

## **Chet Bowers' Letters from Titanic -Ville**

### **Wake-Up Call: Do Public School and University Educators Even Recognize It?**

Six months ago, Europeans faced the day like previous days with its routines and concerns about small and potentially explosive political issues. The flood of immigrants was their wake-call that life as they knew it would be forever changed, especially as the number of people escaping life-threatening dangers and environmental changes will increase. Droughts, forest fires, extreme weather, and the less visible yet life altering changes occurring in the chemistry of the world's oceans should be the wake-up call that lead our public school and university educators to ask if they are providing the conceptual basis for recognizing the root conceptual causes of the environmental changes that are beginning to overtake us.

Because of the digital revolution's many conveniences and now essential uses, there is not likely to be an abrupt disruption to our daily sense of order until faced with a catastrophe such as having the energy grid taken down by cyber attacks—or the banking system, or threats to our water supply. What should have served as a wake-up call that the digital revolution has long term implications that will further add to the suffering and displacement of people now being caused by environmental changes are the number of people and institutions being hacked, the loss of privacy, the surveillance of all electronically recorded behaviors stored in government and corporate data bases, the rise of “predictive” policing, the growing take-over of jobs (including white collar jobs) by robots and algorithms, and the loss of intergenerational knowledge as computer screens displace face to face communication. Universities have served as seed beds for the creation of ever more efficient and “intelligent” machines ; but they still fail to challenge computer scientists/engineers to learn about the cultures into which their technologies are being introduced. Students continue to graduate with the same lack of understanding of what is being lost as the diverse forms of cultural knowledge are being reduced to data—with most unable to recognize the dangers being ignored by the computer scientists, engineers, and corporations that created the technologies that now allow anyone anywhere in the world to hack our personal security, and to simulate cyber attacks on corporate and governmental systems that expose our vulnerabilities in the event of an actual war. For the average citizen, the narrowing of careers and the elimination of jobs due to the take over by robots and algorithms, the loss of privacy and memory of sources of civil liberties such as habeas corpus, threats to national security, and so forth, are a small price to pay for the convenience of instant communication with family, social network friends, and the work place. Constant accessing the data on changes occurring within one's body, using apps to more efficiently manage daily life, and acquiring the latest iPhone are what is important.

While the scale of migration will forever change European cultures, we are also being changed by an elite segment of society whose ultimate goal is to create super computers that not only replicate human intelligence, but surpass it and thus fulfill what key members of this group envision as the beginning of a post-biological phase of evolution.

The question is: if classroom teachers and university professors are unable to question the old myth that technologies, including digital technologies, are simply tools we use, and do not understand how the tools change the deepest foundations of our culture, where do we turn to reclaim what remains of local decision making? Did we vote for any of the changes being introduced by the digital revolution? And who are the winners and losers in this great experiment that data and wisdom are the same thing?

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**Are Teachers Preparing Students for the World They Will Inhabit When They Are 65 years Old?**

With the new school year now beginning, I am wondering if teachers used their summer vacation to reflect on whether they are providing their students with the education needed in meeting the challenges in the decades ahead. The near daily reporting on extreme weather being experienced across the nation and world, according to scientists, is being attributed to global warming. Other changes in the world's ecosystems—from the global loss of species and habitats, especially in Africa where its population is estimated to grow from 1.2 to 4.2 billion by the end of the century, the crashing of marine ecosystems as the acidic pH levels in world's oceans moves from 8.1 to 7.8, and as climate change leads to the melting of glaciers and sea ice—represent a trend line that brings into question the ways in which students are educated to take for granted that progress will continue. Aside from the environmental trend lines, there is another trend line that is also part of near daily media reports: namely, how the digital revolution is replacing humans with machines, and extending surveillance by corporations and governments over more aspects of daily life. This trend brings into question whether technological progress is reversing the progress of previous generations in expanding our civil liberties and providing basic protections. Surely, classroom teachers from the elementary grades through high school cannot be totally unaware of the challenges their students will face in the years ahead. If they are concerned, the questions then become: What reforms can they introduce that will overcome the limitations of relying upon the abstract and culturally uninformed computer software programs and textbooks that reflect the technocratic mindset of the men and women who write them. The challenge facing teachers is that their own education failed to provide the conceptual basis for recognizing how the words used in the curriculum pass forward the cultural assumptions of earlier generations that were clueless about environmental limits. How many teachers, for examples, are aware of the assumptions that lead people to think of technologies as either a tool or as culturally neutral? How many teachers are able to explain to their students that we live in an interpreted world, and that since we learn to think within the language that encodes the assumptions taken for granted in the past, there is no objective knowledge and facts— only interpretations based on critical thought and that take account of evidence, and those based on the taken for granted thinking of earlier generations. How many teachers are able to explain how print fosters abstract thinking that marginalizes awareness of the complex information exchanges that occur in the relational world in which we live? We have a history of going to war in order to protect the abstractions of elite groups. Data, which is also based on culturally influenced interpretations of what should be measured, is now used by “data scientists” to determine who is to be displaced in the workplace by algorithms and robots. The world of numbers is now displacing moral and political considerations. Did we vote for the loss of privacy and for hackers who now operate beyond the reach of the law? Do computer scientists and engineers understand the cultures into which their technologies are introduced? Or did their classroom teachers and professors indoctrinate them with the Enlightenment myth that critical thinking and science are inherently progressive forces and that traditions, including democracy, are impediments to progress? The starting place for teachers is not that complicated. They can ask students to consider the history of words, and whose taken for granted assumptions are being reinforced. They can also ask about daily cultural practices that have a smaller ecological footprint, that lead to the discovery and development of personal talents, and that strengthen a sense of community. That is, they can begin to introduce students to the cultural commons and the economic and technological forces of enclosure. Asking what different technologies make possible and limit in terms of personal experience, as well as within the culture, will lead to recognizing that technologies are not neutral tools. But first teachers need to be aware of the challenges their students will face in the decades ahead.

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## **How the Common Core Curriculum Reproduces Past Misconceptions and Silences**

The proponents of the Common Core Curriculum claim it will prepare students for careers, college, and life by providing students a “world class education”. This will require preparing them for “life in a technological society”, and provide “a vision of what it means to be a literate person in the twenty-first century.” The irony is that anyone aware of the twenty-first century challenges will quickly recognize the false promises hidden in this lofty rhetoric. It is important to note that the current debates between supporters and critics also ignore the unique challenges of this century.

Let me cite three critical challenges students will face in the decades ahead that are not addressed in the Common Core Curriculum. The overriding challenge is how to slow the degradation of the Earth’s ecosystems—such as the increased acidification of the world’s oceans, climate changes leading to droughts and extreme weather systems, and the further loss of habitats and species. This problem is compounded by a world population moving toward nine billion at the same time the sources of potable water and protein are in decline. Yet the current revitalization of local community-centered alternatives to the environmentally destructive consumer-dependent lifestyles taking place across the country receive no mention in the Common Core Curriculum. A second major problem that will intensify in the years ahead is how the digital revolution is reshaping the world’s cultures. The digital revolution has not only undermined traditional values such as privacy and a sense of personal security from hackers (now threatening the possibility of cyber attacks on the nation’s infrastructure) but also is replacing workers with robots and computer driven systems. A recent Oxford University study predicted that within three decades 47 percent of 700 different jobs performed in America could be taken over by robots and computer driven systems. How many classroom teachers possess the conceptual background necessary for helping students understand the appropriate and inappropriate uses of digital technologies? Should we be concerned that computer scientists and their supporters do not understand the cultures into which their technologies are being introduced—or is it enough that their innovations are justified in the name of progress?

The emphasis on students becoming more proficient in the use of spoken and written language sounds good if one accepts the surface thinking that lies behind this objective. However, two key aspects of language will not be introduced to students. That is, students will not learn how print fosters abstract and thus a surface level of thinking. Nor will they learn how print-based cultural storage and thinking differs from face to face communication that is essential to passing forward the intergenerational knowledge, skills, and mentoring relationships that have a less adverse impact on natural systems. Perhaps the most important feature of language that students will not encounter is that most words are metaphors whose meaning were framed by the choice of analogs settled upon earlier in the history of the culture when there was no awareness of environmental limits. As students learn to think and communicate in the metaphorical vocabulary inherited from the past, they often reproduce the misconceptions, prejudices, and silences of earlier eras. How the word “woman” carried forward over centuries the prejudices that were only recently recognized is an example of how the metaphorical nature of language leads to taken for granted patterns of thinking.

The criticism that the Common Core Curriculum represents a top-down reform only touches on the least important limitations. Even if classroom teachers had been more involved the same silences would be continued—but in less lofty rhetoric. This is because the silences in their professional studies, as well as in courses taken in the higher status academic disciplines, failed to address the linguistic processes that marginalized awareness of the cultural mediating nature

of technology—especially digital technologies, the ways in which language reproduces the misconceptions and silences of the past, and the importance of the intergenerational knowledge and skills that enable people to live cultural commons-centered lives that have a less destructive environmental impact. These are the deep cultural issues that need to be understood if fundamental ecologically and culturally informed educational reforms are to be introduced. To cite just one example of the crises we now face: the rate at which the acidification of the world's oceans is occurring, and the impact it will have on one of the world's primary sources of protein as the pH level reaches the scientifically predicted level of 7.8 by the end of the century, points to the folly of corporate leaders, politicians, and educators who lack an awareness of the challenges we currently face. Their hubris is encoded in the educational reforms that will limit the intelligence of the students who, when they reach their forties and fifties, will encounter the full impact of the ecological crisis.

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### **Cultural commons in an increasingly uncertain world**

Curt Chaffee's insightful commentary "[Carmel as a cultural commons success](#)" (Herald, Dec. 5) may be the first reference to the cultural commons encountered by readers in this area. Let me expand on Chaffee's historical account of the sharing, mutual support and less money-driven lifestyles, especially in the arts, that represented a commons-centered lifestyle that had a smaller environmentally destructive footprint.

Two global changes — the ecological crisis that includes the acidification of the oceans, climate change, loss of species and habitats, as well as how the digital revolution, for all its benefits, opens everyone's life to constant surveillance that allows anyone anywhere in the world to hack into one's life and business. Data profiles are built and used by corporations, and security agencies such as the FBI's new \$1 billion Next Generation Identification Program takes millions of photographs that violate people's civil liberties, which are shared with 1,800 police departments — some of which are practicing "predictive policing."

As we move further into the "big data"-driven future, with the narrowly educated "data scientists" who ignore that data are never objective but reflect some expert's interpretative ideological framework that seldom includes an awareness of what should be conserved, it is hoped that more people realize that the cultural commons, still carried forward today, provide a model of how to live less consumer and thus less environmentally destructive lifestyles. The skills and knowledge that enable people to be more self-sufficient as family units and as communities are passed forward largely through face-to-face and mentoring relationships. We can see this in community gardens, learning to play an instrument, in weaving and working with wood, in passing on knowledge of animal behavior, and in the sharing of narratives of social justice gains in the past. It is these face-to-face relationships that provide protection from the constant and often misused surveillance that will become more intense as people yield to the seductive promises of life under the gaze of the Internet of Things, now being promoted as connecting everything to everything else. Face-to-face communities overcome what is lost in the increasingly monetized power relationships that now dominate public decision-making. That is, the cultural commons involve local decision-making that restores a degree of accountability now missing in the political process.

The local cultural commons, in effect, represent zones of safety from the global reach of hackers

and data collectors. That is, the face-to-face and intergenerationally connected activities, such as sharing skills, making something useful for others, performing in one of the community-centered arts, involves a different way of understanding what constitutes wealth and poverty. Wealth, understood from a cultural commons perspective, is possessing a skill valued by others such as being a talented weaver, story teller, skilled craftsperson, and keeper of community and ecological wisdom. Unlike our current view of material wealth that relies upon credit cards which leave an electronic footprint that attracts hackers and adds to the data profiles being collected and stored in the cloud, the cultural commons way of understanding wealth causes hackers to turn elsewhere. That is, the cultural commons are relatively free from thieves and the surveillance systems of the data collectors. Instead of stealing from the local weaver, craftsperson, participant in the Slow Food movement, the potential thieves and data exploiters are likely to be invited to be mentored in a skill and craft valued by others.

Lastly, the face-to-face intergenerationally connected cultural commons bonds people together as mutually supportive communities.