



Academic Governance *on the* Virtual Shop Floor

BY JONATHAN A. PORITZ AND JONATHAN REES

By pushing the use of educational technology, administrators are usurping the faculty's primary role in curriculum and methods of instruction.

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Labor historian David Montgomery devoted much of his career to studying the conflict between industrial workers and their employers over the control of factory production in the late nineteenth and early twentieth centuries. Both changes in technology and “new methods of industrial management undermined the very foundation of craftsmen’s functional autonomy,” he wrote in *Workers’ Control in America* in 1979. Workers who once had unique and essential skills found themselves underpaid or unemployed in the wake of industrial transformations over which they exercised no control.



Trying to convince college professors that they face the same threat to their economic livelihood that industrial workers once did can be a very hard sell. After all, their extensive graduate education is a mark of their accumulated knowledge, and no administrator can know everything about disciplines outside his or her individual areas of expertise. More important, the traditional practice of academic governance suggests that administrators need faculty knowledge and experience in order to create and maintain courses that meet proper disciplinary standards.

What many faculty members fail to recognize is the threat that new technologies and management practices pose to such standards. Educational technology now makes it possible for colleges and universities to “unbundle” the functions of professors. Whether by outsourcing lectures to faculty members from elsewhere running their own massive open online courses (MOOCs) or turning over essay grading to computer programs sold by Silicon Valley start-ups, administrators have access to technology that threatens today’s faculty with obsolescence.

If administrators can assume more control over a virtual academic shop floor than they have had over the traditional face-to-face classroom environment, then the traditional prerogatives of faculty over their classrooms will likely disappear as well. Faculty governance is an essential tool not just for maintaining the faculty’s role in upholding the quality of a university education

but also for ensuring the faculty’s economic survival. Preserving faculty governance at a time when faculty prerogatives are under attack requires understanding the way that technology threatens to tilt the power relationship between professors and administrators even further toward the employers’ side than it already is.

LMS: OMG!

Online education accelerated sharply in the mid-1990s, shortly after the Internet entered the popular imagination, contributing to the rapid growth of learning management systems (LMSs), integrated software packages for administering all aspects of a course. We believe that faculty have accepted the normalization of the LMS, applied both to fully online and to hybrid classes, much too readily and without thinking through its various ramifications. The most obvious drawback to using an LMS is that administrators can observe every interaction that professors have with their students in the system. For an online class, of course, that truly does mean *every* interaction. Teach something controversial, and the LMS will preserve a record of that section of your course so that administrators can have access to it later. According to a December 21, 2016, National Public Radio story, companies like BlackBoard are already tracking students in the name of helping them graduate. How hard would it be to use the same data to track faculty performance?

Less obviously, the LMS dictates a way of thinking that has extraordinary effects on the entire pedagogical process. As Jim Groom and Brian Lamb assert in an important examination of learning management systems written for the May–June 2014 issue of *Educause Review*, “Before we even begin to encounter the software itself, we privilege a mindset that views learning not as a life-affirming adventure but instead as a technological problem, one that requires a ‘system’ to ‘manage’ it. This mindset and its resulting values result in online architectures that prioritize user management, rigidly defined and restricted user roles, automated assessments, and hierarchical, top-down administration.”

The most obvious sign of this kind of top-down administration is the imposition of mandatory LMS usage, usually at community colleges where faculty appointments are often too precarious or faculty members themselves are too busy to resist. The Community College of San Francisco, for example, began to require LMS usage to centralize the tracking and management of courses. This requirement applies to both online and hybrid courses, but other schools have required LMS usage in all courses for similar administrative reasons, as one of us pointed out in an article in the May–June 2014 issue of *Academe*.

While some faculty members might think their institution’s learning management system is easy and convenient, under no circumstances should they abrogate their responsibility to determine how they and their students interact on their campus’s virtual shop floor. Similarly, faculty members need to defend the prerogatives of other faculty to refrain from using an LMS altogether, whether because they prefer other tools for digital pedagogy or because they prefer to forego digital interaction entirely.

A CONTRADICTION IN TERMS

Do you remember MOOCs? Usually created in partnership with private companies, massive open online courses combine recorded lectures by star professors with either automated or peer grading. When used to offer students credit in a college or university setting, most MOOCs are either fully automated (with computer programs on the hosting platform doing all grading) or run with limited human supervision, with local faculty taking the role of teaching assistants offering supplemental guidance for other people’s content. We recount the example of San Jose State University in our recent book *Education Is Not an App*. When the philosophy department tried to resist the introduction of a MOOC featuring Harvard University professor Michael Sandel in order to protect professors’ jobs, departments’ futures, and the quality of their students’ education, the administration introduced

it instead through the English department, using poorly qualified teaching assistants from that discipline.

Such courses, however, have not lived up to the disruptive potential that their creators originally imagined. The clearest sign of this failure is an often-repeated comment by Sebastian Thrun, founder of the MOOC provider Udacity. “We have a lousy product,” Thrun told a reporter from the magazine *Fast Company* in 2013. Yet scores of elite institutions remain willing to partner with providers like Udacity to produce the materials of MOOCs, and institutions as well respected as Arizona State University are willing to give students course credit (under very particular circumstances) for completing online courses. In other words, even though the hype that led the *New York Times* to declare 2012 the “Year of the MOOC” has passed, the potential threat MOOCs pose to faculty employment and the quality of higher education remains.

While both MOOCs and LMSs are well-known, they are hardly the only technological threats that professors face. Computer programs that read and grade student essays have become increasingly sophisticated in recent years. Related technologies have also become a common way for students to do math homework, under which the practice of “drill and kill” has been rebranded as “personalized learning.” While all such programs continue to have many problems, the prospect of using even imperfect technology to replace more expensive faculty labor has become increasingly likely.

Of course, many faculty members will delight in the prospect of not having to grade piles of student essays and problem sets anymore. “Essay-Grading Software Offers Professors a Break” was the headline of one prominent story that appeared in the *New York Times* in April 2013. But although the software does something, whether it is a pedagogically meaningful part of the course can never be guaranteed unless professors themselves control when and how such software is employed. When computer-graded essays are both the standard of excellence and the sole output of the course (as in many humanities MOOCs), the break professors get will likely last forever. The only way that this kind of outcome can be prevented is through the successful exercise of faculty governance.

Faculty (unlike their late nineteenth-century industrial forebears) can actually control which machines they want to employ on their respective academic shop floors. Faculty can ensure that the automation employed at their institutions actually saves them time, improves the quality of instruction, and is not just used to reduce headcount. As the AAUP’s 1966 Statement on Government of Colleges and Universities notes, “When an educational goal has been

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established, it becomes the responsibility primarily of the faculty to determine the appropriate curriculum and procedures of student instruction.”

But simply looking to faculty governance as a solution to the problem of possible technological obsolescence is not enough. Faculty need to know how to get cash-strapped and risk-averse administrators to respect the traditional responsibility of the faculty over the curriculum and instruction even in today’s wired world. Luckily, we have resources and concepts at our disposal that our late nineteenth-century counterparts never imagined.

FREEDOM TO INNOVATE

The English language has overloaded the important word free with a great many meanings. When it comes to higher education and information technology (IT), it is particularly unfortunate that the two common usages—costs nothing and not subject to the control or domination of another—are collapsed into this one word. For software, in particular, if the cost is zero, that is certainly convenient, but the other kind of freedom can be a crucial tool for academic workers when administrators and private companies try to change the way faculty teach.

In the mid-1980s, programmer and activist Richard M. Stallman started the Free Software Foundation, dedicated to promoting software that was free “as in free speech, not as in free beer.” More precisely, these were programs that were free to be run for any purpose, free to be studied and adapted as users wish, free to be copied for the benefit of the community, and free to be improved, with the improvements released to the community. The specifics of Stallman’s definition are not at all radical, although they may seem so in these times of neoliberal ascendancy. If program is replaced with idea (and run with use), Stallman’s freedoms sound like an oddly detailed statement of some of the fundamental features of the academic project, without which innovative new uses of old ideas are not possible.

These ideas led, fairly directly, to the founding of the Creative Commons, whose various licenses are nuanced versions, for different needs, of Stallman’s General Public License (see <https://creativecommons.org/licenses/> and <https://www.gnu.org/copyleft/gpl.html>). These, in turn, led to open educational

resources and open-access scholarly publications that hold the possibility of transforming the teaching and research components of higher education. These licenses can protect the traditions of higher education from the devastating rising tides of neoliberal hegemony precisely because they make licensed books and programs open to all faculty who want to use them. We can choose to use them because we want to, free of administrative interference. We can reprogram them because these changes serve our individual educational goals. We don’t need to use one-size-fits-all books or programs as long as such alternatives exist.

Every faculty member who has ever turned on his or her office computer knows that today’s university IT shops are encased in coprolite-hard layers of nonfree software. In fact, higher education and public K-12 education in the United States are viewed as fertile ground for the marketing of educational technology products, including everything from LMSs and enrollment management packages to automated plagiarism detectors and homework grading systems. Some colleges and universities are currently experimenting with automated tutoring chatbots and other “personalized learning platforms” that can replace faculty entirely! These systems, aside from being educationally deficient, are almost always a threat to academic freedom because they make it difficult or even impossible for faculty members to use them in a new, innovative, unanticipated way.

Suppose a faculty member were to go to his or her department office and pick up a new, blank gradebook for a class that was starting. Suppose that upon tearing off the packaging, this instructor were to see the words, “By opening this product, you agree to use it only in the ways specified in the accompanying user’s manual,” and that the manual included such specifics as how much each part of a course would be allowed to count toward the final grade. If the faculty member wanted to do something different (for example, require a final paper or a final presentation) that was not approved, we should surely say that academic freedom trumps these restrictions. Yet when the restrictions are in a piece of nonfree LMS software, or in the setup of the campus website or network or some other bit of technology, faculty are suddenly willing to give up their voice in how teaching and research will be done.

WHAT IS TO BE DONE?

Both of us use educational technology often, but we are very deliberate about choosing technologies that are outside the direct control of our administration, because we value our autonomy and because we believe the tools we use better meet our pedagogical goals than the nonfree tools our IT department offers. Certainly, we don't want to force faculty to use free, open-source software. Nor do we think that faculty should stop using their campus LMS if that LMS meets their individual teaching and research needs. However, professors who understand the implications for academic governance of LMS decisions driven from the top down rather than the bottom up may want to explore the many available alternatives.

Faculty must educate themselves about the possibilities and dangers of IT in order to maintain their prerogatives. Information technology might seem like merely an instrumental aspect of institutional operations that might be left entirely in the hands of administrations, like landscaping or decisions about which model of copiers to put in department offices. But when IT is a fundamental part of the creation and dissemination of new truths, and when it can be used to monitor and to control all aspects of research and teaching, it necessarily becomes one of those areas where the faculty should exercise its primary responsibility. For that reason, faculty must begin to insist on a role in the governance of IT on their campuses. Faculty don't have to relinquish control of the virtual shop floor just because it's virtual.

In *Education Is Not an App*, we propose a "buffet model" for campus IT shops: "Instead of simply imposing a single system of classroom management or e-mail or even a single way to access the Internet," we write, "the job of campus IT shops is to help faculty, students, and staff choose from a diverse selection of IT offerings available on the open Internet or through inexpensive university-purchased licenses. This will allow every actor at the university to find the best programs that support their pedagogy or their learning." After all, this is basically how things work in every faculty member's face-to-face classrooms. Why should the virtual shop floor be any different? To think otherwise is to risk destroying the faculty's role in academic governance, and with it the educational quality that faculty governance promotes.

While the educational benefits of matching resources to the needs of individual professors should be obvious, the advantages of the autonomy that this approach would promote should not be overlooked. During the era of industrialization in the United States, the management consultant Frederick W.

Taylor promoted a philosophy of "scientific management" that depended on determining both the time and motion that individual workers should invest in their appointed tasks. Any educational technology that can monitor student progress could easily be modified to monitor faculty effort as well.

The potential threat such monitoring poses to academic freedom is clear. The easiest way for faculty to save their autonomy in such a situation is to opt out of using programs that their administration—or anyone else—controls (while they still can). We faculty can choose to exercise authority over IT in order to make it useful for our scholarship and to teach our students to be careful and knowledgeable digital citizens by insisting on a voice in the governance of IT on our campuses and—for those of us who still have tenure—by using the strength of tenure protections to insist clearly and carefully on this freedom and this sharing.

It is sometimes said that technology is neutral. Whether it is good or evil depends on how it's used. Edward R. Murrow could have been speaking of the Internet and not television when he said: "This instrument can teach, it can illuminate; yes, and even, it can inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise, it's nothing but wires and lights in a box. There is a great and perhaps decisive battle to be fought against ignorance, intolerance, and indifference. This weapon of television could be useful."

Had he known about modern information technology, Murrow might have added surveillance to the three adversaries he named in the great battle. Certainly we practitioners must have a share in governing how technology is used in our colleges and universities. We must do the hard work of educating ourselves and our students in how to use this tool for illumination and freedom. Otherwise, as Murrow said at the beginning of that famous speech, "this just might do nobody any good."

Thanks to free software, faculty can even own the means of digital education production if they put their minds to it. While the echoes of Marx and Engels in this suggestion may make some people uncomfortable, faculty taking control of the tools we use in our digital labor is our best bet for preserving our role in academic governance and the quality of education on the emerging virtual academic shop floor. The advantages of choosing this path far outweigh any individual fears of learning how to operate new technologies or in departing from the traditional ways in which some of us have chosen to teach. The only things we have to lose are our virtual chains. At the same time, we have a whole new world to win. ■