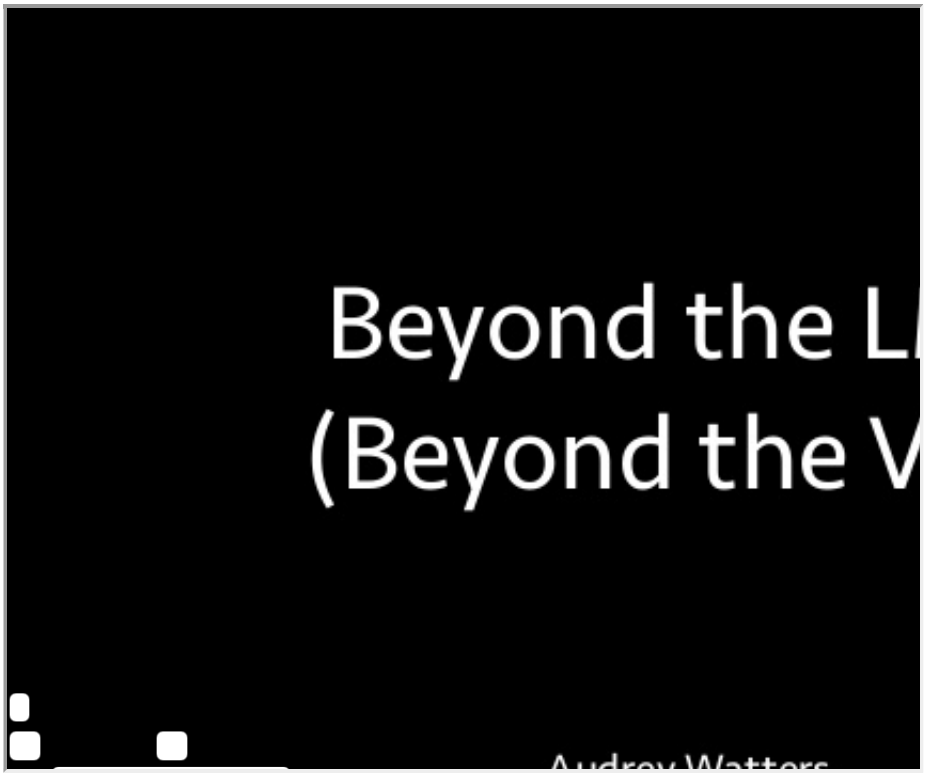
Beyond the LMS

Here are the notes and the slides from my talk today at Newcastle University. Thanks to everyone at NUTELA, particularly Suzanne Hardy, for sponsoring my trip up north.



Beyond the LMS (Beyond the VLE)

I gave a keynote on Wednesday at ALT about "Ed-tech's Monsters" in which I was reminded by the audience that some of the stories I tell about ed-tech tend to be very American stories. (Even though I cited Roald Dahl and Lord Byron and Mary Shelley and Bruno Latour.) But duly noted. And quite true. I find myself following far too closely for my own mental health, the stories out of Silicon Valley.

So as I looked through my notes last night about what I'd planned to talk about today, I realized that I'd probably done it again: I'd prepared a talk that was really about my experiences with American higher education and my experiences with American ed-tech.

So I want to say to you here at the outset of my talk how I responded to a question at ALT: I worry that other countries are importing American education policies — in the name of austerity and efficiency. I worry that the US, particularly Silicon Valley, is exporting its stories alongside its technologies, to the rest of the world as well. It isn't quite cultural imperialism, although I do think that's a part of it we shouldn't ignore. Computing programming, despite the gesture to "programming languages," is done in English after all. I think we're witnessing here a new sort of imperialism — at the level of technology, at the level of infrastructure.

Education has, of course, always been a part of the imperial endeavor. And now, I think, we should talk about how ed-tech might be the newest form of that. Form. Content. Infrastructure. Ideology.

That's not what I planned to talk about today. But it's an important subtext. And it's something I hope we can talk about during the Q&A. I'm quite interested in how and if MOOCs built by and built in the UK, for example, can be a strange sort of resistance to this imperialism.

What I'd like to talk about specifically is how we can move beyond the MOOC, beyond the VLE, "Beyond the LMS"...

The Learning Management System. The LMS. Or in the UK, the VLE. The Virtual Learning Environment.

Even though the latter sounds much less foreboding and controlling than the former, I confess: it makes no difference. I am not a fan.

As a technology writer and observer of the (fairly) thriving education technology startup "scene," one of the things I find both fascinating and frustrating is the number of young education technology entrepreneurs who decide to work in ed-tech because they were, as college students (graduates or undergraduates), frustrated with the LMS.

Again and again and again, I hear "Blackboard sucks." It's like the one punchline a comedian can work into any routine: you say something critical about Blackboard and everyone cheers and laughs until they cry.

And I don't disagree. "Blackboard sucks."

But the solution then, for many of these entrepreneurs, is to build the same thing, just with a nicer, more modern user interface. "It's like Blackboard," I hear them say, but with the blue colors we now associate with Facebook. "It's like Blackboard…" but with a news feed. "It's like Blackboard…" but with responsive design or with a mobile app. "It's like Blackboard…" but you don't have to have permission from your IT department. "It's like Blackboard…" but it's free.

Blackboard, you'll often here these entrepreneurs say, is "ripe for disruption." The LMS (VLE… Sorry… I'm going to keep repeating LMS because I'm an American. And because it sounds more ominous) The LMS market is huge: several billion dollars a year are spent on these systems. Once sold just to universities, the LMS is now used in corporate learning and it's increasing a tool in elementary and secondary education; these companies see a huge potential market in the developing world as well.

And with such rampant dissatisfaction with the market leader — with so much bile over Blackboard — it's not that surprising that investors and entrepreneurs alike are keen to try to get a piece of that pie.

I can think of no other company in education — not even Pearson — that elicits as much hatred as Blackboard. Almost across the board: from students, from teachers, from administrators. But rather than

looking for or building towards a better Blackboard, or more generally towards a better VLE, I want us to ask why we use these technologies in the first place.

This is an important question, I think, for us to consider about all technologies. I think we like the idea that new technologies mean new practices, new affordances. But that's not always or necessarily how technology works. The history of technology suggests otherwise. We often find ourselves adopting new tools that simply perform old tasks a wee bit better, a wee bit faster. Updating your iPhone to the latest model is easy. Shedding 150 years of cultural practices around telephony, for example, is a lot more challenging.

Technology doesn't simply enable new practices; it shapes, limits, steers our practices, and then — and this is key -- even when the technology changes, those practices often endure. Now, with computers, these practices become "hard coded." They become part of the infrastructure.

I think the VLE is a wonderfully terrible example of that.

The learning management system has shaped a generation's view of education technology, and I'd contend, shaped it for the worst. It has shaped what many people think ed-tech looks like, how it works, whose needs it suits, what it can do, and why it would do so. The learning management system reflects the technological desires of administrators — it's right there in the phrase. "Management." It does not reflect the needs of teachers and learners.

I am biased.

I started teaching, as a graduate student at the University of Oregon, in 1999. At the time, the university gave all students and faculty a web space: www dot uoregon dot edu backspace tilde your username. I was new to the Web (we all were, I suppose). I learned a little HTML from a friend so that I could post the syllabi, handouts, and notes to the Web. Thanks to the Internet Archive, some of these have been preserved, but I'm not going to share because OMG, the font.

I thought at the time — naively — that students would appreciate online accessibility to the materials. There'd be no more "Can I get another copy of the syllabus. I lost mine." But I found the students still asked me for printed copies of the materials, even though I assured them that it was all on the Web.

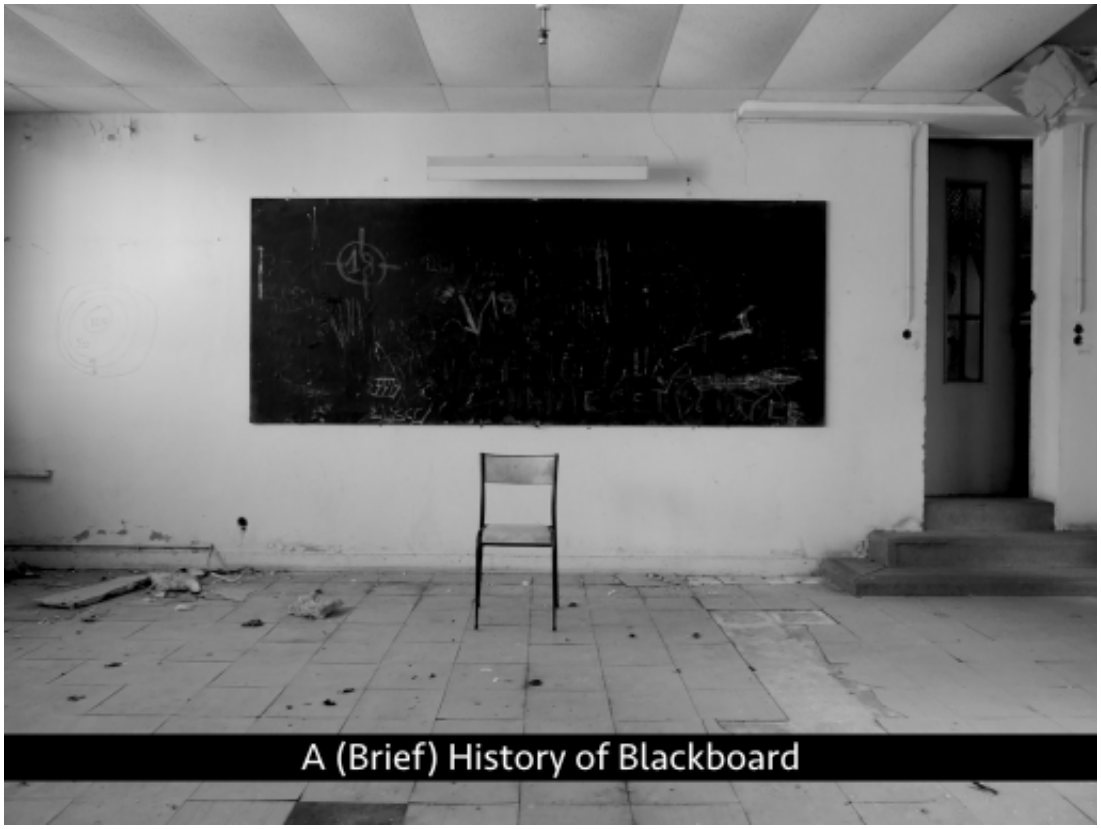
I also posted my stuff to the Web too because, as someone new to teaching, I recognized that I relied a lot on my peers to help me think through what exactly I wanted my course to do. (I taught introduction to college writing initially.) I learned a lot by working with more experienced graduate students and instructors, looking at how they organized their courses, how they structured readings, assignments, and assessments. It seemed worthwhile to post all of this on the Web so that anyone — not just my peers in the Composition Department — could benefit.

But that same year I started teaching — 1999 — the University of Oregon adopted Blackboard. And quickly we heard instruction from above that were were to post our course materials in Blackboard. Syllabi. Handouts. Readings. Quizzes. Discussion forums. All to take place behind the wall of the LMS. I don't recall how much of this was mandate and how much of this was "encouragement" — as if that makes a difference to graduate students whose livelihood and tuition remission are reliant on following orders.

But it stuck with me: a distaste about who exactly the LMS was meant to serve.

After all, at the end of each class, students would lose access to the materials — could lose, I suppose. there are some administrative controls to extend it. Anything they'd written in the forums, for example, any interactions they'd had through the messaging system: gone. And when I left the university, I lost access to all the materials that I'd posted there. My syllabi, my handouts, the rosters of my students. Gone.

We call those administrative controls "privileges." I think that speaks volumes. Who has privilege, who has power in the design of our education technologies?



Some history:

Blackboard was founded in 1997 by Michael Chasen and Matthew Pittinsky — both of whom are still involved in education technology today. They were, at first, consultants for the IMS Global Learning Consortium. They merged with CourseInfo in 1998, a course management system spun out of Cornell University, founded by Daniel Cane and Stephen Gilfus. Gilfus remains an education technology consultant. Cane has now moved on to "modernizing medicine."

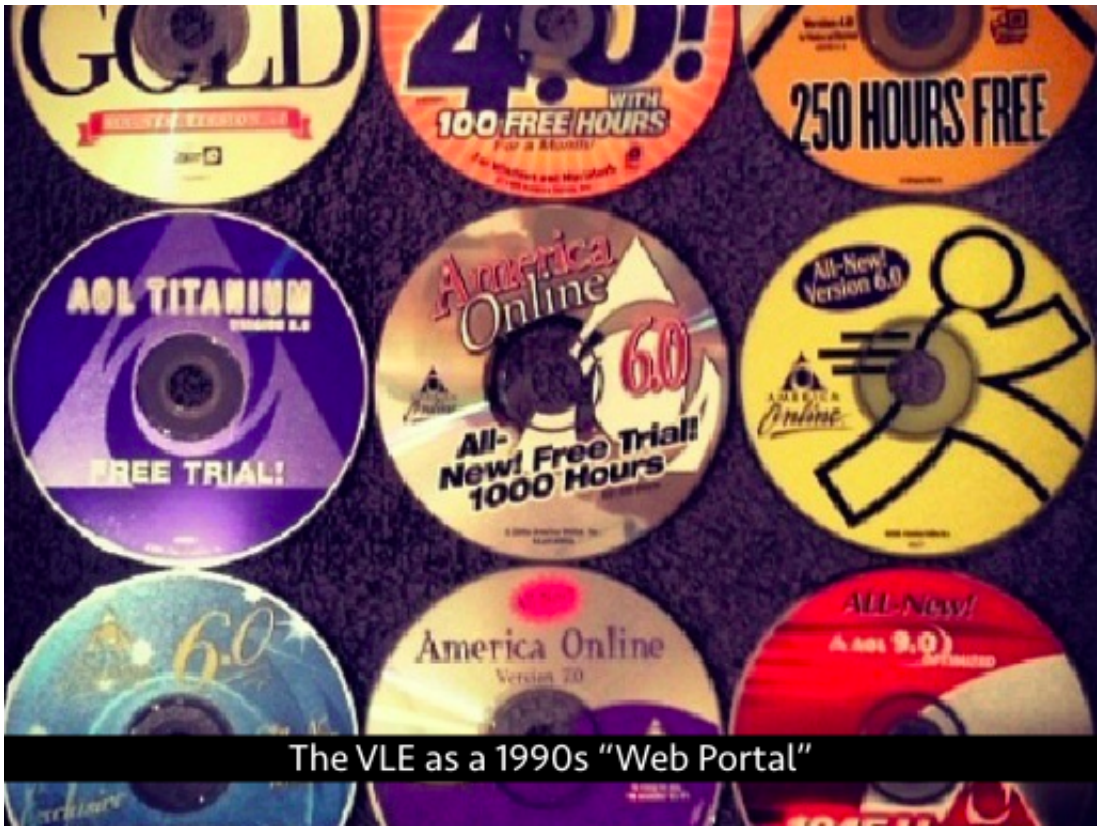
The new company Blackboard made a profit its first year. That is noteworthy. I don't think there are too many ed-tech startups that could boast that today.

While there are many examples of course management tools that predate Blackboard and there are examples of Internet-connected learning environments that predate Blackboard, the company was quickly able to gain press like this, from the *Washington Post* in 1999:

"Blackboard Chalks Up a Breakthrough; Its Educational Software Lets Colleges Put Classes on the Internet."

So why, if there were others, if there were earlier examples, did Blackboard get so much attention and so quickly so much market share? In part: timing.

Blackboard came onto the scene in the midst of the Dot Com bubble and burst of the late 1990s, where there was an incredible influx of investment into all sorts of online endeavors. Blackboard raised investment from the likes of Pearson, Dell, and AOL. Blackboard went public in 2004. In July 2006 it received the patent for "Internet-based education support system and methods" and the same day it filed a patent infringement lawsuit against its competitor Desire2Learn, a case that was eventually settled in 2009 after the US Patent Office revoked its patent claims. Blackboard, its reputation severely damaged in education technology circles by this patent fight, went private; it was acquired by a private equity firm in 2011. 17 years later, Blackboard is still here, the company one of the few remaining survivors in education technology from the Dot Com period.



The Dot Com and AOL references are important. Because I think it points very much to the technology and business interests that drove Blackboard, and more broadly, the learning management system as we've inherited it today.

The LMS was — is — designed as an Internet portal to the student information system, and much like the old portals of the Dot Com era, much like AOL for example, it cautions you when you try to venture outside of it. " re you sure you want to leave AOL?" "Are you sure you want to leave the VLE?" "Aren't you scared to be on the Web?" "There are strangers and strange ideas out there. Stay within the LMS! Stay within AOL!"

You can access these services through your web browser but they are not really "of" the web.

I can't really put all the blame here on the shoulders of Blackboard or the technology sector. They sold a product, but schools bought it. And they bought it because these systems matched some of the very traditional visions of how education worked.

How education worked offline translated into how courses would work online. What a course looked like. How a course, and the knowledge that was generated and shared therein, began and ended in conjunction with the academic calendar. How each course is a separate entity — one instructor and a roster — hermetically sealed in a walled off online space, much like a walled off classroom.

When I say that the learning management system worked like AOL or other early Internet portals it is also because, for the user, the experience was about access to course-related information through the browser. But on the backend, the LMS connected to the school's student information system. The student information system did not offer a way to open student information, course information to the Internet. It was a closed, proprietary tool.

It wasn't about learning. It was about administration. Course enrollment. Scheduling. Grades.

The learning management system built a layer on top of that. Despite all the bells and whistles that have been added since — in Blackboard's case, for example, the acquisition of WebCT and the ability to do video conferencing — the learning management system remains a way to offload the administrative needs of the student information system — roster, grades, attendance for each individual class — to an interface, accessible through the web, that students and faculty can use.

One of my great ed-tech fears: seeing MOOCs, hailed as the "big new thing" in ed-tech, build their online classes on technologies that look like the LMS. That is: a student signs up for a course. A course that has a beginning date and an end date. Despite the adjective "open," the course is behind a wall. Everything is meant to take place therein. At the end of the course, the student loses access to the course, and to any of the content or data they've created. Indeed, the latter is often signed away as part of the Terms of Service. There is one instructor. Maybe two. Maybe some course assistants. They grade. They monitor the forums. The instructors are the center. The content is the center.

The learner is not the center.

The Web, of course, does not work this way.

The infrastructure of the Web is (was — is ideally) open. It's built upon a series of open source technologies. Its infrastructure and ethos are open. Open and participatory. The Web allows contributions, ostensibly, from anyone: the read-write Web. You can point your Web browser to a particular site, and through hyperlinks, we can move through a series of related information and citations. You can build your own site and link your own content to the Web.

I don't think we can overstate how much this has the power to reshape how we teach and learn, and how information, ideas, and people can be connected. The technologies — through links and APIs — enable this, and as such the Web and Internet technologies have enabled a networked learning. This gives us access to an incredible amount of information, yes. But more importantly, the Web enables access to community, to people from whom and with whom we can learn.

If we think about new technologies like the Web as facilitating learning networks and as learners and learning communities as nodes on those networks, we can see a very different "shape," if you will, to education technology than what the learning management system enables.

The Web versus a Wall. Distribution rather than seclusion. Reciprocity rather than recitation.

Nodes and networks need not be forcibly centered around the instructor, for starters. Learners — and we are all learners, not simply those who are formally enrolled in classes — can have say in what they create, how they create it, where they share it, how long they retain it, what it looks like.

They can do this, of course, if they own their own space, their own domain on the Web.

One of the most innovative projects in ed-tech — one of my favorites; again, I am biased — is the Domain of One's Own initiative out of the University of Mary Washington.

UMW gives faculty and students their own Web domain. Not simply, as the University of Oregon once gave me, a web space at the university dot edu slash tilde student name. Their own domain. The university helps them register the domain and hosts it while the students at at the school. Then, when they leave, they can take it with them. It is theirs.

The initiative works alongside an extensive campus-wide blogging program. Many professors maintain their own blogs and assign blogs and other digital projects as part of students' coursework. So instead of writing a term paper than no one but the professor ever sees, the students can display their work on the Web, in public. They can receive feedback from their peers, indeed from the entire Web. Using RSS feeds and tagging, instructors are able to pull in just those blog posts that are related to a particular class into a class website. The students' content can live on their own site and be syndicated to a class hub.

I should note, to assuage any fears about students' privacy, that they are able to run their domains under pseudonyms. Some do.

But many use the opportunity to start building a rich professional portfolio. By owning their own domains, students can learn and demonstrate skills — very desirable skills — in HTML, Web design, and Wordpress. They can come to recognize the importance of digital identity — what it means to control and shape it, what it means to own your data.

This question of "owning your data" is incredibly important. When I talk about "owning your data" in terms of education, I often talk about the manilla envelope in which my mum saved all my old, analog school stuff. Drawings, stories, report cards, awards. Because of the bounded design of some of the technologies we have adopted, we don't have an opportunity to create a digital equivalent. We lose access to our data. Someone else controls the data. Students are mandated to use certain products — that is, to put the data it, but then find that they cannot get it out.

This lock-in and lockdown is something that the learning management system does really well.

It’s something that other technologies now do quite well too.

Wired Magazine tried to argue back in 2010, “The Web is Dead.” "As much as we love the open, unfettered Web,” wrote then editor Chris Anderson, "we’re abandoning it for simpler, sleeker services that just work. ...Over the past few years, one of the most important shifts in the digital world has been the move from the wide-open Web to semiclosed platforms that use the Internet for transport but not the browser for display.”

Around the same time — perhaps not so coincidentally — we started to hear a lot about the potential for “big data,” how analytics and algorithms (often extracted from and build on our data) were going to reshape every industry, every field — including education. Most major LMSes, for example, now sell schools analytics packages, using students’ interactions with the software to measure and predict things like course completion and retention.

I believe reports of the Web’s death, to paraphrase Mark Twain, are greatly exaggerated. Indeed, despite the interests of many technology companies in funneling our activities into applications that are closed off from the Web — without URLs, without syndication, without data portability, often without privacy protections where all our activities are set to be data-mined — the Web remains. It remains a site of great hope and great promise. It remains easily readable, writable, and hackable. And despite the efforts of the Facebooks and the Blackboards of the world, there’s a push for a return to the Web, the indie Web, many of us fell in love with when we first dialed up to it, when we first escaped AOL.

Today the content we create — we all create, but particularly learners create — is important, even critical I’d suggest to the development of our identities, the protection of our well-being. It is not secure in the hands of startups or big corporations — these companies go away. It is not secure in the hands of schools. Schools are not in the business of long term data storage, and they increasingly outsource their IT to those very startups and big corporations.

We must become the holders of our own data, but not so that we bury all of it away from view. We will want to share it with others on our own terms.

We in education can reclaim the Web and more broadly ed-tech for teaching and learning. But we must reclaim control of the data, content, and knowledge we create. We are not resources to be mined. Learners do not enter our schools and in our libraries to become products for the textbook industry and the testing industry and the technology industry and the VLE industry and the MOOC industry — the ed-tech industry — to profit from.

Ed-tech must be not become an extraction effort, and it increasingly is. The future, I think we'll find, will be a reclamation project. Ed-tech must not be about building digital walls around students and content and courses. We have, thanks to the Web, an opportunity to build connections, build networks, not walls.

Let's move beyond the LMS, back to and forward to an independent Web and let's help our students take full advantage of it.

Written by

Audrey Watters

Published 05 Sep 2014