, Charles Dickens’ model of Mr. Gradgrind, the philistine school master who epitomized oppressive Victorian education was challenged by the likes of Matthew Arnold and successive generations of educators who believed that modernity required, and individual citizens deserved, more than narrow vocational training. Fully participating members of society needed exposure to the arts and sciences, to cultural understanding and social awareness. In the sexist language of the day, the state was obliged to provide education for “the whole man.”

From this attempt to bridge the gap between the high-born and those of modest means, twentieth-century educators took language and literature, social studies, and the physical and biological sciences to the elementary and the secondary school classrooms. Then, in mid-century, when it dawned on political and business leaders that “automation,” “technology,” “information” and, more generally, the “service sector” were the evident waves of the future, Western societies exploded with a massive program of educational expansion creating new institutions and enlarging existing ones. Between the end of World War II and the 1960s, the educational landscape was transformed. No longer were working class children expected to leave school at the earliest opportunity. Increasingly, high school completion and, in due course, postsecondary training of some sort became the expected norm.
These developments did not occur easily and the controversies they provoked were not quietly resolved. From the outset, it was acknowledged that modern society would depend on a skilled workforce. At issue was the question of what was to be taught. Reluctant to waste educational resources on the poor, it was generally agreed that practical schooling was required for those who would live their lives as wage labourers, salespeople and low level office workers. Eager to meet the needs of business and industry without unduly encouraging a false sense of entitlement among the lower middle and working classes, great care was needed in the design and implementation of educational reform. Often, that took the form of early and strict allocation of students to categories based on apparent personal and intellectual potential. Those destined for upward mobility and positions as “guardians” were to be segregated from the “drones.”

Antonio Gramsci’s Critique of Education

In Italy, the “curriculum of power” and the “curriculum of practical skills” were separated in the fascist regime of Benito Mussolini. This bifurcation was opposed by Antonio Gramsci. It may well be apocryphal, but the story goes that Il Duce, toward the end of his life expressed regret that he had named his movement, his party and his government “fascist” in a dubious attempt to connect symbolically with the ancient Roman Empire. It would have been better, he is alleged to have mused, to have used the term “corporatism” as signifying the greatest combination of private economic power and public political power in human history.

That is as may be, but Mussolini’s educational system had a great critic by the name of Gramsci.

Antonio Gramsci (1891-1937) is venerated as one of the foremost political thinkers of the twentieth century. An active labour organizer in the newly industrializing city of Turin, he was a founding member and onetime leader of the Communist Party of Italy. Inevitably, he ran afoul of the fascist regime, and was imprisoned in 1926. Never in robust health, he fell gravely ill, and was given a conditional release shortly before death at the age of forty-six. Gramsci is revered by many in the Marxist tradition, especially because of his analysis of culture and politics—subjects that many of his comrades got notoriously wrong. He also offered trenchant commentaries on education.

Gramsci will surely be most favourably remembered for his introduction of the concept of hegemony into mainstream political discourse. It was his view that ruling classes could not rely exclusively on raw power to maintain their control of societies. Police are expensive; secret police are more expensive; and very secret police are the most expensive of all. Monopolistic control of the use of “legitimate violence” (the police and military), duly supplemented by complex systems of internal intelligence, could not long sustain the supremacy of the state in the absence of ideological control as well. While internal espionage, the threat of incarceration, torture and ultimately of death are helpful in maintaining law and order, but they are also inefficient and unreliable in the face of public resentment. It is much more effective, Gramsci argued, to have the people police themselves.
Popular compliance and complicity in their own oppression are hard won, but are certainly within the capability of regimes that seek to use ideas as instruments of social control. Today, many social institutions contribute to the maintenance of elite control. These include the mass media and education. Gramsci called the exercise of power through ideological supremacy “hegemony.” According to political economist Giovanni Arrighi, hegemony in Gramsci’s sense is “the additional power that accrues to a dominant group by virtue of its capacity to lead society in a direction that not only serves the dominant group’s interest, but is also perceived by subordinates as serving a more general interest.” As such, hegemony is a function of ideological control, and ideological control is commonly exercised through collective institutions such as the church, the school and, today, the print and broadcast media. So it was that Charlie Wilson, Chairman and CEO of General Motors could say (and be believed) in 1955, that “what is good for General Motors is good for America.” So it was that Ronald Reagan, when he worked for General Electric, could offer the same homily on the weekly television series, “G. E. Theatre” between 1954 and 1962. This was it: “Remember, folks, at General Electric, progress is our most important product.” As long as there was a general belief in the fundamental commonality of interest between large corporations and private citizens, dissent was not only disruptive, it was considered pathological.

Still, dissent endured. Writing fragmentary comments in his jail cell, Gramsci filled thirty-three ordinary school exercise books with ruminations on philosophy, intellectuals, political parties, Italian history, the United States and, unsurprisingly, problems of Marxism. His ideas about education are of interest, partly because he explains how formal education can be used to construct ideological support for the wealthy and the powerful, and also how it can also be used to develop critiques of contemporary social relations in both theory and practice.

As economies and education developed, Gramsci noted that the vocational training of the workforce differed mightily from the education available to the children of the more prosperous and influential members of society. True, the implicit political content of classical studies in antique languages, history and the arts was essentially conservative. Students became aware and appreciative of the contributions of the great personalities in history, the culture of the privileged and the nature and benefits of political stability and social order. Graduates were well equipped to pursue further professional studies, and to take their places in positions of leadership. Nonetheless, Gramsci recognized the revolutionary potential of “classical” education, which in a radicalized form could lead to sophisticated critical assessments of social life based on knowledge of culture, social evolution and political theory. Rather than seeking to denigrate elitist education and tear down aristocratic academic preoccupations, however, Gramsci recognized their importance and sought to expand their application.

Instead of obstinately criticizing the conservative ideology that was implicit in upper and upper-middle class schooling, Gramsci insisted that all children have the opportunity to experience what we might now call a “liberal education.” For him, all people have the capacity to become intellectuals, for all people possess rational faculties. Moreover, knowledge of history and philosophy was essential for workers to develop a politically relevant critique of their own society. Guiding some students to the practical, instrumental knowledge necessary for employment in factories, and directing others to the aesthetic and reflective disciplines of
interest to higher places in social hierarchy was offensive. Instead, he advocated—perhaps counter-intuitively—a version of elite education for all.

Gramsci did not want to expunge the liberal idealism of bourgeois reformers such as Benedetto Croce; he wanted to come to terms with it. He did not want to jettison the study of Latin, but to encourage it as, if nothing else, an exercise in mental discipline. For Gramsci, traditional education ought not to be a mechanism for replicating social class, but for eliminating it by producing worker-intellectuals able to interrogate the political and economic oligopoly in its own terms. An educated working class culture with a thorough familiarity with notions of human agency in determining social change would be an instrument not for mild reformism, he imagined, but for revolutionary transformation. Whether we see in him links to the critical pedagogy of Paulo Friere or the social dynamics of Frantz Fanon, one thing is clear. The radical reconstruction of educational policies and practices are a necessity if the hegemony of the ruling class is to be challenged.

Harking back to Aristotle, who celebrated learning as the exclusive pursuit of those whose abundant means afforded the luxury of leisure time in which matters from poetry to physics could be contemplated in comfort, Gramsci envisioned a society in which the freedom to learn and therefore to become politically engaged was available to all.

Writing in the socialist newspaper, Avanti, in December 1917, Gramsci argued that the “proletariat needs a free school … not a school of slavery and mechanization… Professional schools must not become incubators of little monsters, who are aridly educated for a job, without general ideas and general culture, without spirit and with only a sharp eye and a strong hand.”5 Education, he believed, should be emancipatory, not merely a means for people to acquire marketable job skills, but to become critics of the market itself. As it was, the divide between elitist and vocational permitted the ruling class to insulate itself from social criticism while simultaneously arresting the cultural development of those who would take up socially necessary jobs without the critical awareness needed to produce an understanding of the way in which the rulers protect themselves against the potential resentment of the ruled.

For Gramsci, any successful challenge to the power of the ruling class required the working classes to become consciously aware of their own history, culture and politics. This, he argued, required knowledge of traditional culture, history and politics, and of their role in dominating the masses. The danger of fascism in Italy was its introduction of vocational training under the rhetoric of “child-centred progressivism” for the working classes. This type of ahistorical, apolitical education would remove the historical memory of the working class. Even though couched in conservative ideology, the traditional Italian school system’s emphasis on history, literature and language encouraged disciplined study and critical analysis.

For some, Gramsci’s support for rigor and discipline was not just counter-intuitive, but counter-revolutionary. Gramsci, however, believed that a disciplined study of history, culture and politics was necessary for the struggle of workers against capitalism, and schooling is hard work requiring concentration, discipline and constant persistence. The facile vocationalizing of education for the masses reinforced the inequalities of the social class system. In the alternative, Gramsci argued that the comprehensive education of the ruling classes be extended to children
of the proletariat because academic work was relevant to understanding the real world of capitalist economic, political and cultural exploitation.

Gramsci’s educational writings are themselves the subject of some controversy. Harold Entwistle set the tone with a superficially persuasive argument that Gramsci advocated a conservative schooling that stressed thorough, meticulous study of the classical curriculum and “disinterested” knowledge in support of a radical politics. He was promptly taken to task for pulling Gramsci out of his historical context and failing to appreciate that Gramsci was concerned with a future which might learn from the past, not with defending the past as such. However Gramsci’s embrace of traditional curriculum and traditional methods might be viewed, it is certain that Gramsci believed that education is misused if it is merely put to use promoting upward mobility in a capitalist context. Allowing the few who are destined to monitor and control the many merely reproduces the social relations Gramsci wished to abolish. For Gramsci, the point was to equip working class people with the skills necessary both to enjoy the thrill of learning for its own sake (as he had done as an almost penniless youth in his native Sardinia and as a worker in Turin, and to build a revolutionary opposition to the fascist dictatorship in Italy and to capitalism around the world. His message was that no oppressive society can survive on coercion alone, and that hegemonic ideological controls can be resisted and overcome only through mastery of the knowledge and methods of the institutions of ideological reproduction.

Of special interest in these days of “student-centred” learning, of course, is Gramsci’s hostility of the so-called “progressive” methods of his day. Recalling, perhaps uncomfortably, the Italian educational scene under fascism, it is noteworthy that Benito Mussolini joined the Montessori Society, funded Maria Montessori’s schools and urged other dictators to use her methods. Of course, it should also be recalled that Montessori was forced to flee Italy when she refused to turn her methods toward the creation of a new generation of fascists. In any case, Gramsci insisted that the pertinent effect of child-centred, spontaneous and autodidactic learning was to eliminate historical and political knowledge from the curriculum. To him, fascism flourished when students were encouraged to treat learning as a game in which the facts of history, geography and science were set aside in the interest, in today’s terms, of making learning “fun.” Montessori remains an icon of progressive education; Gramsci is unnoticed outside the conversations of critical educators.

For Gramsci, of course, education was serious business, and its rewards were intellectual satisfaction and political competence. If he thus seems a little dour for our postmodern taste, we can reassure ourselves that we are no longer threatened by fascism as it was understood in twentieth-century Italy or Spain, to say nothing of Nazi and Stalinist totalitarianism. We do, however, experience seemingly permanent structural inequalities and inequities that are punctuated by periodic economic “melt-downs,” and increasing gaps in wealth, power and knowledge between the elites and the working and poorer classes, with the middle class being increasingly squeezed in between.

It is therefore no wonder that contemporary comprehensive schooling systems containing technological, pedagogical and ideological elements are being intensively used to help to solidify existing patterns of economic, social and political control.
“Schools,” as Henry A. Giroux explains, “are now the key institution for producing professional, technically trained, credentialized workers for whom the demands of citizenship are subordinated to the vicissitudes of the marketplace and the commercial public sphere. Given the current corporate and right wing assault on public and higher education, coupled with the emergence of a new moral and political climate that has shifted to a new Social Darwinism, the issues which framed the democratic meaning, purpose and use to which education might aspire have been displaced by more vocational and narrowly ideological considerations.”

Furthermore, the tightening of social control is sometimes excused because of perceived and well-acknowledged dangers. Everyone claims to understand that we are in some sort of crisis. We are plainly in a financial crisis thanks to two decades of the abandonment of supervisory role of government in attending to corporate finance and the essential privatization of the regulatory powers of the state. We are also clearly in a process of environmental degradation including a process of species extinction that may well reduce the number of animal species by fifty percent by the middle of the twenty-first century. It is equally apparent that we are experiencing an energy crisis. We worry about a declining standard of living and chronic international instability. Some speak earnestly about the “war on terror” and the “clash of cultures.” Some even imagine that we are in a deep moral or spiritual crisis. Yet, at the same time as we are becoming sensitive to the perils around us, we are unwilling to renovate education and reintroduce some of our society’s most fundamental, generous and optimistic ideas and ideals.

We continue to accept the prescriptions and proscriptions advanced by the “leaders” who have caused, and who continue to profit from, many of the hazards that threaten us. It is surely a good time to awaken and to take the delightful words of John Maynard Keynes to heart: “There is no reason why we should not feel ourselves free to be bold …to try the possibilities of things. And over against us, standing in the path, there is nothing but a few old gentlemen tightly buttoned up in their frock coats, who only need to be treated with a little friendly disrespect and bowled over like ninepins.” Alternative and far more insightful and adequate explanations for our current troubles are, of course, at hand; but, they have not been adequately understood, much less embraced, by pertinent decision makers. They are, however, available to teachers who could build those insights and explanations into their courses and their civic life, if they would take the trouble.

What remains outstanding is the question of political will. If Gramsci’s reputation is built largely on his contribution of “hegemony,” it is only slightly less important to mention his concept of “praxis.” Here is where the burden falls on contemporary teachers. The triumph of neo-liberalism has been accompanied by a concurrent flight of leftist thinkers into the arcane domain of theory. As Marvin E. Gettleman observes, Gramscian theorists today seem obsessively and compulsively to be engaged in writing tomes that “remain doggedly fixated on the blandishments of theory, sometimes elaborating Gramsci’s theories and later refinements in post-modern argot.” Thus, obscure and obscurantist language frequent ensures that the working classes will never see the source of their potential liberation and hides its potential behind such phrasing as this: “We argue for a counter-hegemonic coalition composed of committed intellectuals whose political links are connected and articulated through the
unification of demands in heterogeneous, multifaceted, yet focalized anticapitalist struggles.”\textsuperscript{12} Few steelworkers, auto workers or even public service workers are likely to demand training in the deciphering of such language in their annual union schools.

Gramsci was, more than anything else, a proponent of transforming schools into sites of radical social reform. He urged that education be taken to working people and that essential theory be grounded in the experience of their real life. Whether in formal or informal settings, and with some noble exceptions, the challenge remains unmet.

**Harry Braverman’s Analysis of Labour**

If there is any expectation of schools being transformed into centres of social change, one of the major issues to be faced is the nature of the labour process in education. Education is work; education is for work. Understanding how educational facilities from pre-school to postgraduate studies are affected by the conditions of work for their teachers and influence their students by the relations of power they modes raises profound questions. A writer and editor who had been a coppersmith and steelworker in World War II supplied a good portion of the answers. His name was Harry Braverman (1920-1976).

In the mid-1960s, Paul Baran and Paul Sweezy produced a joint work entitled, *Monopoly Capital*.\textsuperscript{13} It was an attempt to describe and analyze the “mechanism linking the foundation of society (under monopoly capitalism) with what Marxists call its political, cultural, and ideological superstructure.”\textsuperscript{14} By their own admission, their project lacked an important element, namely the relationship between technology and the labour process including the nature of work, the character of workers’ organizations and the psychology of workers under intense technological change at the outset of the computer revolution. Braverman stepped in to fill that gap with his “instant classic,” *Labor and Monopoly Capitalism* in 1974.\textsuperscript{15}

It was Braverman’s crucial insight that:

> science is the last—and after labour the most important—social property to be turned into an adjunct of capital. The story of its conversion from the province of amateurs, "philosophers", tinkerers, and seekers after knowledge to its present highly-organized and lavishly financed state is largely the story of its incorporation into the capitalist firm and subsidiary organizations. At first science costs the capitalist nothing, since he merely exploits the accumulated knowledge of the physical sciences, but later the capitalist systematically organizes and harnesses science, paying for scientific education, research, laboratories, etc., out of the huge surplus social product which either belongs directly to him or which the capitalist class as a relatively free-floating social endeavour is integrated into production and the market. The contrast between science as a generalized social property incidental to production and science as capitalist property at the very centre of production is the contrast between the Industrial Revolution, which occupied the last half of the eighteenth and the first third of the nineteenth centuries, and the scientific-technical revolution, which began in the last decades of the nineteenth century and is still going on.\textsuperscript{16}
Technology, as abstract Germanic philosophers from Martin Heidegger to Herbert Marcuse have suggested, is fully integrated into hierarchical and authoritarian structures of modernity. Not content with a mere reification of the structural properties of capitalist political economy, Braverman explains in detail how technology enables, constructs and is embedded in the relations of work in conditions of high technology, and how it manifestly increases worker alienation under those circumstances.

Anyone familiar with the history of industrial psychology in the twentieth century will understand the crucial role played by Frederick Taylor in the massive increases in productivity that arose from scientific management. In essence, industrial processes were broken down into the smallest possible steps. Their measurement and coordination were studied and all possible inefficiencies were removed. With increasing sophistication in the product came a paradoxical reduction in the skill needed by the workers. A simple example features my maternal grandfather. The owner of a small tailor shop in Toronto, he was an entrepreneur and an artisan at the same time. He lived above his store and was subject to no industrial discipline more rigid than his undoubted work ethic demanded. Each day, he met and measured his customers, ordered the cloth, cut the fabric and sewed and stitched until the suit was finished. Every part of the production was under his control and every penny of profit was his as well. What’s more, if family lore is correct, every “tailor-made” garment fit the purchaser perfectly (and all for less than $30 – with a vest and two pairs of pants). Today, unless the consumer can afford a “made-to-measure” suit, clothing is bought “off the rack” and nothing fits flawlessly. The old-fashioned artisan—whether a tailor, a carpenter or a mason—has been largely replaced by a factory process in which the jobs are divided and apportioned to a collectivity of less skilled employees. In the domestic economy, pastry making is commonly called a lost art, and cooking often involves no more skill or creativity than the capacity to open a package of frozen food and press the appropriate button on a microwave. Wherever possible, human judgment is removed and replaced by the standardized requirements of the machine, and the assembly-line. Rather than opening up a world of leisure and creativity, modern technology has closed down a world of meaningful work.

Braverman’s analysis is compelling. Whereas Gramsci was forced to write cryptically and often in code from his cell, Braverman expresses himself with a controlled but evident passion. He had lived the lives he describes, and he describes the lives of modern work with lucidity and dignity. He sets up the necessary theoretical framework, discussing the “habituation of the worker” to the capitalist process, the “scientific-technical revolution,” the mediation of machinery, the modern corporation, the global market and the role of the state. He then gives voice to clerical workers, retail personnel and factory workers who had already been reduced and dehumanized as their skills were transferred to the machinery they monitored. The result was a “giant mass of workers who are relatively homogenous as to lack of developed skill, low pay, and interchangeability of person and function.” He reveals the hollowness of the corporate dream.

The great promise of modernity from the Enlightenment to the present day was the systematic reduction of poverty, disease, toil and ignorance. The time of its fulfillment has not yet come, for instead of full employment and a reduced work week, dual income families (when all adults
can find jobs) with extended hours of work and ever greater financial anxieties have become the norm. And how does this relate to education?

It does so in three ways. First, certification—the ballooning of accreditation required for entry level positions in service, commerce and industry—has made education itself into a business in which growth is mandatory and success is defined by quantity rather than quality. This applies both to the student and the institution. Measurable productivity, whether in the form of a collection of high grades on a series of transcripts or a collection of graduates in a series of semesters attests to the worth of the person and the school. Second, the social relations of the educational institution mimic those of the economy. Students enter as customers and graduate as finished products. Teachers and support staff are production workers. And administrators or, more crudely, managers act out the role of boss. Any pretence of academic integrity or collegial relationships is in jeopardy and, in some cases, has been reduced to a cruel joke. Finally, educators who once exchanged prosperity for “genteel poverty,” but considered themselves fortunate to be responding to a higher “calling” now understand “vocation” in quite a different way. Everything from student evaluation procedures to curriculum development, and from scholarship to student evaluation of teachers (“customer satisfaction”) is increasingly turning education (and especially postsecondary education) into the kind of factory model that Taylor promoted, Braverman lamented and critical educational theorists protest against, seemingly in vain.

At the same time, Braverman pointed the way to a challenging future. By documenting the way in which advanced industrial technology was instrumental in the deskilling of artisans from the introduction of steam-driven looms to the invention of computer-assisted design and manufacturing, Harry Braverman allowed us to see more clearly that what happened to weavers at the beginning of the nineteenth century is also happening to educators at the start of the twentieth first. Educational technology needs technicians; education requires teachers, and teachers are—despite all their pretenses to being “professionals”—increasingly understanding themselves to be members of an emerging “professariat.”

Just as “part-time,” “contract,” or “temporary” office workers or construction hands keep costs down and demands low (especially in non-union shops), so teachers are finding a reserve army of underemployed academics recruited to teach fifty percent or more of college and university classes. Lacking job security, comparative wages and basic benefits, these people are asked to trade their aspirations for a slim chance of a tenure track position — some waiting until they are nearing retirement before finally giving up.

As far as mechanization is concerned, innovations that turn teaching into monitors of the machine-student “interface” reduce reliance on professorial expertise and mutual student-teacher interrogation. They create a new educational paradigm based on the computerized supervision of rote learning rather than the shared experience of refining ideas and acquiring insight. Implicit in the new paradigm is a growing trend toward disempowering faculty and reducing their autonomy by suggesting that their main function is to implement curriculum produced by corporate “experts” in the upper strata of educational bureaucracies. Teaching becomes an exercise in information exchange according to rubrics and templates generated by committees adept at creating lists of performance objectives in language learned from the half-
The vitality of informed discussion is traded for the routine application of predetermined words embodying predigested thought. Such changes not only alter the conditions of teachers’ work, but lead to a changing social perception of their place within the general division of labour. That reduced position is intended to serve the political and economic goals of those who control schooling, rather than those directly engaged in teaching and learning. Their new status effectively proletarianizes faculty and reduces them to specialized technical facilitators. They are cheerfully marginalized as “guides on the side,” rather than holding the much maligned position of a “sage on the stage”.

Finally, there is the entire matter of the quality of education acquired by students. Just as my grandfather’s skills have been downgraded in the garment industry, so the skills transferred to students have been compromised by decades of grade inflation, especially but not exclusively in the humanities and social sciences. Back in the classroom, the shift from curriculum-focused education to student-centred learning is partly premised on the myth that students act as rational decision makers upon whose choices curriculum is to be based, rather than novices who generally lack knowledge of the academic disciplines to which they are being introduced. A number of them—often equipped with an unearned sense of entitlement—appear to believe that a letter of acceptance from an educational institution includes a right to determine what counts as success within the institution, and comes with an implied guarantee of graduation from the institution. Meantime, they do not generally appreciate that “independent learning” is a goal to be achieved, not an assumption to be made.

Fearful of high attrition rates, however, many schools are reluctant to dampen naïve student expectations. In reality, as with shoppers in any department store or music shop, student choice is largely illusory, and is heavily manipulated by the corporate buyers whose choices actually stock the shelves. In such circumstances, teachers are more and more cast in the role of sales clerks, assuring customers that they were getting a good deal and helping them to try on new shoes or to select a popular CD from the “top 40” displays. If the charade is adequately performed, the shoppers exit the educational emporium happy with their purchases, and none the wiser for the experience.

For all the claims to liberate students from the conventional canons of the past and from “antiquated” teaching methods, the current panoply of technical and organizational innovations unmistakably reveals its ideological foundations in the unfolding narrative of privatized market relations and their goal of generating a society in which students will become compliant citizens, uncomplaining workers and, above all, consummate consumers in a global culture that comes dangerously close to channeling nihilism.

It is thanks to largely to Harry Braverman (who died of asbestosis) that educators, once disabused of the illusion that they are in any official way professional, can begin to understand their real place as educational workers in the same way that others are chemical workers or mill workers. Professionalism, after all, has three possible meanings. One involves remuneration, the fact that a person is paid for doing work. So, one may be an amateur bird watcher or a professional ornithologist, an amateur musician or a member of a professional orchestra, an amateur gardener or a professional landscaper. The second enjoins pride, so that a people may enjoy their work, set very high personal standards of accomplishment and derive
satisfaction from a job well done, whether it is in neurosurgery, accountancy, carpentry, sales or manual labour. Finally, there is the formal, legal sense of professional, meaning whether or not the members of an occupational group exercises control over entry and exit, set the fee schedule for, and control discipline within the profession. Neurosurgeons and accountants normally fit into that category. Manual labourers and sales people do not. Neither do teachers. Some might aspire to professional status in this sense, and to having an organization similar to a bar association for lawyers. That dream is currently quite impossible.

**The Digital Diploma Mills of David Noble**

The third brave soul whose work I wish to explore is David F. Noble, who currently teaches history at York University in Toronto.

Dr. Noble has a long and distinguished career as an academic, and an almost equally long record as an academic dissenter. Although he has been involved in numerous contests, mainly over academic freedom and civil rights, his place in the current trilogy is based on his work on the history of technology as it is used in education.

The manufacturers of communications technology have long seen schools, colleges and universities as a lucrative and captive market. In the 1920s, Thomas Alva Edison confidently predicted that radio was the teaching tool of the future. In the 1940s, film was set to replace instructors. Television had its moments as commercialized educational television was broadcast directly into schools giving unsuspecting students the impression that the news broadcasts they watched were of academic value. This was all small stuff, however, when compared to the tsunami of computerization, the Internet and on-line courses. So magical was the hype that, in the 1990s, “futurist” Alvin Toffler’s most stridently political protégé Newt Gingrich expressed his fervent hope that computers would replace books in classrooms by the year 2000.

David Noble has been alert to such developments for some time. His early books include *America By Design: Science, Technology, and the Rise of Corporate Capitalism* (Knopf, 1977), *Forces of Production: A Social History of Industrial Automation* (Knopf, 1984), *Smash Machines, Not People: Fighting Management’s Myth of Progress* (Miles & Weir, 1985), *Progress without People: In Defence of Luddism* (Kerr, 1993) and *The Religion of Technology* (Knopf, 1997). He remains prolific but, for educators, perhaps his most pertinent contribution is *Digital Diploma Mills*. Students of David Noble, unlike most teachers, must take into account his singular career history. His scholarship is much admitted and generally undisputed. He taught at the Massachusetts Institute of Technology, but was let go. He was Curator of Technology at the Smithsonian Institution in Washington DC, but was let go. After settling in at York University, he was awarded the prestigious J. S. Woodsworth Chair in the Humanities at Simon Fraser University. He was let go, before he could take his seat. In each of these cases, his departure caused him no permanent harm, but each institution suffered considerable embarrassment. None of them, it seems, was prepared for a serious, critical analyst of technology. Each, in its own way, has paid the price for placing politics above scholarship and instruction.
David Noble, you see, is fearless. He is undaunted by the authority, and he is not intimidated by huge corporate entities with “deep pockets” to fight union arbitrations or civil litigation. He has been vindicated for his courage. When he fights, he wins. Noble also has a history as an extra-curricular political activist to supplement his academic credentials. There is much good and noble talk about public intellectuals that occasionally combine the highest academic standards with an ability to commiserate with ordinary people. Economists such as New York Times columnist-cum-Nobel Prize winner Paul Krugman and academic James K. Galbraith, author of Predator State, come prominently to mind. David Noble ranks among them. In his career, he has joined with Ralph Nader to found the National Coalition for Universities in the Public Interest, and he has worked for decades with rank-and-file trade unionists. He is as at ease with blue-collar workers as with black-gowned academics—perhaps more so.

In short, David Noble is a citizen-educator who brings scholarship into the service of working people and a part of that service is the active resistance to increasing corporate control over universities, curriculum and the teaching-learning process. To some, he is an embodiment of the fusion of theory and practice. To others, such as ex-York University president Lorna Marsden, he is “anti-science” and “anti-intellectual.”

In Digital Diploma Mills, Noble illustrates how the university has become beholden to corporate, government and military research funding that has fundamentally compromises its integrity and independence. He describes in detail how academic commerce has moved from research into instruction. The curriculum, what George Grant once called “the essence of the university,” has been made over in the corporate image. Examples run from name plates on seats in lecture halls advertising donations, as though the university was a charity (which it may soon be) to contemporary “door-stop” textbooks that can cost students well over $100.00 and are mainly committee projects, overseen by marketing overseers whose job is to pitch to the lowest common denominator, making overworked instructors thankful for a “resource” that makes their work a little easier. Most important, however, is the intrusion of the computer into the classroom or, worse again, the abandonment of the classroom for an insidious e-mail network that substitutes for face-to-face instruction.

Noble has made a sound, sane and serious criticism of a variety of complementary trends in higher education. The book focuses on computerized education. In taking into account the use of electronic gadgetry, he is able to demonstrate how higher education is threatened with becoming a farcical marketplace where tuition dollars are exchanged for deflated diplomas and degrees. Rather than confine himself to complaints about the efficacy and efficiency of digitalized education, however, Noble extends his analysis into other aspects of the twenty-first century educational experience. The current mode of educational production, after all, does not consist exclusively of hardware, software and what, in some circles, is lovingly called “teachware”. It also involves human relationships including those between teachers and students and those among students in their classrooms, where they still exist.

In particular, Noble makes clear the relationships among the mass adoption of educational technology, the politically imposed budgetary restrictions that apply to “second-tier” universities and colleges, the subordination of education to narrow vocationalism and such
trends as the attack on university tenure and the massive changes in the college workforce as, for example, in Ontario where economically exploited and insecure part-time teaching staff now outnumber full-time teachers and where the balance is apt only to increase.

Commodification, commercialization and corporatization are all elements of a continuing process of transformation that is increasingly shaping the ideological and material conditions of employment and education in the colleges. Confronted with this externally imposed modification designed to meet the expressed needs of late capitalism, Noble’s lucid analysis and deft assessment provides invaluable insights into our current working conditions. The question is what, if anything, is to be done.

This is how David Noble explains his project (which, incidentally, appeared as a series of separate articles on-line, prior to their collection in a Monthly Review book:

In earlier books, Progress Without People and The Religion of Technology, I had described the nature, sources, and effects of this peculiar yet hegemonic system of belief that was now contributing to the mindless deformation, degradation, and delimitation of institutions presumably dedicated to the life of the mind. Caught up in, or paralyzed by, this ubiquitous enchantment, faculty for the most part confronted this fundamental threat to the integrity of academia not with the creative and critical thought and robust and rigorous debate supposedly emblematic of academia but rather with the same fear, defensiveness, fatalism, and silence characteristic of all other hapless victims of seemingly technologically driven assault. Their disarray is understandable for their fear is warranted. The ideology of technological progress takes no prisoners. In this cultural context, any and all critics are at once disarmed and marginalized, dismissed as ignorant cranks, Luddites, and lunatics who dare to stand in the way of inevitable progress. Their criticism, however compelling in evidence and argument, is not taken seriously because it is beyond the bounds of respectable discourse, irrelevent and irreverent, heresy. Little wonder, then, that in this environment thoughtful people tend to keep their wayward thoughts to themselves.

I have had the pleasure of meeting David Noble only once, when I introduced him to an eager gathering of college professors, who had braved a daunting blizzard to hear him speak. On the basis of an engaging talk, his audience understood that he would feel comfortable with the label of Luddite, and he certainly inspired a few in the crowd to consider rehabilitating that much denigrated attitude toward technology now—two momentous and monstrous centuries after the first organized critics of industrial technology paid for their skepticism on the gibbet.

To trusting technological triumphalists, early nineteenth-century Luddites were irrational romantics at best and modern terrorists at worst. It is revealing of our historical amnesia that we fail to know about the identity of the Army of Redressers under the symbolic leadership of General Ned Ludd. They were witnesses in the present tense to the political economy that inspired William Blake to write of “dark satanic mills.” We are witnesses to the political economy that links us all in a cyberweb of simulacra and a virtual financial system that makes
enormous profits and countenances historic losses out of the instantaneous electronic exchange of paper and pixels that represent the virtual economy, while the rest of us struggle to predict what heat and food will cost and whether we will have jobs to pay for them.

The handloom weavers did not seek to arrest technological innovation, but merely to guarantee that its material benefits were equitably shared. Their machine-breaking was not a violent rejection of modernity, but only a protest against the manner in which machinery intensified the social class system of early nineteenth-century England. Derided as anachronisms in the era of progress, they have endured a damning indictment for close to two hundred years. It will take some effort to reintroduce chronology and coherence to our study and teaching of history, but we are imperiled without it. Today’s educational administrators seem content to murmur, with Henry Ford, that “history is more or less bunk.”

David Noble does not seek to reverse technology either. It certainly has its place, and cannot be displaced in any case. A careful reading of his criticism shows that he, too, is simply trying to humanize educational arrangements now out of control or, worse, under the control of authorities who are unwilling to acknowledge the questions, much less to debate the answers to the questions I raised at the outset. Of course, Noble’s position remains in the minority, and it is dismissed by the usual suspects, who are not above labeling him a “conspiracy theorist” when all he really does is to describe a convergence of opinion and a confluence of power.18

We would do well to acquaint ourselves with all of these authors—Gramsci, Braverman and Noble alike—and come to some critical awareness of what we do and to whom we do it (including ourselves). Upon considering letters from a prison cell, a contemporary classic produced from a somewhat cluttered office on 14th Street in New York City, where I had the honour to meet Harry Braverman’s long-time friend and co-worker Paul Sweezy just a year before Braverman’s death, and the punchy polemic brought to us in book form, we will be in a much better position to see ourselves in the act of seeing, and to teach ourselves in the act of teaching.

Then, we will be able to begin answering the original question by reflection on a few of the most crucial issues which it is our obligation to explore as we try to negotiate our entry into this darkening night of the soul, this brave new world of indoctrination and impotence, and (I would like to think) to suggest ways to interrogate and perhaps to sabotage it. This is my much abridged inventory of matters to which we might address our energies and such analytical powers as we possess, and to encourage our students to do the same.

- The commodification and marketing of education;
- The existential definition of students as customers, clients and products;
- The transformation of education into training;
- The modularization of curriculum and the imposition of Bloomian behavioural objectives;
- The imposition of the capitalist labour process in management-labour relations;
- The replication of the capitalist labour process in the classroom;
• The implicit and explicit reproduction of late capitalist ideology in the substance and structure of teaching and learning;
• The (self-)censorship of teachers and teaching;
• The broad issue of “academic freedom” and Seneca College’s special efforts to suppress its mere discussion by the increasing imposition of “political correctness” in the classroom;
• The apparent adoption of a supermarket approach to education in which any recognizable standard of academic integrity is sacrificed to the market mentality and the fetishism of consumer choice;
• The weakening of our mandate to provide students with opportunities for self-development, social and cultural awareness, communicative competence, and a critical understanding of the economic, technological and political world into which they will graduate;
• The diminished capacity of graduates to “fulfill [their] responsibilities as citizens while [they pursue] self-development and self-expression”;

The necessity to call into question (or at least to account) the top-down, hierarchical, industrial management model of decision making at the college and to test the limits of our individual and collective existence so that we might lead more satisfying “professional” lives and provide a more abundant education for our students.


Braverman, *op.cit.*, p. 156.

Braverman, *op.cit.*, p. 359