

Speech for American Association of University Professors (AAUP) June 2013

Beware the Education Computer Industrial Complex

I would like to discuss with you now, how the computer industrial complex is destroying the standard modus operandi for higher education. I will present some explicit examples of how the education computer industrial complex is destroying academic freedom; eliminating tenure; skyrocketing tuition costs; crushing shared governance; and infringing upon basic civil liberties. The future of higher education will find itself enmeshed in a new academic aristocracy and a subservient faculty labor pool, with tenure just another roadside victim.

I would first like to start with an excerpt from a 1967 television program starring Patrick McGoohan called *The Prisoner*. Specifically I would like to recall the episode called *The General*. You see, this episode about a computer called the General, programmed by the Professor, predicts the future of technology to allow for the learning of a course in history by just sitting, watching the television. Remember that the internet was still not even a glimmer of a light in the minds of any computer scientists. It was still a long ways off from being conceived. In this episode of *The Prisoner*, Number 6 first hears about the professor's history course while having tea. An announcement is made across the village which warns all citizens of the village that they have 30 minutes to get to their homes, to be ready for the course in world history. This is accomplished by a new method called speed-learn.

You can see a poster about the Speed-Learn history course. It notes that: “Our aim: One hundred per cent entry, one hundred per cent pass.” Furthermore, it states that: “Speed Learn: A three year course in three minutes. It can be done. Trust me.”

Since the café that Number 6 is eating at, closes for the professor’s on air lecture, he heads home. Of course there is a distraction, but let’s ignore this distraction. At home Number 6 turns on his television and begins to watch the broadcast of the history course.

Again, there are some distractions, but finally the professor is on screen. He states that “Speed Learn is nothing less than a revolution in educational technique.” In fact, he states that Speed Learn “is quite simply the most important, most far-reaching, most beneficent development in mass education since the beginning of time. A marriage of science and mass communication which results in the elimination of years of tedious and wasteful schooling. A three year course indelibly impressed upon the mind in three minutes. Impossible? That’s what I said, until I was introduced to the General.” In fact, the professor states categorically that “education is ready for a giant leap forward from the dark ages into the 20th and 21st centuries.”

Such grandiose claims as those made about the course on the Prisoner, can be found with respect to the media advertising splurge undertaken by the computer industrial complex in higher education, except of course for the extreme time dilation effect.

It was Winston Churchill who said: "The farther back you can look, the farther forward you are likely to see."

So what examples from the past do we have that may be equivalent to what we are dealing with today with higher education and the internet? How about the advent of television. Think about it, was television left to proceed without any regulation? No, there was quite a bit of regulation. You couldn't just say anything on broadcast television. There were regulations about the kinds of words you could use. No cuss words, and that list was certainly somewhat arbitrary. There were regulations about the kind of scenes you could display. No nudity of any kind on American television, although toplessness for both genders was apparently OK in some European nations. There were regulations about the commercials that could be shown. And, oh my, there were fees to be paid to the government.

In fact, it is true that television was used by some outlets as a way to take a course. Today, you can get many videos of the best lecturers in the nation and watch the equivalent of a course on the television. But for some reason, that didn't develop into a full blown alternative for-profit venue for higher education. But the internet is a different story.

So now let's examine some examples of how the computer industrial complex has taken over so many aspects of higher education.

One college now specifies the computer and manufacturer for its students to use. It's the only one allowed in the classrooms. I wonder who that benefits? Perhaps the manufacturer? Or is it the software vendor? Or is it the administrator who makes the decision? Nonetheless, you can't teach a class unless you use their hardware and software. Where is academic freedom in that?

In fact, where is academic freedom when all instructors are expected to use one classroom management system? How about administrators demanding that faculty use a new system to demonstrate that they are teaching according to new rules for pedagogy. This entails using one specific software package and maintaining its specific files.

In 2000, a study was done entitled "Studies on the Correlation between Campus Computing and the Rise in Tuition in Community Colleges." It demonstrated a very high correlation between the usage of computers and the rise in the cost of a community college education. However, the linkage is likely only stronger now than ever.

Let's take a look and see why this might be the case.

How about the reservation of seminar rooms? Imagine if you can't reserve a room for a seminar unless you get training on software which was just added without notice. Then imagine that training on the software to reserve a seminar room is limited to one or two representatives from a department. Used to be a simple telephone call, then a

simple e-mail, then an online system open to everyone, then the bureaucrats took over.

How about using classrooms with computers and computer displays? Imagine if you have to use specific software in your classroom - everyone using the same software. None other supported or allowed on computer. And now imagine you have to receive training on the software. And when does this training take place? Why outside of your 9-month faculty contractual time, of course. I recall when I first started using such systems. You plug in your laptop, use what you want to use, and that's that.

How about scheduling of meetings? Imagine if you have to use scheduling software of a specific vendor. Is it the software you would have chosen? Probably not, but the administrator knows best. Why was it so much worse when a simple telephone call would do?

How about announcements about meetings and new policies? E-mails rule. No human-human discussion. All of this is done in an asynchronous manner. And if you have a problem with any of it, it is all open to the world, that is, the administrators know who is saying what about what, and there is a loss of privacy and anonymity.

How about door locks? Now you have electronic locks that cost a lot more than a standard lock. There was a big deal made of keeping track of entries and exits more easily that way, but the accompanying enormous expense was conveniently ignored. And what happens when the

electricity (or batteries) for the electronic lock goes down? Or what if the lock just fails? Oh my, you can't even get in with the campus police, because they are no longer allowed to let you into a room even if they can with a key, because that's the rules.

What about the new classrooms, designed by those that never taught a course in their lives. There are new displays for classrooms that almost dictate how you should teach. Projection screens that block whiteboards or a real old-fashioned blackboard.

Now I utilize a personal response system. But, a personal response system does add costs to classroom instruction. Does it really help learning? Are improved grades just a product of the larger weight placed on the participation using the system?

What about our hallways? You now find displays in hallways using electricity continuously instead of old style posters. Is it really providing more information for the students?

Think displays are just for hallways? Now you see video displays where they were never before. Administrators have money for these displays but not equipment for labs and lecture demonstrations. Higher education has become another empire of illusion. All is spectacle. Where is the substance?

These days there is a tremendous push for buildings to be more “green.” However, what about energy costs associated with increased computer usage? How green are computers whose monitors are always on?

The most famous living computer geek, whose name rhymes with waits, made a statement about the fact that an undergraduate college degree should only cost \$10,000. What about the salary of the faculty? I guess if you make computers in China, you can find workers for \$1 an hour, so why not \$1 an hour faculty. Unfortunately, recently it was noted that a state's governor asked his educator's to see if this \$10k degree could be done in his state schools.

Hey, you know that one IT manager on campus told me that statistics show that you are more likely to have your desktop harmed by your own IT department than an outside hacker.

So who is to blame for this deterioration of higher education and its higher cost? Is it the government? Convenient it is to blame the government, but are we not the government in a democracy? Is it perhaps ourselves? Look at the empty seats next to you. Who is concerned about the direction of education? Is it the educators who are driving higher education, or is it greed. The greed of higher profits at all costs.

Albert Einstein said: “The world is a dangerous place to live; not because of the people who are evil, but because of the people who don't do anything about it.” The fall of

faculty is partly faculty's own fault. But here I speak to the issue of the education computer industrial complex. As Eisenhower warned us of the military industrial complex, higher education, in fact all education must be wary of the education computer industrial complex.

As I conclude, I hope you don't feel that this is the ranting of what some call a Luddite. For the record I was one of the earliest to make use of microprocessors before microcomputers, and then made use of microcomputers from the first available. With respect to higher education teaching, I was one of the first at my institution to make use of the internet, the World Wide Web, and a personal response system in my lectures. I was one of the first to implement computer-based homework assignments (which I no longer require). I have used computers to analyze data and write peer-reviewed papers. However, while I believe in making use of the technology in the classroom, I don't believe that bureaucrats and technocrats are the ones who should be saying what and how we use technology in the classroom. In fact, they are saying what and how should be taught for a degree. This is obviously counterculture to the shared governance, academic freedom and scholarly professional of the past.

Now in the preparation of this talk I had a number of arguments with colleagues, especially those pushing online courses. I learned that the university charges an extra \$100 for students taking a course online. In fact, one administrator boasted to me that this was one of the ways that funds were obtained to develop more courses online.

Thus, another data point demonstrating that the technology has added cost to the education of the student. In fact, the more students that pay the extra fee for online courses, the more funds for the administrators involved in the online courses. Does anyone ask the students if they feel the extra money is worth it? Are we creating another sociological divide? It is not technology that is good or evil, it is how it is utilized by the administration. It creates a positive feedback loop of increasing costs and increasing the depth of the divide between haves and have nots.

Finally, I would like to close with another quote from Albert Einstein. He said: “I fear the day that technology will surpass our human interaction. The world will have a generation of idiots.”

