

# The Future of Ed Tech in Higher Ed when Open Source is a Radical Solution

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Open Aperreo 2019



Yesterday, I had the wonderful opportunity to be a keynote speaker at the [Open Aperreo 2019](#) conference. This is the first time a keynote I've done has been recorded so I'm posting the [recording](#) as well as the text script (even though I diverged from it on occasion). I have nothing but huge gratitude to all the wonderful organizers and people I met at the conference in LA and I sincerely hope that our complementary worlds of open education and Aperreo will overlap more in our future activities.

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It is a great pleasure to be here today, not only because I am a huge admirer of [Aperreo](#) but also because I understand what it is to have this privilege of being here as a keynote. This is my first time at Aperreo, having only discovered its existence this year, so I thought it would be helpful to know a few things about me.

I am an accidental technologist; a mom of a teen and preteens (so pray for me for the next 5 years); a mountain biker (but as I recently discovered watching some video of me, I'm really slow); a former ultimate frisbee player; a romance novel fan (and I thank the people at [Smart Bitches Trashy Women](#) for not making me feel bad about that); sometimes painter, and a Vancouverite.

I am also a proud member of the [#femedtech community](#) who are doing amazing work surfacing and bringing critical feminist perspectives to educational technology.

This year I'm working with [BCcampus](#) as a researcher in Open Education Practices and who have been generously supporting not only research on how institutions are getting to open in our sector, but also the role of open ed tech in open education practices.

Open education practices is the umbrella term for teaching and learning activities that included creation, use, and reuse of open education resources such as open textbooks, open pedagogies and the sharing of teaching practices. **Open textbooks** are textbooks that have been funded, published, and licensed to be freely used, adapted, and distributed. **Open Educational Resources (OER)** are teaching, learning and research materials in any medium that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others. Open Education is part of a broader ecosystem of open (Open Education, yes, but also Open Access,

Open Science, Open Data, Open Source, Open Government). It's been such a delightful year working with BC campus and specifically the open textbook team and I'm so incredibly grateful for one of the highlights of my professional career.

I've spent the last 10 years in senior administration at the [Justice Institute of BC](#) where I am the Director of the [Centre for Teaching, Learning, & Innovation](#) and where I am responsible for the ed tech and innovation strategy.

Today, I'd like to talk about how open ed tech infrastructures need to be part of our institutions if we care about open education practices and ethical ed tech futures. I'm aware that I'm speaking to a room of IT specialists, educational technologists, administrators working with open technology and some of what I talk about today may already be old news to you, but I hope that it will underline the importance of the work that you are doing.

In BC it is customary for us to begin with a territorial acknowledgement and I would like to acknowledge that the land on which I work and live is the unceded territory of the Coast Salish Peoples, including the territories of the x̣m̄əθkwəȳəm (Musqueam), Skwxwú7mesh (Squamish), and Səl̓ílwətaʔ/Selilwitulh (Tsleil-Waututh) Nations.

Through the excellent resource [Nativeland.ca](#) I learned that the LA region is the traditional territory Gabrielino/Tongva (Tongva) peoples.

In looking to learn more about this indigenous past and present, I came across this website which describes a project that aims to map Indigenous Los Angeles through a storymapping project with youth, community leaders, and elders from indigenous communities throughout the city. It's a fascinating website and I urge you to dig into it.

Territorial acknowledgements provide us with the opportunity to reflect on our histories and the erasure of those histories. My work is at the intersection of ed tech, innovation, and open education and a couple of years ago I became interested in these histories, in particular the time period of the 1960s to 1980s. I guess you could say that I'm at that age where new things sound like old things and I wanted to check my assumptions. This took me on a fascinating (but by no means comprehensive) journey into old academic journal articles and I'll share a few gems with you.

a. *“institutions are like blobs of jello: they absorb attempts to change their shape”*. My personal favourite comes from an article called *Radical Innovation in a Conventional Framework: Problems and Prospects*. 1977

b. Next, we have the familiar trope of disruption, 1960s style: *“there is a chorus of exhortations – articles beginning ‘Higher Education should’ or ‘must’”*. This one is from 1967 – [Innovation: Processes, Practice and Research](#).38.

c. This last one is most relevant for the topic of the presentation today: *“The development of new technology for education raises the question of control. Large corporations have entered the education field. They view the reluctance of some educators to commit themselves to the new media as a sign of fear of change.”* This one is from an article called *Technology and Education: Who Controls*. 1970

Of course, finding so many familiar tropes in the literature of the 60s and 70s left me with questions. How do we move towards new ideas without using the past as a check and balance? I should point out that [Audrey Watters](#) has for a long time been an important critic and in 2013 was

lamenting the ignorance of ed tech history by venture capitalists and entrepreneurs, invoking the image of [zombie ideas that can't be slayed unless we pay attention to the past](#). *“But then again, when we don't pay attention to the past, we can't ever quite slay the zombie ideas. We build and move forward quite blindly”*.

When I called this presentation “**The Future of Ed Tech in Higher Education When Open Source is a Radical Solution**”, I'll admit it was a bit tongue in cheek. For me, the biggest innovation to happen to higher education isn't ed tech – it's the creation of the open university system in the late 60s and 70s. If you are familiar with the UK Open University you may know that Canada created three open universities built on the OU UK model between 1970 and 1978, and I'll share with you the goals behind one of them, [TÉLUQ](#), Canada's French open university. These were articulated in 1970:

- a. — Lifelong learning
- b. — Real accessibility for all.
- c. — Social development.
- d. — Needs of working population.
- e. — Greater mobility of knowledge.
- f. — Wide use of new media and techniques.
- g. — Rethinking the learning situation.
- h. — Taking account of people's prior life experiences.
- i. — Reduction of unit costs

You can see that this is an incredible list, and it took advantage of a new structure, the model of the OU UK, to shift towards a future that aligned with the social justice ambitions of its time, and one of those ambitions – accessibility – meant the open university was available for everybody. Today, [70% of enrolments at TÉLUQ are women](#) and approximately 50% would not be attending university if TÉLUQ wasn't an option.

I'll also mention here, that currently of the 10 most enrolled universities in the world, 4 of them are open universities, with Indira Gandhi open university topping the number one spot at 3 million students. **(NB: in the video recording, you can see that I say it has 35 million. This was from an inaccurate source – In the video I question this number because that's equivalent of Canada's entire population. 2 other sources put it at 3.5-4 million, so 35 million is a huge error and I'm correcting it here.)** So the impact of this new structure, in terms of accessibility for all, is profound.

# Ed Tech Absurdities

The importance of new, or alternate structures guided by social justice ambitions and frameworks is the point of my presentation today, but first I'd like to share some stories about current realities that I call ed tech absurdities. As the person responsible for the ed tech strategy and the designated business owner of several ed tech tools I have the dubious pleasure of being the primary contact for our vendors. About 2 years ago one of our most boring but nonetheless important ed tech tools was being upgraded and the vendor wanted us to move to their full featured cloud version from our self hosted version. BC student data privacy laws used to be quite strict and moving to a US cloud wasn't an option. But as you can see from this email excerpt, the core features we needed would no longer be included in the self-hosted version, unless of course we wanted to sponsor its development.

*I have reviewed your XYZ requirements with our leadership team. Unfortunately the cost to add XYZ to the On Site platform is estimated to be upwards of \$120,000. Therefore the decision has been made to not offer it as a feature for On Site unless someone is willing to sponsor the development. There is a chance a government agency might sponsor, but it is not certain and not in the near future.*

This was my response:

*I should let you know that **we have a robust open source ed tech software infrastructure within our province that is currently piloting an open source alternative to XYZ.** I have to be frank and share that even if we had the 120k, I would likely invest that money in providing an open source solution to our consortium of 25 post secondary institutions rather than build out your product at our expense which is hardly a value proposition for a client.*

I'll get back to the robust open source ed tech infrastructure later but first I'd like to share another absurdity. My institution uses a piece of software for our health programs that I'll call ABC software. ABC software costs about 30k/year at about 100\$ per student. The last time I queried about it, there was very little user satisfaction with the tool but there also weren't any other viable options. Incidentally, this tool is used in the same kind of program across at least 10 other colleges and unis in Canada. Is it naïve to think that the 10 or more institutions could pool together to create a more satisfactory – and perhaps open source – tool? The inevitable response to this is it isn't the job of institutions to get into the software game, they aren't equipped for it, they aren't software companies. But of course, this simply isn't true WebCT being the most famous Canadian example, having been developed by a UBC faculty member in the late 90s. In fact, my own, very small, low resource institution created a fantastic piece of software but this leads me to my third ed tech absurdity.

In 2010 we began creating [Praxis, an online system for synchronous scenario based learning](#), which is primary learning methodology that we use at JIBC. The last time I did a search it was still the only one of its kind in the world and we created it because nothing else was out there, not because we wanted to get into the software game.

Here's a sidebar: I'm regularly courted by ed tech vendors and have told them repeatedly that we would love to use their products if they would only create the ones that we need. The last time an LMS vendor visited, I even took them on a tour of our experiential learning spaces, explained the kind of teaching and learning we do and the kinds of tools we needed, which incidentally, wasn't the eportfolio tool they were trying to sell us. Unfortunately, the next time they got in touch they wanted to tell us about the eportfolio tool again.

We created Praxis with public funds, mainly one large grant but we didn't make it open source and without getting into too much detail about why not, let me mention that I know of at least 2 other applications created for health programs by institutions that were created with public funds and nobody else in the public sector can use.

So when I came across this [recent article and quote by Chris Jones](#)... *“While many technologies arise in educational contexts, they are often developed and commercialised elsewhere and sold back to educational institutions as products.”*

...I was reminded of one of academia's biggest absurdities (any guesses?) – scholarly publishing:

To summarize, publicly funded researchers conduct research using public funds, write up this research and submit to academic publishers who then take their free labour and publish it, then sell it back to publicly funded academic libraries for exorbitant fees. It's astonishing to me that an entire sector of exceedingly smart people bought into this system and let it flourish as a status quo for years.

## Radical Open Source Futures

Of course, even powerful entities like academic publishing don't need to be our status quo. This is a good time to talk about the [Public Knowledge Project](#), which began in 1998 (another Vancouver/UBC project) as a move towards shifting the deeply unreciprocal world of academic publishing. The [Open Journal System \(OJS\)](#) was created in 1998 and more than 10k (mostly open) journals worldwide now take advantage of it, up from 400 in 2000. In 2003, the [Directory of Open Access Journals, or DOAJ](#), was created which I think signals that 5 years after the creation of OJS there was actually a need for a directory of open journals. PKP now has four open source tools that allow institutions to create an open source academic publishing infrastructure, and open access journals have absolutely had an impact and as a result academic publishers are actively changing their game.

A second example is [BCcampus Pressbooks service](#). In 2015, BCcampus began a province wide initiative aimed at creating a collection of open textbooks for students in BC post secondaries. [This collection](#) sits on a BCcampus hosted Pressbooks service, and if an institution like my own creates an open textbook they can have it added to the collection where it will be hosted. The collection is peer reviewed, curated and well known around the world. There are 276 books in the collection including toolkits and guides, and of these 60 have been funded by BCcampus. The impact of both the initiative and the service is huge. All 25 institutions have at least one textbook adoption, and since 2015 there's been more 10 million in student savings that would have gone to academic textbook publishers from student pockets. This is incredible if you consider how small BC is – a population of about 5 million, so it's clearly not California. The BCcampus Pressbooks service is also a great example of how an open source infrastructure that the entire sector can access can have an incredible impact. In order to understand this impact, you have to imagine what would have happened if the Pressbooks service didn't exist – I can imagine 2 such scenarios:

- Institutions would host their own textbooks, likely in their LMS where nobody outside of the course or institution would know they existed.
- Larger institutions with IT resources would set up their own Pressbooks service) but smaller institutions would never get their IT departments to agree.

It's important to see these two instances as examples of initiatives with significant impact in shifting paradigms in higher ed. Importantly, these initiatives sit on open source infrastructure that was supported with government funding and I think we often don't give as much attention to open source technology as an enabling factor for open initiatives. In fact, in the BCcampus Pressbooks example, by engaging with an existing open source product BCcampus programmers were able to contribute code back to Pressbooks to make it possible to become a suitable tool for open textbook publishing. This is an example of **educators driving the development of a technology to meet the needs of educators, instead of the needs of a corporation.**

It's also important to talk about this in the context of open education because increasingly I don't think you can have open or open education practices without open tech infrastructure.

As my colleague Jim Luke says – **“Open by license, closed by practice”**. This is a contentious point in open education, where for profit companies are creating value add products and services around OER, or open education resources such as open textbooks. Some proponents point out that this is helping students and higher ed can take advantage of the affordances of OER in a way that might not be possible were trying to figure it out on our own.

I think this is an important perspective to consider, but of course by now we know that ed tech vendors in general are in a different game, and it will be no surprise to anyone in this room that game is increasingly about student data. But I'm not sure this is well understood by decision makers at many institutions. So when I see [this graph](#) it raises some questions for me:

Why would they want student data? What are they doing with it? Why does everything seem to be about data? Does the value proposition for the student or institution of student learning analytics products balance with that of what the vendor gains? These are questions that I honestly couldn't answer in an informed way. So I asked my colleagues who are ed tech leaders at their institutions whether they could answer those questions, and of course they could because while I've been naively focussed on the affordances of technology for open education and teaching and learning they've been paying attention to the bigger picture.

First of all, we've seen the emergence of digital platforms whose business model is to grow and scale and monetise and profit infinitely from the data that is produced in these platforms. In a higher ed context, the merging of LinkedIn and Lynda to build [“a global marketplace for skills to run in parallel to, or instead of university degrees”](#) provides us with a glimpse of that future. In other words, an alternative credentialing platform that plays well into a narrative that higher ed isn't producing graduates that are job ready or have the skills that the market is demanding because we aren't nimble enough to keep up with the fast changing world of digital.

This is laid out quite nicely [in an article by Ben Williamson](#) about the **unbundling of higher ed**. Simply put, when higher ed is unbundled it creates a nice space for the platform university where students are the raw material for monetisation. Importantly, as Williamson points out, higher ed has begun moving inside the platform:

*Significant HE spending is now flowing from universities to platform providers, along with data they can use to their own advantage as market actors in an emerging sub-sector of platform capitalism. Unless universities act collectively in the sector's own interests, they may find themselves positioned as educational product providers and data collection partners for the new HE platform industry.*

And when a [plagiarism detection software like Turnitin is sold for over a billion](#) dollars it signals just how much this data extraction is worth. Higher ed gets “personalized learning” and “helps” instructors be more efficient in their assessment practices, but what does Advance, the privately held media, communications, and technology company get from us? Is this an equal transaction?

This is a question I also have when I see the recent move of Amazon Web Services into Canada, bringing with it a whole array of ed tech companies, many of which sit on AWS, that were previously unable to operate in Canada due to our data privacy laws. Will AWS become the de facto infrastructure on which higher ed and government will sit? Should we be worried about that?

Canada is hardly a huge market (40 million people) but the [AWS Canada blog provides some hints of this ambition](#), bundling public sector, education and non-profit together, addressing the skills gap (that word again) through partnerships with Pearson VUE, and providing training to 200k government employees through its AWS DigiGov program.

When you consider that Canada’s current data privacy laws have not kept up with these new realities, this quote by Michael Kwet paints a disturbing picture

*: ... the overly capacious term ‘Big Data’ has been used to gloss over surveillance activity and power dynamics. Applied to humans, Big Data is little more than a euphemism for surveillance.* <https://journals.sagepub.com/doi/10.1177/0306396818823172>

<cute puppy pause>

Ok, let’s pause here for a second and take it back to the level of an administrator at a small, publicly funded institution. There is no doubt that AWS and cloud services make my life a lot easier, and probably that of our IT department as well. **But I wonder about the value of what is being sold to us, vs the value of what is being extracted.** And while we are promised learning analytics capabilities, personalized learning, student dashboards, I have to ask some practical questions.

- Who has the resources to take advantage of this? We have maybe 2 people in our institution whose job involves institutional data analysis and they are really busy.
- Do students really care about these things? Our students work 10-30 hours a week while taking full time studies. Our data shows that they place the value of their education on experiential learning opportunities and their instructors.
- How much of our institutional budgets should be going to tech in a race to stay innovative and produce job ready graduates? Should we spend more money on ed tech that provide personalized learning or should we spend it on mental health or other support for students?
- How do we feel about our public dollars going to fund enormous marketing budgets to sell us their products? *“Instructure spent \$135M last year on marketing and sales. They took this money from the pockets of higher education and used it to convince more schools to give them more money.”* (link) <https://www.dr-chuck.com/csev-blog/2019/04/why-do-people-like-sakai-given-the-market-share/>

But aside from the data extraction implications, which is increasingly a concern for me, there are other reasons why I think we need to pay more attention to including open source ed tech as part of our ed tech infrastructures.

When the new acronym [NGDLE, or Next Generation Digital Learning Environment dropped](#) I struggled to find how this particular technology-mediated vision of the future was going to be important to my institution. As Anne Marie Scott pointed out [in her excellent critique on her blog](#) it “**fetishes technology to the exclusion of broader thinking about the digital**. It is absolutely concerned only with what can be wired together at a technical level.”

At [JIBC](#) we had already expanded beyond an LMS- for-everything vision and had begun developing open courses in WordPress. We had our in-house [scenario based learning tool](#). And together, with 2 other colleagues Brian Lamb and Grant Potter, we had begun discussions that would lead to the OpenETC.

[Open ETC](#) stands for open ed tech collaborative or cooperative. It emerged out of a context that we were observing in our sector, namely:

- More than a decade of reduced public post-secondary funding.
- Have and have not institutions in terms of resources and IT/ed tech capacity
- The LMS/VLE was the dominant entity in terms of budget and approach. As a result, other options dwindle, as do ways of fostering thinking about teaching and learning.
- Lack of support for piloting open source tools in a context where institutional funding shrinking, control vested with institutions and vendors.
- Increasingly obvious that our online autonomy as organizations and individuals is under threat: we understood the importance of owning data, data sovereignty, recognising that we no longer own software but lease it.

As the name hints, OpenETC runs on contributions, not contracts. It's not a shared service, rather it's a shared contribution model inspired by cooperative principles and platform cooperativism.

This is what we think we are doing with the OpenETC:

- encourage technological autonomy and provide ways for students, faculty and institutions to own and control their own data.
- lower the barrier to participation on the [open web](#) for BC faculty and students.
- provide a more sustainable ed tech infrastructure to BC higher education that gives institutions more control over their tools. Institutions are currently at the mercy of vendor pricing, upgrade cycles, and exit strategies. This puts institutions at a certain degree of risk when there are changes to any of the variables beyond their control. Open-source approaches reduce the risk to institutions in this regard.
- assist BC faculty in evaluating and making informed pedagogical decisions around open-source teaching and learning applications.

So maybe this doesn't technically fit under the rubric of an NGDLE but it does address actual higher education realities that we face and are concerned about, while creating a new structure for moving forward. It looks beyond, as [Clint Lalonde points out in his critique of the NGDLE](#) “a vision of ed tech that is completely vendor driven”.

*My caution is if the only options we put in front of faculty to carry out one of the core functions of our institutions are commercially driven options, then we're not only missing out, but are locking ourselves in to **a vision of edtech that is completely vendor driven**. We are not putting all the edtech options on the table; options that often have much more involvement and development input from actual educators than many vendor solutions.*

It sees open source as an opportunity and a set of affordances that vendor ed tech can't provide which is something David Ackerman and [Ian Dolphin](#) argue for in their article in [Educause](#):

*By its nature an NGDLE is not something that can simply be purchased. Academic institutions need to own an NGDLE as it develops and shape it to their institutional context. Open-source software, with its rich affordances for innovation and range of support options, can play a significant role in this shaping. **Participation in a diverse community, coupled with the natural affordances for customization provided by open-source software, creates rich soil for innovation and problem solving.***

It's also a step towards what [Anne Marie Scott](#) calls [Pop Up Ed tech](#):

*"I'm increasingly interested in exploring the idea of an NGDLE which includes **a suite of small, simple, lightly managed tools that are easy for our academic colleagues and students to pop-up an instance of and use, but which by their very nature are designed to self-destruct.**"*

While our instance of Sandstorm doesn't have the self-destruct button, they are an example of what I like to call ed tech ikea – easy to pop up and use, light enough to not be overly complicated, good for a specific period of time and specific learning activity. It's not bloated, pretentious, expensive ed tech and importantly, it doesn't rely on a business model of monetising student data.

Importantly, Open ETC addresses a problem that smaller or lesser resourced institutions face: how do you shift from the supposed convenience of a vendor controlled ed tech infrastructure to an open source infrastructure? Simply put, it's only feasible if institutions collaborate and share in this endeavour – in our sector, it would be very difficult for an institution to do this alone.

But this is why it's so important for institutions to be aware of other options, like Apereo, like Reclaim and Domains of One Own, like OpenETC. And we also have to recognize that we still have some agency in creating this future, and if we need proof of that we should be sending our senior leaders in higher ed and government to learn more about ESUP Portail (which I think we desperately need to model in our province, but at the moment little known about how higher ed in France is very well organized in terms of open education, oer and open ed tech infrastructure).

Two weeks ago I was at a conference held at Simon Fraser University called [Digital Democracies](#). Safiya Noble – who famously wrote the book *Algorithms of Oppression* – spoke at this conference and [provoked us \(higher ed\) think about big tech as big tobacco](#), and pointed out that reducing the conversation about big tech as one of simply ethics ignored the bigger structural things around it. She encouraged us to think of our institutions as a check and balance to Big Tech, as a place to resist this future that others have pointed out does not have to be inevitable.

I was incredibly jazzed by this message, but unfortunately about a week later I came across this site – [mexapixels.cc](#) which provides examples of open gone wrong, specifically open data.

If you haven't seen this yet, it surfaces how two US university research teams collected photos of unconsenting and unaware students from cameras placed in public areas on campus to conduct research on facial recognition for the purposes of developing surveillance technologies.

*“The creation and distribution of the Duke MTMC illustrates an egregious prioritization of surveillance technologies over individual rights, where the simple act of going to class could implicate your biometric data in a surveillance training dataset, perhaps even used by foreign defense agencies against your own ethics, against your own political interests, or against universal human rights.”* [https://megapixels.cc/datasets/duke\\_mtmc/](https://megapixels.cc/datasets/duke_mtmc/)

This is incredibly egregious on many levels and it raises the question: **If unis are complicit actors, rather than a check and balance, who is the resistance?** [Is it Crossfit HQ?](#)

Is it programmers like this one who [created an algorithm to create make-up that tricks facial recognition?](#)

This is a great time to stop and share some examples of open practices enabled by open tech. There is a fairly strong undercurrent to OER and OEP that rests on a set of principles around access, equity, and sustainability and for the most part Creative Commons licenses are the mechanism used to declare the degree of openness. Given what we know now about big tech data extraction and the unequal relationship that they maintain with higher ed, it seems to me that engaging in open education practices on vendor driven infrastructures is not only incompatible with open education goals, but also constrains what is possible. I think there are good things that are happening that give me some hope.

This year I've turned my attention to the work of Laura Czerniewicz, Cheryl Hodgkinson- Williams and Henry Trotter at UCT in Cape Town. They've articulated a social justice framework for open that is a much needed grounding for our work, allowing a foundation from which to critique and a way of moving forward. Laura's [recent article in the University World News](#) really underlines the importance of this, and while she's writing about a South African context, she notes the need for policy and regulatory frameworks.

*A social justice framework must be reasserted if the inexorable pull towards profit-making is to be resisted as the supposed solution to educational ills. Nuanced and careful thought is needed for the determining of new policy and appropriate regulatory frameworks tuned to the rapidly changing context.*

I think we can celebrate and agree that Open Practices + Open Source Tech are a nice marriage. Given what we know now about big tech data extraction and the unequal relationship that they maintain with higher ed, it seems to me that engaging in open education practices on vendor driven infrastructures is not only incompatible with open education goals, but also constrains what is possible.

For example, OEP + Open tech allows us to explore alternative teaching and learning models, like the [faculty development model we created as part of the work](#) we did with the University of Guadalajara. We used a combo of open source tools and other popular tools to create a new model for faculty development, remixing and expanding on other open projects such as DS106 to create our own version of a learning platform that better met the needs of the project. I have to give a big shout out to [Alan Levine](#) who was the architect of this for us.

OEP and open tech allow us to engage in meaningful activities – there seems to be an explosion of really interesting wiki projects that are a nice convergence of open tools and open

pedagogy. Eg. [Whose Knowledge](#) and the work that the [Wikimedian in residence at the University of Edinburgh](#) is doing.

Some institutions are doing the right thing such as [Carnegie Mellon open sourcing its digital learning tools](#) for all of us to benefit from.

It's institutions like the University of Leeds and University of Edinburgh developing [creative commons licensed Ethical learning analytics policies](#) that make it so much easier for the rest of us to pick up and use.

Developments like [SPLOTs thanks to Alan Levine](#) that allow students to work in wordpress via a simple form with anonymity and untraceability, and there a good reasons why we need to consider that when encouraging students to work in open digital spaces. ([UNBC Biology 421](#) and [UDG Agora](#))

And the work that so many of you here are doing: [Open Cast at large scale](#) ELMS, Karuta.

## **Ethical Ed Tech**

So what can we do? I'd like to thank Amanda Coolidge at BCcampus for pointing out that critiques need next steps. There's a big *so what* if there's no action. Sites like [social cooling](#) and [mexapixels](#) do important work of creating awareness. But I'm looking towards a [liberating structure](#) called the 15% solution in order to help me focus on the things I can do, not spend all energy talking about the things I can't do. So here's my 15%:

I'm looking at the work of [Ethical Ed Tech](#) (Erin Glass and Nathan Schneider) and think they ask [some great questions](#) that could be used as a decision framework having conversations at my institution about ed tech:

*Where does power lie, and where are we expected to place our trust?*

*To whom is it accessible—for instance, in terms of usability and cost?*

*Does it lock us into closed, commercial systems or invite us into open communities?*

*Does it give us more control over the learning process, or does it cede that control?*

*Does it respect and protect our privacy appropriately?*

*Can we access, study, and modify the underlying code or design?*

*Who owns the infrastructure and our usage data? Does it produce private profit or public commons?*

This has encouraged me to think about how I will interface with vendors in the future and this is what I think is needed at my institution:

1. Institutional leadership needs to be educated/informed and care about this. I'm thinking about ways that I can do this work.
2. Ethical Ed tech policies and principles need to be up front and transparent.
3. Vendors shouldn't be allowed to pitch unless they can show that they meet the principles outlined in Paul Stacey's [How-to Guide for Vendor Participation in Open Education](#)

I will engage in a more systematic process to supporting open source tech and people who support our work with it. In keeping with a move towards open source infrastructure, I will structure my budget to allow for contributions to the open source communities and tech that we use.

Lastly, I look to the [#femedtech](#) community to surface important voices that don't get heard, in particular women, POC, and those from the periphery or the Global South and participate in lifting those voices. We still encounter manels, all male keynotes, and our ed tech spaces are incredibly white. And while we acknowledge this, we aren't doing enough to shift it. [Safiya Noble](#), [Caroline Criado-Perez](#) and others have exposed how the white, male dominated industry that is big tech hurts us all and it's important for all of us to participate in shifting towards a more equitable future. On this note I'd like to share this wall of gratitude for the wonderful femedtech allies who inspire me and who I learn from everyday.



## The End

I have walked you through examples of ed tech absurdities from the perspective of a public college administrator responsible for the academic innovation strategy. Together we dove into the importance of institutional control in an environment where it is increasingly critical to understand issues of privacy, surveillance, and big tech business models; our tendency to recreate problematic structures rather than rethink the models; and the need for alternative visions of NGDLEs driven by teaching and learning and not tech.

And now I leave today with this question for you to ponder – If open source is the radical solution to the vendor driven, extracted, dictated-to-us future that we're being sold, what is the 15% that you can address in your work, at your institution?

Thank you. Merci. Gracias.