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# Polemos and Paideia: On the Weaponization of the School in Late Capitalism

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# Polemos and Paideia: On the Weaponization of the School in Late Capitalism

#### **Abstract**

A popular refrain in the politics of American education, often buttressed by a steady stream of studies, contends that 'we are falling behind' students from other countries. Sometimes this decline is specified in terms of discipline, but the general premise is that American students lag behind their foreign counterparts, with special dread attached to the notion of falling behind adversaries such as China. The failure to rectify our educational inadequacies apparently portends a genuine crisis, the loss of global dominance. The articulation of such fears is particularly instructive in discerning the political role of education in late capitalism, its conceptualization and uses within the context of politics. How do the fears of falling behind speak to the political role of education in late capitalism? I draw upon the ideas of the Herbert Marcuse and his Marxist intervention into Freudian psychoanalysis. Using Marcuse's framework, I argue that in late capitalism the political role of education, formerly understood to serve life affirming value, has been reoriented to further the aims of the death drive. The fears of falling behind, and the policies that have followed, are symptomatic of a disposition toward education that has reconfigured the school as a means of conquest, subjugation, and war.

#### Keywords

Polemos, Paideia, Herbert Marcuse, STEM, Education politics, Eros, Thanatos

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#### **Cover Page Footnote**

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## I. The Blackboard Dragon

Since at least Aristophanes and his ferocious caricature of Socratic teaching, the role of education has been fiercely contested, deeply politicized, and invested with innumerable fears. The questions of who is to be educated, in what subjects, and in what manner are perennial disputes. And because it frequently serves the interests of the future rather than the present, education often becomes a repository for the varied fears and anxieties of concerned parties. How do fears animate the political role of education? By 'political role of education,' I mean the way in which education is regarded as a good for the city or state in a given historical era. Although differing on many issues, political philosophers from antiquity to early modernity were unified in the view that education ought to serve the quality and vitality of society. Originating with the ancient Greek concept of paideia (civic-minded education), this is what I would describe as the classical view on education. It is decidedly different from an increasingly prevalent disposition toward the role of education emerging from the conditions of late capitalism. That is, in marked contrast to the classical view, the political role of education in the present is frequently portrayed as an integral component of belligerent international struggle, or, put differently, as part of a literal arms race. Thus, rather than paideia, there is an increased emphasis on the role of education serving the aims of polemos, the aims of war.

Although there are many perspectives, one constant in the politics of American education concerns the inadequacy of preparing students for global competition. The popular refrain, often buttressed by a steady stream of assessments and studies, contends that as a nation we are educationally "falling behind." Of course, this view is not meant to imply that we are falling behind some sort of absolute standard. Rather, the aptitude and acumen of our students in vital areas of knowledge is supposedly inferior in comparison to students taught in other countries. Sometimes, this decline is specified in terms of certain subject areas; we are told that our students' knowledge of science and mathematics is relatively deficient. In any case, and whatever the subject matter, the general premise is that American students are falling behind their foreign counterparts. Moreover, this relative decline is, or ought to be, a source of alarm. There are material consequences, hazards posed to the future security of the nation, if this trend continues. The greatest concern apparently lies with the potential for those considered to be our international adversaries, especially China, to surpass American education and thereby gain an educational advantage in those fields vital to national security. If, that is, Chinese students are better educated in science and technology, then their country will possess an intellectual edge in global commerce or even the development of military equipment. In that sense, the fear of falling behind in education is directly tied to the fear of a Chinese hegemon, or at least a loss of American hegemony. This fear, as I will demonstrate, articulates its own vision for the political role of education. This contemporary American view specifies its aversion quite clearly, and in doing so reflects an object of desire in which education ought to be used as an instrument for global domination.

As indicated by the classical view, education has not always been harnessed for the purposes of conflict and struggle. In fact, that would seem to be a relatively recent development. Classical visions of education, as formulated by varied thinkers such as Aristotle, Cicero, Immanuel Kant, and Mary Wollstonecraft concurred on the merits of education in cultivating virtue, which would in turn create more verdant societies. Of course, the material background of those visions was markedly different from our own. According to Herbert Marcuse, critical

theorist of the Frankfurt School, capitalism increasingly insinuates bellicose tendencies into activities that ought to serve the interests of life. Thus, the origin of this more recent view is not at issue here, nor is there any claim that the classical view has been entirely supplanted. Rather, it is becoming eclipsed, drowned out by the volume of an ideological shift that instrumentalizes education in terms of warfare. My argument is that these attitudes and policies envisioning the role of education as an economic and intellectual instrument of international power signal a fundamental revaluation from classical thought. The school, as the apparatus of education, formerly belonged to what Marcuse, in his Marxist intervention into Freudian thought, considered the "life-drive," or *Eros*, builder of civilization. In its present configuration, however, the school has become tainted by the objectives of *Thanatos*, the "death-drive," destroyer of life.

In the next section, I will outline Marcuse's Marxist reading of Freudian psychoanalysis. While Freud identifies the instincts of life and death, Marcuse, drawing on the principles of historical materialism, reminds us that even these drives are susceptible to the prevailing conditions of production. In the third section, I endeavor to portray the perspective toward the role of education informed by *paideia*, the building of civic culture through the cultivation of virtue and better citizenship. Although originating in the scene of ancient thought with Plato and Aristotle, paideia persists well into modernity through the voices of Immanuel Kant and Mary Wollstonecraft. And while paideia still retains strong support today, it is now confronted by a markedly different attitude toward the political role of education, one that is reflected in the fears of "falling behind." Therefore, in the fourth section, I apply Marcuse's framework to the rhetoric and policies constructed in response to this fear that the country's educational inadequacies have made it vulnerable to international adversaries. Whereas *paideia* sought a life-building objective for education, the scene of the contemporary school, reeking of this fear, has been stamped with the objectives of polemos, the objectives of war, conquest, and domination. Finally, I will offer comments on how we can rethink our education politics, orienting them back toward life and away from death.

### II. Historicizing Instinct

Marcuse's reading of Freudian psychoanalysis proceeds from a decidedly Marxist basis. In that sense, his aim was to reconcile Freud's work within the principles of Marxism, rather than adjust Marxism to suit Freudian thought. Accordingly, he begins from Freud's observations on the instinctual drives, and situates them within the framework of historical materialism. This effectively historicizes the instincts. Instead of portraying the instincts as unmalleable, Marcuse contends that these drives are conditioned by the prevailing circumstances of production in a given historical moment.

In the Freudian view, human action is essentially governed by two instinctual drives. The first of these is *Eros*, or the life-drive. Its influence is most clearly identifiable in terms of sexual desire, but extends well beyond that. For instance, Freud observes that, in addition to sexuality, the life-drive also entails the instinct for self-preservation. Even more crucially, Freud maintains:

We can only be satisfied, therefore, if we assert that the process of civilization is a modification which the vital process experiences under the influence of a task that is set by Eros and instigated by Ananke – by the exigencies of reality; and that this task is one of uniting separate individuals into a community bound together by libidinal ties.<sup>ii</sup>

In essence, *Eros* is the builder of civilization itself. When the life-drive confronts the problem of *Ananke*, the scarcity of resources in the natural world that imperil life, it resolves the problem by encouraging the composition of societies. Collectively, human beings can produce the means of survival far more efficiently than can any one individual. Once in society, the life-drive continuously promotes improvement to facilitate the greater ease of survival. It is, therefore, *Eros* that promotes the formation and augmentation of civilization.

The second instinctual drive is that of death, or *Thanatos*. This is the drive that promotes aggressiveness and destructiveness; it is directed toward the termination of life. iii *Thanatos* is most apparent in the calamities of war, and those efforts made in preparation for conflict. Importantly, Freud notes that the death-drive can be "pressed into the service of Eros." For example, the survival of one individual may demand the causing of injury or death to some other being. In that sense, both *Eros* and *Thanatos* – constructiveness and destructiveness – belong to the same life process.

Because of the life-drive, human behavior is governed by what Freud labeled "the pleasure principle." In the absence of any restraint, individuals would only seek out more and greater sources of pleasure. However, in order to survive and improve the possibility of acquiring *some* measure of enjoyment, the necessities of life must be administered. Accordingly, the pleasure principle is immediately restricted by "the reality principle." The unrestricted pursuit of pleasure must be renounced to ensure the continuation of life.

It is here, with the reality principle, that Marcuse begins applying the principles of Marxist thought to Freudian psychoanalysis. Marx observed that capitalism could only succeed according to the mechanism of surplus value. In essence, those who own the means of production ensure that the laborers generate a certain amount of value. Those laborers, however, are only paid for a fraction of the value created. The owners retain the excess, the surplus value. So, as Marx explains:

Half the working day costs capital *nothing*; it thus obtains a value for which it has given no equivalent. And the multiplication of values can take place only if a value in excess of the equivalent has been obtained, hence *created*. Surplus value in general is value in excess of the equivalent.<sup>v</sup>

For Marcuse, the production process in capitalism not only generates surplus value, thereby leading to an unequal distribution of wealth; it also leads to an unequal distribution of repression. Again, in order to survive, human beings must renounce the unrestricted pursuit of pleasure. Survival demands some level of repression, but only that amount necessary to obtain the necessities of life. Provided the individual has met his or her needs, there are no restrictions on the quantity or type of pleasure that can be pursued. Of course, having to account for all the necessities of survival is likely to leave very little time for pleasure. Thus civilization is formed in accordance with *Eros*, since the combined efforts of the many ought to make individual survival more efficient and thereby leave more time for pleasure. However, in order to acquire more time and resources of pleasure for themselves, those with power install additional burdens and restrictions on *Eros*. Marcuse explains that "the specific interests of domination introduce additional controls over and above those indispensable for civilized human interaction." By working for the benefit of the wealthy few, and in a manner that is longer and more strenuous

than is necessary to survive, the many are compelled to renounce even more pleasure. This excess is what Marcuse labels "surplus repression." As he writes:

Domination differs from rational exercise of authority. The latter, which is inherent in any societal division of labor, is derived from knowledge and confined to the administration of functions and arrangements necessary for the advancement of the whole. In contrast, domination is exercised by a particular group or individual in order to sustain and enhance itself in a privileged position. Vii

Surplus repression becomes a vital tool for the preservation of such privilege. Just as the capitalists harvest surplus value in order to enhance their wealth, the bounty of surplus repression is similarly enjoyed on an unequal basis. Viii As the workers are required to spend additional time laboring, those who live off the work of others accrue even more free time (whether they use it or not) to pursue pleasure. For that reason, there is a strong incentive in capitalism to increase the surplus of repression.

In advanced industrial society, more of life becomes continually subject to repression. Marcuse observes that "alienation and regimentation" surpass the working day and "spread into the free time." For these reasons, he claims "contemporary industrial society tends to be totalitarian," insinuating itself into work, recreation, media, and every other conceivable space until even the horizons of imagination become limited to what the system offers. The consequence of this expansion of repression is particularly hazardous. All civilization, in Marcuse's view, installs excess restraints on *Eros*. There is always some surplus repression. Likewise, civilization would not be possible without restraints on *Thanatos*. A civilization with no prohibition against murder would probably not last very long. However, in capitalism, with its incentive to generate increased surplus repression, the restraints on *Eros* quickly outpace those on *Thanatos*. Consequently, while *Eros* becomes weakened, *Thanatos* is given a freer rein, at least in terms of "socially useful destructiveness." As *Eros* becomes further repressed, the means by which civilization functions become increasingly dependent upon tools of aggression, destructiveness, and warfare. Marcuse notes the profound irrationality of advanced industrial society, which, despite possessing the means to eliminate poverty and deprivation, uses its tremendous productive powers and "vast resources for waste, destruction, and an ever more methodical creation of conformist needs and satisfactions."XII With more surplus repression, as is symptomatic of capitalist societies, Thanatos triumphs over Eros, insinuating itself more pervasively and more deeply into the processes of civilization. "Never before," he writes, "has death been so consistently taken into the essence of life."xiii Though it remains a persistent possibility, this does not mean that civilization will invariably destroy itself. Rather, late capitalism builds itself through the means of destruction and war. xiv Exactly that tendency has now surfaced in the politics of education.

# III. The Ages of Needless Agony

The respective views of ancient thinkers concerning education were largely shaped in response to the practical absence of any formal pedagogical institutions. In practice, education in the ancient world was more often than not a private matter. The Athenian state, in particular but not exceptionally so, "appears to have taken little close interest in the upbringing or education of the young." Any formal instruction "above the most elementary reading, writing and counting

was of course restricted to a small elite," generally those who could afford private tutelage. The result of this dearth in formal, standardized institutions of learning were a cacophony of competing and often highly questionable doctrines, the persistence of illiteracy, and inequalities in education that closely paralleled disparities in wealth. There was, however, a very serious political problem, especially in Athens. In that democratic city, every male citizen, regardless of aptitude, wealth, or education was permitted to participate in the political process, including holding important offices. So, while Athens had no particular provision for schooling its population, it nevertheless "required a very high degree of education in its citizens, if they were to discharge their duties." A democratic city with no educational institutions was likely to be managed by incompetents. Consequently, a number of ancient thinkers crafted a view of education embodied in the notion of *paideia*. As Barker explains:

We have already seen that the Greek State was regarded by the philosophers as an ethical society; and if we push that point of view further, we shall see that the State is necessarily a community in a common spiritual substance, and that the activity of its organs is necessarily an activity of education, and the imparting to its members of their share in that common substance. Society is an educational institution, by dwelling wherein each man has his capacities elicited to the fullest extent; and conversely education is a social fact, which makes society cohere in virtue of a common substance of the mind. \*viii\*

In other words, for the philosophers who established the groundwork of *paideia*, the political role of education was to create the ideal *politeia*, a qualified, rational citizenry in which each member fulfilled his vocation to the highest possible degree of excellence.

Perhaps most famously, Plato delineates an extensive program of schooling in *The Republic*, though its most extensive form was largely reserved for the Guardians, those soldiers and rulers who would watch over the *kallipolis*. However, in *The Laws*, composed during the later period of his work, the Athenian Stranger asserts that in the fictional polis of Magnesia, "education must be compulsory for 'one and all' (as the saying is), because they belong to the state first and their parents second." This fiat applied equally to boys as well as girls. While willing to permit the education of girls, which was a radical gesture for a time in which women had virtually no rights, Plato also despised innovation and novelty in education. Most of the elements of *The Laws* are designed to establish a good city and then preserve it without change. Magnesia's laws, once in place, could only be altered by a unanimous vote of the citizenry, practically eliminating any possibility for such change. Likewise, since education is a means to truth, and since truth is eternal, education should also undergo transformation only in the rarest circumstances. In that regard, education in Plato's Magnesia proceeds in concord with its laws, working to facilitate the best possible citizen for the city.

While somewhat less rigid than his teacher, Aristotle agreed with Plato that education ought to serve a civic function, rather than private interests. Given the importance of matter to his metaphysics, Aristotle was not at all opposed to commerce and the generation of wealth. Indeed, such activities were sources of strength for a prosperous city. "A state," he says, "can be no more composed entirely of poor men than entirely of slaves." In order to provide for the necessities of life there must be industry. However, business is by no means the highest goal around which laws and state power should be arranged. Instead, for Aristotle, "a state exists for the sake of a good life, and not for the sake of life only." He is clear in ranking military and commercial pursuits as less honorable and inferior to other objectives. As he writes:

For men must be able to engage in business and to go to war, but leisure and peace are better; they must do what is necessary and indeed what is useful, but what is honourable is better. On such principles children and persons of every age which requires education should be trained. XXIII

In the Aristotelian view, the state is expected to provide the environment for *arête* (excellence or virtue) to flourish. Bare life does not demand the elaborations of government whereas a *good* life does. The state, while providing the necessary tools for commerce and war, maintains honorable pursuits and the good life as its goal.

What, then, is a good life? Happiness, it turns out, is the "chief good among the things that fall within the scope of human action." Whether conceptually mistaken or correct, every action we undertake has as its objective the achievement of happiness. Of course, there are many wrong notions of happiness and correspondingly erroneous means. Hedonist pursuits are a false image of the good. What is the correct definition of happiness? Aristotle clearly answers this by explaining that "human good turns out to be activity of soul exhibiting excellence." In other words, the chief good is happiness, and happiness is the exhibition of virtue.

If the chief good is the exhibition of virtue, then the question becomes how individuals can expect to acquire virtue. Here, the answer is education. The excellence of the city, Aristotle explains, is only possible when its citizens are also excellent. The cultivation of virtue is partly accomplished by proper laws, but beyond that, "All else is the work of education." While issuing sharp disagreement on a number of positions with Plato, Aristotle concurred that education ought to be universal. No state could be excellent if its constituent elements were not similarly virtuous. Thus, all children, including girls, since they would compose "half the free persons in the state" were to be educated. Turthermore, Aristotle maintains that education "should be public, and not private" since the city "had one end." Thus, for Aristotle, the purpose of education was not primarily to instruct individuals on techniques for commerce or war, but the cultivation of virtue. As he explains:

For, inasmuch as every family is a part of a state, and these relationships are the parts of a family, and the excellence of the part must have regard to the excellence of the whole, women and children must be trained by education with an eye to the constitution, if the excellences of either of them are supposed to make any difference in the excellences of the state. \*\*xxx\*

Given his view that "the female is inferior," it seems unlikely that education would consist of the same content for all persons. Not all individuals would be equally virtuous, in either kind or degree. Nevertheless, the role of education should be the augmentation of excellence in all individuals. As a result of more virtuous individuals, the body politic would become more vital and reciprocate by being better able to create the conditions for virtuous living.

Even among the comparatively more pragmatic Romans, the connection between education and virtue remained an important ideal. The philosopher-politician Cicero questions the value of life were it not for the benefits yielded by a "multitude of arts." Without these arts, he says, there would be no aid for the sick, no "delights" for those in good health, or even the most basic sustenance. \*\*XXXIV\*\* Moreover, the very foundations of civilization, systems of laws and justice, would be impossible without "a regular training for the business of life."\*XXXV\*\*

However, for Cicero, it is not merely that such knowledge as medicine and justice has been discovered. Rather, as he writes, "But note that those who have devoted their entire life to learning things have, after all, managed to contribute to the benefits and advantages of mankind. They have educated many to be better citizens and more beneficial to their countries." The value of education is again primarily for the purpose of producing good citizens. For Cicero, as for the Greeks before him, this practice is inextricably tied to the acquisition of virtue. The idea of good citizenship is tied to "duty that is based upon sociability." \*\*xxxvii\*\*

Eighteen-hundred years later, the idea that education ought to create more virtuous individuals persisted. Immanuel Kant also argued that the role of education was primarily for the betterment of domestic society. This, in turn, would engender a more peaceful international society. Indeed, Kant's views on education were consistent with his doctrines of perpetual peace and cosmopolitanism. As each generation improved upon the education it had received from its ancestors one step further would be taken "towards the perfecting of mankind."xxxviii The very nature of human beings would continuously improve in this manner, leading to "the prospect of a happier human race in the future."xxxxix In fact, the benefits of cultivating virtue in the individual transcend the state, and even the society of states. As he writes:

One principle of education which those men especially who form educational schemes should keep before their eyes is this – children ought to be educated, not for the present, but for a possibly improved condition of man in this future; that is, in a manner which is adapted to the idea of humanity and the whole destiny of man. x1

Education, therefore, endeavors to perfect individual character, the character of states, the relationships between states, and the very future of humanity.

Unfortunately, the dream of a public education was undermined by several obstacles, principally that of war and its attendant industries. Kant lamented that due to the constant expenditures of warfare and rearming, "the world's present rulers have no money to spare for public educational institutions or indeed for anything which concerns the world's best interests." Nevertheless, it remained imperative "to bring about perpetual peace and put an end to the heinous waging of war." In the meantime and in lieu of a properly funded system of education, war occupied a role of perverse instruction, with the bitter lessons of bloodshed and conflict dragging humanity toward the fruition of nature's plan for a peaceful world. As he writes, wars:

[A]re the means by which nature drives nations to make initially imperfect attempts, but finally, after many devastations, upheavals and even complete inner exhaustion of their powers, to take the step which reason could have suggested to them even without so many sad experiences – that of abandoning a lawless state of savagery and entering a federation of peoples in which every state, even the smallest, could expect to derive its security and rights... xliii

Because they exhaust their resources on war, nations invariably take the unnecessarily violent path toward eventually realizing just constitutions and international federations, results that the methodical cultivation of reason could have bloodlessly instructed. While war serves as a cruel tutor to ignorant nations, proper education might have spared ages of needless agony. Such conflagrations must gradually diminish and eventually disappear in order to create the conditions

for any "mechanism of education." For Kant, this should necessarily be accomplished through a public education because, as he observes, "Home education frequently not only fosters family failings, but tends to continue these failings in the new generation." Based on a foundation of moral training in which students "learn from their youth up to detest vice," this public education would have two objectives. First, it would provide the conditions for developing better citizenship by having students "learn to measure our powers with those of others, and to know the limits imposed upon us by the rights of others." From this starting position, a more peaceful world can emerge. Better citizens lead to better states, which in turn fosters a better society of states. Whereas parents, he declares, focus on the welfare of the home, and rulers are fixated on the power of their states, "Neither have as their aim the universal good and the perfection to which man is destined and for which he has also a natural disposition. But the basis of a scheme of education must be cosmopolitan." In that sense, education is the antithesis of international competition and war. Instead, it forms a global responsibility, and a duty to the species for self-improvement.

Shortly after Kant's writings, Mary Wollstonecraft renewed the cause of calling for the proper education of women. The instruction that the women of her time tended to receive was unworthy of the label 'education,' being largely confined to the development of skills thought likely to lure a male suitor. In fact, Wollstonecraft was quite explicit concerning the purpose of authentic education. Once again, its purpose ought to be the cultivation of virtue. As she observes, "Into this error men have, probably, been led by viewing education in a false light; not considering it as the first step to form a being advancing gradually towards perfection; but only as a preparation for life." The primary role of education is personal development and the betterment of character. While it ought to have pragmatic value as well, virtue takes precedence, in Wollstonecraft's view, over training in what we might now label as marketable skills.

The idea that education primarily ought to have as its goal the "perfection" of the individual maintained multiple political objectives. Chief among these aims is Wollstonecraft's desire for women to inhabit a space of equality. The greatest obstacle to this achievement was the inaccessibility to a proper education for women. The result was a prevailing condition of intellectual decrepitude that kept women in a state of perpetual immaturity and dependence. Hence, her first ambition was to ensure that women received a rigorous education that would exercise the mind. This would permit them to lead the fullest possible lives and thereby offering meaningful contributions back to society. However, an even broader political end is articulated in her writing. Education supplies and enhances the vital faculties of reason, virtue, and experience. Reason, she notes is what distinguishes human beings from beasts and brutes. Virtue is what distinguishes the character of one person from another. Experience provides a person with history and wisdom. Importantly, education is what refines and improves all three faculties. It sharpens individual reason, enhances virtue, and, in addition to shaping experience can be its own source of experience. These three faculties – reason, virtue, and experience – qualify an individual for participation in political life. They make participatory government feasible, and neutralize the patronizing arguments of monarchists who insist that a king is the only person divinely bestowed with the qualities to rule. But Wollstonecraft emphatically attacks the power of monarchs, writing:

Nothing can set the regal character in a more contemptible point of view, than the various crimes that have elevated men to the supreme dignity. Vile intrigues, unnatural crimes, and every vice that degrades our nature, have been the steps to this distinguished

eminence; yet millions of men have supinely allowed the nerveless limbs of the posterity of such rapacious prowlers to rest quietly on their ensanguined thrones. What but a pestilential vapour can hover over society when its chief director is only instructed in the invention of crimes, or the stupid routine of childish ceremonies?<sup>1</sup>

It is, she notes, the "pestiferous purple" – the institution of monarchy – that obstructs progress and the development of reason itself. Just as education strengthens the faculties of women allowing them to become equals "and not the humble dependent of her husband," so too does education permit individuals to take part in the affairs of government. Indeed, Wollstonecraft calls for a universal public education that will "enable the individual to attain such habits of virtue as will render it independent." The same arguments used by men to suppress the autonomy of women are also used by monarchs to suppress consensual forms of government. That is, in the same way that women were kept languishing in a state of perpetual childhood, kings assumed the role of patriarch over their immature subjects.

## IV. Dread of the Peril Foretold

The concept of *paideia*, the civic cultivation of virtue and good citizenship, begins under historical conditions in which public education was largely non-existent. Chiefly then, from Aristotle to Wollstonecraft, the conceptual development of *paideia* is largely one of lamentation over the waste that could have been prevented had there been organized schooling. In the present, however, conditions are markedly different. Public education now exists in the United States. And regardless of whether an individual enrolls in a public institution, or has the means to afford private schooling, a certain duration of study is compulsory for all children. Moreover, the state is deeply involved in both public and private institutions by monitoring accreditation.

But instead of trepidation for an incompetent or vicious citizenry, views on the political role of education appear increasingly animated by the fear of falling behind the performance of other states. Furthermore, this competition is portrayed as neither amicable nor sporting, but critical to maintaining the nation's position. Losing in this competition portends dangerous consequences. For example, Fareed Zakaria warns that "other countries have caught up and are doing better." Our education system is now "inadequate in the new global environment." Consequently, Zakaria admonishes that America is being "overtaken" by the world. This admonition is hardly unique. In the wake of recent assessments depicting American students inferior to those in Vietnam, Secretary of Education Arne Duncan declared, "The brutal truth, that urgent reality, must serve as a wakeup call against educational complacency and low expectations." The urgency lies in losing position to global competitors, or, as Duncan continued, "In a knowledge-based, global economy, where education is more important than ever before, both to individual success and collective prosperity, our students are basically losing ground." Based on comparisons with other nations, the performance of American students raises "concern that the U.S. isn't prepared to succeed in the global economy."

Moreover, the comparative decline in education is accompanied by the particularly dire news that as American descends intellectually, the "Chinese Lead the Pack." More generally, as American teens stagnate or fall behind, "Asian countries rise to the top." Here again, we are alerted to danger brewing in the cauldron of the East as "nations like China eclipse U.S. students' performance." The test results from American students signal "dangerous disparities" with their Chinese counterparts. These fears are reverberated at *The New York Times* Editorial Board,

which averred how the country continues "losing ground to its economic competitors abroad and would eventually fall behind them unless it provided more of its citizens with the high-level math, science and literacy skills necessary for the new economy." Furthermore, the board has declared "the long-predicted peril has arrived." Though clearly paramount, the threat is not exclusively in losing ground to established economic adversaries, such as China. Rather, it is compounded by the scores of students in other developing economies such as "Latvia, Chile, and Brazil," which have made "gains in academics three times faster than American students." Furthermore, the same author contends, "A country ignores the quality of its schools at its economic peril."

The problem is stated quite clearly. American students are falling behind those from other countries, and if the trend is not reversed, the United States will lose its global place of economic and military dominance. The United States will become subordinate to other countries, most likely China. These fears are not merely dwelled upon by journalists and politicians. Instead, American education policy has been modified to reflect this aversion. At both federal and state levels, resources are increasingly diverted away from the arts, humanities, and social sciences, and toward so-called STEM fields, those pertaining to science, technology, engineering and mathematics. The Department of Education declared, "President Obama has set a priority of increasing the number of students and teachers who are proficient in these vital fields." An increasing number of states are following suit, with Florida, Massachusetts, Texas, North Carolina, Wisconsin and others funding STEM training at the expense of other fields. Some have proposed creating a tiered tuition system, in which students pursuing degrees in the arts, humanities, and social sciences will essentially subsidize those in the sciences and technology. lxvii As indicated, STEM is considered a particularly vital cluster of subjects for international competition. Scientific and technological education, it is thought, lead to scientific and technological innovations that benefit commercial and military interests. Therefore, the country that prevails in STEM training, prevails in the conflicts of the marketplace and the battlefield.

In addition to STEM training, other programs, such as the controversial "Common Core" have been promoted. Intended to provide an established national standard for education, the Common Core has already been adopted by forty five states. Similar to STEM, those who support the Common Core believe it will serve the international economic interest of the country. As Engler writes, "The Common Core State Standards have the support of America's business leaders, and these standards should have the support of any American who wants to ensure our country and our children are ready to compete in the 21st century global marketplace." Issue of the country and our children are ready to compete in the 21st century global marketplace.

The existence of STEM and Common Core programs are owed in part to corporate interests – science and technology firms as well as private education corporations – that have a keen interest in the outcome of such initiatives. Although it seems unlikely that they are responsible for its invention, there is a strong financial incentive for these corporations to stoke the fear of falling behind. In the case of STEM, politicians responded to technology firms that bemoaned the lack of a suitably trained workforce. If the state oversees training individuals in those areas, then presumably the private firms are spared the cost of doing so. Moreover, while students are lured into specializing in those areas with the promise of high salaries, an increased number of STEM graduates seems likely to result in lower pay. As for Common Core, Diane Ravitch notes it "was intended to create a national market for book publishers, technology companies, testing corporations, and other vendors." In either case, education policy is already being modified, and whether for the profit of private corporations or the purposes of international

economic and military supremacy, the fear that the nation's education is losing ground to China, among others, is motivating these changes.

This fear of falling behind betrays an ideological assumption concerning the political role of education. That is, if education is not doing what it is supposed to be doing, as indicated by this decline of international standing, then it fails as an instrument for maintaining international supremacy. Put differently, education appears to be a means for exerting power over other states. In this view of education, the intellect is exercised, not for the cultivation of virtue, but for the invention of commercial and military technologies that will supply the state greater power than its adversaries. The objective here is not the creation of a state imbued with excellence; it is the arming of a powerful state. Former Secretary of State Condoleezza Rice complained "of the failure to educate to the levels that the military needs, not to mention in foreign languages or cultures so that we have a ready group of people for the foreign service or for intelligence agencies." Speaking on behalf of Common Core, retired Army general Marvin Covault similarly described national education as a "disgrace" and argued, "The military has a vested interest in this, because we need to have a continuous pool of talented young people to fill the ranks." Toward meeting that end, the promotion of STEM training is considered vital in keeping "U.S. armed forces safe and successful on the battlefield." Further enhancing national STEM training is a "Key to Our Military Strength." The successful result of such training will be a workforce, as the commander of the Army Corps of Engineers stated, "critical to the success of the U.S. military mission." Conversely, the failure to properly invest in STEM training is "jeopardizing our national security." The Obama Administration's "National Security Strategy" of 2010 expresses precisely this point as part of official doctrine, stating that while the country retains a military advantage "our competitiveness" in that area has declined, partly because of inadequate investment in education. lxxvii "America's ability to lead" is tied to the use of education that ensures "the breakthroughs of tomorrow take place in the United States." Additionally, the chair of Obama's National Science and Technology Council issued a letter declaring STEM training "critical for the prosperity and security of our Nation." laxix Speaking at George Washington University, President Obama warned of the nation's decline in "the proportion of graduation rates," as well as rankings in science and mathematics. In doing so, he declared education "a national security priority." Perhaps it is not entirely coincidental that Obama announced "a priority to train an army of teachers" in STEM areas. lxxxi As Marcuse notes, "a government spokesman has only to pronounce the words 'national security' and he gets what he wants – rather sooner than later. "lxxxii

In this view, education is understood as crucial to retaining a position of international dominance. Rather than, *paideia*, the cultivation of virtue for the purpose of building civic excellence, this view concerning the political role of education is best characterized by *polemos*, the preparation and execution of war. The role of education under *polemos* is not primarily concerned with virtue or the development of a good state. Instead, the focus has shifted outward, and education is called upon to aid in the struggle against other states, as a means to maintain commercial and military supremacy. Under *paideia*, the success of education is measured according to the absolute excellence of the state. Its health is a primary concern, but vitality is measured neither in comparison to others nor under the terms of their conquest. Yet, that is precisely what is at stake in the political role of education when conceived through the terms of *polemos*. Education becomes a means of domination. The classroom is effectively harnessed as a tool of conquest, the precursor to inventions that will stalk battlefields of the future. Under educational *polemos*, the classroom is mobilized. Lessons and degrees are measured for their

utility to the purposes of national security and military success. The classroom is weaponized. The intellect is drilled and readied for war production.

There is a sharp difference, then, between the political roles of education respectively envisioned by paideia and polemos. The former embodies the life-building principles of Eros. Paideia is primarily concerned with the possibility of building a vital civic culture. By enhancing individual virtue, a more excellent citizenry follows and, from that, a more excellent state. This is not at all to suggest that Greek states, or Athens in particular, were not violent and warlike far from it. Rather, the argument is that a view on the political role of education guided by paideia is life-affirming. In contrast, a view guided by polemos is necessarily disposed to war. And when the role of education is understood as integral to the composition of war industries, or even economic conquest, then the life-drive has been supplanted by the death-drive. Importantly, Marcuse reminds us, "Organization for peace is different from organization for war; the institutions which served the struggle for existence cannot serve the pacification of existence. Life as an end is qualitatively different from life as a means." Ixxxiii There is never an instance in which Aristotle or Kant or the other adherents of paideia suggest that a good education ought to lead to the development of a sharper sword or a more accurate musket. In fact, good education might spell the obsolescence of such baneful invention. With *polemos*, the lucid implication is that education ought to produce improved means of warfighting. Education, under the aegis of polemos, signals the triumph of *Thanatos*, the death drive. It may be the case that the fears of falling behind are predicated on the desire for the continuation of life, but only by means of accumulating power over others through violent conflict. Education has been put into the service of conquest over markets, territories, and lives.

# V. Restoring the Life Drive

In both *paideia* and *polemos*, there are political roles for education. That is, both views envision a value or good that education can provide to the state. Guided by the psychoanalytic Marxism of Herbert Marcuse, I have argued that they are vastly different in their orientations. Born from a condition in which there was no public, standardized, or compulsory education, paideia promotes the cultivation of virtue for a more excellent state. That is, driven by the lifeaffirming instinct of Eros, paideia arises from a fear of vice in order to build civilization. But according to Marcuse, surplus-repression, more pervasive and permeating in late capitalism, leaves a freer reign for the death-drive in terms of socially useful destructiveness. Life-building thereby adopts a more aggressive and more violent disposition. In sharp contrast to paideia, the fear of falling behind signals a political role for education guided by polemos, the ensemble of war and its industries. This view has arisen at a time when education is widely practiced in formalized institutions, but is lamented for its failures in helping to preserve the nation's global supremacy. In response to this inadequacy, policy is reengineered and education is mobilized as an instrument for the conquest of others. The classroom is weaponized as more commodifiable and militarily applicable fields such as science, technology, engineering, and mathematics are emphasized at the expense of other disciplines. The performance of students is measured against those of the enemy, another stockpile to be tested. Each lesson and degree becomes an armament in the arsenal of the state; their byproducts are deployable in future conquests of battlefields and economies. This is socially useful destructiveness. The means by which the nation's security can be achieved include converting education into an appendage of the war machine. Policy has already shifted toward this direction. *Thanatos* has already infected the conduct of the school.

Paideia still retains a strong voice, particularly among practitioners of education. There are undoubtedly many who still feel the first duty is to create better citizens. Judging by the shift in policies, that priority is not shared by what Marcuse called the Establishment of political, military, and corporate leaders. Despite their efforts, education should not be a client for business or the military, nor does its purpose belong to the fields of occupational training. The public university has long betrayed the deception that it behaves differently than a business. Its executives and administrators are often paid, or ardently seek the salaries, of the private sector, and look to recoup from students the funding deprived by state legislators. In turn, the schools outdo one another luring in students with promises of competitiveness and the untold fortunes of easily acquired careers. Faculty must resist such schemes. Degrees are not commodities.

Secondly, the political role of education must be reoriented away from the tendency of the imperial gaze. We ought to resist the notion that our greatest priority is international struggle, which tends to conscript so many other facets of life into the service of that end. A student's choice of study is no longer a matter of developing citizenship, or even the comparatively crass concern of getting a job. Now, it is a matter of national security. Instead of gearing everything toward the paranoid concern of what our adversaries do, we ought to consider what kinds of excellence our communities need to make better citizens. How do we encourage responsibility in our communities toward rampant poverty, environmental destruction, injustice and exploitation, cruelty to human beings and animals? A quick pass through those subjects, or the scene of an average American ghetto, demonstrates that we probably ought to fear what we ourselves have become rather than behind whom we have fallen.

<sup>&</sup>lt;sup>i</sup> Freud, Sigmund. 1960. *The Ego and the Id.* Ed. James Strachey. Trans. Joan Riviere. New York: W.W. Norton & Company. P. 37.

<sup>&</sup>lt;sup>ii</sup> Freud, Sigmund. 1961. *Civilization and Its Discontents*. Ed. James Strachey. New York: W.W. Norton & Company. P. 104.

iii Ibid, 78.

iv Ibid, 78.

<sup>&</sup>lt;sup>v</sup> Marx, Karl. 1993. *Grundrisse*. Trans. Martin Nicolaus. London: Penguin Books. P. 324.

vi Marcuse, Herbert. 1955. Eros and Civilization. Boston: Beacon Press. P. 37.

vii Ibid, 36.

viii Ibid, 87-88.

ix Ibid, 47.

<sup>&</sup>lt;sup>x</sup> Marcuse, Herbert. 1964. *One-Dimensional Man.* Boston: Beacon Press. Pp. 3 and 12.

xi Marcuse 1955, 86.

xii Marcuse, Herbert. 1969. An Essay on Liberation. Boston: Beacon Press. P. 62.

xiii Marcuse 1955, 28.

xiv The reader of Marcuse may ask whether this has always been the case. Indeed, the long, blood-stained history of imperial conquests of Persia, Macedonia, and Rome (among others) demonstrates that this tendency has always existed. Marcuse's point is not that this is in any way novel to capitalism. Rather, in this mode of production, in which there exists a great incentive to increase surplus repression, the *intensity* and permeation of *Thanatos* into every aspect of politics is unprecedented.

xv Sinclair, R.K. 1988. Democracy and Participation in Athens. Cambridge: Cambridge University Press. P. 51.

xvi Finley, M.I. 1983. *Politics in the Ancient World*. Cambridge: Cambridge University Press. P. 28.

xvii Sinclair, T.A. 1959. A History of Greek Political Thought. London: Routledge & Kegan Paul. P. 45.

xviii Barker, Ernst. 1951. Greek Political Theory. London: Metheun & Co. P. 37

xix Plato. 1975. The Laws. Trans. Trevor J. Saunders. London: Penguin Books. P. 293.

xx Ibid 283

xxi Aristotle. 1996. *The Politics*. Ed. Stephen Everson. Cambridge: Cambridge University Press. P. 80. xxii Ibid, 73.

xxiii Ibid, 187.

xxiv Aristotle. 2011. *The Eudemian Ethics*. Trans. Anthony Kenny. Oxford: Oxford University Press. P. 10.

```
xxv Aristotle, 1998. The Nicomachean Ethics, Trans. David Ross, Oxford: Oxford University Press, P. 14.
xxvi Aristotle 1996, 185.
xxvii Ibid, 185.
xxviii Ibid, 30.
xxix Ibid, 195.
xxx Ibid, 30.
xxxi Ibid, 17.
xxxii Ibid, 66.
xxxiii Cicero. 1991. On Duties. Eds. M.T. Griffin and E.M. Atkins. Cambridge: Cambridge University Press. P. 68.
xxxiv Ibid, 68.
xxxv Ibid, 68.
xxxvi Ibid, 60.
xxxvii Ibid, 59.
xxxviii Kant, Immanuel. 2003. On Education. Trans. Annette Churton. Mineola, New York: Dover Publications. P. 7.
xxxix Ibid. 8.
xl Ibid, 14.
xli Kant, Immanuel. 1991a. "Idea for a Universal History with a Cosmopolitan Purpose." In Kant: Political Writings.
Ed. Hans Reiss. Cambridge: Cambridge University Press. P. 51.
xlii Kant, Immanuel. 1996. The Metaphysics of Morals. Ed. Mary Gregor. Cambridge: Cambridge University Press.
P. 123.
xliii Kant 1991a, 47.
xliv Kant, Immanuel. 1991b. "The Contest of Faculties." In Kant: Political Writings. Ed. Hans Reiss, Cambridge:
Cambridge University Press. P. 189.
xlv Kant 2003, 26.
xlvi Ibid, 20.
xlvii Ibid, 29.
xlviii Ibid, 15.
xlix Wollstonecraft, Mary. 1995. A Vindication of the Rights of Women. Ed. Sylvana Tomaselli. Cambridge:
Cambridge University Press. P. 127.
<sup>1</sup> Ibid, 85.
li Ibid, 99.
lii Ibid, 89.
liii Zakaria, Fareed. "Why World is Overtaking America." In CNN.com. May 5, 2014.
http://globalpublicsquare.blogs.cnn.com/2014/05/05/whv-world-is-overtaking-america/
liv Zakaria, Fareed. "America's Educational Failings." In CNN.com. May 1, 2014.
http://globalpublicsquare.blogs.cnn.com/2014/05/01/americas-educational-failings/
<sup>lv</sup> Bidwell, Allie. "American Students Fall in International Academic Tests, Chinese Lead the Pack." In U.S. News &
World Report. December 3, 2013. http://www.usnews.com/news/articles/2013/12/03/american-students-fall-in-
international-academic-tests-chinese-lead-the-pack
lvi Ibid.
lvii Hechinger, John. "U.S. Teens Lag as China Soars on International Test." In Bloomberg.com. December 7, 2010.
http://www.bloomberg.com/news/2010-12-07/teens-in-u-s-rank-25th-on-math-test-trail-in-science-reading.html
lviii Bidwell 2013.
lix Arkin, Daniel. "U.S. Teens Lag in Global Education Rankings as Asian Countries Rise to the Top." In NBC News.
December 3, 2013. http://www.nbcnews.com/news/other/us-teens-lag-global-education-rankings-asian-countries-
rise-top-f2D11686930
lx Ibid.
lxi Honda, Mike. "Why American Students Lag Behind." In CNN.com. December 17, 2010.
http://www.cnn.com/2010/OPINION/12/17/honda.education/
Editorial Board. "The United States, Falling Behind." In The New York Times. October 22, 2013.
http://www.nytimes.com/2013/10/23/opinion/the-united-states-falling-behind.html? r=0
lxiii Ibid.
<sup>lxiv</sup> Zhao, Emmeline. 2014. "U.S. Students Still Lag Behind Foreign Peers, Schools Make Little Progress in
Improving Achievement." In Huffington Post. July 23, 2012. http://www.huffingtonpost.com/2012/07/23/us-
```

students-still-lag-beh n 1695516.html

lxv Ibid.

- lxvi Department of Education. "Science, Technology, Engineering and Math: Education for Global Leadership." In *Ed.gov*. Retrieved May 25, 2014. http://www.ed.gov/stem. lxvii Travis, Scott. "State Proposal: Vary Cost of College Tuition by Degree Sought." In *Sun-Sentinel*. October 24,
- Travis, Scott. "State Proposal: Vary Cost of College Tuition by Degree Sought." In *Sun-Sentinel*. October 24, 2012. http://articles.sun-sentinel.com/2012-10-24/news/fl-higher-ed-report-20121024\_1\_tuition-increases-popular-bright-futures-scholarship-lower-tuition-and-fees
- lxviii Bidwell, Allie. 2014. "The Politics of Common Core." In *U.S. News & World Report*. March 6, 2014. http://www.usnews.com/news/special-reports/a-guide-to-common-core/articles/2014/03/06/the-politics-of-common-core
- lxix Engler, John. 2013. "Common Core Can Make America Competitive." In *The Washington Times*. July 22, 2013. http://www.washingtontimes.com/news/2013/jul/22/common-core-can-make-america-competitive/
- lxx Strauss, Valerie. "Everything You Need to Know About Common Core Ravitch." In *The Washington Post*. January 18, 2014. http://www.washingtonpost.com/blogs/answer-sheet/wp/2014/01/18/everything-you-need-to-know-about-common-core-ravitch/
- lxxi Rice, Condoleeza. "U.S. Education Reform and National Security." In *Council on Foreign Relations*. March 21, 2012. http://www.cfr.org/united-states/us-education-reform-national-security/p27618
- lxxii Neff, Blake. "Generals Defend Common Core." In *The Daily Caller*. June 13, 2014.

http://dailycaller.com/2014/06/13/generals-defend-common-core/

- kurtzleben, Danielle. "National Security a Crucial Part of STEM Discussion." In *U.S. News & World Report*. June 28, 2012. http://www.usnews.com/news/blogs/stem-education/2012/06/28/national-security-a-crucial-part-of-stem-discussion
- <sup>lxxiv</sup> Schiavelli, Mel. "Investments in STEM Education Are a Key to Our Military Strength." In *Huntington News*. March 29, 2012.
- lxxv Lopez, C. Todd. "STEM Grads Critical to U.S. Military Mission." In *Army.mil.* August 14, 2013.

http://www.army.mil/article/109326/STEM\_grads\_critical\_to\_U\_S\_\_military\_mission/

lxxvi Swanson, William H. "Meeting the STEM Challenge." In U.S. News & World Report. February 18, 2014.

http://www.usnews.com/opinion/articles/2014/02/18/meeting-the-stem-challenge

- lxxviii Office of the White House. "National Security Strategy. May 2010. In *White House.gov*. http://www.whitehouse.gov/sites/default/files/rss\_viewer/national\_security\_strategy.pdf. P. 9 lxxviii Ibid, 2.
- lxxix Holdren, John P. Letter in "The Federal Science, Technology, Engineering, and Mathematics (STEM) Education Portfolio." In *White House, gov.* November 11, 2011.
- $http://www.whiteouse.gov/sites/default/files/microsites/ostp/costem\__federal\_stem\_education\_portfolio\_report\_1.pdf$
- lxxx Schram, Martin. "Education Must Be America's New National Security Priority." In *Newsday*. January 8, 2013. http://www.newsday.com/opinion/oped/education-must-be-america-s-new-national-security-priority-martin-schram-1.4421835
- lxxxi Obama, Barack. "Educate to Innovate." In Transcript of *Third Annual White House Science Fair*. Retrieved June 10, 2014. http://www.whitehouse.gov/issues/education/k-12/educate-innovate. Emphasis added.
- lxxxii Marcuse, Herbert. 1972. Counterrevolution and Revolt. Boston: Beacon Pres. P. 110.
- lxxxiii Marcuse 1964, 17.

#### **Works Cited**

Aristotle. 1996. The Politics. Ed. Stephen Everson. Cambridge: Cambridge University Press.

Aristotle. 1998. The Nicomachean Ethics. Trans. David Ross. Oxford: Oxford University Press.

Aristotle. 2011. The Eudemian Ethics. Trans. Anthony Kenny. Oxford: Oxford University Press.

- Arkin, Daniel. "U.S. Teens Lag in Global Education Rankings as Asian Countries Rise to the Top." In *NBC News*. December 3, 2013. http://www.nbcnews.com/news/other/us-teens-lag-global-education-rankings-asian-countries-rise-top-f2D11686930
- Barker, Ernest. 1951. Greek Political Theory. London: Methuen & Co.
- Bidwell, Allie. "American Students Fall in International Academic Tests, Chinese Lead the Pack." In *U.S. News & World Report*. December 3, 2013. http://www.usnews.com/news/articles/2013/12/03/american-students-fall-in-international-academic-tests-chinese-lead-the-pack
- Bidwell, Allie. 2014. "The Politics of Common Core." In *U.S. News & World Report*. March 6, 2014. http://www.usnews.com/news/special-reports/a-guide-to-common-core/articles/2014/03/06/the-politics-of-common-core
- Cicero. 1991. *On Duties*. Eds. M.T. Griffin and E.M. Atkins. Cambridge: Cambridge University Press.
- Department of Education. "Science, Technology, Engineering and Math: Education for Global Leadership." In *Ed.gov*. Retrieved May 25, 2014. http://www.ed.gov/stem.
- Editorial Board. "The United States, Falling Behind." In *The New York Times*. October 22, 2013. http://www.nytimes.com/2013/10/23/opinion/the-united-states-falling-behind.html?\_r=0
- Engler, John. 2013. "Common Core Can Make America Competitive." In *The Washington Times*. July 22, 2013. http://www.washingtontimes.com/news/2013/jul/22/common-core-can-make-america-competitive/
- Finley, M.I. 1983. Politics in the Ancient World. Cambridge: Cambridge University Press.
- Freud, Sigmund. 1960. *The Ego and the Id.* Ed. James Strachey. Trans. Joan Riviere. New York: W.W. Norton & Company.
- Freud, Sigmund. 1961. *Civilization and Its Discontents*. Ed. James Strachey. New York: W.W. Norton & Company.
- Hechinger, John. "U.S. Teens Lag as China Soars on International Test." In *Bloomberg.com*. December 7, 2010. http://www.bloomberg.com/news/2010-12-07/teens-in-u-s-rank-25th-on-math-test-trail-in-science-reading.html
- Holdren, John P. Letter in "The Federal Science, Technology, Engineering, and Mathematics (STEM) Education Portfolio." In *White House.gov*. November 11, 2011. http://www.whiteouse.gov/sites/default/files/microsites/ostp/costem\_\_federal\_stem\_education\_portfolio\_report\_1.pdf

- Honda, Mike. "Why American Students Lag Behind." In *CNN.com*. December 17, 2010. http://www.cnn.com/2010/OPINION/12/17/honda.education/
- Kant, Immanuel. 1991a. "Idea for a Universal History with a Cosmopolitan Purpose." In *Kant: Political Writings*. Ed. Hans Reiss. Cambridge: Cambridge University Press.
- Kant. Immanuel. 1991b. "The Contest of Faculties." In *Kant: Political Writings*. Ed. Hans Resiss. Cambridge: Cambridge University Press.
- Kant, Immanuel. 1996. *The Metaphysics of Morals*. Ed. Mary Gregor. Cambridge: Cambridge University Press.
- Kant, Immanuel. 2003. *On Education*. Trans. Annette Churton. Mineola, New York: Dover Publications.
- Kurtzleben, Danielle. "National Security a Crucial Part of STEM Discussion." In *U.S. News & World Report*. June 28, 2012. http://www.usnews.com/news/blogs/stemeducation/2012/06/28/national-security-a-crucial-part-of-stem-discussion
- Lopez, C. Todd. "STEM Grads Critical to U.S. Military Mission." In *Army.mil.* August 14, 2013. http://www.army.mil/article/109326/STEM\_grads\_critical\_to\_U\_S\_military\_mission/
- Marcuse, Herbert. 1955. Eros and Civilization. Boston: Beacon Press.
- Marcuse, Herbert. 1964. One-Dimensional Man. Boston: Beacon Press.
- Marcuse, Herbert. 1969. An Essay on Liberation. Boston: Beacon Press.
- Marcuse, Herbert. 1972. Counterrevolution and Revolt. Boston: Beacon Press.
- Marx, Karl. 1993. Grundrisse. Trans. Martin Nicolaus. London: Penguin Books.
- Neff, Blake. "Generals Defend Common Core." In *The Daily Caller*. June 13, 2014. http://dailycaller.com/2014/06/13/generals-defend-common-core/
- Obama, Barack. 2013. "Educate to Innovate." In Transcript of *Third Annual White House Science Fair*. http://www.whitehouse.gov/issues/education/k-12/educate-innovate
- Office of the White House. "National Security Strategy. May 2010. In White House.gov. http://www.whitehouse.gov/sites/default/files/rss\_viewer/national\_security\_strategy.pdf.
- Plato. 1975. The Laws. Trans. Trevor J. Saunders. London: Penguin Books.
- Rice, Condoleeza. "U.S. Education Reform and National Security." In *Council on Foreign Relations*. March 21, 2012. http://www.cfr.org/united-states/us-education-reformnational-security/p27618

- Schiavelli, Mel. "Investments in STEM Education Are a Key to Our Military Strength." In *Huntington News*. March 29, 2012.
- Schram, Martin. "Education Must Be America's New National Security Priority." In *Newsday*. January 8, 2013. http://www.newsday.com/opinion/oped/education-must-be-america-s-new-national-security-priority-martin-schram-1.4421835
- Sinclair, R.K. 1988. *Democracy and Participation in Athens*. Cambridge: Cambridge University Press.
- Sinclair, T.A. 1959. A History of Greek Political Thought. London: Routledge & Kegan Paul.
- Strauss, Valerie. "Everything You Need to Know About Common Core Ravitch." In *The Washington Post*. January 18, 2014. http://www.washingtonpost.com/blogs/answersheet/wp/2014/01/18/everything-you-need-to-know-about-common-core-ravitch/
- Swanson, William H. "Meeting the STEM Challenge." In *U.S. News & World Report*. February 18, 2014. http://www.usnews.com/opinion/articles/2014/02/18/meeting-the-stem-challenge
- Travis, Scott. "State Proposal: Vary Cost of College Tuition by Degree Sought." In *Sun-Sentinel*. October 24, 2012. http://articles.sun-sentinel.com/2012-10-24/news/fl-higher-ed-report-20121024\_1\_tuition-increases-popular-bright-futures-scholarship-lower-tuition-and-fees
- Wollstonecraft, Mary. 1995. *A Vindication of the Rights of Women*. Ed. Sylvana Tomaselli. Cambridge: Cambridge University Press.
- Zakaria, Fareed. "America's Educational Failings." In *CNN.com*. May 1, 2014. http://globalpublicsquare.blogs.cnn.com/2014/05/01/americas-educational-failings/
- Zakaria, Fareed. "Why World is Overtaking America." In *CNN.com*. May 5, 2014. http://globalpublicsquare.blogs.cnn.com/2014/05/05/why-world-is-overtaking-america/
- Zhao, Emmeline. 2014. "U.S. Students Still Lag Behind Foreign Peers, Schools Make Little Progress in Improving Achievement." In *Huffington Post*. July 23, 2012. http://www.huffingtonpost.com/2012/07/23/us-students-still-lag-beh\_n\_1695516.html