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CORPORATE FANTASY AND THE “BRAVE NEW WORLD OF DIGITAL EDUCATION”

The application of information technology in postsecondary education will continue at an accelerating rate through 2020. It will stimulate and feed a transformation of most aspects of education delivery, funding, and organization. Information technology comprises a megatrend in postsecondary education, as it has ramifications for every dimension of the endeavor.

—William Chance, 2020 Commission on the Future of
Post-Secondary Education for Washington State¹

Although promising to glimpse the future, Chance’s words also serve as an apt description of the past. Information technology has long been imagined as a “megatrend” in higher education, as the academy was an intended early market for computers. Since its inception in the 1960s, EDUCAUSE, a consortium of 1500 universities and about 100 corporations, has promoted the integration of computer-mediated communication into higher education.² And in the early 1970s, a Carnegie Commission report on higher education embraced information technology, describing its “ultimate dream” as the “national interconnection of independent information, communication and instructional resources, with the combined capacity of making [learning] available to any student, anywhere in the country, at any time.”³

But 1998 witnessed a series of significant turns in technomediated education’s promotion. Bill Clinton signed a bill waiving classroom requirements for fifteen distance learning organizations. One of them, the purely virtual Western Governors University (WGU), opened its doors (or its windows) for business that same year. Also in 1998, one of WGU’s board members, Washington Governor Gary Locke, convened the 2020 Commission on the Future of Higher Education to consider “how new communications technologies can transform access to higher education.” Meanwhile, Wallace Loh, Locke’s chief policy advisor and ex-officio member of 2020, spent the year discussing the “brave new world of digital education.” As a graduate student at the University of Washington at the time, I, along with other students, faculty, and staff, witnessed the promotion of this digital future in what felt like the year of the virtual university.

As the debates unfolded, however, it became apparent that technology was not driving the changes being imagined for this brave new world. Rather, technology provided an air of legitimacy and urgency to what was really a campaign to expand markets for the computer and higher education industries, use public funds to subsidize such expansion, and reorganize academic labor. The promises of technomediated education also interacted with other discourses that rationalized the reorganization of Washington’s entire education system. Strong faculty and student opposition, combined with the lack of a market for online instruction, arrested the more fantastic promises of this brave new world. Certain elements of the dream, however, have already been realized and continue to degrade academic labor. Now that “the bloom is off

the rose,” as David Noble describes the waning exuberance for digital education, it is time for careful and critical reflection on the year of the virtual university and its lasting significance.⁴

This paper confronts the virtual university movement by analyzing its promotion in Washington state, particularly during 1998. I critically evaluate key speeches and policy proposals made by Locke and his advisors and analyze planning and promotional documents of the Western Governors University and the 2020 Commission. I also consult PricewaterhouseCooper’s *Reinventing the University* (1998),⁵ which provides additional insight into the ways in which marketers, managers, and university administrators are planning to transform higher education.

Analysis of these texts shows that the virtual university serves as a discursive toolbox that helps rationalize and obfuscate strategies to reorganize higher education. In so doing, the e-cademy distracts us from the less dramatic, less visible ways in which policymakers and administrators intend to finance higher education and deskill and downsize its labor force. However, history suggests that by exposing what officials want to keep hidden, academics can effectively struggle against the future that virtual universities’ promoters imagine and the present conditions under which academics labor.

The Overture: Dwindling Funds, Growing Enrollment

Overtures to virtual university’s promotion typically cite funding problems exacerbated by growing enrollment. In his speech announcing the formation of the 2020 Commission, Washington Governor Gary Locke argued that it was “urgent” for the state to “rethink and reinvent higher education from the ground up” because “demand for higher education is growing faster than our ability to finance expanding enrollments.”⁶ Among those contributing to “the explosion in demand” are “echo boomers” (Generation Y or baby boomers’ children) who will reach college age over the next twenty years; students who “historically have been underserved by and underrepresented in higher education”; and “adult learners,” working adults who return to college to “upgrade or retool their skills.”⁷ Loh expects adult learners will be the largest “market” seeking education. Locke agrees, advising his audience of high school seniors: “think of yourself as a perpetual learner, and plan to buy the education you need, when you need it, for your whole life.” This “tidal wave of high-school graduates and working adults” means that “the public dollars to pay for the expansion of educational opportunities will be unequal to the need” and will be “stretched beyond the breaking point.”⁸ Clearly, Washington’s policymakers seem concerned about the ability to fund growing demand.

Of particular concern is the funding crisis’ effect on access. Loh is disturbed by the “intergenerational shifting of the cost of higher education...reflected in the dramatic increase in tuition and student indebtedness of recent years.”⁹ Similarly, Locke argues that “it would be a terrible tragedy to let our colleges and universities become the educational equivalent of gated communities that admit only the affluent.” There is cause for alarm, as tuition has skyrocketed over the past decade in Washington. Tuition kept pace with inflation and personal income in the early 1990s but overtook both by the 1993-1994 academic year. In 1997-1998, increases in undergraduate tuition exceeded growth in the state’s per capita personal income by fifty percent and grew twice as fast as inflation.¹⁰ Further reflecting the “intergenerational shifting” of higher education’s cost in Washington, in fiscal year 1990 the State General Fund’s contribution to higher education was more than five times the amount generated by tuition and fees.¹¹ But by 1998, the state’s contribution shrank to less than three times the amount generated by tuition and fees, which more than doubled since 1990.¹² Moreover, by the mid-1990s, the percentage of the General Fund allocated to the UW was less than half of what it was in 1965, and state funds for all higher education instruction dropped by nearly 40%.¹³

²To make up for declining public support for higher education and prevent the further erosion of access, schools are told to cut costs. According to Loh, “the fundamental change [colleges and universities] will

need to make...is to lower the unit cost of learning in order to expand capacity.”¹⁴ Similarly, the 2020 Commission recommends that post-secondary education institutions “find ways to reduce the costs of education without compromising quality.” Doing so means that the state should

use all accredited post-secondary education providers to meet the expected surge in demand,...manage its resources carefully in order to accommodate the explosion of new learners,... [and find] new ways to stretch the capacity of existing public institutions...[like] contracting with independent and for-profit providers when public institutions are full.¹⁵

The solution, in other words, is to expand access without increasing costs by carefully managing already existing institutions and outsourcing instruction.

Virtualizing the Problem, Accessing the Market

The virtual university is now poised to solve funding, access, and capacity problems. But the rhetoric takes a more circuitous route through what appears to be a glaring contradiction: the argument that public funds cannot sustain growing enrollment transitions into a recommendation to expand the market. In Loh’s opinion piece for the *Seattle Times*, the move is subtle. After discussing the coming “tidal wave” of new post-secondary students, especially adults, Loh argues:

Work-force training and economic development are critical to a knowledge-based economy. Hence, the state has a responsibility to promote the lifelong learning of adults, though not necessarily to subsidize it to the same extent that it does the learning of youth.¹⁶ So on the one hand, the coming wave of students poses a problem if public funds cannot rise to cover them. But on the other, if funding the largest portion of that wave (adult learners) is not a priority for the state, then the problem is not one of convincing legislators to increase funding for higher education but becomes one of courting other, (i.e., private) investors. This is partly what Loh means when he tells his UW Law School audience that “the role of the state is to allow market forces to operate.”¹⁷

More specifically, Loh recommends that the state generate revenue by working with private industry to expand the market. Loh imagines that a “collaborative effort among all those who have a stake in our system of post-secondary education” will create “new organizational forms” that “deliver education at a lower cost” and “serve nontraditional students.” Technology is a key component of these “new organizational forms,” as “technology...opens up the educational marketplace to competition from other providers located outside the geographical service area.”¹⁸ The virtual university stands as the sort of ideal distance education “provider” for the “new growth sector” of adults seeking distance education.

Western Governors University, a purely virtual university,¹⁹ epitomizes the public/private partnership designed to cash in on growing markets. Governor Locke has co-chaired the school’s Board of Trustees since January 1999 with Utah Governor Mike Leavitt, but has been involved in the planning phases since his term as governor began in 1997.²⁰ WGU also offers learningware vendors—the companies that produce the hardware, software, content, and network connections for the education market—the ability to shape curriculum and policy through advisory positions. WGU’s National Advisory Board members include Apple, AT&T, IBM, International Thomson Publishing Microsoft, and Sun. Companies like these have long courted the higher education market. When Apple launched its Macintosh in 1984, it created the Apple University Consortium to provide member universities with volume discounts on the machines. Reaffirming its desire for the education market in 1997, Apple boasted that it was the “the biggest education company in the world.”²¹

Planning documents also emphasize WGU’s intentions to expand markets for higher-ed and high-tech industries. Outlining their mission in 1996, WGU’s founders envisioned “creating broader markets for existing educational services rather than creating an independent capacity to deliver those services.”²²

WGU also aims to be “market-oriented,” “client centered,” and to “broaden access to higher education by fostering the use of advanced technology for the delivery of educational services.”²³ Like Locke and Loh, WGU acknowledges that adult students seeking job training are a key part of its target market. But WGU also hedges its bets by promoting “up-to-date education options” for “today's Information Age employees” engaged in “work-to-work” and “school-to-work” transitions.²⁴ WGU, in other words, avoids labeling itself as an exclusively adult education organization. And, arguing that it was “born out of a desire to make education more accessible to the citizens of the largely rural Western United States,” WGU promises to serve rural students in particular.²⁵

I want to underscore the significance of the ways in which WGU uses “access,” because the term has come to euphemize discussions in which the virtual university figures as a vehicle for higher ed’s and high tech’s market expansion. Historically, debates about “access” to communication technology have centered on social equality and democracy. As Carolyn Marvin’s analysis of the telephone’s early days shows, debates about access to the telephone system were also about extending democracy. At the turn of the twentieth century, telephones were alternately celebrated and feared for making upper classes accessible to lower.²⁶ More recently, concern over the “digital divide” between black and white, rich and poor, and urban and rural Internet users has reflected the assumption that access to technology strengthens democracy. In these debates “access” promises to deliver social equality, a defining feature of democracy. The Department of Commerce’s 1995 report on digital “haves” and “have nots” invents a category of social inequality that displaces questions of race and class: “the information disadvantaged.”²⁷ Here, access also serves as a measure of social inequality.

Since discussions of access to information technology have long euphemized and metonymized debates about the quality of democracy, marketers have been able to use the term to politely discuss market expansion. Apple Computer, one of WGU’s national advisory board members, has proven deft at such rhetorical maneuvers. As Jonathan Sterne has shown, in the early 1990s Apple began awarding grants to support “projects serving student populations that historically have had limited access to computer technology” such as “linguistic and ethnic minorities” and “the economically disadvantaged.”²⁸ Apple’s grant program signified a wider shift in the computer industry’s marketing priorities: targeting nonwhites as the next growth market. But the important point here is that substituting “access to computer technology” for “consumption of computer technology” helped re-position Apple’s project as a philanthropic and political one rather than as a marketing strategy. Moreover, Apple exploited and reinforced the dual sense of “access” by using the term’s meaning as an agent of democracy to obscure its marketing meaning.

The virtual university’s promotional rhetoric makes a similar sleight of hand. As we saw above, WGU’s promotional texts are replete with promises to “broaden access” to higher education. And like digital divide activists, WGU hopes to make education more “accessible” to rural have-nots--the “citizens of the largely rural Western United States.” In addition, WGU’s *raison d’être* is expanding access to those hemmed in by their location or busy schedule: “The principal mission of [WGU] is to improve quality and expand access to postsecondary educational opportunities by providing a means for individuals to learn independent of time and place.”²⁹ In these statements “access” implies the notion of reducing social inequalities by making higher education more convenient for those who cannot physically attend.

Washington’s policy advisors, however, seem more concerned than WGU with specifically serving the nonwhite and nonwealthy. Loh argues for “full and equal access to higher education for persons from all racial and economic backgrounds” because it is “essential to civic discourse, democratic government and a more inclusive society.” The 2020 Commission expresses both Loh’s and WGU’s concerns:

We must reach out to those who traditionally have been under-represented and under-served by post-secondary education: people from low-income families, people of color, families with no

prior experience with post-secondary education and people who live far from traditional campuses. This will require not just system expansion, but also active recruitment of students from these families and communities, and a commitment to adapt service delivery to meet their needs.³⁰

In this excerpt, 2020 explicitly foregrounds the correlation between social inequality and higher education in demanding a “commitment to adapt service delivery” to meet the needs of “low-income families” and “people of color.” But the Commission specifies virtualizing university education as a way to adapt delivery. According to 2020: “asynchronous learning” – learning the Commission defines as independent of time and place, delivered by technology— would serve lower income students because it “lowers the cost of education for students by eliminating the expenses of relocation and/or transportation.”³¹

However, the promise to democratize education by extending access seems disingenuous. Reducing such costs might make higher education more “accessible” to some nonelites, but do virtual university students receive an education equal to those at face-to-face schools? As David Noble has argued, if the quality of on-line education were truly comparable to that of face-to-face instruction, then elite colleges and universities would award full credit for their purely virtual offerings.³² Purely virtual access to higher education cannot yield the same quality of education as access to truly interactive, face-to-face instruction in classes with low student-teacher ratios.³³ Instead of democratizing education, extending virtual access would encourage separate but inferior education for projected markets like rural residents, people of color, and the nonwealthy.

There are instances in which the marketing intentions of expanded access become visible in cyberacademy’s rhetoric. In a candid moment, WGU’s promotional literature reveals that it is the student-as consumers—who are accessed by the virtual university:

Providers of educational modules and materials -- including both colleges and universities and private sector providers -- will gain access to wider markets for their services and see the removal of many of the barriers that now frustrate their delivery in multiple states and rural areas.³⁴ This excerpt reveals what WGU’s other promises about access obscure: expanding access to students means that educational “providers” also gain access to students. Here, “access” signifies entry into a market of consumers.

Extending access is a crucial problem for the virtual university, because large markets are a prerequisite to profitability. As Loh points out, “Distance education via interactive technologies becomes fiscally viable only with economies of scale.” And economies of scale, because they lower unit costs by increasing the amount produced, require widespread consumption or a “large learner base,” as Loh puts it.³⁵ Thus, cyberacademy’s promoters are under pressure to find the largest market possible. But so far, virtual universities have “delivered” education to a strikingly small learner base. When WGU opened in fall 1998, the institution expected 5,000 students but enrolled ten, received only seventy-five inquiries, and experienced a 90% dropout rate.³⁶ And the following year’s enrollment of 208 students fell well below its initial target.³⁷ As WGU’s enrollment history shows, the sort of market expansion required to achieve an economy of scale is by no means guaranteed.

Alchemy for the E-cademy: Turning Competency into Gold— Lesson One: How to Secure Taxpayer Subsidy

Given the paltry market for e-learning, how do virtual universities plan to generate revenue? One answer is by dipping into the public purse. Doing so has meant changing the way federal student aid is regulated. Since 1992’s amendments to the Higher Education Act of 1965, students have been required to attend class for at least twelve hours a week to qualify for federal aid.³⁸ This “twelve-hour rule” was intended to prevent institutions from collecting additional aid through their students by extending terms

without providing commensurate instruction. According to a report by the Department of Education, higher education and high-tech organizations that backed e-learning initiatives found these rules “stifling.”³⁹ Western Governors also objected to what they perceived as “statutory and regulatory barriers to the WGU at both the state and federal levels.” WGU’s complaint was part of the distance learning industry’s wider campaign--which included directly lobbying Congress--to lift restrictions imposed by the 1992 reauthorization of the Higher Education Act.

And since higher education and high tech industries covet each other’s investment and markets, they make natural allies in the campaign against the twelve-hour rule. Illustrating the symbiosis between higher-ed and high-tech, the President of the University of North Carolina says she expects federal student aid to lure additional investment from high-tech vendors: “As federal student financial aid dollars become available for pursuing higher education via network technologies, our market will become even more attractive to technologically advanced information service providers...”⁴⁰ In other words, by absorbing some of the risk of investing in the e-cademy, federal investment is hoped to beget private investment. Federal investment has long served in such capacity, funding research and development and providing contracts when markets were far from guaranteed.⁴¹ Yielding to higher-ed/high-tech industry pressure, Bill Clinton signed an education bill in 1998 that included the “Distance Education Demonstration Program,” which removed class time requirements for fifteen distance learning organizations and freed up federal aid for these students. WGU was one of the program’s participants.

The battle to secure taxpayer subsidy through student aid was waged—and is still being waged—through a series of rhetorical maneuvers that redefined instructional quality as “competency.” WGU was one of the leaders in mobilizing competency for taxpayer subsidy. WGU claimed that “financing policies at the state and federal levels tend to define enrollment and student progress in terms of credit or clock hours, not on the basis of competency,” and argued for “new policies that will be required for programs delivered across state lines by technology and based on competency.”⁴² WGU’s press releases, which boast about offering the “only online competency-based degrees in the country,” reflect the notion that its uniqueness warrants the revision of aid policies. Establishing the obsolescence of the twelve-hour rule hinged on articulating technology with competency and substituting competency for credit hours.

What does it mean to redefine instructional quality by measures of “competency”? According to “competency-based” organizations like WGU, it awards degrees and certificates “based on what a student knows, rather than on the number of hours a student spent in class or the number of credits earned.” In lieu of accumulating credits for passing courses, WGU’s students earn degrees by proving they possess the requisite “competencies” by passing “assessments” (exams of “competency”). Courses might be recommended when students fail competency exams. In addition, competency-based education is supposedly concerned with learning, while the credit-hour system is concerned with teaching. But in some ways, the two models are much closer than competency advocates acknowledge. The credit model requires competency assessment: students receive credit for time spent taking courses only if they pass required examinations (i.e., by receiving passing grades on exams, papers, projects). And, like the competency system, credit-based universities award credits for some courses by exam (i.e., AP courses). In the end, it seems that WGU’s commitment to “shifting the focus of education to the actual competence of students and away from ‘seat time’ or other measures of instructional activity” stems from the desire to qualify for federal student aid rather than improve credentialing.⁴³

Virtual universities like Western Governors clearly stood to gain by redefining enrollment and student progress through competency assessments, but Washington state has also prescribed competency in its broader educational reform plan. In his Washington Scholars’ speech, Locke advocates competency-based education for undergraduate, high school, and elementary school students:

In our K-12 system, we’re just now beginning to hold both students and schools accountable for meeting

tough new academic standards. This means that your little brothers and sisters won't be able to get high school diplomas just for sitting through 12 years of class. They'll have to prove that they've met specific academic standards for math, science, communication, and other subjects. That's called "competency-based education."... That idea--the idea of judging the quality of education by what students actually learn--is coming soon to a college near you.⁴⁴

So "competency" does more than secure taxpayer subsidy for the cyberacademy; it also describes new criteria for evaluating primary and secondary education. Why is competency so widely embraced? The rhetoric that promotes the virtual university is instructive.

Alchemy for the E-cademy: Turning Competency into Gold— Lesson Two: How to Reorganize Academic Labor

In addition to helping secure federal student aid, competency-based education promises to serve the ostensible goal of Washington's educational reforms: lowering the unit cost of education. Western Governors imagines itself as uniquely positioned to use competency-based education to lower costs. As WGU's prospectus notes, it seeks to "develop and demonstrate innovative, cost-effective approaches to delivering education and certifying learning." More specifically, WGU promises to "provide mechanisms for refocusing attention on the critical issues of quality and competence, encouraging the states to concentrate their resources to have maximum effect."⁴⁵ WGU articulates competency with cost cutting, but how do competency advocates propose to lower costs?

Reformers argue that competency-based education will reduce costs by refocusing university priorities on output or "outcomes" rather than on "input." According to Loh,

The culture of the academy equates quality with resources. These resources define institutional excellence: increased funding, more faculty, larger endowments, better facilities, new programs, reduced teaching loads, etc. In universities, academic prestige and national rankings are determined by input measures such as selectivity of admissions and plentitude of resources. Academic status is not measured by the learning of students. Quality so defined, drives up the cost of higher education.⁴⁶

In other words, measuring the quality of an education according to "the learning of students" (another way of referring to "competency") reduces costs, because competency is an output (a product) rather than an input (a cost). The logical contradiction that emerges is that since any sort of funding is an input, the idea of funding outcomes--funding learning or competency--confounds the model.⁴⁷

But the point of the input/output argument is not to demonstrate how funding a competency actually reduces costs. The point is to develop a discourse that helps legitimize cost-cutting through reorganizing academic labor. By criticizing inputs like "more faculty" and "reduced teaching loads" for driving up costs and by recommending the more economical output model based on competency, Loh implicitly supports downsizing and overwork (through enlarged teaching loads) to cut costs. In the end, this rhetoric constitutes a defense by diversion. Loh's input/output model serves as a red herring that sidetracks us from his proposal to reduce the instructional workforce and increase its workload.

Moreover, Loh defends contracting out grading to third parties by articulating the practice with competency and by plugging competency into another series of diversionary binaries:

One future is a system that's primarily learner-centered, technology-based, and market-oriented. Another future is a system that's primarily institution-centered, campus-based and externally regulated...A learner-centered system would award degrees or certificates on the basis of third-party assessments of demonstrated competencies. An institution-centered system awards them on the basis of accumulated

credit hours (“seat time”)...[Learner-centered systems] may produce curricular and fiscal effects...⁴⁸

Loh prefaces his proposal to contract out assessment by contrasting “learner-centered” to “institution-centered,” “technology-based” to “campus-based,” and “market-oriented” to “externally regulated” systems. Following this flourish of technophilic, neoliberal binaries, Loh implies that the learner-competency model will save money (have “fiscal effects”) by awarding degrees based on “third-party assessments.” This approach stands in contrast to credit hours, which are associated with external regulations (like the twelve-hour rule), costly and inefficient “seat time,” and the institution-centered input model. Instead of candidly discussing outsourcing, Loh buries the proposal in incantations of the market and technology and funnels it through a binary discourse. Thus, the notion of competency helps concretize the dichotomous and euphemistic language that stands in for frank discussion of cost-cutting strategies like downsizing, overworking, and outsourcing.

The Recourse to Technological Determinism

The rhetoric we have looked at thus far articulates a soft technological determinism. Technological determinism is a theory that privileges technology as an agent of social, political, and economic change. According to Raymond Williams (1974), technological determinism “depend[s] on the isolation of technology. It is either a self-acting force which creates new ways of life,” what Williams calls “pure technological determinism,” or “it is a self-acting force which provides materials for new ways of life,” what we could call “soft” technological determinism.⁴⁹ Technological determinism, both hard and soft, has long provided a discourse for the defense of downsizing, casualizing, and deskilling labor.⁵⁰

Speaking through a purer technological determinism, virtual university’s advocates argue that technology will divide instructional labor into narrower tasks to reduce labor costs. As Loh explains, “computing could fundamentally change universities,” leading administrators to “rewrite job descriptions.” More specifically,

Technology allows for the division of labor—at less expense. Salary is 80% of the cost of any institution. We could have faculty whose primary job is to design courses...Other faculty could take on other duties...⁵¹

Technology, in other words, enables the division of instructional labor into ever-smaller parts: some faculty would design courses, others lecture, others write exams, others evaluate or “assess.” Such deskilling promises to significantly reduce labor costs.

Digitalizing education also promises to trim production costs by raising instructional labor’s productivity, thereby facilitating downsizing and casualization. According to *Reinventing the University*, “Technology removes two other significant barriers to entry. The first is the need for bricks and mortar...the second involves full-time faculty. Distributed learning enables a small number of professors to reach a huge market of students.”⁵² Technology, in other words, raises productivity by enabling a few workers (professors) to produce a large output (educated students). Thus, production demands less--perhaps no--full-time faculty.

Those who blame technology for casualizing academic labor also blame technology for making tenure obsolete. According to the cyberacademy’s marketing analysts:

Now digital technology renders unnecessary the physical proximity of scholars to their universities, or to their students, for that matter. The cost of the physical university increases exponentially...Tenured professors cost more to maintain than part-time instructors... [As the cost of the physical university] rises, the role of the university shifts from physical repository of knowledge to electronic access to knowledge. The professor is liberated; departments (and perhaps programs and degrees) may form around

physically separated groups of scholars who themselves may no longer work as university employees but as freelance, independent speakers and researchers.⁵³

This vision of a casualized professoriate alternates between hard and soft technological determinism. Technology either single-handedly “renders” face-to-face instruction obsolete or co-mingles with rising costs to do so. Here, the recourse to technological determinism permits glaring leaps of logic. Even if we grant that tenured professors cost more to “maintain” than do part-timers, it is still a leap to suggest either that this discrepancy or that universities’ rising operating costs transforms the university from a “physical repository of knowledge” into a conduit for “electronic access to knowledge.” It takes yet another jump to suggest that this change “liberates” professors to work nomadically as freelancers for free-floating departments.

These sorts of leaps are significant because they reflect the ways in which e-academy’s advocates have learned to publicly discuss abolishing tenure. At the University of Washington, the language used to promote tenure’s eradication grew increasingly opaque. In a speech several weeks before his Law School address, Wallace Loh’s anti-tenure rhetoric was blatant and biting. Loh accused faculty of suffering from “mural dyslexia” in that they could not see the writing on the wall that tenure’s demise was imminent and inevitable. In his address to the Law School, Loh was still deriding faculty—for the “charmed” lives they led—and said that for business, “tenure is an issue.” Many of us in the audience found his speech antagonistic toward instructional labor, as the centerpiece of his vision of “the brave new world of digital education” entailed a university without faculty. But Loh’s *Times* article, which appeared about one month after his Law School speech, eschews blatant displays of hostility toward faculty. Using more ambiguous language to attack tenure, Loh hints at tenure’s demise by claiming that new technologies mean that “the academy’s control over the delivery and credentialing of education may shrink,” and that “higher education has a record of reinventing itself...[therefore] the academy—and the faculty that’s its lifeblood—can be as innovative as the times require.”

Following the rhetorical retreat in regards to tenure, exuberance for the e-academy waned. The 2020 Commission’s early reports—like William Chance’s discussion of post-secondary trends, feature information technology as the driver of and vehicle for “the post-secondary reformation.” Chance’s report opens with the contention that “information technology comprises a megatrend” that will “stimulate and feed a transformation of most aspects of education delivery, funding, and organization.” Throughout the text, technology is at the center of Chance’s vision for higher education.⁵⁴ In contrast, 2020’s final report downplays its earlier embrace of technology. The document’s support of the virtual university is less prominently featured, more narrowly focused, and articulated in less inflated language. The Commission buries its promotion of online learning in a subpoint to its ninth recommendation (out of fifteen).⁵⁵ The final report also omits discussion of tenure. During the year of the virtual university, a kinder, gentler technological determinism emerged but belied the deep antagonisms between management and labor.

Confronting the “Brave New World of Digital Education”

But if the rhetoric has grown more elusive, so has the attack on tenure. In fact, we do not need a crystal—or silicon—ball to forecast the casualization of academic labor. Instructional labor is already being divided up among a bifurcated labor pool. According to a 1997 report by the Department of Education, the percentage of tenured faculty and staff declined from 58% in 1987 to 54% in 1992, while the percentage of faculty employed in non-tenure track positions grew from 8% to 11%.⁵⁶ In addition, part-time faculty, who are less likely to have tenure or hold tenure-track positions,⁵⁷ make up an increasingly large proportion of the instructional workforce. In the US, the percentage of part-time faculty has more than doubled from 22% in 1970 to 43% in 1998.⁵⁸

The University of Washington depends on a large pool of untenured and non-tenure track instructional

labor and an elite minority of tenured professors. While 72% of the UW's teaching faculty hold tenure-track positions, 73% of all who teach undergraduates are untenured. Of these, two-thirds are contingent, holding "non-ladder" (non-tenure track), temporary, or graduate teaching assistant positions.⁵⁹ I include graduate students here, because teaching assistants conduct approximately 50% of all undergraduate instructional hours in lower division courses at UW,⁶⁰ maybe more if we count the unpaid hours that graduate students work in undergraduate teaching assistance labs. UW's contingent workers provide a cheap labor source, earning wages between one-half and one-tenth of what professors earn. The UW's workforce is also circumscribed by a gendered and raced glass ceiling, as 30% of tenure-track faculty are women, yet women hold 58% of non-ladder positions.⁶¹ A mere 2% of tenure-track faculty are black, 2% Hispanic, 9% Asian, and a fraction of a percent are American Indian. In short, a small but shrinking segment of mostly white, male instructional labor enjoys the job security--not to mention living wages--that underlie academic freedom.

Tenure, in other words, is far from dead; it is suffering a silent erosion. Management recognizes this fact, as their consultants acknowledge that while "the tenure system that underlies and reflects [a] professional ethic is under serious challenge in many institutions," it is also "being sidestepped in others as adjunct and part-time faculty spots replace tenure-track positions."⁶² Bureaucrats seem to prefer "sidestepping" tenure, as direct attacks on tenure involve protracted, public battles.⁶³ Perhaps the Chair of the Board of Regents, reflecting on campus-wide protests against weakening the University of Minnesota's tenure code, put it best when he said, "The best way to have prevented it would have been to not bring tenure up in the first place."⁶⁴

Washington's year of the virtual university certainly bore out this conclusion. The transparency of Loh's early attack on tenure helped mobilize opposition to the brave new world of digital education. Loh's slight about faculty's "mural dyslexia" reverberated throughout faculty and graduate student circles. The statement provided the context for interpreting subsequent discourse from Locke, Loh, and 2020. Those of us who heard the remark described it to our colleagues as evidence of an attack against tenure, against academic freedom, and expressed the need to respond to it. In June 1998 the UW faculty publicly circulated a letter to Locke and his advisors protesting the profit-driven, digitalized, downsized "brave new world" of higher education. Over eight hundred faculty and graduate students signed the letter, a demonstration of campus unity rumored to have exceeded that shown during the Vietnam War.⁶⁵

In addition, the early hostility toward instructional labor reaffirmed what so many graduate student teaching assistants already perceived as exploitative working conditions. Graduate assistants are ostensibly employed as apprentices but in reality are exploited as cheap labor with growing rates of indebtedness and little guarantee of stable academic jobs upon graduation.⁶⁶ The promotion of higher-ed's brave new world coincided with forums for teaching assistants on our pay, benefits, and job security. These conversations blossomed into a successful organizing drive. The Graduate Student Employee Action Coalition (GSEAC) affiliated with the United Auto Workers in fall 1999, struck for recognition in spring 2001, and recently won legislation requiring recognition from the UW administration. GSEAC may have to strike again for recognition, but graduate students have expressed that they are in it for the long haul. And while the year of the virtual university helped spark unionizing efforts, GSEAC enjoys sustenance from the coalitions they have formed with other contingent workers, including the state's part-time community college faculty as well as newspaper, technical, and agricultural workers.⁶⁷

The rhetoric that promotes the virtual university offers important lessons for both proponents and critics of digitalized education. Proponents learned to keep plans to degrade and downsize academic labor hidden. To this day, Washington's administrators and policymakers prefer mystified to frank public discussion about securing funds and expanding markets for higher education. They still shroud the

relationship between marketing, financing, and management imperatives in euphemism.

But as this analysis shows, e-cademy's rhetoric also has its more candid and outrageous moments. UW faculty and graduate students made the most of these by using them to anchor critique and inspire collective action. And there is still plenty of demystifying and organizing to do if we are to redesign the glass-ceilinged, gated community that our higher education system has become. For the silent degradation of academic labor outlives the sexy rhetoric of the virtual university. As the more fanciful images of digital education's brave new world fade, our resolve to confront its less glamorous reality must not.

AFFILIATIONS

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NOTES

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¹ William Chance, "Post-Secondary Education Trends," Prepared for the 2020 Commission on the Future of Post-Secondary Education (March 31, 1998). Available at: <http://www.governor.wa.gov/taskcomm/regrpt/98regprt.pdf>.

² EDUCAUSE is the result of the 1998 merger of Educom, founded in 1964 by university administrators and Cause, formed by a group of college and university data processing directors in 1962.

³ Dan Schiller, *Digital Capitalism: Networking the Global Market System* (Cambridge: MIT, 1998), 143.

⁴ For further discussion of faculty, student, and the odd administrator's protests against virtual university initiatives see Noble's chapter "The Bloom is off the Rose" in David Noble, *Digital Diploma Mills: The Automation of Higher Education* (New York: Monthly Review, 2001) 50-60.

⁵ Clark L. Bernard, Sandra L. Johnson, Jillinda J. Kidwell, eds. *Reinventing the University: Managing and Financing Institutions of Higher Education* (New York: John Wiley & Sons, 1998), 110. The editors are PricewaterhouseCoopers executives.

⁶ Gary Locke, "2020 Commission Announcement" (February 4, 1998). Available at: <http://www.governor.wa.gov/speeches/speech-view.asp?SpeechSeq=130>.

⁷ 2020 Commission on the Future of Post-Secondary Education, "Learning for Life: Report of the 2020 Commission," available at: <http://www.governor.wa.gov/taskcomm/2020/learning.htm>; Gary Locke, "Remarks to Washington Scholars" (Olympia, WA, April 27, 1998). Available at: <http://www.governor.wa.gov/speeches/speech-view.asp?SpeechSeq=132>.

⁸ Wallace Loh, "The Future of Higher Education: New Realities for Universities." *Seattle Times*, (June 14, 1998), Opinion, 1; Locke, "Remarks to Washington Scholars."

⁹ Loh, "The Future of Higher Education."

¹⁰ Washington Higher Education Coordinating Board, 2001-2002 Washington Tuition Fee Report (January, 2002). Available at: <http://www.hecb.wa.gov/policy/Reports/TFWash01-02.pdf>.

¹¹ Washington's General Fund is generated by taxes (such as sales, property, and business and occupations tax).

¹² In 1990, Washington’s State General Fund contributed \$793 million to higher education, while tuition and fees generated \$160 million; in 1998 the General Fund contributed \$980 million, while tuition and fees generated \$342 million.

¹³ University of Washington Factbook (University of Washington: Office of Institutional Studies, 1998). Available at: <http://www.washington.edu/admin/factbook>, Table C-6; Table C-11.

¹⁴ Loh, “The Future of Higher Education.”

¹⁵ 2020 Commission, “Learning for Life.”

¹⁶ Loh, “The Future of Higher Education.”

¹⁷ Wallace Loh. “Rembe Endowed Lecture,” University of Washington Law School, May 21, 1998.

¹⁸ Loh, “The Future of Higher Education.”

¹⁹ WGU lacks a physical campus and “brokers” courses from educational “providers.”

²⁰ Initial planning for WGU began at a 1995 meeting of the Western Governor’s Association, an association of governors of eighteen western states, two Pacific-flag territories, and one commonwealth.

²¹ Jim Carlton, *Apple: The Inside Story of Intrigue, Egomania, and Business Blunders* (New York: Random House), 16; Dan Schiller, *Digital Capitalism: Networking the Global Market System* (Cambridge: MIT), 182.

²² WGA Virtual University Design Team, “A Prospectus for the Western Virtual University” (May 8, 1996). Available at: <http://www.wgu.edu/wgu/about>.

²³ WGA Virtual University Design Team, “Draft, Western Governors University: A proposed Implementation Plan” (Jun 6, 1996). Available at: http://www.wgu.edu/wgu/about/imp_plan.html.

²⁴ See “Student” section of WGU’s website, <http://www.wgu.edu>; WGA Virtual University Design Team, “Draft, Western Governors University.”

²⁵ See “Student” section of WGU’s website.

²⁶ Carolyn Marvin, *When Old Technologies Were New: Thinking About Communication in the Late Nineteenth Century* (New York: Oxford University, 1988), 63-108.

²⁷ Larry Irving, *Falling through the Net: A Survey of the “Have Nots” in Rural and Urban America* (U.S. Department of Commerce, National Telecommunications and Information Administration, 1995). Available at: <http://www.ntia.doc.gov/ntiahome/fallingthru.html>.

²⁸ Jonathan Sterne, “The Computer Race Goes to Class: How Computers in School Helped Shape the Racial Topography of the Internet,” in *Race in Cyberspace*, eds. Beth E. Kolko, Lisa Nakamura, and Gilbert B. Rodman (New York: Routledge, 2000), 207. Apple also set its sights on “the disabled,” and “female students studying math and science,” the same groups virtual university promoters around the US saw as its potential market. Washington state policymakers, however, did not focus on these groups.

²⁹ See “Mission,” http://www.wgu.edu/wgu/about/vision_history.html.

³⁰ 2020 Commission, “Learning for Life.”

³¹ Ibid.

³² Noble, *Digital Diploma Mills*.

³³ As Noble points out, the one unambiguous conclusion of a century of instructional research is that quality education depends on low teacher-student ratio and high student-teacher interaction.

³⁴ WGA Virtual University Design Team, “Draft, Western Governors University.”

³⁵ Loh, “The Future of Higher Education.”

³⁶ Noble, *Digital Diploma Mills*, 57.

³⁷ U.S. Department of Education, Office of Postsecondary Education, Policy, Planning and Innovation, Report to Congress on the Distance Education Demonstration Programs, (Washington, D.C., 2001).

³⁸ In 1992 Congress amended the HEA to define an academic year to include a minimum number of credit hours and a minimum length of instructional time (30 weeks). For programs with nonstandard terms, the Department of Education defined a week of instructional time as any week in which at least twelve hours of instruction, examination, or preparation is offered.

³⁹ U.S. Department of Education, Office of Postsecondary Education, Student Financial Assistance and Nontraditional Educational Programs (Including the “12-Hour Rule”): A Report to Congress (July 2001). Available at: <http://www.ed.gov/offices/OPE/News/12HourRuleReport.html>.

⁴⁰ Molly Corbett Broad, “Strategic Partnerships,” in *Reinventing the University*, 113.

⁴¹ For a concise analysis of the computer industry’s reliance on government funding, see Kenneth Flamm, *Creating the Computer: Government, Industry, and High Technology* (Washington, D.C.: The Brookings Institution, 1988). For analysis of government support for virtual university initiatives, see Noble, *Digital Diploma Mills*, especially chapter 6.

⁴² WGA Virtual University Design Team, “Draft, Western Governors University.”

⁴³ WGA Virtual Design Team, “A Prospectus.”

⁴⁴ Locke, “Remarks to Washington Scholars.”

⁴⁵ WGA Virtual Design Team, “A Prospectus.”

⁴⁶ Loh, “The Future of Higher Education.”

⁴⁷ Shrugging their shoulders at the paradox, one 2020 advisor argues, “While it is not yet clear how to ‘fund a competency,’ the focus of finance will shift from the “input” to the “outcome” side of the equation, as state financing is restructured to fit more closely with the postsecondary reformation.” Chance, “Post-Secondary Education Trends.”

⁴⁸ Loh, “The Future of Higher Education.”

⁴⁹ According to Williams, “pure” technological determinism views technology as directly effecting social change, while the softer view, what he calls the theory of “symptomatic technology” treats technology as a symptom of or material for new ways of life. See Raymond Williams, *Television: Technology and Cultural Form* (Hanover, NH: Wesleyan University Press, 1992) 3-8.

⁵⁰ For discussion of the ways in which technological determinism helped legitimize the deskilling of machinists, see David Noble, *Forces of Production: A Social History of Industrial Automation* (New York: Oxford University, 1984).

⁵¹ Loh, “Rembe Endowed Lecture.” Some quoted material is paraphrased.

⁵² Bernard et al., *Reinventing the University*, xviii.

⁵³ Don Peppers and Marsha Rogers, “The Business End of the One-to-One Future in Learning and Credentialing” in *Reinventing the University*, 67.

⁵⁴ Chance argues digitalized “asynchronous learning” will cut costs, foster public/private collaboration, and help reach new markets. Chance, “Post-Secondary Education Trends.”

⁵⁵ Here, 2020 argues that “asynchronous learning...has the potential to reduce the need for new buildings...[and] to lower the unit costs of education” and can make education more affordable and accessible, particularly for adults and rural residents. 2020 Commission, “Learning for Life.”

- ⁵⁶ U.S. Department of Education, NCES, “Instructional Faculty and Staff in Higher Education Institutions: Fall 1987 and Fall 1992” (August 1997). Available at: <http://nces.ed.gov/pubs97/97470.html>.
- ⁵⁷ U.S. Department of Education, NCES, Part-Time Instructional Faculty and Staff, National Study of Postsecondary Faculty (1993). Available at: <http://nces.ed.gov/pubs2000/coe2000/section5/indicator57.html>.
- ⁵⁸ U.S. Department of Education, NCES, Part-Time Instructional Faculty and Staff, National Study of Postsecondary Faculty (1999). Available at: <http://nces.ed.gov/pubs2002/digest2001/tables/dt232.asp>; Linda Ray Pratt, “Disposable Faculty: Part-time Exploitation as Management Strategy,” in *Will Teach for Food: Academic Labor in Crisis*, ed. Cary Nelson (Minneapolis: Minnesota, 1997) 264-277.
- ⁵⁹ In October 2001, the University of Washington employed 2948 tenure-track faculty: 1,529 were tenured and 1,419 were in the pipeline. The UW employed 782 “non-ladder” or non-tenure track faculty, 384 “temporary” teaching faculty, and 1500 graduate student teaching assistants. “Non-ladder” (non-tenure track) faculty include lectures, teaching associates, and artists in residence; the university does not count them as “temporary” although their continued employment requires continual renewal. “Temporary” faculty include faculty who hold positions at other universities and those who are on track for a tenure track position (i.e., they have not yet completed the requirements for the position). See University of Washington Workforce Profile-Total University, available at: <http://www.washington.edu/admin/eoo/AAReports.html>.
- ⁶⁰ The Graduate Student Employee Action Coalition (GSEAC/UAW) routinely quotes this figure, which they obtained from UW’s Office of Institutional Studies. The Office declined to give a figure for this paper. Even excluding graduate student assistants, tenured faculty are still a minority, accounting for 37% of UW’s teaching workforce.
- ⁶¹ At UW, women also hold 42% of the 384 “temporary positions” that include visiting faculty with positions at other universities.
- ⁶² Thomas R. Donnelly, Jr., Jerry Macarthur Hultin, and Stuart H. Rakoff, “The Revolution in Health Care and a Prognosis for Higher Education,” in *Reinventing the University*, 69-98.
- ⁶³ “Academic Freedom and Tenure: Bennington College,” *Academe* (March/April, 1995), available at: <http://www.aaup.org/Com-a/Institutions/cenben1.htm>; “Bennington College: A Supplementary Report on a Censured Administration,” *Academe* (January/ February, 1998), available at: <http://www.aaup.org/Com-a/Institutions/Cenben.htm#back2>; Jim Martyka, “Tenure Armistice May Be at Hand,” *The Minnesota Daily* (June 5, 1997), available at: <http://www.mndaily.com/daily/1997/06/05/news/tenure/>.
- ⁶⁴ Martyka, “Tenure Armistice May Be at Hand.”
- ⁶⁵ Open Letter to Governor Gary Locke and the 2020 Commission on the Future of Higher Education, available at: <http://staff.washington.edu/uwaaup/2020.htm>.
- ⁶⁶ The notion that graduate students are apprentices is pure fallacy, as apprentices’ wages typically rise with their experience, approaching that of a journeyman—the equivalent of a professor in the skilled trades. Stephen Watt, “On Apprentices and Company Towns,” in *Will Teach for Food: Academic Labor in Crisis*, ed. Carey Nelson (Minneapolis: University of Minnesota, 1997), 238-239. Linda Ray Pratt estimates that 90% of new PhDs in English will not enter tenure track positions. Linda Ray Pratt, “Disposable Faculty: Part-time Exploitation as Management Strategy,” in *Will Teach for Food: Academic Labor in Crisis*, 264-277.
- ⁶⁷ Larin McLaughlin Organizing for Change: GSEAC/UAW. *Workplace: A Journal for Academic Labor* 7 (May 2001).