

Free Learning

Essays on open educational resources and copyright



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I want and visualize and aspire toward a system of society and learning where each person is able to rise to his or her fullest potential without social or financial encumbrance, where they may express themselves fully and without reservation through art, writing, athletics, invention, or even through their avocations or lifestyle.

Where they are able to form networks of meaningful and rewarding relationships with their peers, with people who share the same interests or hobbies, the same political or religious affiliations - or different interests or affiliations, as the case may be.

This to me is a society where knowledge and learning are public goods, freely created and shared, not hoarded or withheld in order to extract wealth or influence. This is what I aspire toward, this is what I work toward.

Free Learning

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Introduction

Issues surrounding copyright and free access are among the most divisive and most important of the digital age, bringing into the open questions about the nature of knowledge, of content, of society, identity and democracy.

So there should be no need to defend the presentation of a volume of thought on these issues, and yet, I nonetheless feel compelled. Some will say the release of such a larger work, which collects lecture transcripts, blog posts, position papers and essays, offers no new value. Others will suggest that the arguments based in such a work are needless semantics, hair-splitting, and unnecessary. Still others dismiss the positions advocated here as too radical.

Yet I am not aware of any extended work that treats these issues in anything like a systemic fashion, much less a volume that stakes out the particular perspective on open access I offer in this work. For this reason along, a collection of these essays is necessary, as a version of record. And I think I am in a position to offer such a version, and I think there is a historical necessity for one.

Indeed, it wasn't until being engaged in the OER debate of May, 2011, that I realized how one particular version of the history of open source had taken sway, had become enshrined as *the* history of open source, when my own lived history was based on, and as a part of, quite a different history, one that had its origin not in the computer science departments of major U.S. universities, but in the back streets of FidoNet and the underground corridors of MUDs and MUDLibs.

There is a story to be told about open source, open content, and open learning from the point of view of the person desiring *access* to these things, rather than from the point of view of the provider. And it has been my steadfast (if I may say so myself) setting of the priority on access that draws out and clarifies this alternative perspective on free content, free software and free learning.

It is *not* just a point of fine semantics that determines, for example, whether 'free' includes or excludes commercial trade in the work. For those who make the fine distinction between 'free' as in *gratis* and 'free' as in *libre* I offer the sometimes baffled questioning of how one can exist without the other. And as we have entered into an era in history in which everything – from content to software to business methods and even DNA – is being valued and commoditized and subject to the will – and whims – of the marketplace, we need to at last take into consideration a perspective on open learning that at least considers as reasonable an alternative perspective.

The title of this work – “Free Learning” – is one of those phrases with double meanings of which I am fond. Such a phrase captures some of the nuance and intricacies of an idea.

In one sense, 'free learning' means, of course, 'learning for free', which in turn may be thought of as 'learning without charge' or fee or cost, and also, learning freely, according to one's own will and direction. In another sense, 'free learning' may be thought of as an imperative, a command, to release

learning from its existing shackles, from its role as a colonizer and commoditizer of people and societies, and to set it free as a common cultural heritage, like a language, like a cuisine, like a musical tradition.

These represent, from my perspective, the major philosophical divides in 21st century education. The divides are:

- commercial vs non-commercial? What is the role of the private for-profit sector in learning? Is open education the the final full flourishing of public education, or is it the end of it?
- directed learning vs self-directed learning (or, instructivism or constructivism; or, formal vs informal; or, control learning vs free learning) - or to put it another way - does the education system serve the interests of the providers, or of the learners?

These are not easy issues. They are hard issues, and it is not always clear on what grounds they will be decided. That's why David Wiley's arguments and mine appear to hang on a hair - nobody is sure what argument (if any) will break the debate open.

These issues are also difficult to untangle because no one perspective is an absolute. In a strict sense, as [Richard Hall said](#) the other day, there are no public and private sectors - it's all a blend, so the issue is really in how to manage that blend. And similarly, both the interests of providers (aka society (and to some (undetermined) extent the private sector) and the interests of learners must come into play. But how?

And these issues have eminently practical consequences. I cannot overemphasize how large the stakes are.

[Brian Lamb recently](#) summarized what's at stake with the first set of issues. The potential for the private sector to usurp education, the way Rupert Murdoch has usurped journalism, is too great to be ignored.

And this plays directly into the second issue. Education can at the drop of a hat become propaganda unless there are safeguards in place, but as the banking crisis has show we are as a society all too liable to be conned into giving up our safeguards.

There are days - most days, I fear - when I believe most people doesn't see these issues the way I see them, that they don't even see these as the dividing lines at all. I see them as too naive, trusting in the good intent of the corporations and the private sector, not realizing that when the economy collapses and the environment degrades completely, that they along with the rest of us will be thrown under the bus, grist in the mill as the wealthy and powerful close ranks and save only themselves.

And I suspect they sees me as too cynical, too sceptical, too willing to believe in the corrective role of government, too willing to believe people can steer themselves through and out of crisis. And at the same time, too radical, too unwilling to embrace a more inclusive, more commerce-friendly stance, more concerned about the weight of ideas and philosophies than the day-today needs of the average person trying to make a living.

Yet I believe that this network of common systems, supports and cultures is what makes day-to-day living even *possible*. Where would we be if language and literature remained the property of a privileged few, to be dispensed as wisdom and guilders from on high, where we can only imagine and think what we are allowed to imagine and think, what we can afford to imagine and think?

I think that our common heritage is too valuable to slice and dice and apportion off to the highest bidder, and I think that the right of each person not only to consume, but also to contribute to, that heritage is a right that out not easily be surrendered. Who we are as individuals, as a society, as a species, rides on the outcome of this.

So it's work, I think, a few pages of digital paper, a few whispers in the aether, a few moments of my time, and your time, to think of these issues, and out place in them.

Kildare, PEI, Tuesday, August 16, 2011

Shifting Morality

[Doug Johnson writes](http://doug-johnson.squarespace.com/blue-skunk-blog/2007/12/23/a-differently-moral-ed-generation.html), "I am not sure that these kids are less moral - only differently moral." (http://doug-johnson.squarespace.com/blue-skunk-blog/2007/12/23/a-differently-moral-ed-generation.html)

I think you may also want to examine how publishers and their supporters are changing (or trying to change) the concept of 'morality'. Let me highlight some areas:

- the 'doctrine of first sale' is in the process of being repealed. What this doctrine states is that, if you buy something, you own it outright. You can, in turn, lend it, sell it, use it as a doorstop, whatever you want. Increasingly, manufacturers are retaining rights - not just regarding copying, but where something is used, how it is used, for what purpose it is used, and more. It's fair enough for them to try, but how does it become *immoral* for people to defend their rights under the doctrine of first sale?

- the doctrine of 'fair use' or 'fair dealing'. It has long been understood that a creator's rights under copyright are not absolute. In particular, under 'fair use' (or 'fair dealing' in Canada) we have historically had the right to copy a small portion of the work to use when citing, referencing, criticizing, parodying, or teaching. Publishers simply refuse to respect this doctrine - try publishing work with citations allowed under fair use but explicitly cleared by the other publisher. Or try showing a logo in a video without blurring it out. Meanwhile, DRM and similar technology makes fair use impossible. And such use, we are told, is immoral. How so now?

- the distinction between personal use and commercial use - we have had a longstanding understanding that restrictions on certain commercial activities - making copies onto blank media, for example - are perfectly legal in the non-commercial domain. That sharing copies among friends is a fundamentally different type of activity. In Canada, moreover, the government collects royalties on blank media, distributed to content providers, in explicit recognition of such activities. How, then, do they become immoral?

- the idea of 'free access' - from time immemorial, we have grown up believing that performances of various media are free to the viewer or listener. From listening to musicians play on the street or in bars, to watching TV or listening to the radio, to reading books in the library or billboards on the wall, if the media was available, then we could access it for free. There was never a *way* to act immorally in this regard. But now we are required to 'avert our eyes' - to not view, to not listen, to not download - in certain cases (and somehow, to magically know what those cases are). Why is this? Why is it OK to listen to a song for free on the radio but not listen to the very same song on the internet? How does the one behaviour remain moral but the other, somehow, become immoral?

- the doctrine of 'sharing' - as children we were told that sharing is good. And that when there are things that everybody can use - parks, roads, museums, culture - these are good as well. But more and more, we are being told that sharing is bad, and that everything must be owned by some person, who in turn

has a 'right' to be compensated. How so? What gave *this* person, rather than the thousands of generations before him that nurtured the concept or the idea, ownership? How did sharing, always a virtue, become *bad*?

You get the idea. Children do not have some fundamentally different morality. Rather, they see - while adults, for some reason, are blind - that the game is shifting, that some very self-centered and greedy people are trying to change the rules. The children - who have no stake in this sudden 'ownership society' - are not fooled. We shouldn't be either.

Moncton, December 23, 2007

Copyright, Ethics and Theft

This essay was written early in 2003 in response to a lively exchange of opinion that took place on the corporate-oriented trdev mailing list. I am including it in this volume because it is the first and foundational statement of my position on these issues. This essay challenges many of the preconceptions surrounding copyright and the ownership of creative works and ideas. And it is the starting point from which many of my later, more nuanced, writings depart.

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The relation between copyright and ethics is not nearly so clear as supposed. While it is easy to piously pronounce that people who copy online content are unethical and even evil, it is also wrong. The copyright debate is not a case of the morally right trying to maintain the defense against the morally wrong. It is a debate about what should even count as morally right or wrong.

Preamble

A discussion has erupted on [trdev](#) discussion list, hosted on Yahoo! Groups, about the copying of members' posts to another Yahoo! Groups discussion list. As one member wrote, "In other words, people are participating on lists, and then someone is taking their posts and putting it on the Training Ideas list without their permission. Then others are replying to these bogus messages, generating activity on the Training Ideas list."

I posted a response to trdev to the effect that "this is pretty funny" and with the observation that "there was zero chance of getting away with it." I also commented that "this is a (more or less) public bulletin board. When you write here, it's like you're tacking your missive to the office wall. Sometimes people will move your post, sometimes they'll photocopy it (on the office photocopier with company paper). You've put your words 'out there.' They're going to get circulated. If you didn't want that to happen, then you should never have posted them on the open web."

A number of people replied to my comments and to similar comments offered by Brad Jensen. The tenor of these comments varied but the message was uniform: not only was it inappropriate for someone to copy these posts to another list, it was probably illegal and most certainly ethically wrong. One person even wrote that it was evil.

Illegal? Ethically wrong? Evil?

1.

I have been working in the field of online learning for a long time. I have written volumes of materials concerning the design, pedagogy and technology behind online learning. I have even been paid for my work from time to time, paid enough that I have on occasion contemplated building a business based on my writing and thinking. And even though I am happily employed as a government researcher, my personal website remains my calling card, establishing my credentials and expertise, acting as my personal forum, functioning as my online research lab.

Over the years I have seen most of what I have written appear, in one form or another, elsewhere on the web. Very often, entire texts were copied to other websites. More, often, though, what I see are my concepts and ideas repeated elsewhere. Not just what I have printed in text, but features and attributes of software I have designed and shared over the net. Descriptions of the future of online learning. Designs for online learning modules (now called learning objects). Outlines of essential attributes for online communities. The learning object economy.

But even where the concepts are not explicitly attributed to me (and very frequently, they are not), I do not consider this to be theft. For what I have done is to throw an idea or a concept out into the public commons, using a medium explicitly designed for that purpose. I expect it to be shared, and if it is a good idea, replicated throughout the online world. I have no problem with that.

What I have also seen, though, disturbs me a lot more. Many of the concepts and ideas that I and others have distributed through the open web have been appropriated by others as their own personal property. Scanning through the U.S. patent web page, for example, I see ideas that I have discussed in person or in print listed as patents granted to major corporations. Common terminology is registered as trademarks. And the concepts and ideas are codified as academic articles, granted copyright, and locked away as having been 'discovered' by the author in question (yours to view for only thirty dollars an item).

To me, this is theft. It comes in many guises, many forms. But it has in every incarnation the same appearance, the removal of something from the common domain and the making of that idea or concept the property of some person or corporation with the resources to defend it. It has become nearly impossible to simply share an idea on the open internet without it being stolen in this way. And (to judge from the list of patents) it seems that anything new that appears on the net is instantly seized upon by a horde of vultures determined to profit from someone else's work. How did it come to this?

Now I can hear your response already. I could have protected my work, you say, had I merely copyrighted it, or as applicable, registered a trademark or filed a patent. Well, yes, I could, which is why today the Creative Commons logo is attached to all of my work. But this is only a reluctant admission that the system is deeply broken. And worse, it legitimizes all those copyrights and trademarks and patents. It allows these vultures to say that they have legitimately acquired that which they have stolen.

Copyright, from my perspective, is a haven for thieves. It is a license to claim ownership over anything you might happen to find on the internet (and elsewhere) that isn't clearly nailed down. Worse, it is providing a means for those who enter this free and open space called the internet to put up fences and say "this is mine," to appropriate a network designed for open exchange and to convert it to a private publication and distribution system.

2.

In the replies to my previous post most writers staked the ethical high ground. "It is not pointless," writes David Ferguson, "for members of a list to decry a practice that is technically illegal and certainly unethical." Will Pearce expresses the hope "that we will choose to maintain the high level of ethics [and]

integrity." Robert Bacal wrote, "As an author and intellectual property creator, I'm just frickin fed up with rationalizations and defences of decrepit dishonest behavior." And Christopher Tipton states it bluntly. "Plagiarism is thievery."

I do not concede this ethical high ground so easily. I do not think it is so clear and obvious that the reuse of someone's content is such a breach of morals. And leaving aside the question of what the law in fact says, I certainly do not think that such reuse should be illegal.

How can I say this, you ask? Well, would it bother anyone if I retrieved my stereo system from the burglar who broke into my house and took it? Would it be all right were I once again to drive my car after having recovered it from a thief? Obviously. Retrieving and reusing something that has been stolen from me is obviously something that is ethically permissible. And in just the same way, retrieving and reusing something that has been stolen from the public domain is something any person should have the right to do.

Where the error lies in the current interpretation and application of copyright law is in the presumption that the many multifarious works produced by the members of this and other lists, much less the applications filed for copyright, patent or trademark, are the original creation of the author. It is simply not so. Though original authorship is frequently claimed, it is seldom, if ever the case. Even the greatest work of prose stands, as they say, on the work of giants.

As I look through the various posts that comprise the digest to which I now respond, I am witness to a large number of concepts, ideas, sentiments and even expressions that clearly have their origin in some prior source, an origin that is unattributed, an origin that the author does not even acknowledge exists. "Plagiarism is thievery," writes Christopher Tipton. Well congratulations to Mr. Tipton for having come up with that original idea! Should I now respect his ownership of those words? His origination of that idea? Of course not. It would be absurd. And yet, according to the many writings of authors asserting that I must respect copyright, that is exactly what I must do.

3.

I recognize that the principle of copyright is not to protect an idea, but rather, the specific expression of that idea. That is why it is legal, say, to express in your own words the ideas that you may have found elsewhere. Thus, IMS (say) can create and copyright the idea of a "search application" without ever having acknowledged to having ever heard of a metadata repository before. That is how someone from MIT can blandly assert that the Open Courseware project was devised entirely by staff from that institution, without acknowledging any external influence or source for that idea.

But this line is blurring. With the advent of "business methods" patents in the United States, with the ever-widening use of trademarks to appropriate common terms and abbreviations, the idea itself is increasingly becoming a type of property. The term Freenet, for example, was in wide use before it and the concept were trademarked, thus forcing an entire sphere of activity to call itself instead "community networking." The term "blog" was around long before Blogger became a trademark, and now the method and manner of posting your thoughts to a website has become private property. "One click" - not just the words, but the practice - is now the property of Amazon, their ownership resting on the

absurd premise that nobody thought of that principle before it was embedded in concrete by the U.S. patent office.

Let there be no mistake about this: when you place a copyright on your own work, then unless you are explicitly crediting external sources, you are claiming to have created every word, every idea, in your work by yourself. If I were to utter the phrase, "Plagiarism is thievery," without crediting Mr. Tipton, he, by virtue of his copyright, may now claim that I have appropriated his idea. Should I reproduce an entire paragraph, he now claims he has unique ownership over that phrasing. Well I ask: does he know this? Can he prove that each sentence in his work is unique? Much less the ideas expressed therein? On what ground, therefore, does he claim copyright? On what ground must I recognize that this expression now belongs to him and him alone?

Moreover, even though copyright was intended to protect a particular expression of an idea, as any academic scanning for plagiarized student essays will attest, the mere rewording or rephrasing of content does not count as the creation of a new work. Students the world over have tried cutting and pasting sentences, introducing grammatical errors, replacing words, reordering sentences, and a host of other techniques, in order to circumvent plagiarism restrictions, and each of these has been rejected. Well, what now, of the ownership of a string of ideas in slightly different wording? Who can say who first came up with the idea that "Many of us benefit free of charge from the ideas, suggestions, and even the rants of some of the folks on this list." Surely this is not original! The mere rephrasing of this concept does not make it the unique creation of the author.

In the creation of my daily newsletter, I read dozens of articles a day. I cannot count the number of purportedly original creations that do not lift, in whole or in part, concepts and ideas previously expressed elsewhere. Each one of these has a copyright label attached to it, as though it were some sort of unique contribution to society. If I read one more "original" explanation of XML I am tempted to scream! And then I see these articles cited as authorities, as though their authors contributed to the debate. I see the "Lego" analogy of learning objects attributed to David Wiley more times in a week than I can count, as though he came up with the idea.

Copyright may protect only the expression of an idea. But in virtually every article, every post, there is more than a little reuse even of the expressions of ideas, much less the ideas themselves. It's not that I am saying that there is nothing original under the sun. But what I am saying is that there is far less that's original than the supposed originators would like to claim. It is in my view blatantly dishonest to slap a copyright label onto anything you have written unless you are quite sure you have checked and verified the original statement of every idea in your work. For otherwise, your claim to copyright is nothing less than theft, and theft of the worst sort, for you did not even bother to acknowledge the existence of the person from whom you stole the idea.

4.

I stated above that copyright is used to protect thieves. Let me explain this a bit. The purpose of copyright is to control how the expression of some concept or idea is used. This is very clear, for example, in the terms and conditions of the trdev discussion group (and countless other forums where

the same conditions are stated). Nobody is to copy, assert these terms, the posts in this group without the explicit permission of the author. Even the Creative Commons licenses contain this assumption. The idea is that the work cannot be used without adhering to the conditions stated in the license.

The purpose of copyright, then, is to prevent others from using the material. Hence the use of the word "copy" in the term. It restricts the right to make copies of the work except under the terms and conditions outlined by the author. That is why I refer to the use of copyright as protection for theft. If I express an idea, and you take that expression (modified to disguised the original authorship), and place a copyright on it, then I can't use that idea any more, at least, not without explicit attribution, and subject to your terms and conditions.

Now quite the opposite sort of thing happens when I copy your work without permission. Even granted that your work may be your original idea (an assumption which, recall, is generally dubious), I cannot be said to have stolen anything from you. You are still in possession of your original work. You are still able to use it, reproduce it, cite it, have it cited.

Of course, what you have lost is your ability to control my use of your work. You have lost the ability to force me to pay money for it. Or to force me to acknowledge you as the sole author and originator of the work. You have lost the ability to prevent me from reproducing the work in order to criticize it. You cannot stop me from creating a parody of the work. Or even from using it as evidence to show that your work is not, in fact, original.

Many people feel this as a real loss, and hence call the unauthorized copying of a given work a type of theft. But something is a theft only if you can show that I have taken from you something that you previously had. And while it may look, from the phrasing above, that I have indeed taken something you had, you never had any of those things to begin with. They are, at best, what might be called counterfactual properties. Under certain conditions, you might have had them. But you never did have them, and under most conditions, you never would have had them.

Consider, for example, your ability to charge me money for the work. This lies near the surface of the minds of most defenders of copyright. My copying of a work is frequently represented as a substitution for paying for the work. That is how the billions of dollars "lost" income is calculated by software publishers in their endless tirades against what they call piracy (another form of "theft", but with an entirely fictitious element of force connoted by the expression). But this income is only lost if there is any circumstance in which I would have paid you. And there isn't. Had I not copied it for free, I would not have copied it at all.

This is a clear example of how unauthorized copying is not theft. If you steal a CD from a store, not only has the copy not been paid for, the store has also lost the ability to charge anyone else for that CD. That is not the case here. It is as though I had taken the CD (which I would never have purchased) and yet left the copy of the CD in the store. The store has not lost any income, because a person who would pay for the CD could come into the store, pay money, and leave with the CD.

You may argue that I may send a copy of the CD to my friend, a fiend who, in other circumstances, would have purchased the CD. That may be true, but this example only shows the dangers of relying on counterfactual properties. For now I can argue, with equal plausibility, that my sharing of a copy of the CD prompted a person who would not have purchased the CD to now go to your store and buy one. And empirically, it appears that your sales actually increase if you allow people to copy the CD. And conversely, as happened with the shutting down of Napster, if you prohibit copying, then your sales decrease.

The ethics of copying cannot be established by pointing to financial loss, because there are many cases in which my copying can produce more gain than loss. It reduces the question of ethics to a financial calculation, which isn't the point at all. And it is especially not the point when the material being distributed is being distributed for free, as on the trdev discussion list and most elsewhere on the internet.

5.

Your holding of a copyright over a certain work isn't about money at all. It is about control. You want to control my use of what you have claimed to be your work. You want to control who I show it to, if anyone. You want to control my use of the expressions or ideas for the purposes of analysis or criticism. You want to force me to quote you accurately, to ensure that I do not quote your words out of context. When I copy your work without authorization, you have lost all of this.

But where we disagree is whether you had any of this in the first place. And where I deeply disagree is in your assertion that it is somehow unethical (much less something that should be a criminal offense) for me to disrupt your control over me. Quite the contrary: I allege that it is inherently dishonest, unethical, and should be illegal, for you to assert that you can control me in any of these ways.

Take, for example, the sharing of your work with my friend. This is a right I have always had. I could play your music at my party. I could pull your book off the shelf and show it to anyone I pleased. We would all gather around my radio and listen to the evening news. You couldn't tell me who I could share this content with. Even if my friend was someone who was evil incarnate, you couldn't prevent me from doing this. But online, the equivalent of showing somebody a page of printed text is to make a copy and send it by email or to post it to a discussion list. You don't want me to do this because now other people might start talking about your work, and making comments about your work. And you can't stop them, you can't respond to their comments, you can't ensure that they are understanding what you said in the right way.

It is the epitome of a desire for control to assert that the discussion of a work must occur in only one forum. After all, isn't that the major reason why posters to trdev do not want their material copied to another list? Because people on that other list - some of whom are disliked by the original authors - might conduct an illicit discussion of the work.

But of course people have never had the right to control the discourse of others. They have never had the right to prohibit the sharing of a piece of text for common dissection, criticism, and even

misinterpretation (where would we be if Kant had got Hume right?). People have never had the right to prohibit parody and derivative works. It is only in the digital era, where every form of sharing amounts to a form of copying, that people have even begun to assume that they have, and can enforce, these rights. Now the Church of Scientology stifles internal and external dissent. Now Dow Chemicals (the current owners of Union Carbide) shuts down criticisms of their actions at Bhopal.

I do not accept anyone's assertion that they have that much control over the use of their work. When I obtain some sort of content - whether it be by buying a CD, reading it on the office wall, borrowing a book from the library, or reading it on a discussion board, I do not under any circumstances give up the right to share the work with others, to comment, criticize, parody, misinterpret or do any of a hundred things the original author may find distasteful. No doubt Mr. Tipton would really prefer that I did not hold up his words as an example for all to see. But he never had the right to prevent this use, and that is the risk he took when he allowed me to view it in the first place. And it is a travesty of ethics to somehow suppose that he has not only a legal, but moral, right to control my expression in this way.

6.

There is a growing assumption on the part of software vendors and content producers to the effect that, when I access their content, I have or can in some way sign away my rights. This is the essence of what are called "shrink wrap" licenses, and the essence of the terms and conditions of the trdev discussion list, among others. The use of trdev is contingent on the "guidelines" and within those guidelines is the assertion that the deliberate violation of copyright will get a member banned.

The language used in the trdev guidelines is as fuzzy and dubious as the language used in many such shrink-wrap licenses. What counts as, for example, a violation of copyright? Are we all to be subject to U.S. copyright laws and therefore the loathsome DMCA? If someone alleges that copyright has not been violated, who makes that determination? If I maintain that copying posts to another list does not, in fact, constitute a breach of copyright, am I subject to any sort of hearing and appeals process? Does the rule of law even apply on trdev (or in similar environments), or is more along the lines of the stipulation, posted in jest, that you will be sanctioned for "saying the wrong thing when one of us coordinators is in a bad mood?"

And of course the purpose of this (and similar) statements of conditions is to assert that my use - my reading - of your content is subject strictly and solely to the list owners' discretion. There is no law: what constitutes a law is created by, interpreted by, and enforced by the list owners. There are clear restrictions - some contained in the terms of service, some enunciated in passing by list owners' posts - on what I can say and how I can say it. And if I want to offer a criticism that is beyond the bonds of what is allowed on this list, then I cannot take the discussion to another forum, for that, too, is prohibited by a wide and liberal reading of the copyright provisions.

Acceptance of the terms of service, therefore, is tantamount to my explicit recognition that I have no rights. It is an explicit abrogation of any of the freedoms I assumed I had when I conducted my affairs in the old world of print and oration. This, I am told, is the contract that I agreed to when I signed up to this (and other) lists, and for that matter, the sort of contract I agree to every time I buy a book, listen to

a CD, or install some software. And the members of this list, in part, expect me not only to accept this elimination of my rights, they hold me to some sort of odd moral code in order to do so. Jack McCarty tells us that our violation of the terms of service is "evil." How did this come about? How did my assertion of my own rights become evil?

In fact, no matter what U.S. and other legislators and courts may have to say, it remains not only ethical but even morally responsible to hold and to protect my freedoms, even in the face of products and services that seek to limit these rights. My reading of the posts on this or any other list does not, by virtue of some terms of service, limit my right to restate the points contained therein, to criticize them, or to discuss them in other manners not approved by the list owner.

It is morally and ethically wrong to allow copyright to be used to stifle the freedoms we enjoy, and morally reprehensible to use copyright in an effort to stifle someone else's freedoms. But that, in the digital age, is what the application of copyright is all about.

7.

There is a response to my assertion that trdev is "a (more or less) public bulletin board." Specifically, Will Pearce responds that "it's not at all like a public bulletin board" in that "no one has the "right" to post anything he wants or do anything he wants with others' postings--there's not even a "right" to be a member, as the list owner can toss you off any time he or she chooses." In various other posts are assertions that trdev is a private space, that the owners may therefore control a person's conduct and enforce it as necessary.

I do not deny that the owners have the power to enforce their will. They could ban me from trdev (at least until I created a fictional identity). They could moderate my posts. That is why I said "more or less" (a qualifier that was conveniently ignored by all the critics).

But I maintain my assertion that trdev is a public forum. Part of my assertion rests on the practical. As Pearce himself stated, "anyone can join." Only the most trivial and flimsy of barriers prevents me from reading the posts, a barrier so insignificant that it may as well not exist at all. The discussion board is hosted through a service on the World Wide Web, meaning that almost everybody with an internet connection already has the tools and means needed to access the list.

Saying that trdev (or any similar discussion board) is a private space is like saying that a poster on a wall facing a public street is a private space. Technically, it may be true, but the effect of posting a message in a place where it may be viewed by the entire world is tantamount to mounting it in a public place. You cannot place a message on a wall in public view and then claim that anything contained in the message can be read and discussed only under a set of rules and conditions established by the owner of the wall, not even if you post those rules and conditions in large text on the message itself.

There are many things a list like trdev could do to become a private space. For one thing, it could move itself from the World Wide Web to a much more private system. Groove, say, or even individual emails to a set of trusted friends. Many other discussions happen in this way and these discussions remain

private. There is no illusion that they are public discussions because there is no chance of the public viewing them.

But of course, trdev and similar lists will not do that because nobody would join them. The advantage to a person posting on a list like trdev just is that it is a public space. Because it is so open to a large readership, posting on trdev ensures that their work will receive a large audience. Posting to trdev is just like posting a message to a wall facing a public street. The people who post to trdev take advantage of the fact that they are posting to a public place, and by their use of the internet and the web, are taking advantage of all the opportunities offered by the fact that it is a public place. But they do not want to give up the control that exists in a private place.

But it doesn't work this way. You cannot put up bulletin boards with the notice that "anyone viewing this material must refrain from talking about it to others." Anyone who tried would be laughed of the street. In the same way, a great many people on the world wide web are laughing at the idea that you can post something to a (more or less) public website and expect its contents to remain sacrosanct, the rules expressed by the author to be adhered to.

Again, this is not about me stealing your property. This is about you telling me what I can do, about you asserting your power. And even if you have the punitive weight of the moderator or the U.S. Supreme Court to back you up, the simple fact is that might does not make right and that my defense of my own liberties is at least ethically grounded as your attempt to abrogate them.

8.

My main point in this post has been to show that the relation between copyright and ethics is not nearly so clear as supposed. While it is easy to piously pronounce that people who copy online content are unethical and even evil, it is also wrong. The copyright debate is not a case of the morally right trying to maintain the defense against the morally wrong. It is a debate about what should even count as morally right or wrong.

In what I have written above, I have tried to show that the deployment of copyright has led to as much abuse and injustice as it has tried to prevent. I have tried to show that it legitimizes the theft of ideas and opinions from the common weal. I have tried to show that it incorrectly ascribes ownership to unoriginal content. I have tried to show that violating copyright is no sort of theft at all. I have tried to show how copyright is used to exercise power, to stifle criticism. I have tried to show that it is being used to stifle our freedoms. And I have tried to show that it is used in an effort to convert public spaces into private domains.

No doubt some people will read what I have written as some sort of endorsement of plagiarism. Or as some sort of advocacy of the idea that all content should be free. I am not making either point here.

There is something dishonest about taking some words or ideas and passing them off as your own. But we need to be clear about the ethics of this sort of misrepresentation. This is not some sort of theft from the original author of the idea, because the original author has not lost anything (indeed, they may be dead and by definition cannot have lost anything). No, plagiarism is a breach of trust between the

plagiarizer and the reader of the plagiarized work. It is a misrepresentation of one's self as something one is not.

A person who plagiarizes cannot be trusted. That is the beginning and the end of it. What he plagiarizer said (or inferred) is true, is not. In certain circumstances, such as affidavits and financial reporting, laws and sanctions are required to enforce honesty. In other cases, such as academic misrepresentation, lesser sanctions are imposed. But in general our reaction to instances of dishonesty is a community-wide condemnation of the individual in question. No further penalty is applied because no further penalty is needed.

Nor am I saying that all content should be free. Nothing in what I have said implies that no person should ever sell content. My objection to the design and use of copyright isn't based on the idea that people should not sell content, it is based on my objection to the manner in which the sale of very similar (and sometimes more original) content is prohibited, and in its use to impose illegitimate terms and conditions on the sale of content.

Indeed, many business models involving the sale of content are possible even in cases where copyright is not imposed. As companies such as Red Hat have shown, it is possible to sell content you don't even own. Moreover, the distribution of content at low cost or for nothing is often seen as a means of establishing credentials and landing contracts for service (that's why those many private consultants on trdev are so willing to give their stuff away). Content can be sold if it is offered in a more convenient format, if it is distributed to a more convenient time and place.

The purpose of copyright is merely to establish a monopoly over certain kinds of content, a monopoly over some piece of software, some piece of music or art, some piece of writing. The purpose of copyright is therefore, in all cases in which it is applied, to prohibit the sale of content. But just as in other areas of endeavour we have learned that a monopoly is not the only viable business model, so also with regard to the sale of content monopoly is once again not necessarily the only viable model.

9.

I would like to conclude by considering one more objection. This objection is essentially the assertion that unless creative content is protected by copyright, people will not produce original content.

As Gary Lear wrote, "What will happen if we allowed people to take other's words and do what they wanted is that people who have great ideas will cease to share. Conversations will stagnate, and those who are not creative will not be able to generate any new ideas. Those who are creative will also end up cutting themselves off from those who might stimulate their very creativity."

Quite the opposite is the case. The more restrictive a copyright regime one works under, the less likely you are to share your own ideas, and even more to the point, the less likely you are to seek out and use the ideas of others.

The former is the case because, if you share your ideas, you leave yourself open to the possibility that someone may appropriate the essence of those ideas, or use those ideas as a starting point, to develop

and control a product or idea you could have developed in time. You are therefore risking being cut off from the fruits of your own labour.

IBM, for example, has a patent application, filed on December 12 (United States Patent Application 20020188607), of a system "for providing multi-user electronic calendaring and scheduling functions." What it essentially involves is the use of a system very similar to a learning object repository to provide access to live events in just the way you would provide access to learning objects. Now this is an idea I have talked about in my papers and presentations for the last twelve months. Did IBM get its idea from me? Who can know? Should I have kept my big mouth shut? Probably.

The fact that IBM can, by dint of its lawyers and financial strength, appropriate and say that it invented an idea which is, on the face of it, obvious, tells me that any discourse of anything genuinely new in the public sphere is inherently dangerous. It forces me to rethink whether I should post anything on the internet at all. Certainly, if I had run to the patent office instead of writing papers and sharing ideas, then I - and not IBM - would own that idea.

The latter is also the case. This is clearest in the area of music publishing, where recording artists are very clear about their refusal to listen to song proposals. Were they to listen to the song, then they leave themselves open to the allegation that they stole the song in question, or at the very least, were influenced. Thus we get cases like the suit against George Harrison who, it was held, copied his song "My Sweet Lord" from the Chiffons hit, "He's So Fine." It is a wise (but creatively stifled) musician who does not listen to any music at all!

10.

People forget that the periods of true innovation and creativity through history were those periods when copyright and the ownership of ideas was at its minimum, and that long periods of stagnation occurred when arts and crafts were the exclusive domain of restricted castes or guilds.

Certainly, legislators in the United States realized this in the 1800s when they refused to enforce Charles Dickens's copyright. This, of course, was at a time when London and Paris were the cultural centers of the world and Los Angeles was a backwater. Even at the relatively late date of 1928, it was permissible for a then young Walt Disney to copy not only the appearance, but even the music, from Steamboat Bill (released that same year) to create what would become his icon, Mickey Mouse.

When people like Plato can copy freely and build upon the work of people like Socrates, creativity and new ideas flourish. But when the copying and creation of new work is rigidly controlled, as in the Middle Ages, creativity and innovation is stifled.

The suggestion that people will not create new products, content or services if they are not protected by copyright is a myth. Nobody owns the rights to apple pies, but I can buy them in any store in the world. The patent does not exist that would prevent me from cooking my own hamburger, but McDonalds is one of the largest hamburger vendors today.

Nobody is being paid through royalties or other protections for their work on Apache (the world's most popular web server), Linux, Perl or Free-BSD. Nobody is paying the hundreds of thousands of individual weblog or website authors. Nobody paid me to create "Stephen's Guide to the Logical Fallacies," "The Future of Online Learning," or this very post. But I did it anyways.

As Mark Pilgrim writes, people create because they can't not create. They are motivated not by some external reward but through some sense of internal satisfaction.

It is, indeed, only when this process of creation by people with a genuine need to create is corrupted by the needs and prohibitions of commercialized, royalty-driven commerce that we see lurches and interruptions in the steady stream of creativity provided by people around the world. Only when we see creativity motivated by the dollar rather than the joy do we see a needless proliferation of copies and knock-offs. If there were no need to sell a thousand copies, would we really see a magazine print a half-rate description of XML rather than referring readers to better written and more authoritative accounts already available on the web?

If the objectives of those who defend copyright were really to stimulate creativity rather than monopoly and control, they would throw off the fetters of intellectual property legislation and embrace the opportunities a genuinely free market of ideas would provide. But they are not willing to do so. And so, we all lose.

Update, January 6, 2003

I do need to address the issue of developments that require significant investment. My short answer is that people will continue to make these investments in any case, even though they are not granted special protections.

But let me address some specific points:

Let's see somebody build a Boeing 747 out of the goodness of his heart.

I am not expecting anyone to build a passenger airliner for free. Quite the opposite: any company that builds one should be able to get millions of dollars from the airlines that buy them.

But does granting Boeing an exclusive license to build 747s actually make any money for the company? Is it likely, were this protection not granted, that Boeing would no longer make passenger aircraft? No. It requires significant expertise, not to mention a large physical plant, to make aircraft. Ever were the full specs publicly available, it is unlikely that anyone else would be selling them.

Moreover, granting full public access to the 747 specs would reap an unexpected dividend to Boeing. Airliner enthusiast (of which there are thousands, maybe millions) would pore over them with a fine-toothed comb. Boeing would soon find itself the recipient of numerous suggestions on how to build the airplane more reliably, more safely, more cheaply.

Or what about all those writers, great and small, who make their living by writing books for sale? Surely, you don't think they would spend months, even years, writing great masterpieces if they could not receive any income? People do have to earn a living some way.

As everybody by now knows, J.K. Rowling spent years working on Harry Potter before ever having received a dime for her work. Her expectation of actually being able to sell the book (much less make millions) was probably low. But she did it anyways.

Tens of thousands of manuscripts are produced like this every year, with the authors not expecting their ship to come in. The fields of poetry and philosophy would not exist were writers required to expect financial return before they picked up a pen.

And in any case, who is to say that J.K. Rowling would not have received any money for Harry Potter even were it distributed on the open internet. The book has, for one thing, made her an immediate draw on the public lecture circuit, so she could have been sure of a good income.

People seem to assume that the end of copyright means that every creative person is transformed into just another starving artist. There's no reason to believe that this is so.

Moncton, January 6, 2003

Pay Per Post

Re [Scott Karp's comment](#) that: "Blogging has now been irrevocably tainted. No one can say anything even remotely positive about a company — or negative for that matter — without being accused of being on the PayPerPost payroll." (<http://publishing2.com/2006/06/30/payperpost-will-taint-us-all/>)

I don't know. I don't think anybody will accuse me of being a shill for some company. The people who continue to promote open source, open content, and a non-commercial basis for an online environment will continue to be credible. You can generally tell, I think, when somebody has capitulated to the commercial side of the house.

It's like when you say "We promoted the hell out of blogging as a revolutionary form of marketing - and now we see the dark side." A lot of people out there weren't really concerned about whether blogging was a new form of marketing. That's something the commercial side of the house thinks is important. A lot of people thought about the conversations being created, the increased understanding being generated, the good that a free and unfettered flow of ideas and opinions could generate.

Sure, if you are blogging from the commercial side of the house - if you are a professional blogger, say, or you are promoting the use of blogging for commercial purposes, then the emergence of a company that pays people to blog favourably about companies will dent your credibility. But let's not fool ourselves. If you're on the commercial side of the house, you already have a money-making agenda. It's not like you were lily-white to begin with.

Now I don't know enough about this blog to say whether or not its reputation will be damaged. I haven't followed it long enough to say whether it pursues an overtly commercial agenda. But the comment above isn't reassuring, the fact that it jumped on the '2.0' meme in the blog title, the ads in the right hand column - all of these suggests that the purpose of this blog is to make money. And if so, then anything said would be tainted by *that* fact, and not the actions of any external agency.

But we'll see.

Moncton, June 30, 2006

Paid Content

I wrote, on [Ian Delaney's blog](#): "Thanks for being honest. I'll be honest too. One more paid post and I'm unsubscribing." (<http://twopointouch.com/>)

He wrote back, "Thanks for being candid. Can I ask why, though? My take on it is that I get paid for writing articles elsewhere. So... What's the difference?"

I wrote the following in response:

It is one thing to be paid for writing articles. News journalists are paid for writing articles, and I am happy to read them. It is quite another to be paid (either directly or indirectly) by the *subject* of such writing. If a politician paid the newspaper to review his party's policies, I would not be interested in reading that. Because no matter what protestations of neutrality may exist, such writing is not neutral.

You may say you write very neutrally. But what you don't control is the *selection* of which writers to fund in this way, and which to not fund. Consider, for example, a writer who is by any definition a good writer but who is very anti-corporate, very anti-globalization, and very anti-media. Such a writer is not going to be selected in the first place for such funding. So the people who get funding (and the improved distribution) are those who support a certain point of view.

You may say that newspapers also select in this way. That's quite true. Our local newspaper is owned by a multinational corporation and therefore quite deliberately does not publish anti-corporate arguments in its pages. It is for this reason that I have been very critical of the commercial press. And why the opinions expressed in the commercial press play a very small role in my thinking.

I have always believed that online publication offers an alternative. Because it allows people to write, and more importantly, to distribute, their thoughts without regard for who is or is not paying for them. It allows me to hear all voices as equal, rather than only those voices that have been willing to pay for preferred placement. This removes the bias, and helps me, in the presentation of my own work and my own writing, to reflect an accurate view of the world, and not one that has been bought and paid for.

You may say that you have a *right* to accept money for writing articles about certain subjects. That is quite true, and nothing in what I am saying suggests that you should not be allowed to do what you do. But again, what I value is the writing that is not paid for, because it does not contain the bias inherent in paid writing. And because it *is* the internet, there is no shortage of alternatives. Thus, it is a very simply matter for me to express my preferences for non-biased content by unsubscribing for content that has been paid for in this way.

Update: Ian Delaney writes back:

Hi there Stephen,

Really good answer. Some responses for you: I can't post these on your blog since I don't have a blogger account. Feel free to add them if you think it adds interestingly to the conversation.

ReviewMe's selection is, as far as I know, based on technorati + google + alexa rankings rather than the politics of individual writers. I think that the whole point of companies using ReviewMe rather than approaching individual bloggers is to save time having to find and read them and just go on their traffic ratings. Certainly, it would be cheaper for companies to approach bloggers directly - they pay double the fee by using ReviewMe.

Most products in this space that I might consider reviewing are not produced by large corporations but by very small startup businesses. Also, FWIW I am a lefty.

Online publications offering an alternative to an almost inevitably tainted mainstream media? You're certainly on to something there. Though I note that the most successful online publications - including a lot of blogs - are just as much commercial operations as many print publications. Many more so. But, as you say, there are plenty of free alternatives to commercialised blogs and sites nonetheless.

Beyond ReviewMe and other paid content schemes, there is a larger topic around this of how, whether and why bloggers (and other content providers such as YouTube directors and digg searchers) should be rewarded or incentivised. I certainly believe that they should be, that this means that the best contributors will continue to try their best to produce the best content. AdSense is not doing the job for most of the Long Tail, though. So what are the alternatives?

*Paid Content is **very clearly** an ethical minefield, mind you. ReviewMe, though, with their disclosure requirement and avoidance of any requirement for bias seems better than a lot of the other alternatives out there.*

The ReviewMe experiment on my site is just that, an experiment. The amount of money they're offering is hardly going to change my lifestyle or allow me to give up the day job - In the UK, my fee amounts to a six-pack and a packet of cigarettes. In part, I did it to stir up exactly this sort of debate. And also, yes, I do want to get paid and am keen to explore various alternatives that I can live with. That won't include, I assure you, puff pieces for anyone.

Another little note. One thing that these schemes are doing that you'll perhaps like is that they are internationalising media production. In many parts of the world, that fee is a decent days' wage. The same thing is happening in Second Life, where a lot of the most dedicated "craftspeople" are from developing nations. Hopefully, things like the \$100 laptop scheme will increase the ability of such people to earn money independently on their own terms.

Take care, Ian

Moncton, November 13, 2006

Will Richardson's Business Model

Will Richardson [writes](#): "I don't mind people quoting my blog in their own or using any other of the content that I create to inform their own work. But [this bothers me](#). Someone has decided to simply use my RSS feed and that of about a dozen other edbloggers to create a "river of news" page upon which to sell ads and, I would guess, make money on our ideas. No idea who this is... Should I care?" (<http://weblogg-ed.com/2006/another-thing-that-bothers-me/>)

[Tom Hoffman responds](#), "Uh... dude. If it bothers you, you should stop licensing your work under Creative Commons and stop raving about Lawrence Lessig all the time."

He adds on his website, "Isn't it also true that Will's blog can't use other people's by-nc-ca content either, since it also has ads? Nor can [David Warlick's blog](#), as it has advertising for his books and is generally part of his commercial enterprise. [Tim Lauer has an ad](#)."

The suggestion here is that the NC condition is so vague it can't be understood and should hence simply be abandoned. "I'd say whatever Will isn't selling he should give away, but give away [freely](#)."

So far as I can tell, neither Will Richardson nor Tim Lauer use other people's work in violation of an NC clause. Sure, they quote other people's work and link to it from time to time, but that does not constitute 'use', it constitutes 'reference'. There is a significant difference, one which is captured in the doctrine of fair dealing (in Canada) or fair use (in the US).

As for me, Hoffman writes, "What about Stephen Downes? How much paid work has resulted from his blog? Is he untainted? Do we need to examine his tax return? My point here is not that we all ought to be working for free, but that these non-commercial content licenses are terribly vague, and in my opinion for that reason should be avoided."

I am certainly not going to worry about whether I am 'tainted'. My 'business model' has always been clear, and is certainly not a secret. And my 'use' of other people's work arguably falls under the domain of 'reference' rather than 'use' (though one might want to quibble about Edu_RSS, though since it publishes short excerpts only, and not entire articles, is probably safe under the same legal precedent that protects search engines).

But (as anyone who actually looks into this knows) in fact I do not obtain "paid work" from my blog. I certainly receive offers. But as an employee of the National Research Council, part of the government of Canada, I would be in breach of conflict of interest legislation. When I do external work, I do not charge any fees (form example, I charge no fees for my presentations, or for consulting on software, publishing articles, etc).

To take the other side of this now, my work is certainly 'used' and not merely cited. Commercial use of my work (and this typically includes academic journals, commercial websites, books, etc.) requires permission from the National Research Council of Canada. My website allows non-commercial use and some software is available by GPL, a condition that NRC has tolerated but doesn't exactly enthuse over. With others at NRC, I am working to increase the agencies open publishing and GPL practices.

Some of my content is reused on a commercial basis, though not by edutechtalk. My site has been syndicated by NewsIsFree since the late 1990s, despite the oxymoronic name of that site. More recently it has been picked up by Technology4Teachers, an annoyance mostly because it messes up my Technolorati listings. Funny that Technolorati doesn't use the 'wisdom of crowds' to weed out such echo blogs. My work is aggregated by Yahoo!, Bloglines, and other commercial aggregation services.

The suggestion in this post is twofold: first, that I should get hot under the collar about such obvious and flagrant violations of my license conditions, and second, that I should abandon such conditions, because they are too vague. Some services that use my work may be 'tainted' by their making of money in one way or another.

First of all, life is too short to be bothered by such things. The sites out there that flagrantly violate my license are very obvious to my reader and others. They reveal through their own actions that they are not to be trusted (perhaps something that Google's search engine doesn't recognize yet, but that's Google's issue, not mine).

As Janice Friesen says on Will Richardson's site, "I NEVER take this type of site too seriously. If someone wants to do a service by collecting the information in one place they should identify themselves and their biases. I think this is all a part of contemporary literacy that we so desperately need to be educating kids (and teachers and other adults) about."

But the main issue is whether I should simply abandon my license. I should, it seems, either change the conditions to allow such licensing, or I should pursue the instances of violation and get them to stop.

This is to misunderstand the principles of content licensing, at least, the principles as they should be, and not the principles that have been corrupted by a litigious and self-serving publishing industry and so-called 'information economy'.

What I have done with my license is to express what I want, to express how I would like my content treated. Sure, there is recourse under law, as there is recourse under law for many things. But it is hardly a practical recourse, nor a reasonable recourse.

I have also in my life expressed other desires. For example, I have from time expressed the desire to be treated nicely. I have expressed the desire that people tell the truth. I have asked that people be courteous to me.

True, sometimes these requests are vague. Precision is for lawyers. It's for people who are trying to obtain the maximum benefit, without any real regard to my interests or desires. If someone finds a loophole in the wording of my wishes, and exploits that, they demonstrate that although they can read and infer, they don't care about what I actually want.

We learn a lot about the actions of such people. Vagueness is what allows a person's character to emerge. If Will Richardson, for example, want to use my materials, and if he wasn't sure about whether it would be all right with me, he wouldn't parse my license, he would ask me. Because he values his relationship with me more than he does the money he might earn in this instance.

For me, like for everyone else, there are those inconsiderate boobs who lie to me and treat me as though I were beneath them. People who don't ask, who just assume. Who behave dishonestly out of some sort of self-interest, financial or otherwise, rather than taking what I want into consideration.

This bothers me, as it should. And I am not going to change that; why should I give up on my self-respect because others behave badly? I will continue to want to be told the truth, because that is what I want. The people who think they can just push their way around and act with no consideration for who I am and what I want cannot be allowed to define for me what is right and what is wrong, what I want and what I don't.

True, I don't sue such people. I don't take them to court when they lie to me, at least, not unless there was significant material harm caused by the lie. As I said above, life is too short.

But I don't embrace their behaviour either. When people lie to me, when people disrespect my wishes, when people use my content in violation of my license, they harm themselves because I will have nothing to do with them, I will not recommend them, and I will not trust them. And when such people do the same to others, again, they harm themselves, because people like me will have nothing to do with them.

Sometimes it may appear that dishonesty and disrespect prosper, especially in an increasingly anonymous society. The person who has cut into line ahead of you may appear to have gained something at your expense. My belief is that a life led thusly is not one that profits. It is a life led solitary and alone. The essence of living in a community is to respect the interests, rights and desires of the other members. Those who disregard that essence soon find themselves excluded from the community, and from the benefits to be derived from the community.

And these benefits, I might add, go well beyond merely financial gain (and we blind ourselves if we limit ourselves to looking at money). Reputation, for example: as Audrey Hill says, "The more you give away, the more your reputation is assured. And paradoxically, the more your reputation is assumed." And mutual support. And friendship. And sharing. And loyalty.

Jym Brittain, from Tahlequah, Oklahoma, for example, simply copies my website and makes a few pennies from the Google ad. But what is his standing in the educational community? What is his relation with the rest of us? How much does he participate in the dialogue, the discussion, and indeed even the joy and accomplishment felt by those who, together, achieve?

None of it. None. Whatever it is that prompts a person to behave dishonestly, it isn't worth it. Never.

That's why I don't have to take action, and why it is important that I not abandon those desires, needs and values that I express on my website, either as a Creative Commons license or as any other part of my work.

Moncton, August 01, 2006

IIEP-OER: Our Discussion

Contributions to the UNESCO Forum on OERs.

Diem Ho wrote:

Please find enclosed the [IBM Academic Initiative](http://www-304.ibm.com/jct09002c/us/en/university/scholars/academicinitiative/), in which any faculty members can download software, course materials, tutorials, webcasts, etc. and to give them to their students to study toward certifications or to learn about ICT and Service Sciences. All are free. (<http://www-304.ibm.com/jct09002c/us/en/university/scholars/academicinitiative/>)

Not to get us dragged down a side-issue, but on the IBM site I read this:

"Membership in the IBM Academic Initiative is free and open to individual faculty members of qualified institutions who have been authorized by their institution to participate. Membership is renewable on a 6-month basis."

I do not consider this to be an example of an open educational resource. In order to use this resource, you must already be educated and have a job, and moreover, be approved by IBM. Why doesn't IBM just make access to this resource available to everyone? What would it cost them?

Gary Lopez wrote:

As a grantee of The William and Flora Hewlett Foundation we are encouraged to design our project to financially self-sustaining. After all, a worthwhile project that ends with foundation support does not serve the ongoing goals of improving education. We strongly support Hewlett's position....

I've always wondered about this.

Like the current project under discussion, when a project is given a mandate to become 'self-sustaining', this invariably adds a commercial dimension to the project, so that it doesn't end after the foundation funding runs out. This commercial dimension, however, changes the nature of the project - not dramatically, necessarily, but in such a way that the 'free' component of the project does not compete with the 'commercial' component. What I've wondered is, why isn't the funding granted in the form of an endowment, so that the project need not worry about developing a commercial component, and so that its staff can remain totally focused on providing and supporting open educational resources?

Clearly, the endowment model works: it is no coincidence that universities manage legacy funding and scholarship support in this way.

To relate this to the current mapping discussion:

In my presentation to OECD in Malmo last spring, [Models for Sustainable Open Educational Resources](#), I outlined not only different types of 'free' and different types of resources, I also looked at different funding models. I felt this was important because the funding model impacts the content and technical

models available. In particular, I drew a distinction between a 'provider' model and a 'community' model for the production of resources. While, for various reasons, I argue in favour of a community model, I would suggest that funding models with commercial components push agencies toward a provider model. This involves providers in marketing and competition for a 'market share', an issue that became the subject of some debate in Malmo.

Aspects of this issue have already cropped up in this discussion. For example, some people questioned the use of a 'non-commercial' clause in licensing. My own preference is to allow, and indeed even to encourage, the 'non-commercial' clause. The reason for this is more practical than philosophical. When commercial entities become involved and begin the sale of materials, they tend to try to limit the distribution of free versions of the same resource. I discuss a number of these tactics in my paper [Reusable Media, Social Software and Openness in Education](#) (see the section on 'barriers'). In particular, they seek to limit the capacity of communities to easily use, repurpose, remix, reuse and distribute these resources, to focus, in other words, on a 'provider' model.

Members of this discussion are, of course, free to favour producer-centered or community-centered models as they wish, as they are free to favour licensing models allowing and disallowing commercial use. My interest in these remarks is to caution against a vocabulary or mapping where the commercial producer-centered model is the default, because then the free (both *libre* and *gratis*) model becomes the exception, and this, it seems to me, is the difference between charity and empowerment.

Moncton, November 14, 2006

Copyright and Creativity, Again

Vanessa Tuckfield kicked off a discussion for World Copyright day on Networks (may require login, sorry). She cites the role copyright plays for Disney and quotes a speech from WIPO director Kamil Idris. (<http://www.groups.edna.edu.au/mod/forum/post.php?reply=39222>)

My response...

Um, wow. So much here I disagree with.

I'll begin by linking to my paper 'Copyright, Ethics and Theft' to give readers an alternative perspective on the issue.

And I'll begin by grappling with this year's theme: encouraging creativity.

The presumption - and we see it shared once again in Kamil Idris's address, is that copyright encourages creativity. "Encouraging creativity – rewarding the creative, innovative talents on which our world and our future are built – these are the ends which intellectual property serves."

But it seems to me that the preponderance of the evidence suggests otherwise. The evidence seems to be that creative people will continue to create no matter what. It is certainly clear that millions of people - bricklayers, chefs, landscape artists, people working for Microsoft - create even though they do not enjoy any intellectual property as a result of their work. McDonalds, which enjoyed neither a patent on the hamburger nor copyright on the word 'hamburger', nonetheless managed to go on and create an empire worth billions of dollars.

It is indeed arguable that copyright (and other forms of intellectual property) stifles creativity. That was certainly the intent, for example, behind Blackboard's recent lawsuit against Desire2Learn. In the world of fashion design, where creativity abounds, people are encouraged to copy each other. But in the world of popular music, where people (like 'My Sweet Lord' George Harrison) get sued, artists refuse to listen to each others' work with the result that we have slid into the bland depths of boy bands, cover tunes, and American Idol. With such a miserable offering (and a huge decline in the number of titles offered) no wonder CD sales have declined! (I mean, seriously - did you rush out to buy Paris Hilton's new album?)

As I argue in my article, copyright is essentially a means of allowing people to take what they've borrowed from elsewhere (like Paul Simon did in 'Graceland') and stamp the label 'theirs' on it. Virtually nothing is completely original, but copyright acts as though the whole work was. It allows people to steal from the ideas, culture, language that we have all created in common and to label it their own.

The Disney Corporation is a good example. It is very well documented that Mickey Mouse was copied from a Buster Keaton character. <http://www.authorama.com/free-culture-4.html> That's the way it was back in the early days of Hollywood, when strong copyright protection would have kept culture locked

into places like London and Paris, and would have prevented the American film industry from talking off at all.

As Lessig points out, "the catalog of Disney work drawing upon the work of others is astonishing when set together: Snow White (1937), Fantasia (1940), Pinocchio (1940), Dumbo (1941), Bambi (1942), /Song of the South (1946), Cinderella (1950), Alice in Wonderland (1951), /Robin Hood (1952), Peter Pan (1953), Lady and the Tramp (1955), Mulan (1998), Sleeping Beauty (1959), 101 Dalmatians (1961), The Sword in the Stone (1963), and The Jungle Book (1967)."

I have nothing against Disney's practice here. "Rip, mix, burn." That's how Disney built his empire. And that same freedom should be allowed the creative artists of today, instead of the lockdown society in which they must toil.

Moncton, April 26, 2007

Reusable Media, Social Software and Openness in Education

Text of a keynote presentation to the Open Education conference, Logan, Utah, September 7, 2004

Introduction

Well thank you, it's a pleasure to be here, and I'd just like to say before I begin my talk that I've found this to be an absolutely fabulous conference. The talks have been uniformly interesting and I've managed to get a lot of material to draw from, I've been able to draw from quite a bit of that material even for this presentation today, so I think all credit to David and the rest of the organizing committee for putting on just a wonderful conference. I've really enjoyed it.

I'm going to talk in broad strokes today. I'm going to make some sweeping generalizations, which I'm sure David would say is nothing unusual for me. I'm going to draw some issues in black and white and of course the issues aren't in black and white; there are much more nuances. I'm going to give you, if you will, an overview, and for those of you who read my newsletter or look at my website you might think of this as a field guide to my newsletter, a field guide to my website.

I was forced to provide an abstract for my talk some time ago and so that's the talk that I'm stuck with now. But the topic is 'reusable media, social software and openness in education' and the way I introduced this in my abstract was by talking about a dichotomy between the consumers and the producers of information or content and I'm going to draw from that a bit, because of course that's one of these black-white yin-yang things that aren't absolutes, because of course we aren't producers and we aren't consumers, we're a little bit of both. So when I draw lines like that, I don't mean it just that way, I don't mean to divide the world into producers and consumers, I'm not saying that's the way the world is divided. But I'm going to pull a bunch of these things out.

I style myself, the career that I've chosen for myself if you will, is that of what William Gibson calls *Idoru*, and in the book of the same name *Idoru* is defined as 'intuitive perceiver of patterns of information'. And that's what this talk is about. This talk is about patterns. And broad strokes. Patterns in events, patterns in technology and software, patterns in cognition and the way we think and the way we create knowledge and the way we transfer knowledge.

Dichotomies

In May of 1995, and I still remember it well, which in a way is kind of sad because it dates me, but in a way is kind of nice because it gives me a context, the most amazing thing happened on the internet, and the amazing thing was that people who used to use information services like CompuServ? and Prodigy and especially America Online joined the internet. Now from the point of view of those of us who were already on the internet it was like this flood of AOL Newbies and it was like, you take this room, and

imagine the same number of people, only children, all came flooding into the room and all sat at the front and started asking questions. It felt like that. It was the most wonderful thing.

Now the question is, what prompted that? Why did AOL decide in 95 to join the internet? Tim O'Reilly, who was with a company called Global Network Navigator that sold to AOL at the time, says, "Gradually people are becoming to realize that free means access, not price." AOL could not provide access; it was a closed, proprietary system and for AOL and the others to survive they had to become open.

But the story doesn't end there. The story didn't end there because of course AOL went into this sort of only half-heartedly. Sort of, as O'Reilly said, "wishing the internet would go away and allow it to get back to its traditional business of providing a closed space," vertical media market, proprietary technology, control over the message, everybody goes to AOL, AOL is where the community is, AOL is where the content is.

This difference between AOL and the internet can be characterized along a number of dimensions, and it's these dimensions that I want to use to highlight the distinction between what I believe is the coming picture of learning and the going-away picture of learning. The coming picture of learning, the one that we want to work toward, is *open*, where there is access for everybody, open in the sense of the internet, open in the sense that, if you can type in the URL, you can go to a web site. As compared to the *closed* spaces, such as AOL, or Prodigy, where you have to go, use their service, use their conditions and terms of service.

There's not just open and closed. Another dimension is the distinction between *broadcast and conversation*. In traditional media what we see is broadcast. They speak, you listen. If you go to your home, your hotel room, today, you turn on the television, in all probability, you will not be talking back to your television, or even if you are, because I do frequently, it turns out they do not listen. As contrasted with the model of communication on the internet where communication is two-way. As anyone who has published a blog understands, as soon as you put something out on the internet people start sending you stuff back. "This is great. This is awful. You should move to wherever."

A third dimension of this dichotomy is the distinction between *institution and individual*, and this is where a lot of my clashes with David lie. My perception - and I might be wrong, the way I sort of caricature it in my mind, which is what I do, little pictures, big noses - the old way is centered around the institution - government, corporation, Microsoft, broadcasting agency, AOL-Time Network - the new way is centered around the individual - the personal website, the blog, the email address.

The fourth dimension is the organization of this system, the organization not only of communication, the organization of business, the organization of learning. Now we contrast here between the *hierarchy*, where there is a directory or a president or a CEO at the top, and instruction and information diffuse from the top, and is sent to the peons, as compared to a *network*, where there is no one person in control.

A further dimension is between the concept of *centralized and decentralized*. And again we can go back to AOL and the internet. AOL is centralized. Everybody went to AOL. The internet is decentralized. You

may go to a website here, you may go to a website from my home in Moncton, you may go to a website from Africa, or Iran, or wherever. The organization and the location of the material and where the decisions are made occur in many places rather than in a central place.

What Lawrence Lessig talked about in the opening keynote to this conference, he talked a lot about remix. He didn't draw out the way I would have liked the contrast between *remix*, with remix, but the contrast with remix is what I might call '*product*'. Remix is when you mess around with song files for yourself and create something. Product is when you go to HMV or something like that and buy a shrink-wrapped jewel case with a prepackaged CD-ROM with all the music already laid out in order for you and you do not change that. Remix is when you put your own photos and videos on the net; product is when you watch television and they plan the shows and you watch the shows as they were planned and delivered.

Which leads us to our next dimension, *planned versus chaotic*. Now I'll come back to chaotic quite a bit during the course of this talk - some people may say the talk itself is an instance of chaotic - but it's the idea that you can plan and organize everything up front versus the idea that things develop on their own in a natural way. The idea of putting things into a precise sequence versus the idea of each step being self-determining, each step following from the last but not necessarily depending on the last.

Static versus dynamic. Television shows are static. Once an episode of *Cheers* is made, it's made. It never changes. The web is dynamic. Once somebody creates a wiki page, who knows what it will be tomorrow? In the field of learning we have trouble with this because we have this vocabulary of learning objects, and 'learning objects' gives us a picture of something that is static, and we want to talk about it according to its properties. But learning objects are something that should be thought of as something dynamic. People ask me for the analogy that I like to use for learning and what e-learning is, and I say, e-learning is like electricity, not like Legos. It's something that flows, it's like the water system. It's something that should be available, in the wall, where it comes out, it changes, it's not concrete, it's not the same thing you got yesterday - that's what we're really happy about with water, we wouldn't want yesterday's water.

The distinction between *push and pull*. Broadcast media pushes. It tells you what you're going to see. As opposed to pull, which is the model of RSS, which I'll talk a little bit about, where you, the consumer, go out and get what you want, you pick what web page you're going to see, you pick what blog you're going to read.

Affordances

Now we have this set of dichotomies, and what made this happen - because we didn't have this set of dichotomies when I was growing up, at least, not really - what happened - and Lessig talked about this and many other people talked about this - is that when the internet arrived on the desktop it gave people a whole new set of capacities.

A lot of people have talked about the same sort of thing that happened when the printing press came out. I like to think about what happened when writing came out because when writing came out people

had this capacity to express information in a way that they never did before. Imagine when writing was invented the possibility that writing would be everywhere. On this desk: "Evacuation procedure statement." On the walls when you need it. People can create writing by themselves. This is a fantastic development.

And the same thing has happened with the internet. We can create a new kind of content for ourselves. Wonderful tools. We have simple text editors. I use one called NoteTab. Love it. Email clients, a way we can send, for ourselves, a message around the world. HTML to design things.

Also, the technology gives us access to new markets. Before the internet, and I remember these days, my power of communication extended to the room that I was in, maybe a bit further if I shouted, and I did shout from time to time because I wanted to be heard, and that's it. But today, with the various technologies, I have a global reach. I have a global reach not just in terms of distance, I have a global reach in terms of audience. I can reach out beyond my own community, my own group. This is a capacity I never had.

Now the point I made in my abstract, and it's in this slide here because it's in my abstract and I'm stuck with it, because it's a bit of an overgeneralization, is that traditional media and traditional services view this new development, quite rightly, as a threat.

Think about the fax machine. Some of you may recall the introduction of the fax machine. I'm still wrapping my mind around the idea that there are people possibly in this room who have grown up and there's always been a fax machine, but before the fax machine what people did is that they would actually send physical messages from one place to another, and it sounds like an odd idea, but that's what we had at the time. When the fax machine was introduced the courier companies said, "This is great. We will offer an electronic messaging transfer service. You come to us, you give us this message, we'll make a digital copy of this message, and send it over the wires." Instead, their business was basically destroyed.

Or the television. Everybody still has a television, it's one of these things that's just beginning to pass its peak, but we're seeing in news articles and that these days, "The internet is past the television." And more importantly, the role of the television in our lives is changing. It is moving from becoming an up-front medium to a background medium. The way radio is now. A major change in the status of television.

Some of you will have heard of something called Skype. Skype, or something like that, will basically destroy long distance telephone service. Because Skype, basically, is internet long distance telephone. It's free. Now you need your internet connection, you load your program on, you call up your friend, if your friend has Skype you have a free high quality voice connection with them. So the call that used to cost you, I don't know, 90 dollars or whatever, to talk to Australia for an hour or so, that costs you nothing. Now, of course, you know, we're still in the early stages so there are cases where we have to

interface between Skype and the traditional telephone system, and that costs money, and of course there's talk about regulating it, and that costs money, but Skype replaces long distance telephony.

Blogging. I participate in online news mailing lists and the online journalists are, you know, in the one sense fascinated and in the other sense scared to death of blogging. Newspaper circulations have begun to drop and they've begun to drop most dramatically in the youngest demographic. As many people now get their news off the internet as they do reading the newspaper. Circulations are dropping. And what's happening, it's not simply that people are using a new medium, but people are getting their news from new sources. You find out about events in Russia or Georgia, not from the New York Times, but from Yusuf, who lives down the block from where it happened.

Now, in general, these new technologies evolve in two stages. The first stage, and this is pretty much where we're at in the world of digital media, it duplicates existing processes and services. Just like, when we got the internal combustion engine, the first thing we got was the horseless carriage. Just like when we got refrigeration we got ice boxes. In the second step, it obliterates them.

But - and part of the point of this talk - is, this is not a Hegelian sort of determinism here. This is a set of choices that we made. And this talk is about the choices that we make.

Traditional media understand this and they know that if they put in the right kind of systems and structures they can resist this change. And they look at the new technology and the new affordances - I was looking for a place to use 'affordances' - and new affordances that it offers and it sees itself being threatened in three areas.

One area is in the area of production. This is a business model change, this is not so much a technological change, although it's an effect of technology. In the old model, production was enabled by demand. "Work for us, produce what we want you to produce, or, through the mechanisms of finances and governmental structure, we will cause you to starve." That was the mechanism. The new mechanism is volunteer. You choose what you will contribute into society. The contrast is between Encyclopedia Britannica, where they hired a bunch of people to produce this massive 24-volume set which sells for two thousand, three thousand dollars, and wikipedia, which was produced with a labour cost of, well, I guess, nothing.

Another tension is in business models. You may have read, heard, about this a great deal, the distinction between proprietary and commercial software, or products, because it's not just software, and free and open source. And the old way is the proprietary and commercial software - this is the model, this is the commercial business model that is under siege, because of new technology. New technology allows not just for the distribution of open software, as some of the people in this conference have talked about so far, it also allows for the creation of it in the first place, because we can organize ourselves into a programming entity that has as much capacity as a centralized system such as Microsoft.

And then finally, business models in traditional media are threatened in terms of distribution models.

The music industry, which I'm sure you're all familiar with, the debate surrounding the music industry, is on the verge of being destroyed by peer-to-peer content. I know they're fighting back and this fight will continue I'm sure. Until I retire. But if you look at sales and profits, they've peaked, they're declining.

The Empire Strikes Back

But again, and I want to emphasize, this is not historical determinism. Rory McGreal likes to talk about, in the context of standards, how the Romans decided that roads would be one chariot-width wide, and this width has carried down over the years to determine the size of our rail tracks, and therefore the size of the boosters on the shuttlecraft, and so the size of the boosters on the shuttlecraft is determined by a decision made more than 2,000 years ago. So this is not inevitable.

So even as we are bringing our local forms of communication - conversation, sharing, community - the global forms - the broadcast, the centralized, the proprietary, the commercial - are bringing themselves into our home, into our lives. Things like copyright. Things like Air Miles and purchase points. When somebody complains to you, and this has happened to me, I use the word 'coke' or 'xerox' or something like that in a message, and somebody always writes, well, "You can't write that word without using a little (c) after it." Or "you shouldn't use that word to refer to a generic." This is the centralized model intruding itself right into my speech.

Lessig drew this out beautifully. "If technology means everything is a copy, and if copyright law covers copying, then copyright law covers everything." It's a major intrusion and a major change.

As I said, it has infiltrated not just our homes - people are putting controls, they want to put controls into our computers under the rubric of 'trusted computing' whereby, and this was actually raised in a case in, I believe it was Finland, where they said the person has trespassed, where because he cracked CSS, a DVD scrambling system, he had trespassed on his own computer because he had broken into a piece of software on his own computer - so it's coming right into our homes. And right into our language, as I mentioned before.

So the message here is: the internet does make us more free, it gives us more capacity, but even as we are becoming more free the calls - and by calls I mean not just oration and agitation, I mean a wide variety of tactics and strategies that I'll talk about a wee bit - for a closed network are becoming more insistent and more pervasive. And for those of you who read my newsletter, this is why I get so strident, because they are persistent and they are pervasive, and in many cases, many cases, they're winning.

Now what sort of things? Well, look at bundles. Bundling. Read people like Shapiro and Varian, in their book *Information Rules* they talk about bundles and all of that, and bundles is the new marketing strategy. Bundles have been with us for a long time but we're seeing this more and more. Music albums. That's a bundle, all you wanted was one song but you bought fourteen. Preformatted radio is a bundle, right? You listen to that rap song because that other song that's on after it is the one you like. Journal bundles, things like that.

Closed spaces and markets. One of the big things to sweep the internet over the last year was social networks, but if you go to these social networks, go to Friendster or Orkut, they're closed. I don't mean

that they're closed in the sense that nobody can get in, well, Orkut is kind of that way, but they're closed in the sense of, the community exists only in the context of Friendster, or only in the context of Orkut. You can't communicate between Friendster or Orkut. You have these closed systems that you have to go into. Newspapers are becoming like that with registration; you have to register and go into this closed newspaper website, from which there are no links out.

Learning design. This is another place where I talk with David. The idea that learning is something that's pre-packaged, structured, where you as a student are like an actor in a play, and the instructor or the designer will be like the director, and they will tell you how to play a role, what to say, what to do, versus the approach promoted by people like Seymour Papert and James Paul Gee of learning, or structure and design, as a game, open ended, where you can decide for yourself what you're going to do.

Media formats. Now you'd think: learning design, media formats, completely different issues, but it's the same issue. PDF, which pervades our lives and tells us how we are going to read something. Versus HTML, which is open and free-form. Real Media, or even worse, Windows Media Format, which sometimes doesn't even work on Windows, versus MP3, which is something that can be played by anyone anywhere.

Digital rights. I've been up to my ears in digital rights expression languages over the last couple of years because of my involvement with the eduSource project as the package manager for the DRM part of the project, and the presumption of digital rights expression going in is that anything that is not explicitly permitted is prohibited. Now imagine if you governed yourself in society that way. Unless there's a law that says you can walk on the sidewalk, you can't. There was a fascinating talk by Dan Rehak about CORDRA, and he says, behaviours, services, identification, authorization, authentication, digital rights, all these have to be built into the system ahead of time in order for it to work. Do they? Did we do digital rights before we came up with blogs? Did we do digital rights and authentication before we came up with the web and home pages? Was I not able to send an email before I could attach an XML description of it detailing exactly how the receiver could use it?

Perceiver of patterns of perception, of information.

When we know what we're looking for we can see it everywhere. Now sometimes that's called paranoia. But it's like mathematics, once you understand, you can count things, you can count things all over the place.

Barriers

So I'll draw that out a bit and look at the types of barriers and impediments that characterize the centralized proprietary closed type of system that I've been talking about as opposed to the open type of system that I argue that we want to move toward.

One of these is obvious and I'm sure every one of you is familiar with it, and it's called '*lock-out*'. It's like the lock on your front door. Only it's digital. It's a subscription fee to access certain stories at the *Chronicle of Higher Education*, which seems to me to be ironic in the highest degree. It's registration

forms to view the news. Again, ironic. It's network authentication. Now, again, it's not all black and white - sometimes we need this. I want a lock-out system to govern the management of the ATM system. But when you're talking about systems of knowledge, news, learning and information, that kind of lock-out is inappropriate.

Even more subversive, even more insidious, is the idea of '*lock-in*', and again, if you read all this new economic stuff you read a lot about lock-in. It's proprietary content. Proprietary software. Everyone has to use Word because Word is the only software that understands a Word file. It's closed markets. Go to a grocery store and notice the trend that more and more of the products on the shelves of the grocery store are being replaced with generic store brands, because they know, when you go to a grocery store, they can determine the set of options available to you, and the more they can narrow that, the more they can determine what your purchasing patterns will be.

High-bar. That's talked a lot about by people who have to deal with things like educational technology standards. I remember when IMS first landed on my desk, and IMS landed on my desk as about a two-inch stack of paper, and actually made a thud when it hit. And I said, this is great, this is exactly what we want, and we need to implement this, because I was young and naive, and when I started showing it to the instructors they actually turned pale.

Flooding. That's something I talked to David a little bit about because... because we have this idea, and Lawrence Lessig talks about this idea, that you know if we just make Creative Commons and free and open content one of the options then people will be able to naturally go toward it, but that's not how it works in the marketplace, and if you look at the marketing strategies of companies like Starbucks, even if people offered free coffee on the corner people would still go to Starbucks because everywhere you turn there's a Starbucks. On the internet, that tactic is known as spam.

And then finally, the *legal barriers* that are thrown up against openness and sharing. It's fascinating that we live in a society where openness and sharing can actually be considered crimes. We have the attack on fair use, as Lessig mentioned, publishers don't even bother with fair use any more, it's like that right no longer exists because the threat of being sued outweighs any benefit they could gain from exercising their right.

Now, the reason why I get strident, and the reason why I come and do broad stroke generalization talks like this is because, as a community, in my perception, we are complying with the erection of these barriers and hurdles blocking open access. Look at IMS metadata. Again, we were young and naive. We welcomed IMS metadata. And it seemed like a good idea at the time. But if you look at it there's 87 or whatever fields to fill out. Metadata in fact creates a barrier; it's a high-bar barrier. Isn't it? If you wanted to produce free content, and you wanted it to be available through the SCORM network, you'd have to hire teams of librarians in order to complete this requirement.

And I wonder, and I ask now, and I have the benefit of hindsight, why didn't we use something like Dublin Core or even RSS, which has like three fields, in order to create our sharing networks?

SCORM. SCORM just is the old model. Centralization. Command and control. Broadcast. Why did we pick a model like that? Why did we adopt it so wholeheartedly, follow that lead, and I know that the U.S. government, ADL, threw a lot of money at this, and I know that money attracts people like lemmings, but if we saw the direction that we were headed we could have, could we not have, asked, is SCORM the way we want to go? Now we're doing it again with learning design. IMS has come up with learning design and of course it's being adopted and extended and so on, where we tell people what roles they will play, what things that they will do, the analogy of a directed play, versus the kind of learning that really works, which I characterize as improv. Now I actually asked that when Learning Design was presented, at a conference somewhere in Vancouver, "What about improv?" You can't do improv with learning design. It rules out self-directed independent action. Think about that.

Digital Repositories. I've spent the last two years of my life involved in a thing called the eduSource project and a good part of that has been arguing vehemently with people in small rooms about the nature and structure of our repository network, because the model that they wanted to go in with was a federated system, and with single sign-on user authentication such that a library such as CORBIS could be attached to the network, and you would not be able to find out, would not be able to find out what resources CORBIS had to offer unless you had already authenticated, already paid CORBIS, were already admitted into the system. That's the nature of a federated system, it's like a gated community of the internet.

And now we have CORDRA. Some of you were either the happy recipients or the hapless victims of the discussion that Dan Rehak and I had. The jury's still out on CORDRA because CORDRA's not done, although I will observe and I did observe in my newsletter yesterday that it was being presented to us as a package from On High, they'll actually tell us about it some time later this year, it'll actually be launched a month or two later. CORDRA is what you get from a centralized, top-down, hierarchal organization and I question - and I emphasize that it's still a question - how much of this authentication, command and control, is going to be built right into the backbone of the network. And again, open question still. And I hope, because I am that kind of agitator, that some of the wild-eyed conspiracy theories that I was launching from the floor of that conference room work their way back into the design of CORDRA because people understand that it has to be an open system. It can't control how the network works.

What Works?

And we ask ourselves, "What worked?" In the history of the internet? There's a lot of things that worked. The internet's a fantastic success. FTP - file transfer. Email - killer application. Usenet, which is now kind of by the wayside, but was huge in its time. The web itself. Worked. Billions of pages. Blogs. RSS.

Well what were their properties. What nature did these successes have? And you can see the list (because the list advanced on me before I was ready for it). They were simple, and this is Dave Winer's genius. I disagree with lots of things about Dave Winer, but Dave Winer always emphasized the simplicity of RSS. Anyone can get it. They were decentralized. There was not a single place where you got files on the internet, you got them where they were. It was open. You could go anywhere. Anyone

could send an email, you didn't have to sign away your blood type and your mother's maiden name. And it was open. We could all play.

Now as I said, IMS quite literally landed on my desk in 1997. Give or take a year, I forget exactly when. You'd think I'd remember, but I don't. And that's seven years ago. And I have to ask and I do ask and I want to know, where is the 'Blogger' of e-learning? We've got Microsoft, Sun, Intel, Cisco - all of these companies - Department of Defense, government - everybody's been working on this for seven years and we have not been able to produce a nice application that everybody can use to create learning for themselves. Why not?

There's the view that the market will do it. Right? You get the standards out there, the standards are free and open, it doesn't matter if they're a little complicated, and then the market will provide the tools that we need in order to become producers and not just consumers of information. I do not share that faith. Because it's been seven years in our field.

And it's worth noting, you look at the list that I read earlier, FTP, email, so on and so forth, none of these, not one, was a commercial product. FTP? Not a commercial product. That only came later. Email? Not a commercial product. The web? Tim Berners-Lee gave it away. Blogs? Blogs existed for three or four years before Blogger came along. Photoblogs, which we're finally getting now - the commercialization comes later. People haven't created some kind of online internet marketplace where you pay per view for photoblogs. It hasn't happened. They're not commercial implementations.

David Wiley said, and Brent Weinburg said some smart things in the discussion of their conferencing system they're attaching to the Open Courseware product, and he says, and I think it was Brent said this, and it's a paraphrase, if you put too many features up front it's going to be feature-heavy. And he talked about Dave using Slash Code. Slash Code is very good code. But when he used Slash Code, which is the software used to run the Slashdot website, it has moderation and all kinds of features like that, the moderation features killed the community. And I contend that exactly the same thing is happening with learning. Where all the features and the complexity, not just of the standards and the production and the design, but even the use of learning - you know I mean, learning management systems, LCMSs, they cost hundreds of thousands of dollars to make these work, and you go in, and they're incredibly complex, and it's killing learning.

Think about the mode of production of this. Luc Chu, great talk, talked about translating Open Courseware into Chinese. If we used a commercial model in order to get this done the simple answer is that it wouldn't be done. Because the people who you would hire to do this, who are qualified to do this, simply would not take the job, because they are doctors and lawyers and that's what they do, they're not translators. The only way to get OCW translated into Chinese is a non-commercial model.

Why

Now the question is why. Why favour the open model? Because of course, you know, the closed demand-driven model, you know, it may take away some of our freedoms but at least it gets things done.

We want to think of - and I mean this very literally - think of new media, and I include in this learning content, learning objects, multimedia, audio, video, this talk, your cat pictures, as a new vocabulary, a new language. Now I mean that not as a metaphor. I mean this as being quite literally the case. This new media is now how we talk. Or at least, how we will talk.

Well right now the control, the mechanisms of the production of this new media, especially in the case of learning, is in the hands of the traditional content publishers. It's the broadcast model. And the reason why we need to move to the conversation model is because: nobody can learn only by listening, nobody can teach only by talking.

Jacques Duplessis captured this, he captured the parallel between language and learning objects beautifully and he draw the obvious next conclusion, he captured the idea that there are two ways, the one way where you wrap everything up in a bundle - it wasn't in my list earlier but I would have included Content Packaging as among those things that we don't like - Content Packaging, you put it all in a file, it's not a nice HTML file so you have to kind of interpret it, and then you zip it, which makes it completely inaccessible for any browser on Earth, and that's our model - Duplessis said, "Programs are to digital media what syntax is to language." With one, the package, it's signed sealed delivered, with the other, it's open. In language it's open. We have access to our syntax. We know how to speak in English. We do not have the capacity, we do not have the access yet to the syntax in order to speak digital. In the pre-packaged mode, the decision has been made. There's only one speaker. But in the open model, we all get to speak.

And this is a phrase that comes not just from me, it's the opening of the *Cluetrain Manifesto*, we look at various theories of learning which I won't refer to, we need to have conversations. And Erin Brewer captured this, I'll give a nice picture later. Need negotiation: somebody goes on to Yahoo, they say, "I need to know how to, I don't know, raise a bee." And what happens is, the person at the other end who knows all about raising bees, doesn't come out and say, "well, here's how you raise a bee," what they come back with is, they say, "Well why do you need to know how to raise a bee?" And the person explains and that allows the person who knows all about bees to say, "Well you don't really need to know how to raise a bee, you just need to know how to convince a bee to get to a flower." Whatever. You can only push these metaphors so far.

We need to have diversity. If there's only one way of thinking, that leads to bad results, it leads to bad results for more reasons than I can talk about, from the stagnation of knowledge, of learning to even things like Rwanda, where people only had one channel of communication and this one channel was horribly abused.

We need to have symbiosis. That allows us to share resources, and importantly - and this is what I believe I do with my newsletter - to take resources that are in one form and transform them into a resource of a new form so that people can use that resource. A lot of people, myself included, have difficulty with academic journal articles but they're pretty good with nice little summaries, so that process of transformation takes a resource that's hard to obtain and makes it a resource that's easy to obtain.

You have to have feedback. Or in the U.S., checks and balances (you can't say that in Canada). In the world of network theory, in neural networks, the concept is called 'back propagation'. It's how networks learn. The information in a network is not one-directional. You try something out. You burn your hand. That sends information back, "Don't do this again."

And we need to have emergence. This is the concept of the wisdom of crowds, and if you Google that phrase you'll find a book of the same name that explains this in detail. The idea that all of us, acting independently, but ensemble, en masse, can come up with something better than any individual in the group could by themselves. This is not a case of marching toward mediocrity, this is a case of the group simply being able to take into account more factors, more variables, than any given individual. The group being able to absorb more information than any individual. But for this to work, we have to have the open communication and access. We have to have the distributed non-centralized non-hierarchical model.

And here we have Erin Brewer talking about how learning, self organized learning, occurs in Yahoo groups, and she studied Yahoo groups. That's a good thing to study. And we have the process of renegotiation, and we have the need for diversity. And the idea that diversity creates more stable, more productive communities.

Filter, repurpose, remix, feed forward

Now again, I'm a great abstractor and I'm a great generalizer and I look at this model as described in Yahoo and elsewhere, and I pull out of this the mechanism, this basically the same mechanism that networks in the natural world use, it's the same mechanism that the neurons in our brains use. Filter - pick what you want. Repurpose - change it. Remix, and then most importantly, feed forward. The brain works, not as information channels - we don't have, you know, the 'eye channel' and the 'ear channel'. We do to a certain extent. But what happens is the information is processed through layers of filtering, repurposing, remixing, feed forward. This happens in a historical process - "I have stood on the shoulders of giants." Filter, repurpose, remix, feed forward. And it happens in the transmission of information through the internet.

And those of you who are looking at small worlds networks and things might observe that in the internet there is a directionality of links and that is something that people have been studying but there is also a directionality of content and information, that runs in the opposite direction - if the link goes one way, the flow of information goes the other way. Instead of trying to organize e-learning, learning objects, metadata, we should be thinking about how this network can organize itself through the mechanism of filter, repurpose, remix, feed forward.

Now, we are at the point now, it is a turning point, and I actually wrote a little paper called 'The Turning Point', where we've pretty much replicated the non-digital environment, we have classrooms online, we have courses that have modules that have lessons online, and people are looking at this and scratching their head and they're saying, "Well what was the fuss?"

But the potential of the internet as a communications tool, as a learning tool, occurs only when we move to the second phase of this transition. When we begin to speak, and not just listen, and in the new language, not just the old language. When we gain access and control of the syntax, the semantics and the vocabulary of the new media. And this happens if, and only if, we have an open communications network.

Can you imagine how we could possibly have learned to read and write if only a certain class of people were allowed to use language to begin with?

We have to gain our voice. We have to speak for ourselves. To reclaim our language, reclaim our media, reclaim our culture. And as Brian Lamb would say, just a few minutes from now in the all-Canadian thread, "Go fast, go cheap, and let it go" - and this is hard for educators. "Let it go out of control." And people ask, what's the one sentence piece of advice you can give for people who want to be instructors in new media, and well I say it's a very short one, a two-word sentence: "Let go."

Just this morning Marie Jasinski, great little piece, I'll run it in my newsletter, on eduChaos. Marie gets it; Marie's an educator from Australia.

So we come to the three themes of my talk. At last. Hope it was worth the wait. Reusable media - we need a 'Blogger' of learning content. And we need it yesterday. Social software - we need a way to support conversations and not just content, and indeed I would take that even further, we need a way to support conversations with content. This ties into the 'Blogger' of e-media; we need a way to create our words, we need a way to send our words. And learning, again as Erin Brewer suggested, we need to first of all understand, and then leverage, the principles of self-organizing networks.

If you want slogans, we need to transform learning, like the fax machine, from something that we do for people, to something that they do for themselves. It is our job as educators in the field of e-learning to not only allow, not only give, but encourage people to have a voice.

And I thank you for your time and you can find more information on my website. Thank you very much.

Logan, Utah, September 7, 2004

Economics in a DRM-Free World

After my previous post, Doug Johnson asked me to explain the economic model of a DRM-free world. This has been done by others on numerous occasions, so what follows should only be thought of as a summary.

Today, the demand that *someone* (not necessarily the artist) be compensated for the creative act is driving the demand for digital rights management. Because it is today so easy to make copies of content, the idea is that *any* access to content must be compensated. Otherwise, we are told, the creator (or, more accurately, the rights holder) will not be rewarded.

But we have had free content since time immemorial. Not always in the form of television, obviously, but from the days the first stories were told around the campfire and the days the first paintings were drawn on the walls of caves, listeners and viewers could access that content for free.

It is important to recognize this. It is important to see that free access to content has, though history, been the *rule*, not the exception. That the commodification of content, that the charging of access fees, subscriptions, or some other form of tariff, is a recent invention for almost all forms of content.

Yet, somehow, through history, artists and authors and musicians managed to ply their trade. How was this possible? It was rarely through sale of recordings or reproductions. Here are some ways authors, artists and musicians can support themselves in a post-DRM world.

1. Sale of Original Works

The best examples of this practice are found in the visual arts - painting and sculpture, especially. Even though it is possible to create copies, the original cannot be recreated. This makes it rare, and hence, valuable. The same approach may be used in writing; witness J.K. Rowling's [The Tales of Beedle the Bard](#), handwritten and bound, which sold for £1.95 million at a Sotheby's auction.

Indeed, it is by selling original works that most craftsmen and artisans make their livings. We see at the [Craft Fair](#) at the local park very year everything from photographs to candle holders to wood shelves to maple syrup being sold by local merchants. And people who lay bricks, build houses, make hamburgers, and grow wheat also profit by the sale of original products. This, indeed, is the dominant form of commerce in society, one that artists would do well to consider.

2. The Sale of Services

While the musician does not frequently sell an original work, the musician is almost unique among the artists in his or her ability to offer a *performance* (though you can also watch [painters](#) performing). As we are frequently told, musicians typically [make more money performing](#) than through CD sales. That is why Canadian musicians have [split from the recording industry](#).

Most people in the world make their livings from performing services. Photographers take photos by request, artists paint portraits, and authors write news articles and obituaries and greeting card poems. Waiters bring us our food, receptionists greet people and ask them to sit in the waiting room, call centre staff answer questions and provide advice. The people who perform services rarely, if ever, retain rights to the work they have performed. Artists and other creative talents should consider that this might be good enough for them as well.

3. Selling Sponsorships

This is the reason we have free access to content on television and radio. Today we know this under the more generic name of 'advertising', but the sale of sponsorships has a wide variety of models, everything from the restrained sponsorship messages on public broadcasting to the blazoning of company logos on sports jerseys and racing cars.

Advertising has always been (and remains) the major source of revenue for newspapers - so much so that even the venerable New York Times has [abandoned](#) its paid content model in order to lure more readers to view its advertisements.

Advertisers seek implied credibility by association with quality or entertaining content. So advertising is not suitable for all types of content, of course (though you would never know by the way it is relentlessly pursued). Advertising is probably inappropriate for educational content. But for many artists - especially those in video and entertainment - advertising can help pay the bills.

4. Obtaining Patronage

Mozart was employed as a court musician by the ruler of Salzburg [Prince-Archbishop Hieronymus Colloredo](#). Michelangelo worked under the patronage of [Pope Julius II](#). Ranier Maria Rilke was supported for a time by the patronage of Ludwig Wittgenstein. The glory days of patronage may have passed us by, but it remains the primary means of income for many creative workers.

My own work, for example, is funded by the Government of Canada, as I am employed by the National Research Council, an appointment that may be seen as a sort of patronage. Foundations routinely support authors and artists and others. IBM has its [fellows](#) program. Japan has its [living treasures](#) program.

5. Work for Hire

If it's good enough for tens of thousands of university professors, it should be good enough for artists as well. Professors are not compensated for the articles they write, nor do they receive income for reviewing publications. Even if they write textbooks, their earnings are minor compared to the salaries they receive for teaching and research.

The vast majority of creative workers - authors, artists, even musicians - receive no royalties or other income from their creative works. These rights are retained by their employers - newspapers,

magazines, advertising agencies, and myriad other businesses and agencies. This content is, in turn, used to make money by any of the other means described in this article.

6. Bundling

Vendors compensate artists for creating or contributing content to be distributed with their products.

Prince recently created a sensation when he released his [latest album for free](#) as an insert inside the *Daily Mail*. This is a distribution method writers of open source software will recognize instantly, as almost everything written under the GPL eventually winds up on a magazine CD as a giveaway.

Starbucks, meanwhile, has been giving away [free music](#) to coffee patrons. Even McDonald's is [giving songs away](#) with meals.

It's a bit harder to give away writing and art - there's less demand - but nonetheless very practical and useful add-ons can be given away with food, hardware, indeed, any sort of product. This will be a significant source of income for learning materials, as vendors seek to stimulate a demand for their product by teaching people about it (the book on types of coffee the vendor in McEwan Hall once loaned me made me an aficionado for life).

7. Loss Leaders and Marketing

When Ben Goodger was [hired by Google](#), his previous position had been unpaid: he was one of the lead developers for Firefox. Like many programmers, he made his name writing open source software. The work he did became a calling card or an advertisement for his work.

If we look around the education blogosphere we see numerous examples of the same phenomenon. [Jay Cross](#), [Harold Jarche](#) and [Nancy White](#) all offer consulting services - and they also make their views known for free on their weblogs. Their free public writings are the best publicity they could hope for as they can clearly demonstrate their talents to others.

8. Helping People Being Creative

I call it the 'butterfly thesis'. It goes like this: people everywhere in the world decorate their homes with wooden butterflies. They are not paid for this act of creativity; quite the contrary, they actually pay for the privilege. But they want their houses to look nice.

In a similar manner, the vast bulk of the content on [Flickr](#) was produced not by people who wanted to make money from their art but by people who were creative and simply wanted to share.

This becomes a business model when people realize that our desire to share is itself a powerful force in society. From the scrapbooking store down the road to the photography shop to Google Video and YouTube, people have been making a living helping other people be creative.

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The idea that you have to restrict access to make money is a fallacy. None of these techniques require payments or subscriptions or other fees, nor do they require digital rights management or any sort of access control at all. Indeed, many of them depend on free and open access.

Moncton, December 25, 2007

Zero

Response to [Amy Gahrn](http://www.poynter.org/column.asp?id=31&aid=119501). (<http://www.poynter.org/column.asp?id=31&aid=119501>)

Off the top of my head I can name dozens of people who are performing heroic journalism for niche markets. The vast majority of them are not of the crackpot ilk, but rather, have established a loyal readership by being steady, reliable and informed commentators. I consider myself to be one of them.

Yes, the costs are not zero. So, strictly speaking, the media revolution is limited to those with the means. But what is different now is that while, in the past, only large media outlets had the means, today, millions upon millions have the means. And yes, it costs me money to produce what I produce. It's a net loss proposition. But you know - so what?

Alex Dering takes pains to point out to us that people cannot afford computer access, that people are going hungry. "There are people going hungry right now, and there are people going hungry without internet access, too. Got that? Good." Quite so. But hunger - which kills thousands of people a day - is pushed off the front pages by things like Paris Hilton and Anna Nicole Smith.

The stuff most of these niche journalists produce never makes the front pages. I write about online learning, which a stated objective of providing a free education to every person on the planet. In the commercial press, such an objective is almost treason.

Amy Gahrn talks about trust - "people really do want to know what information and which sources they should trust." We all know that they cannot trust the professional media, which demonstrates over and over again that it is open to the highest bidder (and today, while organizations at the Times practice their mea culpas, the entire nation of Iraq suffers an ongoing agony as a result).

But people do not live in a vacuum. They form networks of trusted individuals - called, variously, friends or colleagues - who pass on good sources of information. The good online sources do not need to market themselves.

And **this** site has a 2000 character limit in comments. What are they scared of? Me?! (And it can't count to 2000 correctly either)

Moncton, March 08, 2007

Making Software, Making Money

I am sympathetic with Dave Tosh's plaint. But only to a point. And not so far as when he says that open source does not work.

I hate to be the one to state the obvious, but: the fact that open source didn't work for Dave Tosh doesn't mean that open source doesn't work. No more than you would say, for example, that capitalism doesn't work because it didn't work for some failed businessman.

Let's look at what he says more closely. He writes,

Having worked on a [true open source project](#) for more than three years I am now more convinced than ever that the open source model does not work.

The project to which he refers, of course, is ELGG. This is a social-network slash content management system written in PHP. It has been reasonably popular, particularly in the education circles for which is is designed.

But - can I be honest? The PHP content-management system field is pretty crowded. It was crowded even when ELGG launched. There's Drupal and PHP-Nuke and Post-Nuke and Moodle. WordPress, for those who are more blog-oriented. And that's just the popular PHP ones.

And then on the social network side there's Friendster, Orkut, Linked-In and all the rest. LiveJournal, which has been around for ages (and open source, too). The market has been pretty crowded over there.

Here's the question to ask: would ELGG have had any measure of success had it been subscription-based software? Honestly, I doubt it. There was a niche, which was sufficiently small when it was free, and would have closed quickly were people asked to pay.

Tosh continues,

Sure, in an ideal world, it is the way to go. There should be transparency of data, users should be able to get stuck into the source code if they wish and tweak the software to meet requirements, customers should not be locked into long term contracts with vendors deliberately making it difficult for them to upgrade, change their service etc - that is in an ideal world, not the world we all operate in.

It is, in fact, the world I operate in. I don't deny that there have been challenges. And to be frank, I get really frustrated by open source code a lot of the time. Readers of these pages know of my struggles with Ruby on Rails, my wrestling with Drupal and my most recent bout of dissatisfaction with OpenOffice.

But I keep in mind - as I type in Firefox on my Ubuntu machine (I could use an Apple or a PC, they are both sitting right beside me here) - that Windows has cost me more frustration than all the rest combined. Outlook alone has been more of a problem than all the open source applications combined, and I don't even use it!

My world - as a 'customer' - is the one Tosh describes, and I won't go back.

OK, so what precisely is it that Tosh finds doesn't work in open source? I'll skip his short section on the advantages of open source and get straight to the disadvantages:

- 1) No real revenue stream outwith the big guns like Linux, My SQL and Apache - it is worth noting that this took years to build up and most of these project are backed by big business such as IBM.

There's a *lot* packed into that short statement.

Let's first begin with the fact that *not one* of Linux, MySQL and Apache had its origin with IBM or any other such company. IBM, when it tried to build an operating system, came out with [OS/2](#). It was a failure - not because it didn't work, but because it didn't sell.

Next, let's observe that none of them was created with the intention of *creating a revenue stream*. As open source software goes, ELGG is almost unique in its intent to create a revenue stream for its producer. True, things like mySQL and even Moodle have made some money for their originators. But that isn't why they were created.

The successful open source projects did, as Tosh notes, take years to build up. They also benefitted from a fairly large development community. In a sense, generating developers is like generating sales. If people think the software is worth the investment, they'll add to it. But if it's a No Sale - well, then, no developers.

Apache would have been nothing without millions of people building websites. Linux has benefited from XWindows, KDE, Gnome, and dozens of other applications. MySQL would be nowhere without the database-driven applications that extended its capacity. Look at Moodle and look at all the Moodle modules. Look at all the Drupal modules. This is *in addition* to the large communities working on the base code.

And that's the bottom line. Open source projects are not *products* intended to produce *revenues*. It is a *mistake* to think of them that way. Open source software is developed in order to satisfy a *need*, one typically experienced by the developers themselves, and an open source project is not a *commodity*, it is a *community*.

Yes, people need to earn money in order to live. This is true for every single person that works on open source projects. But making money from the open source product itself is very much the exception, not the rule, and depends on a lot of things falling into place.

2) You cannot get investment, which is crucial for growth, for an open source product released under a GPL license

Strictly speaking, this isn't true. Both Red hat and Ubuntu have benefited from investment.

More generally, though, this is a line I hear all the time. The line is that, in order to attract the venture capitalists, you have to have some intellectual property. Some patents, say, or some proprietary code. Because they need to be buying something, and if the code is open source, they aren't getting anything for their investment.

And, more generally speaking, this is true. Venture capitalists succeed by creating conditions of scarcity for things of value, so they can charge money for access to those things. The point of the initial investment is in order to take the thing of value from the concept stage to implementation. Their objective - their *only* objective - is to create a return on their investment.

If you are selling to venture capitalists, then you need to play by their rules, even if they are short-sighted and predatory. Because they're the ones with the money. And venture capitalists *really don't like* things like co-ops and shared source and community development because they *get in the way of ownership*. And ownership is how VCs make their money.

So, yes, you need to get out of open source if you are going to sell to VCs. The question is, do you really need to sell to VCs to make a decent living? No. Of course you don't. Do you need to sell to a VC to create growth? No, again, no. Because if you hit that sweet spot, your problem will be *too much growth*, not too little. And at that point, you can develop a revenue stream and investment is surprisingly easy to obtain.

It's hitting that sweet spot that is the trick, of course. As hundreds of thousands of software developers around the world will tell you.

3) Open source works as a two way street - however the reality is that most people just take and then complain if it isn't quite right, hardly a fair balance.

That's because open source isn't about being a *quid-pro-quo*.

My relation with ELGG, if I am to be perfectly honest, is exactly as described. I haven't contributed one line of code to the software. Not one semi-colon. But I have made statements that could be called 'complaining', both about ELGG and the more recent Explode!

Is it fair, then, to describe me as someone that just takes? Well, no, that would be absurd. I am, I hope, well known for the fact that all the work that I do is available for free, to be used pretty much as the user wishes to use it. It is probably no secret that I am working pretty hard to make the rest of it - that bit owned by the Government of Canada - open as well. And in passing to free the combined resources of the government to the community.

Dave Tosh reads my newsletter every day (well, I *hope* he does ;)) and yet he doesn't write a word of it. Do I complain? No. Because *the whole point* of what I do is that people will use it, and not have to do it themselves.

Yes, with open source software, it is nice to have more developers, especially people creating modules and skins and applications and the like (it's like the Steve Balmer dance... "developers developers developers developers"). But few developers doesn't mean that the open source model is flawed. It means the community doesn't need the application. I live with the same harsh reality. Few readers means that there is a limited demand for what I write. It's not pretty, but that's reality.

4) You get treated the same as a commercial product but aren't receiving any money for your goods or services. I can recall a situation where we didn't reply to a bug report within 36 hours and were completely ripped for it, yet my old institution accepted waiting 4 weeks for a response from Blackboard regarding a critical bug report for what was institutionally critical data - WTF?

So people act inconsistently. The person who ripped you for it would probably rip into Blackboard as well. Meanwhile, your institution probably doesn't expect to *ever* get a response from an open source project - they probably think four weeks is good service.

Also, people learn to treat you the way you define yourself. It has never been a secret that ELGG is a business and that the developers are trying to make money from the software. This is why they treat ELGG as a business. If it were clear that ELGG is a hobby, they would react differently (of course, they might not be using ELGG to begin with).

It's like Rails. I ripped into the Ruby on Rails in some of my previous posts here. Not because I thought Rails was a business, but because when I went to the Rails site or read what rails developers wrote, I heard nothing but about how simple it was and how automatic everything was. So I installed it, believing what I was told. And then it turned out that Rails did not behave at all as advertised, and I complained, bitterly, for having wasted several good weekends of my life on this stuff.

You told people you were a business. You were treated as one. Case closed.

5) You can't raise funding to work on open source projects if you are the developers - were you to talk about it or perhaps provide services, that is different but because you are directly tied to a 'product' it is seen as bias if public funding was directed your way.

Why not? This happens all the time. How many times have I seen people raise funding for their own projects? It must be in the dozens. The hundreds!

Just across the hall from me Rod Savoie, working with some people across the road at the U de M, developed a software application called Synergic3. They went out looking for people to invest in the product and raised, oh I don't know, something like two or three million from ACOA. They also got a major software company involved and are even dragging me into it.

The fact is, hundreds of things get funded every year, many of them open source, and a lot of that funding goes to the developers. The fact that yours didn't is unfortunate, but you can't generalize from that single case. It *may be* that the applications weren't sound, that they weren't supported by influential academics (yeah, I know, it's a stupid system, but...), or that the funders didn't see a need for the product.

But the mere existence of the hundreds of other funded projects (seen the [E-Framework](#) lately?) shows that this statement is simply false.

6) Open source projects which are deemed to be successful are often not truly open source - they can often hide many features, hold back developments and so on. With good reason - they need to in order to survive!

Care to give us an example of this?

The only cases like this I can think of are cases like Totem (or as I refer to it, "the world's worst media player"). Because most of the codecs are proprietary, they can't include them with the product. They have to be shipped and installed separately (with a nudge and a wink).

Yes, there is a lot of *free* software that comes, as they say, 'crippled' - WS-FTP was like that for ages, PaintShopPro started out that way, and the list goes on. But these free applications are not open source.

In fact, I think it's very difficult to create a crippled open source product, because (after all) you're opening the source.

7) Most people in the decision making positions don't seem to trust open source, the [DFES/BECTA scenario](#) is proof of this.

I wouldn't take DFES/BECTA as proof of anything. But there is no denying that open source faces competition from proprietary software in many environments, including many educational institutions.

It does not follow that *all* decision-makers oppose open source. And it doesn't follow that they oppose open source across the board. After all, these same systems are using Apache servers. Some of them are using Firefox browsers. It's a pretty mixed landscape.

It's also one that is changing. After all, the gist of the story in the link is that the British MPs are lobbying for a *change* in the DFES/BECTA policy, so that open source *will* be allowed. I've been reading a lot of stories like that recently.

Tosh continues,

There are exceptions. However, by and large, most open source projects start out in good faith and fall by the wayside or simply remain as cool projects to tinker away on due to a lack of money.

Well guess what. *So do most businesses*. So do most things of any sort that people do.

It's like gardening. Many people garden. Sometimes people think that they can make money from their gardens, and so they become horticulturalists or farmers or something. Some of them make a decent living, and many others fail because they couldn't make the revenues cover the expenses, because they couldn't get people to buy their strawberries, or whatever. A very small percentage of people make a million from it - these are the DelMontes of the world, and usually what they have to do is to get the government to seize land from illiterate peasants or something.

And the vast majority of gardens remain hobbies. Not because of a lack of money. Not because we should always allow gardeners to seize land from peasants. But because it genuinely is a hobby. Something they do *for fun* and sometimes for the *common good*.

It is important that you do not confuse this with a lack of traction or a good product. Take [Elgg](#) for example; Elgg is the most popular white label social networking platform in the world powering over 2000 networks. However, Elgg could power 100,000 networks and it would make no difference - there is no revenue stream as we give everything away under a GPL license.

If there were 100,000 ELGG networks then it is very likely there *would* be a revenue stream.

Yes, the revenue stream would not come from the sale of software. Because that's not how GPL works.

For one thing, it would be a lot easier to get funding for ELGG projects. Funding agencies take 100,000 a lot more seriously than 2,000. For another, there would be many more opportunities to offer workshops and seminars. Moreover, the service and support market would be a lot larger. And finally, 100,000 is not a static market - chances are that software that has 100,000 users is on its way to a million, and with numbers like that the venture capitalists become very interested. Because even if you have licensed the software under GPL, you can still sell a commercial version.

The number *does* matter. It is foolish to think anything else.

Tosh continues,

If you transfer this to the web 2.0 market - most successful web 2.0 products had/have venture capital or angel investment of some description; [flickr](#), [youtube](#), [facebook](#), [myspace](#) (founder actually sold spyware to make money, funny that), last fm - why? They are closed, commercial services where there is an obvious business model, investors can put their money into something tangible that can be acquired by a computing giant.

We have already discussed above the relation between proprietary software and venture capital. The VCs are only interested in things they can own, ethics be damned. *That's why* they're interested in spyware. That's why they don't care if YouTube was running 'pirated' videos; it's just a matter of risk versus reward.

What made these things successful was not that they were closed. People didn't look at them and say, "Oh good, closed software, I think I'll use *that* service." No, they were successful because they were

popular, because they offered a service - including some services that just skirt this edge of the law - that people *wanted*.

So here's a formula for success - *if* you are smart enough or lucky enough to create a product millions of people will want to use, and *if* you are willing to sell user data and lock in user accounts, and *if* you are willing to surrender control of your company to VCs with an even lower ethical standards, then there is a *one-in-a-million* chance that you'll make your millions.

Most people decide that life is better spent doing other things.

Take the latest [Cisco purchases](#). There are plenty of very good [white label social networks](#) out there; so why did Cisco pay out [a rumoured](#) \$25 million dollars [for crap technology](#)? One can only assume it is because the services they bought were closed source and commercial, it was certainly not because those product were good!

Who knows why people buy software companies. Sometimes the acquisitions make no sense. It's like when [Salon bought the WELL](#), for example. There was no proprietary software, no nothing, just a community of users. But Salon thought the name was worth the money (and many of the users are still there).

See, the presumption being touted here is that there is only one value proposition: proprietary software. But it's just not so. You can find a market for just about anything.

I remember when [Slashdot was sold to Andover](#). It certainly wasn't because of the software; Slashcode was (and is) open source perl code. But it made the developers millions. And Slashdot is still out there today, attracting script kiddies like there was no tomorrow. Around that same time we thought we were going to sell NewsTrolls to Think Geek. We came close, but we didn't have the readership. There but for the grace of the internet gods go I.

Why did [Cisco buy Tribe](#)? Especially if they had *already* acquired Five Across? Perhaps they are clearing out the underbrush, so there's room for them to make a (much belated) social network play. Or maybe there's something [much more interesting](#) happening behind the scenes.

Therefore, what is the future for open source innovation? Developers need to live and unfortunately the current climate can and will turn many away from building true open source applications, and the reality is that most users won't care - they just want services that work, so perhaps there is a lesson in all this; listen to the user.

OK, well, like I said, I am sympathetic. How can Dave Tosh make money?

Well, he *could* get a job.

Because he is right in this, at least: if you plan to make and sell software and make a million doing it after just three years' work, then open source isn't for you.

Doing it commercially isn't either, though.

Either way, it's a long shot. And you really have to pay your dues. And you have to wait for the results to come in. And sometimes, you never make a million.

I mean, look at all the commercial applications out there. How many of them do you think made their developers a lot of money? Most of the stuff we see on the shelves was created by Microserfs slaving away in their cubes, the profits being made by the gnomes with the investment money.

Look at all the businesses out there. The millions of mom-and-pop restaurants. Only a small handful become a McDonald's or a KFC. Most restaurants fail. Sad, but true - people pick the wrong location, the wrong menu, the wrong chef, whatever.

Being in business for yourself means trying over and over and over again. In software, it means creating something new every few weeks, not working on the same thing for three years - at some point, if you're in it for money, you've gotta say, "Let's let this turkey go." Of course you keep supporting it, because it has created a community for you (aka the network you can use to launch new software). But at a certain point you say this *software* isn't working for you.

Personally, I think that if the ELGG developers picked up on Explode!, worked like crazy, did it *exactly* right, and got a lucky break or two, then it would acquire enough traction to create a revenue stream. Then *this* (coupled with the network) could be turned around and sold as a commercial edition to the business community. And thus the foundations of the enterprise that might actually make a million can be laid.

Yeah, it's a long shot. And I wouldn't blame Dave Tosh for saying that his failures so far prove that it is foolish to try to work for yourself or create your own business.

But my understanding of people who actually *are* in business for themselves is that the money is secondary. Just like in open source. The reason they work for themselves is that they like the freedom, the opportunity, the challenge, the creativity. And just so, people who work in open source like the community, the developers, the sharing and the software.

And now we come to the other side of the story.

Yes, Dave Tosh could work on proprietary software. Then, if the conditions are just right, he can make a living selling his creations.

More likely, he'll be faced with the need to do contract work or maybe even to get a job. Because writing software is a lot like writing - it's *really* hard to make those sales. Most people who do it professionally live in very little money.

But what will also have happened is that he will have turned his back on the community. I would not, for example, be criticizing his software. Because I wouldn't care about it (more accurately, because the bar is set a lot higher). I'd be very unlikely to mention it in the newsletter, and I certainly would never code any modules for it.

OK, sure, that's just me.

But most of the community would react that way.

Not because they hate Dave Tosh. Most people would probably say he's a nice guy. But now he's kind of like the guy who sells insurance or the guy who writes subroutines for Microsoft. They're nice people, but you don't see any particular reason why you should help them with their work.

Yes, there is a world out there, outside the open source community.

It's a world that I see a fair amount of, from my position. It's a world where 'community' becomes 'competition', where 'network' becomes 'rival'. It is a world of secrets and NDAs and underpaid labour and coding bad software because that's what the customer wants. It's not a very happy world and the people I meet are not anything like remotely as interested in their work as the open source community, not even those who are only doing it as a hobby.

Yeah. You *can* make a living selling proprietary software. Maybe. You can even make a million doing it. Maybe. But if you love making software, then it's pretty hard to give up the community and the camaraderie you would need to give up to make software and make a million selling it. It really *does* cost you your soul.

Moncton, March 03, 2007

Models for Sustainable Open Educational Resources

This text was originally prepared as a submission to the OECD conference on open educational resources in Malmo, Sweden, in 2006. It was intended to be published by OECD in conjunction with other works on the subject, but this failed when OECD and my employer, the National Research Council, could not agree on ownership of the document. I later arranged to have it published as Models for Sustainable Open Educational Resources in Interdisciplinary Journal of Knowledge and Learning Objects 3 29-44 February 27, 2007.

The Open Courseware concept is based on the philosophical view of knowledge as a collective social product and so it is also desirable to make it a social property. - V. S. Prasad, Vice-Chancellor - Dr. B. R. Ambedkar Open University, India

Imagine a world in which every single person is given free access to the sum of all human knowledge. That's what we're doing. - Jimmy Wales, cited by Terry Foote, Wikipedia

The Importance of Open Educational Resources

The importance of open educational resources (OERs) has been widely documented and demonstrated recently. From conferences and declarations dedicated to the support of OERs to the development of resource repositories and other services, there has been a general awakening in the learning community.

Countering that trend are some of the challenges surrounding the fostering of a network of OERs. If, as Larsen and Vincent-Lancrin (2005) say, "The open sharing of one's educational resources implies that knowledge is made freely available on non-commercial terms," then this raises the question of how such a network is to be sustained. If resource users do not pay for their production and distribution, for example, then how can their production and distribution be maintained?

This short essay is about the sustainability of OERs. Most people, when they think of sustainability, think of how resources are paid for, but this essay takes a wider view, for it should be clear that this is only one part of a larger picture. So we will what they are, who creates them, how we pay for this, how we distribute them and how we work with them. Only if we understand the answers to these questions can we address how OERs are to be sustained.

In this we begin with a look at why OERs are desirable in the first place. And it is interesting to note that the primary argument is based on value. In OER communities, write Larsen and Vincent-Lancrin, "the innovation impact is greater when it is shared: the users are freely revealing their knowledge and, thus

work cooperatively." (Larsen and Vincent-Lancrin, 2005) Indeed, many authors begin their inquiry by looking at the inefficiency of commercial distribution. Kansa and Ashley, for example, point to statistics showing that only 27 percent of research papers are published, and only five percent of research shared. (Kansa and Ashley, 2005) The value of research data, they argue, increases ten times on openness.

We can also understand the benefits of OERs when we look at the impact on the stakeholders in an OER network. (Doyle, 2005) For authors, open publication grants access to the widest possible audience. Studies shows that their articles are cited more frequently. (Open Citation Project, 2005) For readers, open access grants access to an entire body of literature. For publishers, open access guarantees the widest dissemination of the articles they publish. File sharing may actually increase the market for their commercial products. (Oberholzer and Strumpf, 2004) Funders obtain the highest impact for their investment. And universities obtain increased visibility for their scholarship.

We can agree at the outset that a network of OERs would be of great benefit to the community, increasing the value of individual resources and increasing the well-being of the community as a whole. But a network of OERs is desirable only if the cost can be borne, not only in terms of funding, but also practicality. Can we pay for it? Can we get the resources produced? Can we ensure effective use? That is what the rest of this essay addresses.

In sum, what we will see is that, in addition to worldwide interest in OERs, numerous plans and projects have addressed this question. And while it remains early days in the field, a proliferation of sustainability models has emerged. While it would be too much to hope that all such model will prove themselves in the long run, it is expected that the reader will conclude, with the author, that some of them are well on the way to demonstrating the viability of OERs, and that the question of interest at this point is how best to sustain OERs, toward which some remarks will be addressed at the conclusion of this paper.

What Resources?

The term 'resources' is necessarily vague, and even the constraint that the resources in question be 'educational' does not narrow the domain significantly. So it is worth a few words to identify the objects under discussion.

Guidance is available from previous OECD-CERI discussions: "By Open Educational Resources (OER) initiatives we understand:

- 1) open courseware and content;
- 2) open software tools (e.g. learning management systems);
- 3) open material for e-learning capacity building of faculty staff;
- 4) repositories of learning objects; and
- 5) free educational courses." (Hylan, 2005)

This definition is consistent with similar definitions from previous work. For example, Johnstone, (2005) defining the nature of resources according to their function in learning, writes, "By 2004 OER was defined to include:

- Learning resources - courseware, content modules, learning objects, learner-support and assessment tools, online learning communities

- Resources to support teachers - tools for teachers and support materials to enable them to create, adapt, and use OER, as well as training materials for teachers and other teaching tools
- Resources to assure the quality of education and educational practices."

One is tempted to think of 'resources' in terms of static physical objects or digital resources, such as texts, images, graphics and multimedia. But a wider view would include all the supports for an educational system. For example, a UNESCO (2002) report includes:

- Visiting lecturers and experts
- Twinning arrangements, providing for international exchanges of students and academic staff
- Imported courseware in a variety of media
- Externally developed sponsored programmes
- Inter-institutional programmes developed collaboratively
- Publications
- Information resources of the Internet.

It seems clear, based on the discussion, that there ought not be an a priori stipulation that something may, or may not be, an educational resource. Such stipulation may only serve to limit discussion unproductively. For example, both Hylan and Johnstone seem to contemplate an environment in which OERs are used primarily in the context of traditional learning employing teachers and courses. But it should be clear that learning extends beyond the scope of formal learning, and hence that resources not used in a formal environment may yet be instances of OERs.

For the convenience of taxonomy, though, we may contemplate the domain of OERs in two senses: types of resources, and resource media. The types of resource contemplated may include software (which includes, but is not limited to, learning management systems), papers and monographs, courses, contacts and mentoring, animations, demonstrations, simulations and games. The resource media contemplated may include those included in information and communications technology (ICT), such as web pages and internet services, internet, videoconference, CD-ROM, paper-based materials, radio and television, satellite, and more.

Obviously, not all of these are equally viable as OERs. One might ask, for example, how a guest lecturer could be an OER. Or one might point out that the economics of paper-based OERs is very different from those of digital OERs. These are legitimate observations, but the objective here is to preclude prejudice by stipulation, and hence, any resource that supports education is, at this point, under consideration.

What is 'Open'?

There is a great deal of debate extant concerning the definition of 'open' resources. Many authors begin by distinguishing between 'open' resources and 'commercial' resources, but a slight examination shows the paucity of this definition: many resources offered by non-commercial enterprises, such as academic papers published by learned societies, are nonetheless not openly accessible, requiring as they do the payment of a subscription fee for access. And many resources and services offered by commercial enterprises, such as Google search, are widely and freely available without constraint.

The emphasis on 'commercial' and 'non-commercial', moreover, allows the definition of 'open' to be stretched in a manner that would discomfort many advocates. For example, Ed Walker (2005) defines 'open' as "convenient, effective, affordable, and sustainable and available to every learner and teacher worldwide." Or Sir John Daniel, who speaks of "The 4 As: accessible, appropriate, accredited, affordable." (Daniel, et al., 2006) A critic would note that there is a significant difference between 'affordable' and 'free', a difference that stretches too far out concept of 'open'. Everyone would agree that gumballs (which sell for one cent) are for almost everyone 'affordable', not nobody would suggest that the gumball market is therefore 'open'.

The concept of 'open' entails, it seems, at a minimum, no cost to the consumer or user of the resource. This account is expanded into a set of unambiguous affordances by proponents of open access. For example, for the Public Library of Science (PLOS), 'open' includes the following (Doyle, 2005):

- Free, immediate access online
- Unrestricted distribution and re-use
- Author retains rights to attribution
- Papers are deposited in a public online archive such as PubMed Central

Richard Stallman (Foote, 2005) defines "Four Freedoms:

- Freedom to copy
- Freedom to modify
- Freedom to redistribute
- Freedom to redistribute modified versions."

Of course, such freedoms may nonetheless be accompanied with a non-monetary tariff. Stephenson (2005), for example, adduces four freedoms similar to those sketched above, but includes a fifth "obligation to contribute back to the community." On his proposal, "Educators whose students spend on aggregate N hours using the open course content for learning are obligated to contribute back to the Project N hours of their own or their students' time.")

It is not clear that resources that require some sort of payment by the user - whether that payment be subscription fees, contribution in kind, or even something simple, such as user registration, ought to be called 'open'. Even when the cost is low - or 'affordable' - the payment represents some sort of opportunity cost on the part of the user, an exchange rather than sharing. The requisite of payment not only imposes overhead on the distribution of the resource, mitigating the value of the resource, as described above, it predisposes access to (and therefore design of) the resource to those willing to obtain the resource instead of some other sort of asset they could purchase with the same money or effort.

That said, there appears to me no consensus that 'open' means 'without limitation whatsoever'. Some rights may be retained by the author of the resource, as Doyle suggests. In the system implemented by Creative Commons (widely thought to be representative of an 'open' license) authors may stipulate that use requires attribution, that it be non-commercial, or that the product be shared under the same

license. So while 'open' may on the one hand may mean 'without cost', it doesn't follow that it also means 'without conditions'.

Sustainable?

It is commonly pointed out that even though a resource may be free for the consumer, it does not follow that the resource is free, in the sense that it nonetheless costs something in funding or services to create and distribute a resource. Consider, for example, the Stanford Encyclopedia of Philosophy, an open learning resource made freely available on the internet. According to Zalta (2005), this service costs roughly \$US 190,000 to provide. The bulk of the costs are in staffing (\$US 154,300) with contract programming, travel and office expenses, computer services and overhead taking up the rest.

This is a small amount compared to what it may cost to mount a full-fledged resource. Beshears (2005) outlines the costs facing the United Kingdom Open University (UKOU), which, he notes, spends an average of \$US 3 million per course on content development. They have over 200 undergraduate courses in their inventory, which represents a total investment of \$US 600 million, 40 percent of their budget. At an average eight year depreciation for courses, this represents an ongoing development cost of \$US 75 million per year.

It becomes clear that by 'sustainable' we cannot mean 'cost free', and indeed, we may be forced to agree with Walker (2005) that the production of OERs may entail a large scale investment. Rather, with Walker, we note that by sustainable we must mean "'has long-term viability for all concerned' - meets provider objectives for scale, quality, production cost, margins and return on investment." This is significant: for after all, if the consumer of a resource obtains the resource for free, then the provision of the resource must be sustainable (whatever that means) from a provider perspective, no matter what the benefit to the consumer.

Providers vary. For some, OERs are sustainable if they represent a cheaper alternative to accomplish the same task than the mechanism they are currently employing to accomplish the same task. The Wellcome Trust, for example, in an examination of scientific publication, argues that savings of up to 30 percent could be achieved through open access publishing. (Wellcome Trust, 2004)

Even when considering something as apparently straightforward as costs, what constitutes 'sustainable' (or 'cheaper') may vary depending on one's point of view. For example, while advocates of open publishing, as noted above, argue that open access lowers publication costs, publishers respond by arguing that the commercial model reduces costs when costs are considered on a per-download basis. "Users gain quicker and easier access to more content at lower per-article-costs for the institutions that serve them." (Elsevier, 2004)

Calculations of sustainability need to consider much more than merely the cost of the resource. Ancillary costs, such as staff training to use a resource, are often overlooked. (COL, 2004) This is why, in comparisons of open source and commercial software, calculations are often expressed in terms of 'total cost of ownership' (the make-up of which varies, depending on who is asked).

In addition to the cost of the resource, the concept of 'sustainability' needs to take into account the resource itself. If, for example, the resource consists of a piece of software (or content written with a particular piece of software), then it is important to consider 'software sustainability'. (UNESCO, 2002a)

Additionally, the infrastructure needs generated by the use of the resource need to be considered:

- Technology (hardware, software, connectivity, standards, etc.)
- Organization (technical competencies, training, standardization communities)
- Policy (openness, business model)

Each of these constitutes some sort of investment on the part of the organizations providing and consuming the resource. (UNESCO, 2002a)

Other providers may have different objectives. As a Commonwealth of Learning report notes, providers in Australia would not say that offering distance learning is cheaper, because the way it is practiced in Australia, it is not, however, Australia does not use distance learning to save money but for other reasons (for example, enabling people to learn in their own communities). (COL, 2004) Thus 'sustainable' in this instance may mean not merely financially cheaper, but capable of promoting wider objectives.

This is especially the case in developing economies. In environments where course completion rates are not as important, provision of resources in a particular manner may be favoured because it is cheaper, however in some nations, particularly those where there are few existing graduates, completion rates are more important, and therefore the outcome of the resource provision, and not merely the cost, becomes the primary factor. (COL, 2004)

These non-economic definitions of 'sustainable' should not be dismissed lightly. Foundations supporting OERs, such as the Hewlett Foundation or the Wellcome Trust, incur a net loss, as funding activities are not (obviously) revenue generating. Much of the work done in the field of open source software also reflects alternative objectives; the point behind the slogan, "Free as in freedom," is to underline the idea that the distribution of open source software meets important social objectives. "Free software" is a matter of liberty, not price. To understand the concept, you should think of 'free' as in 'free speech,' not as in 'free beer.'" (Free Software Foundation, 1996) It is possible that 'free speech' may one day be found to result in a net loss economically, but it would be hard to find people who would abandon it on those grounds.

What constitutes 'sustainable' is unlikely to be reducible to a single metric or calculation; it will ultimately depend on the economies and the objectives of the provider. This may well explain why, as we shall see, there are many models for sustainable OERs. This indeterminacy, though it may raise difficulties for economists, may nonetheless be a good thing. It may allow many organizations in many ways to see OERs as 'sustainable' even in cases where a broad social consensus does not exist.

Funding Models

As mentioned above, a variety of OER projects have been started in recent years. These have originated from governments, from foundations and organizations, and from groups and individuals. Each of these projects must be financially supported in some fashion, but no single model has emerged as predominate. This section reviews a variety of the models currently in use.

Endowment Model - on this model, the project obtains base funding. A fund administrator manages this base funding and the project is sustained from interest earned on that fund. At the Stanford Encyclopedia of Philosophy, for example, where organizers reasoned that a subscription-based model would cost more than it would earn (because volunteers would have to be paid), funds (\$US 3 to 4 million) were raised from a variety of charitable foundations, generating in interest the service's \$US 190,000 operating budget. (Zalta, 2005)

Membership Model - on this model, a coalition of interested organizations is invited to contribute a certain sum, either as seed only or as an annual contribution or subscription; this fund generates operating revenues for the OEM service. The Sakai Educational Partners Program, for example, is a for-fee community that is open to educational. Members contribute \$US 10,000 and in turn are granted a set of privileges, including early access to roadmap decisions, code releases and documentation. (Sakai, 2005) Beshears (2005) describes how this model could replace user-pay models of textbook distribution.

Donations Model - on this model, a project deemed worthy of support by the wider community requests, and receives, donations. Donations are in turn managed by a non-profit foundation, which may apply them to operating expenses or, if amounts are sufficient, seek to establish an endowment. Numerous open source and open content projects are funded in this manner, including Wikipedia (Foote, 2005) and the Apache Foundation. (Apache, 2005) It is worth noting that such donations are often supplemented with purchases of branded products; the Spread Firefox initiative is a good example of this. (Mozilla Foundation, 2005) Variations of this model exist. For example, contributions to the Apache project are owned by the contributor and licensed to the project. However, in another model (sometimes called the conservancy model), property is assigned to the organization, which then acts as a steward. (Everitt, 2004)

Conversion Model - as summarized by Sterne and Herring (2005) "In the Conversion model, you give something away for free and then convert the consumer of the freebie to a paying customer." This approach, they argue, is needed because "there is a natural limit to the amount of resources the Donation model can bring to an open source project, probably about \$5 million per year." Linux distributors, such as SuSe, RedHat and Ubuntu, where the software is available for free under an open source license, have adopted this model. Subscribers receive services (such as installation and support) or advanced features. In the educational community, the conversion model has proven popular, having been adopted by Elgg and LAMS.

Contributor-Pay Model - adopted by the Public Library of Science, the 'PLOS Open Access Model: One Time Author-Side Payments' (Doyle, 2005) consists of a mechanism whereby contributors pay for the cost of maintaining the contribution, and where the provider thereafter makes the contribution available for free. Interestingly, this is a model that has earned some support from publishers, particularly in view of foundations, such as the Wellcome Trust, that have begun to require that materials funded be freely available. Thus, in the 'open choice option' offered by publishers, "research articles and supporting documentation will be made freely available online to view immediately upon publication. The charges for this process will be met by funding bodies, such as the Wellcome Trust - who calculate it will represent approximately 1% of their annual spend." (Wellcome Trust, 2006)

Sponsorship Model - this model underlies a form of open access that is available in most homes: free radio and television. The sponsorship model can range from intrusive commercial messages, such as are found on commercial television networks, to more subtle 'sponsorship' message, as are found in public broadcasting. In online educational initiatives, various companies have supported OER projects on a more or less explicit sponsorship basis, often in partnership with educational institutions. Examples include the MIT iCampus Outreach Initiative (Microsoft) (CORE, 2005) and the recently announced Stanford on iTunes project (Apple) (Stanford, 2005) It is worth noting that GNU EPrints adopted this model as a direct result of a move by Research Councils UK to mandate open access for all funded research. (Yeates, 2005)

Institutional Model - a variation, perhaps, on the sponsorship model is the case in which an institution will assume the responsibility itself for an OER initiative. Probably the most well known of these is MIT's OpenCourseWare project, where funding for the project represents a part of the university's regular program, justified as constituting a part of its organizational mission. "It is an ideal that flows from the MIT Faculty's passionate belief in the MIT mission, based on the conviction that the open dissemination of knowledge and information can open new doors to the powerful benefits of education for humanity around the world." (MIT, 2005)

Governmental Model - similar to the institutional model, the governmental model represents direct funding for OER projects by government agencies, including the United Nations. Numerous projects sustained in this manner exist, for example, Canada's SchoolNet project.

Partnerships and Exchanges - though perhaps not thought of as a funding or financing model, partnerships and exchanges nonetheless play an important role, or potential role, in the development of OER networks. Partnerships depend not so much on exchanges of funding as on exchanges of resources, where the output of the exchange is an OER. For example, at a recent UNESCO conference an Open Source Congress was proposed, which "would be a voluntary, collaborative effort by interested higher education institutions to lend their expertise - both technical and functional - to begin the high-level design and planning for what will become the next-generation, open source, administrative systems." (UNESCO, 2002) Such partnerships are often more or less ad hoc and bilateral; examples include that between Memorial University of Newfoundland and The Federal University of CearÃ¡ UFC in Brazil (Barreira, 2002) and even the International Fellowships at the Open University. (OU, 2006)

In the preceding section, it was noted that what constitutes 'sustainable' will ultimately depend on the economies and the objectives of the provider. In this section, we see this reflected in the multitude of funding and financing models. In some cases, direct funding is provided by organizations who see OERs as constituting part of their mission, while in others the free distribution of OERs may promote or support different objectives, including commercial objectives. In some cases, the resource providers themselves believe that the OERs are important enough to fund, either directly or through fund-raising efforts, while in other cases the resource providers are able to obtain the support of third parties. In some cases, funding is applied directly to operating expenses, while in others funding offers seed capital or even a sustainable endowment. Each of these approaches reflects the interests of the funding party,

the needs and the motivations of the resource producers, the nature and expense of the project, and the level of funding available.

Technical Models

A consideration of the sustainability of OERs would be incomplete without at the same time considering how the development and distribution of OERs is to be accomplished. As is the case in so many initiatives, merely securing the funding for the project does not ensure sustainability; it is expected and often required that the resources thus funded will be useful, and the manner in which this is accomplished could have a significant effect on the level of funding needed and received.

In the field of OERs, financial considerations have driven technological development. The widely touted concept of the 'learning object' was driven, at least in part, by the hope that sharable and reusable learning resources would reduce the cost needed to produce them. (Downes, 2001) This, in turn, imposes requirements on the nature of OER design; as Walker (2005) argues, it requires interoperability between data, software and services. Friesen (2001) suggests therefore that learning objects must be discoverable, modular and interoperable.

What this entails has been the subject of considerable discussion (and dispute) over the intervening years. Two broad models have emerged (UNESCO, 2002a):

- Free use, used locally- the OERs are used 'as is' without modification by the educational institution; use consists (in a sense) of the 'putting together' of a collection of resources, as for example, atoms are put together to form molecules, or lego blocks are put together to form toy houses. (Wiley, 2000)
- Resources are downloaded, adapted, and sent back to the system repository for vetting and potential use by others. It is noted (in UNESCO, 2002a) that translation is part of adaptation, not a separate function. It is also noted that in order to effect these and other recommendations, an appropriate level of user registration may be indicated.

It should be noted that these two approaches characterize a dichotomy not only in the realm of educational resources, but also in other content types. Creative Commons, for example, when licensing multimedia resources, found it necessary to allow authors to add a 'no modification' clause to the three conditions available in Creative Commons licenses (described above). Moreover, the ability to modify software for one's own use is often touted as one of the major distinctions between software that is merely 'free' and software that is 'open source'. (ABA, undated)

Access and usability are also important considerations. The development of an OER network will require tools for access, including browsing, search and data-mining, syndication, and even resources such as a virtual speakers bureau (Hanley, 2005) Such considerations also comprise mechanisms to assist dissemination, adaptation, evaluation, and use of open courseware materials. For example, in UNESCO discussions of OERs (UNESCO, 2002a) participants suggested the establishment of a Global Index System, the purpose of which is to help potential users to find courseware and then to make it easily accessible.

Questions of quality are also frequently raised, as learning resources are expected to be trusted and authoritative. Consequently, the Global Index System just mentioned would be based on vetting by a volunteer group acting as an editorial board. It was suggested that a feedback loop should be established for evaluation and distribution of lessons learned in the process of developing and using open courseware. These discussions also raised the need for training and capacity building around faculty needs.

Another concern frequently raised is access to OERs. In the field of OERs, access is typically maintained through software systems called 'repositories' (software, meanwhile, is accessed through specialized version control systems, such as CVS or Subversion). Configurations vary, but the following is typical: (UNESCO, 2002a)

- Resources should be stored in distributed databases.
- They may be downloaded from there for adaptation or use.
- There will be one centrally maintained index of resources.
- The courseware is very dynamic; the index will represent a snapshot in time and will need to be regularly updated
- The index will include a full history of the provenance and use of the resources as well as users' feedback and comments.

Numerous OER repository projects exist, including MERLOT, NSDL, CAREO, and more. Additionally, various repository software projects have been undertaken, including the Open Archives Initiative, DSpace, and eduSource. It is worth noting that resources stored in repositories, even those just listed, may not be open educational resources; some repository projects, such as Advanced Distributed Learning's CORDRA project, often include access controls and even digital rights as part of their core functionality.

It can be argued that the mechanism for accessing OERs, even those that may be freely used and even modified, impacts on whether such resources may be considered to be 'open'. Some repository networks, particularly those that form repository 'federations', restrict access to (for example) students at member educational institutions. It is argued that such networks, while not charging directly for access, nonetheless impose access fees indirectly by requiring that users enroll in (and pay tuition for) university courses. (Downes, 2004)

Content Models

The nature of the content being developed will impact its sustainability. A book may be useful for decades or even centuries, but courses may have a much more limited lifespan, as little as eight years or less. (Beshears, 2005) Moreover, the nature of educational resources may impact how they can be used and reused - a digital image may be pasted into a document, but a book cannot be (unless the book is digitized and the content format permits it).

It should be no surprise, then, to find that OEMs, to be considered 'sustainable', are often described as needing to be types of flexible content that can be adapted to local needs and conditions (or 'glocal'). (Walker, 2005) Sustainable, in this context, could be seen as tantamount to reusable. And so OEM

developers have devoted a great deal of attention to reusability, as evidenced, for example, in the JIME Special Issue titled "Commentary and Debate on: Reusing Online Resources: A Sustainable Approach to eLearning." (<http://www-jime.open.ac.uk/2003/1/>)

While reusability is on the one hand a technical matter (and is therefore discussed in the preceding section) it is also at the same time a content question.

For example, 'reuse' means, in a certain sense, an integration into an existing context of use, which in turn raises questions of meaning and vocabulary. Students educated in a standard (Peirce) logical notation, for example, will be faced with difficulties if presented with a logic text that employs exclusively Polish notation. In the description of learning resources the difficulty of meaning and representation arises in discussions of datasets and metadata. Hence, for example, in order to support reuse, it was necessary for Axatalhyk, a multidisciplinary project in Turkey to reduce more than 124 related tables into a much simpler structure of 8 related tables. (Kansa and Ashley, 2005) Such processes - especially with respect to data schemas and canonical vocabularies (a process called 'crosswalking') is neither easy nor trivial, and pose challenges to educators.

Another type of content issue concerns the license associated with the resource (a matter that has been alluded to above). It is worth noting that one of the major expenses faces in MIT's OpenCourseWare project was the clearing of licenses for all materials used, even though they did not pay royalties or use commercial content for any of it. (Downes, 2002) Numerous licensing schemes exist, including Creative Commons and the Gnu Public License.

Licensing models vary according to a variety of factors: (UNESCO, 2005a)

- Does the published material remain the property of the person who produced it?
- Can authors request material to be removed from the user site?
- Can material be updated or amended only upon author approval?
- Can content be exclusively used by non-profit educational organizations, or can for-profit institutions have access?

The question of modification and adaptation has raised considerable interest among those discussing OEMs. As Mason (1994) summarizes, "The accusation of cultural imperialism has long been levelled at attempts to export courses outside national boundaries, particularly as most of the examples involved Western institutions providing courses for Third World countries."

Recent discussions have focused on the need to rethink the relation between provider and consumer. For example, at a recent UNESCO conference, "Mohammed-Nabil Sabry began the session by presenting the French University of Egypt's experience of adapting and using four OCW courses. He set the agenda for much of the week's discussion, by arguing that OER use could be improved most effectively through a shift from a 'provider/user' paradigm to a community model of collaborative development. The artificial provider/user/organiser/sponsor roles attributed to different actors in the first deliberations on OER are constraining and misleading: the reality of OER creation, adaptation, use, advocacy and financing is less neat, but provides far more scope for creativity and sustainable development. As one

participant characterised it, it would represent a move from 'knowledge for all' to 'construction of knowledge by all'." (UNESCO, 2005)

Co-development is emerging as an important aspect of OERs. (Diakit, 2002) Johnstone writes (2005), "The real vision for OER is the sharing in all directions of resources and approaches to teaching, not just North to South. When universities in Brazil put their medical journals online a few years ago, the number of citations by non-Portuguese speakers rose dramatically." What is needed, argues Keats (2003), is a process model. "Given the cost of content, the under-resourcing of universities and the scattered nature of expertise in Africa, the collaborative development of open content seems like a useful way to get high-quality, locally-relevant content for using to enhance teaching-and-learning."

This, in turn, suggests that it will be important to think of OERs not in isolation, but with respect to the community that accesses them and uses them. Or as Stephenson (2005) explicitly suggests, "Open Content + Community = Open Course." Hence, the development of a sustainable open content community is an integral part of the development of a network of OERs. This, in turn, reflects a different set of technical and support needs. As Stephenson describes this shift in emphasis, "As our thinking developed it became clearer that in many parts of the world, where transport, telecommunications and the numbers of qualified people available to teach at a relatively local level are seriously constrained, many students are left to rely on their text materials alone. Our thinking then has developed to encompass the importance of tutorial support from within the learning materials whether these are print, web-based, or through the use of audio/video tapes and broadcasts."

Staffing Models

The traditional model for the production of resources, whether they be educational resources or otherwise, involves the selection and hiring of staff (typically professional staff) to complete the work. In the production of OERs, however, different models have emerged, partially out of necessity, and partially out of the considerations just listed. To a large degree, the production of OERs (and especially software) has been driven by volunteer staff. (Zalta, 2005)

This raises a set of new considerations when the sustainability of such initiatives is considered, as sustainability is now no longer merely ensured through appropriate payment. The incentives of volunteer staff are very different from those working for a paycheque.

Usually that motivation is altruistic, based on a desire that their work be used and shared. "The main motivation or incentive for people to make OER material available freely is that the material might be adopted by others and maybe even is modified and improved." (Larsen and Vincent-Lancrin, 2005) In other cases, more concrete incentives drive volunteer participation. Professors, for example, contribute their work to the public good in the hope of receiving tenure, promotions or recognition. (Kansa and Ashley, 2005)

These non-financial incentives often require that the act of sharing resources take place in a community, as many of the factors that motivate sharing may only be produced within a community. Indeed, it could be argued that without an extant culture there's no motivation to share. (Fox and Manduca, 2005) A

potential contributor would not feel a professional obligation to share, and perhaps more importantly, would not have personally experienced the value of sharing.

Volunteers, moreover, need organizing, and the form of organization must be such that it recognizes and promotes the volunteers' motivations for sharing. Thus, as Horton (2005) observes, a volunteer organization needs a clear overall vision, strategy, and roles for participants. For example, consider the manner in which the Apache Foundation - an explicitly self-styled "meritocracy" - organizes its volunteer staff (Apache, 2005). In addition to a lengthy list of vice presidents responsible for different products, volunteers serve roles varying from "developers" to "committers" to "users". Members who have developed significantly may become a "PMC member [which] is a developer or a committer that was elected due to merit for the evolution of the project and demonstration of commitment."

In volunteer-driven open resource communities, two major models of organization have developed: the Emergent Model and the Community Model. (Foote, 2005)

- Community Model - Reputation is a natural outgrowth of human interactions o Users are powerful, must be respected
- Emergent Model - Need reputation mechanisms like Ebay, Slashdot o Users are tiny, have no power (except in the aggregate)

These systems, thought of in combination, could be thought of as forming an Ecosystem Model (Stephenson, 2005) where "those creating, using and improving open content form an ecosystem."

As the discussion thus far has illustrated, the sustainability of an OER network is based not simply on financing but on a number of inter-related factors, including funding, technical considerations, content models and even staffing. Yet at this point two approaches may be discerned, which while they are not as sharply demarcated as may be suggested here, nonetheless paint in broad relief the choices faced.

On the one hand, OERs may be supported using what might be called a producer-consumer model, where the support for OERs consists in support for production and distribution to a consuming population; such an approach is more likely to be managed centrally, to involve professional staff. There is more control over quality and content, but such approaches require greater levels of funding.

On the other hand, OERs may be supported using what might be called a co-producer model, where the consumers of the resources take an active hand in their production. Such an approach is more likely to depend on decentralized management (if it is managed at all), may involve numerous partnerships, and may involve volunteer contributors. There is little control over quality and content, but such approaches require much less funding.

The Way Forward

How do we, asks Prasad (2002):

- Equip ourselves with human and technological capabilities to contribute to open course ware development in a globalised competitive context?
- Develop the skills of adaptation of open courseware to suit the local requirements?
- Build in elements of culture sensitivity in open courseware?

- Address the question of language especially in the multi lingual contexts Integrate the processes and outcomes of open courseware?

These are questions of workflow, where workflow involves not only the development of OERs but also "how to use the material in our rich digital library, to orchestrate that fantastic learning activity..." (Fox and Manduca, 2005)

A traditional workflow is described by Hanley (2005)

Step 1: Discovery & Research for Teaching

Step 2: Designing the Learning Experience

Step 3: Teaching

Step 4: Learning

Step 5: Feedback, Assessment, & Evaluation

At each of these steps, the two models considered in the previous question may be considered. Consider, for example, the production and selection of learning materials for use (what might be seen as the first two steps).

One approach, adopted by MERLOT, is to invite volunteer contributions, but then to subject the material to professional review by peer committees. The production and selection process, therefore, is formalized, and to a good degree centralized. It is also slowed considerably. At MERLOT, only 14 percent of materials submitted have been reviewed (Hanley, 2005) This has created what almost amounts to a crisis in OERs. "There is little doubt that the generic lack of a review process or quality assessment system is a serious issue and is hindering increased uptake and usage of OER. User commentary, branding, peer reviews or user communities evaluating the quality and usefulness of the OER might be possible ways forward." (Larsen and Vincent-Lancrin, 2005)

We need to rethink the idea of 'producing' OERs at all. We need to rethink the workflow just described. Rather than think of each of these five steps as something that is done for learners, and supported through some sort of sustainable (or commercial) program, we need to think of each of these five steps as something that learners do for themselves, and indeed, that any act of learning consists in exactly these steps.

Wiley asks: "what is the future of open education? Where is it going? I think there is only one answer: localization." (Wiley, 2005)

"How do we keep funding activities whose main purpose is to be free of charge once foundation funding goes away? It seems like we may be approaching the problem backwards somewhat. I think everyone is looking for huge funding to support huge projects. It seems to me that sustainability and scalability are problematic only when people rely on others to do things for them (e.g., when a site gets slashdotted). Scalability and sustainability happen more readily when people do things for themselves (e.g., the same content distributed by BitTorrent). Centralizing open educational services is less scalable / sustainable. Decentralizing them is more scalable / sustainable. Wikipedia has two employees and well over a million

articles in multiple languages. We need to learn this lesson if open education is really going to reach out and bless the lives of people."

In the context of this discussion, what this means is that the functions of production and consumption need to be collapsed, that the distinction between producers and consumers need to be collapsed. The use of a learning resource, through adaptation and repurposing, becomes the production of another resource. Though there is a steady stream of new resources input into the network by volunteers, this represents, not the result of an OER sustainability project, but the beginning of it.

Though there is great temptation to depict the sustainability of OERs in terms of funding models, technical models or even content models - and no shortage of recommendations regarding how each of these should proceed - it seems evident that any number of such models can be successful. But at the same time, it also seems clear that the sustainability of OERs - in a fashion that renders them at once both affordable and usable - requires that we think of OERs as only part of a larger picture, one that includes volunteers and incentives, community and partnerships, co-production and sharing, distributed management and control.

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Crowdsourcing the Future of eLearning

Based on points submitted beforehand, and the discussion at the final plenary. Paul Stacey created a slide show based on the contributions.

<http://www.slideshare.net/BCcampus/future-of-elearning-moodle-moot-2011>

Global

- it's not about e-learning, it's about we-learning. The idea that post-secondary education will be available to all worldwide.
- the idea that each Moodle institution might sponsor a new Moodle institution in a developing country. Or students in one country creating a Math 8 course for all students on Moodle. Kind of like the tutoring Grannies.
- online classes and institutions might develop local capacity by developing courses and resources for a global audience. One of the major issues this addresses is how to get people to share existing knowledge and capacity.
- it's sort of breaking out of that idea of catchment boundaries, that we're trying to serve a local audience.

Students

- allowing students to 'friend' courses on different sites, and share forum messages from similar courses around the world.
- make learners into prosumers by giving them the tools they need to create. The idea of making students co-creators of the course, by creating definitions, wiki entries, etc.
- students can be involved in the establishment of parameters for assessment.
- students should be self-directed in the future of e-learning, picking and choosing what they take, and the manner in which they take it.
- but students still need support, they have difficulty working on their own. So there needs to be a whole set of support tools to help self-directed and self-paced learning.
- one of the things that is not done well in course design is formative evaluation, and maybe there are ways to enable students to support this.
- Martin makes a plug for the survey module, which is not widely and effectively used. This supports formative evaluation of the course.
- we will have to start trusting students more to take control of their learning, listen to their feedback, and be confident in their ability to contribute.
- maybe set up a separate instance of Moodle just for students to use

Pedagogies

- courses of study will be planned and assignments interrelated so that at the program level students can see interconnections between multiple areas of study

- students are engaged in self-directed learning so students are focused on outcomes (but not content - the shift away from content is a recurring theme). Let them decide how they will learn and demonstrate how they have acquired the learning.
- student support in terms of personal learning plans, e-portfolios, competency profiles, self-testing, etc. Having the e-learning be personalized based on learning styles
- having students lead the learning, either on a self-directed or peer-to-peer basis
- content be thought of as being an on the side vehicle for acquiring those skills; e-learning should not be fixed to a particular resource or canonical body of resources; focused more on research in learning
- having courses that sense what students already know, so they only work on stuff they don't
- the inevitable comment that "they don't know what they don't know" and that "sometimes they need to do things they don't want to do". Yes (in response) a good teacher will disrupt thinking, to help them see what they don't know, so they want to know - it's messy, but that's what makes it personal for them (as opposed to industrial) - that's why we want activity-focused, rather than content dump
- Martin talks about a keynote by Richard Clark at the Austin Moot who did a lot about research on 'this versus that' - the things students like are not necessarily the things they are learning from

Teachers

- the idea of teachers and instructors being facilitators rather than instructors
- instruction will revolve around interdisciplinary community-based projects (as opposed to the way faculty work in a fairly autonomous way) - this can be done on fully mobile devices so classroom location is not necessary
- the idea that teachers need e-training to improve online pedagogy
- creating and offering online courses will be so easy my grandmother could do it
- 'small' schools, grades 10-12, will have specialist courses, and students will have access to those specialists, and specialists from other courses
- many students will need daily contact in a structured classroom situation
- as a nursing instructor, went from being a lecturer to a tutor to a counsellor - less and less need for deep knowledge of the subject, and more and more need for deep knowledge of interpersonal skills
- on the teacher as evaluator, some of the dichotomy of self-paced versus instructed comes together in the area of evaluation - the evaluation may be the challenge - is there a way the teacher can challenge the learning objectives set by the student?
- there is a fear that if we move to teacher as facilitator, that's not the same skill set teachers have now. Right now it takes a great deal of content area skill as well as facilitation skills
- being human online is essential. And we need to remember how new and unfamiliar the online environment still is to many people

Technology

- mobile learning will become the medium of choice with projected screens and keyboards. Holographic projections will replace video. Immersive tech will replace audio and video
- with cloud computing and mobile, people will use learning any place and time. People will learn when they play
- there will be a central repository of learning
- a revised user interface
- shift from a pull-from-server to a push-to-subscriber. Learning should move to the personal area network. This might help us break out fo a schedule-based top-down delivery model.
- student records, marks, courses, communication systems., etc., will all be on the same system
- eLearning will make no sense in the future, it will be standard learning with content, etc., online
- biometric authentication for test-taking
- it's a team project; the trick going forward will be will be choosing which technologies, when do we move, how far do we jump, how much do we invest
- technology when appropriate, but there's something to be said for meeting face to face. Eg. the QR codes on the badges at the Canadian e-learning conference was pretty stupid, I didn't see anyone using their phone to read the name they could read on the badge

Credentials

- what about the guild model of learning, where you join the pphilosophy for life, where you always have access and community?
- we need a flexible model of credentialing where you set out your own learning path, credentials where you prove what you know, not where you learned it, a portfolio approach, skills oriented
- credentials from e-learning will be seen as a higher achievement
- continuous learning will simply be how things are done; it will be learning while earning
- is it really about how much we know, or the nature of what we know
- There was some discussion about whether it was even possible to get a crowd-sourced talk like this, and obviously it worked fairly well.

Access2OER: The CCK08 Solution

Contributed to the UNESCO OER discussion list, February 16, 2009.

I believe it would be worth a few words to describe a course run by George Siemens and I last fall. The course was titled 'Connectivism and Connective Knowledge'. It was offered through the University of Manitoba as a credit course, but we also offered the course for free to any person interested. It came to be called the MOOC - Massive Open Online Course.

** Participants: A note about the learners and educators involved. Who provided the solution, for whom?*

George Siemens and I acted as instructors. Logistical internet support was offered by the University of Manitoba, by Dave Cormier, and by myself. 24 students registered and paid fees to the University of Manitoba. 2200 people signed up for the course as non-paying participants. We offered all aspects of the course to both paying and non-paying participants, with the exception that paying participants submitted assignments for grading and received course credit.

** Context: A note about the context, e.g. socio-economic conditions, geographical region, rural vs. urban, available internet access, ...*

Participants registered from around the world, with an emphasis on the English-speaking and Spanish-speaking world. The course was offered in English; Spanish participants translated key materials for their own use. The course attracted a wide range of participants, from college and university students to researchers to professors and corporate practitioners.

** Solution: Please give details of the solution here.*

The course was designed to operate in a distributed environment; we did not centralize on a single platform or technology. With the assistance of University staff and Dave Cormier, George and I set up the following course components:

- a wiki, in which the course outline and major links were provided
- a blog, in which course announcements and updates were made
- a Moodle installation, in which threaded discussions were held
- an Elluminate environment, in which synchronous discussions were held
- an aggregator and newsletter, in which student contributions were collected and distributed

We encouraged students to create their own course components, which would be linked together with the course structure. Students contributed, among other things:

- three separate Second Life communities, two of which were in Spanish
- 170 individual blogs, on platforms ranging from Blogger to edublogs to WordPress and more
- numerous concept maps and other diagrams

- Wordle summaries
- Google group, including a separate group for registered participants

** Key Barriers: Please give some of the key barriers to access addressed by this solution. (Ideally referring back to our list of access issues.)*

o Access in terms of awareness. (Lack of awareness is a barrier to OER.)

Given that we attracted 2200 people, we addressed the lack of awareness in some fashion. The course was not widely advertised; it was posted on George Siemens' and my newsletters. That said, these newsletters are leading sources of information to a community that would be interested in the course.

o Access in terms of local policy / attitude. (Do attitudes or policies pose barriers to using OER?)

One of the major attractors was that the course was offered by the University of Manitoba. It was necessary to convince the university to offer an open course, which George Siemens managed by adding the enrolment component. In one sense, the paying students funded the non-paying students; in another sense, offering the course as an open course created sufficient marketing to attract the paying students. The University was satisfied with this result and will be employing the same model again.

o Access in terms of languages. (How well does the user speak the language of the OER?)

We did not provide multilingual access. However, because we encouraged participants to create their own resources, we created the conditions that enabled a large self-managed Spanish-language component to the course.

o Access in terms of relevance? (Is the OER relevant to the user?)

The design of the course - as a distributed connectivist-model course - created a structure in which the course contents formed a cluster of resources around a subject-area, rather than a linear set of materials that all students must follow. Because participants were creating their own materials, in addition to the resources found and created by George Siemens and myself, it became apparent in the first week that no participant could read or view all the materials. We made it very clear that the expectation was that participants should sample the materials, selecting only those they found interesting and relevant, thereby creating a personal perspective on the materials that would inform their discussions.

o Access in terms of licensing. (Is the licensing suitable / CC?)

All course contents and recording were licensed as Creative Commons Attribution Share-Alike Non-Commercial.

o Access in terms of file formats. (Are the file formats accessible?) Access in terms of disability.

We did not try to provision access in all formats; rather, we employed a wide variety of formats for different materials and encouraged mash-ups, translations, and other adaptations.

o Access in terms of infrastructure (Lack of power/computers makes access hard.)

We experienced a full range of issues. Basic course material was provided in HTML and plain text, however, various course components required more bandwidth. The use of UStream proved useful to nobody, as the bandwidth requirements were too great even for instructors. Skype worked well for planning and recording, but not for instructing. Elluminate was effective with limited bandwidth, but had limits on the number of seats we could offer (it was capped at 200, though to be fair, Elluminate said they would extend this as needed). We made MP3 recordings of all audio for download. Second life was accessible only to those with sufficient bandwidth and platform. Essentially, the structure of the course provided a wide range of access types, making it possible for people with limited infrastructure to participate, while still employing more intensive applications.

o Access in terms of discovery. (If the OER is hidden, not searchable, not indexed, it's hard to find.)

Though we provided search, the major resource related to discover has nothing to do with search. The provision of a daily newsletter aggregating and distributing course content proved to be a vital link for participants. A steady newsletter subscription enrolment of 1870 persisted through the duration of the course. In evaluations and feedback participants said that the newsletter was their lifeline. A full set of archives was provided, allowing people to explore the material chronologically, to make up days they may have missed.

o Access in terms of ability and skills. (Does the end user have the right skills to access?)

One of the things that we noticed was that, by combining participants from a wide range of skill sets, people were able to - and did - help each other out. This ranged from people answering questions and providing examples in the discussion areas, to people commenting on and supporting each other's blogs, to those with more skills setting up resources and facilities, such as the translations and Second Life discussion areas.

** Scalability: Please comment on how your solution might "scale".*

We believe that the connectivist model employed in this course might offer a unique approach to the problem of scalability. We could not, nor did we try, to provision everything that was needed for 2200 students. Rather, we created conditions, and encouragements, where participants would provide additional resources for themselves. The role of the instructors and facilitators is essential in this model, but this role is not to provide solutions but rather to establish a basic structure.

Regarding marking and recognition, the course offered an insight that may prove useful in the future. While the University of Manitoba graded 24 students, we did receive (and grant) a request for a student from another country to be assessed and graded by their own institution. All assignment descriptions were displayed as part of the open course, and the assessment metric was also distributed, so other institutions could know everything needed in order to provide evaluation and feedback.

** Questions: What questions should we be asking about this solution that will add to our understanding of enabling access to knowledge and learning resources?*

I think the main questions are in the area of applicability: would this model work in other areas? Would it work in other communities?

In addition, I am exploring the question of whether this approach can be supported with technology designed specifically for this model, for example, the creation of serialized feeds to automatically create and conduct cohorts through the course material.

** Implications and adoption: What are the implications of this solution for OER and enabling access to knowledge and learning?*

The course - which came to be known simply as CCK08 - was a landmark, we believe, in open access, because while providing the formal requirements of open learning - course structure and content, recognition, assessment and credentials - it nonetheless operated on a very different model from other OER initiatives. Materials for the course were not 'produced' in the traditional sense - rather, the instructors created a framework, populated that framework with open materials already extant on the web, added some commentary and videos of their own, conducted open online sessions and recordings, and created the infrastructure for wide student participation.

** Links: If there are any web links to initiatives or projects, please include them!*

Course materials may be accessed from the course wiki: <http://lrc.umanitoba.ca/wiki/Connectivism>

Here is the course blog: <http://lrc.umanitoba.ca/connectivism/>

Here is the newsletter site (note that newsletter publication ceased with the end of the course):
<http://connect.downes.ca/>

Here are some participant feeds: <http://connect.downes.ca/feeds.htm>

I hope you found this contribution useful.

Moncton, February 16, 2009

Thoughts on Solutions

Submitted to the [UNESCO OER Discussion](#), February 26, 2009

1. We have to accept that in some communities there will be priorities other than education. The need for clean water and safe food may be much more pressing, for example. In this discussion, we read of places without access to electricity. Providing electricity in such cases is of primary importance. Electricity - whether solar or wind generated or even from hydro or human power - can do so much more than power computers: it provides water, refrigeration, light, and more. Electrification is a key requirement, and in my estimation, for such regions, talk of OERs is a distraction.
2. The corollary to that is, that the design of a program regarding OERs should not be based on the needs of regions where other priorities - such as electrification - are significantly greater than the need for OERs. We may be told (by publishers?) to focus our efforts on non-digital technologies. This is a distraction and a distortion of the idea of open educational resources. Attempting to employ non-digital means to distribute OERs is significantly more expensive; this is why the idea of OERs really became feasible only with the advent of digital technologies.
3. After basic civic infrastructure, and after electricity, the next prior condition for OERs is a viewing and playing platform. It is clear that significant advances have been made here in the last few years, catalyzed by such projects as the Simputer and the One Laptop Per Child, and ultimately made possible by flash memory, low wattage CPUs, and advanced display technology. The availability of low-cost computing greatly increases access to digital materials, and projects that increase such access (microloans for the purchase of a netbook, for example) should be contemplated. While mobile phones are touted as a viable platform, this should be regarded with some caution: data rates on mobile phones are very high, displays and computing capacity are minimal, and mobile phones are closed systems (the telco retains control over the platform (the hardware and operating system)).
4. Given access to suitable platforms, the next major requirement is typically construed as access to open educational resources themselves. As backbone connectivity is often prohibitively expensive, we often hear proposals for the encoding of content onto flash memory and DVD for distribution and possibly sale. While access to materials is desirable, and should be promoted, this misconstrues the need. Just as a telephone system is valuable for the conversations it can carry, so also a computer network is valuable for the communications it sustains. It is not a substitute for lack of telephone connectivity to simply record some telephone conversations and distribute them to recipients. The next requirement after computation, therefore, is not content, it is *connectivity*.
5. Where possible, computers should be deployed in clusters and network connectivity established. Even if backbone connectivity to the internet cannot be sustained (because of cost and availability) local connectivity can be used to share communications and resources. Wireless mesh networks, wider area WiMax network, and regional iBurst networks, are all either viable or soon to be viable technologies.

With such networks, the physical distribution of resources (ie., content on flash memory or DVD) can focus on single nodes, to be propagated as needed from there via the local network.

6. The *production* of open educational resources ought to be thought of as a community process, with the distribution of these resources established through a process of *sharing* rather than giving or sales. When the various considerations regarding the sustainability of OERs are taken into account, as I do here <http://www.downes.ca/post/33401> then it seems clear that, unless the creation and management of OERs is community-based, the result will be a requirement for a significant overhead. When we think of OERs as something that are *given*, then we are inclined to channel resources to the *givers*, in order to sustain the giving. The givers, however, are typically those least in need of resources: it is no coincidence that the givers are large institutions such as MIT, Stanford, and Open University. But it is a misapplication of funds to channel resources to such large institutions, the entities in the value chain *least* in need of additional subsidy and support.

7. Models and instances of knowledge creation and sharing ought to be instantiated and propagated. The recent effort by the Indian government <http://pib.nic.in/release/release.asp?relid=47343> to document and share traditional and regional knowledge is an excellent case in point. Such initiatives depict the creation of OER programs not merely as the passive recipients of knowledge, but as active creators and sharers of knowledge. An OER training package is proposed, not so much on the receipt and use of OERs, but rather, on the creation and distribution of OERs. As people begin to create and share their own knowledge, they begin to see the value and insight in others'.

In summary:

- the key is to focus on connectivity, not content
- low-cost 'netbook' computers are encouraged, with an emphasis on local connectivity
- resources should not be directed toward 'givers', as they are the entities least in need of support
- resources should be directed toward helping intended 'recipients' share their own knowledge

I hope this is useful.

Update - February 28, 2009

I would like to respond to Moyomola's comment,

Bolarin, Moyomola (ICARDA) wrote:

Your thoughts on solutions raised many questions within me, one of which I can only express now. To begin with, in your summary, you think "the key is to focus on connectivity, not content".

My question: Will there be a need for connectivity where there are no content to connect? In which case availability of "content" is the driving force for "connectivity."

Again, as I stated earlier, in small villages where there is no electricity, the priority may be to provide electricity, not OERs.

That said, it must be stressed, by 'connectivity' I do not mean broadband access to the rest of the world. As I tried to emphasize in my previous post, what I meant most especially was connectivity with each other. This can be accomplished without paying any internet access fees, if the computers are equipped with wireless mesh network capacity.

You ask, "will there be a need for connectivity where there are no content?" That is like asking, "will there be a need for a telephone service without pre-recorded messages?" It is to mistake the internet as a content-access system, when in reality it is a communications system. The internet is much more than merely a means of receiving content.

If people are connected, they will produce their own content. If they have a means to create, to communicate, to record, share and save, they will create their own knowledge and share this knowledge. We know this because this is what has happened in all other areas that have received the internet. In classrooms, in businesses, in homes, people are sending messages back and forth, creating accounts on social networks, uploading photos and videos, writing poems, creating software, and so much more.

Now this does not mean that there should be utterly no content, and utterly no connectivity. I believe that it would be useful to have a computer in local networks that contains a library of content - a copy of Wikipedia, for example, the Stanford Encyclopedia of Philosophy, Open University courses, Flickr photo libraries, WikiEducator courses, maybe even my own website (heh). Content that would be selected and downloaded or brought in on Flash memory or DVD, once, for the whole community, after discussion of the matter.

But even this content is much less useful without community connectivity. There is a big difference between reading something all by yourself, and reading it as a part of a group and creating and sharing things based on it. Indeed, the need for content is generated by community and communication. The ability to use content is created through community and communication.

Finally, community and connectivity, unlike mere content only, are a means of generating value and wealth for a community. By capturing and creating its own knowledge, a community is creating something of value. Whether or not this value can be monetized, what is important is that the members of the community are not merely passive recipients of their learning, but also actual creators of that learning. By developing this capacity, they become able to take part in online commerce, first among themselves, and then with the rest of the world.

Moyomola, I have never been to your village (but I would love to visit one day - does it have a website?). But I have been in communities large and small, in South Africa and Lesotho, in Colombia, in Malaysia. What I see is not simply a desire to read stuff and to watch TV, but to create and share. As soon as people see what can be done with this technology, very simply and very cheaply, their faces light up and they want to begin to create. And they don't stop.

-- Stephen

p.s. I would like to add two remarks, to add some context for the rest of the discussion members.

First, I would like to make the observation that, insofar as there is a need for content, as described above, the content already exists or can continue to be developed through voluntary (community-based) effort. The same is the case for software, with organizations developing packages of free community applications for learning communities. <http://k12ltsp.org> for example. These are available for free; there should be no need to purchase commercial packages.

Second, where expenditures are required, it seems to me, it would be much more appropriate that they occur in recipient countries rather than donor countries. For example, suppose it were determined that there were a need to create copies of DVDs to distribute community applications and contents. Then, blank DVDs should be purchased from local vendors and local staff hired to create copies. Additionally, if it were determined that certain network infrastructure were needed to create community mesh networks. Then, an enterprise should be established in a recipient country to manufacture and distribute these components. To reiterate the wider point: it just seems wrong to me to see the bulk of money intended for world development end up in the pockets of people and agencies based in North America and Europe.

Moncton, February 26, 2009

Valuable Learning

Responding to [Stephen Carson](http://www.tofp.org/blog/?p=228) (<http://www.tofp.org/blog/?p=228>). I wanted to post this as a comment, but his blog requires that you be logged in to post a comment, and then provides no way to register, making commenting impossible.

Stephen Carson takes issue with my comments in a recent eLearn article where I distinguish between MIT's OpenCourseWare style of open educational resources (OERs) and the Open University. In a nutshell, the former consists of the handouts and related materials used to support an in-person class, while the latter consists of self-study materials.

Carson is right when he asserts that I prefer the latter over the former, for reasons I'll get to in just a moment. He nonetheless appears to rather misinterpret the gesture I made in calling the one form 'green' and the other 'gold'. Perhaps he is not familiar with the open archiving movement. Proponents such as Steven Harnad use the green-gold system to argue that *both are acceptable*, though they constitute different forms of access.

I was *trying to say* that while I don't think the OCW approach was everything it could be, I was nonetheless supportive.

But why would I take the stance I did in the first place? Carson takes issue with me when I say this: "The understated message in an initiative such as OCW is that an MIT education is not equivalent to the resources that support the education, that it consists essentially of the contact with the professors and the community that develops among the students."

Well, yeah. But the reason I say this is that *this is what MIT staff said* when OCW was launched, and what they continue to say to this day. *I am not the one saying that OCW is not a complete package, MIT is the one saying this.*

Now of course I continue on to criticize this approach in a way that MIT staff obviously would not. I ask, *contra MIT staff*, "is the development of an institution and a class, whether online or in person, necessary in order to translate digital content into learning?" Remember, *I am not the one saying that OCW is not a complete education. MIT staff are the ones saying it.*

And, it seems to me, that if MIT staff are saying that OCW is not a complete education, and that if OCW was developed and implemented by MIT staff, then it was a deliberate policy intent of MIT to *not provide* a complete education. The materials would be helpful, but not in themselves enough. *That's what they said.* So, obviously, what you would need, in addition to OCW materials, is MIT staff.

Now I would suggest that Stephen Carson not get all huffy with me for merely repeating what MIT officials told the world.

My suggestion in the article is that the creation and distribution of complete self-study packages, *a la* the Open University, is better. I say this, not simply because OCW 'does not address my agenda', but because I believe that there are good reasons to believe full self-study materials are better than incomplete course resources.

Carson himself makes it clear why you would want to offer complete self-study resources rather than ones that are designed to be supplemented by in-person instruction: "the [data we've developed \[PDF - 9.0MB\]](#) demonstrating that the vast majority of use of OCW is self-learning independent of institution and classroom." In other words, exactly the use *not intended* by MIT staff when they developed OCW.

Well, of course, this was always going to be the case, wasn't it? Only a few rich people can afford the personal tutelage of MIT professors, or even those of affiliated institutions. The vast majority of people accessing the materials, and particularly those outside the western nations, cannot afford professors. So they make do with the materials, even though they're incomplete.

That's what makes the materials good. That's what makes them 'green'. Because people *can* make do with them. But surely it is not unreasonable for me to prefer materials *explicitly designed* to support self-study over materials designed to make it harder. No?

Carson explains the point of his objection to my characterization: "the reason Stephen's comments irk me is that they are exactly the kinds of comments likely to discourage broad participation in open sharing." In particular, "Stephen dings us on the one hand for [appearing elitist](#) and then turns around and sets a gold standard for open sharing that very few other schools are going to be able to meet."

Well, if MIT staff had come out several years ago and said something like, "We would like to be able to offer full self-study materials, but this is not our expertise, so we're going to do what we can," that would be one thing, and I could very easily have lived with that explanation.

But instead what we got was a stuffy, "Of course, it's *not* an MIT education," which makes me think, well aren't we so lucky they're allowing access for their leavings for us plebes. Now that's not an accurate picture either - I know as much as anyone how much work it has been to put OCW together and to make it available. But that's how it *sounds* - and I'm not the one making it sound that way.

A little humility would wear well on MIT, some sort of admission that it did *not* invent everything and cannot solve all the world's problems. If MIT cannot produce materials up to the quality of the Open University's, well, that's OK, they're still good. They're 'green'. Not 'gold', sure, but nonetheless, still worth supporting.

Would the development of materials up to the Open University's standard deter broad participation in open sharing? It's hard to say, though it's worth noting that the Open University materials do now exist, and so we're going to see whether the deployment of that model has any impact. I don't see why it would. I haven't seen any slowdown in activity since Open University's announcement. If anything, it has sped up. Sure, the bar is higher now. But I don't see people throwing up their hands and saying "Oh it's

too hard for us." And why would they? Most academic I know - even ones who aren't from MIT - think that they could improve on existing materials. That's what drew them to the profession in the first place.

So, yeah. I'm going to criticize the attitude. I'm going to criticize the proposition that you need the tutelage of MIT professors to get an MIT-quality education. I'm going to question why the OCW Consortium site offers no community function (this is not 1995, after all - we've evolved well beyond links). I'm going to wonder why participation needs to be mediated through a secretive email exchange.

And let me emphasize, since this point seems to have been missed: I support OpenCourseWare. I think it's a good thing. I am pleased that MIT has spent the time and money to make these resources available. This support is pretty much unqualified.

Just... if something better comes along, I'm going to say it's *better*. In what world would I *not* do this?

p.s. I did not write the article for ScienceGuide (I have never even heard of them). The source Carson cites, ScienceGuide, has published a [copy of the article taken from eLearn](#). Not that I care, but eLearn Magazine may have something to say about it.

Moncton, February 17, 2007

Noncommercial?

Responding to [David Wiley](http://opencontent.org/blog/archives/308) (<http://opencontent.org/blog/archives/308>):

I had a look at the Creative Commons discussion draft. What they are doing is presenting a decision-tree type approach. "Is it x? If yes, it is commercial. If not, is it y? If yes, it is commercial. If not..."

This is one way to make such a determination. But there are other ways we could do the same thing (there is an interesting parallel between ways of making a decision and ways of defining a game - see <http://www.downes.ca/post/11> - this parallel is also reflected in the differences of types of artificial intelligence - the 'branching story' reminds one of Newell and Simon's General Problem Solver.)

The point is that the branching story - and indeed most any other formal process - will always leave gray areas. The attempt to define 'noncommercial' more precisely leads us down a slippery slope based on the assumption that it can be done.

My own feeling is this: if you have to ask whether or not your use is commercial, it's commercial. The very precise definitions are being used to weasel the maximum advantage out of the definition of 'noncommercial' rather than any genuine desire to respect the intent. The only people who are actually interested in the definition of 'noncommercial' are those commercial users hoping to find a loophole. Which is exactly what the precise definition of 'noncommercial' allows them.

My own view is that the test for 'noncommercial' is very simple: "Is it being used to make money? Yes - it's commercial. No - it's not." Any further attempt at a definition constitutes an attempt by a person using it to make money to make it appear as though they're not.

Take, for example, the question about commercial or noncommercial users raised earlier this week. The presumption here is that there could be a noncommercial *use* undertaken by some commercial user that would allow the use to be characterized as noncommercial.

This is a sleight of hand. By definition, every activity undertaken by a commercial entity is commercial. Commercial entities exist solely for the purpose of making money. They may be engaged in acts that benefit the community, but that it only because benefiting the community is a reliable way of making money.

You may say that the commercial entity may be engaging in genuine charity work. Certainly, corporations have been successful in designating some of their activities as charitable activities. The 'Ronald McDonald House' springs to mind. So suppose McDonald's uses my image to promote Ronald McDonald House. Is the use noncommercial?

While McDonald's may be able to fool the legal system but they're not fooling me. The McDonald's name and logo are plastered all over that charitable entity. It constitutes a part of McDonald's continuing attempts to brand themselves as a children's product (a branding I find morally

reprehensible, but I digress). It is a commercial activity, as are the vast bulk of corporate 'charitable' activities.

The point here is, if you allow this camel's nose into the tent, you are not in a position where it will be necessary to look at all sorts of different types of uses in an attempt to determine whether or not they are commercial. Because the primary determinant, whether or not it is used to make money, has been taken off the table.

My feeling is that the mechanism of determination whether something is commercial or noncommercial should not cater to this misuse. If there is any sort of question as to whether the use is commercial, the presumption should be that it is commercial. This places the onus on the user to query whether the use is allowed.

Yes, I know that the purpose of Creative Commons is to eliminate the need for such queries. And Creative Commons does have a mechanism for eliminating such queries: the By license. You do not *have* to use the noncommercial clause. The fact that you *are* using it suggests that commercial use is a matter of concern to you. Which means you are *exactly* the sort of person who will be off-put by some company walking a legal tightrope to have their commercial use declared 'noncommercial'.

'Commercial use' should be defined as an 'I know it when I see it' phenomenon. Whether a use is commercial or noncommercial is a matter of *recognition* rather than rule or legislation. Defining it this way does not allow the ethically dubious to sneak through a loophole to defeat the intent of the clause. It opens the way for obviously legitimate noncommercial uses, such as positing on a personal website, while closing marginal commercial uses, like posting on a fake personal website.

There is a tendency, especially on the part of lawyers, to try to define the minutiae of the law. This tendency should be resisted. Leave the gray area reasonably large, and hence, the scope for human judgment and recognition equally large.

Commenting, [Chris L](#) said...

*Your idea sounds good, but it's bunk in practice most of the time. In fact, the quandary over whether a use is non-commercial or not may just as well stem from someone who is being *overly* thoughtful about the question, as one sees all the time on the CC mailing lists.*

I work for a public institution, a registered non-profit, so it would seem obvious that using NC materials for course development would be OK. But my unit is self-sustaining, we in particular make a "profit" (because we don't receive money from the mother ship) from the tuition (where the rest of the university loses money despite tuition), so does that mean we can't use NC materials?

CCs answer, eventually, was "you're just fine...if you worked for a private, for-profit institution it would be different." I guess I was guilty of over-thinking.

At least I hope so, since being characterized for my honest question as a "weasel" is much less pleasant.

My response:

Congratulations, you found a loophole. This is just the sort of thing I was talking about.

You write, "But my unit is self-sustaining, we in particular make a 'profit'..."

That's commercial activity. And you *knew* it was commercial activity, that's why you felt you needed to check.

Yes, non-profits shouldn't be undertaking commercial activities, but you know as well as I that though the guise of 'self-supporting' spin-offs they do exactly that.

That's why my approach is not bunk. Because you can't spin commercial activity with some kind of story. There's no loophole to jump through.

Moncton, February 18, 2007

Why Not CC-By?

Responding to [David Wiley](http://opencontent.org/blog/archives/366) (<http://opencontent.org/blog/archives/366>):

This post goes a long way to explain the genesis of the OEL (Open Education License). However, significant questions linger.

Wiley writes:

First, the OEL is not meant to be “the license” that replaces all other licenses...: CC By-NC-ND, CC By-NC-SA, CC-By-ND, CC By-NC, CC By-SA, GFDL, CC By, (OEL goes here)... Public Domain is impossible to put at the end of this list.

The U.S.-centric nature of Creative Commons has long been a problem, and this is most clearly evidenced by its attitude toward public domain. So I accept the idea that there needs to be a license to the right of the list.

But why is it called the Open *Educational* License? Why not just call it the 'Open License'. Or 'CC-Open' Or some such thing that does *not* tell readers that educational content is Open for Business?

Second, there is a major mechanical problem with the way CC By is used by people. The Attribution requirement of all CC licenses, including CC By, states “You must attribute the work in the manner specified by the author or licensor.”

This problem is generated by an equivocation on the word 'specified'.

I 'specify' my attribution on every page of my site. At the bottom where I say 'Copyright 2007 Stephen Downes'. The attribution to me would be as I have specified it, 'Stephen Downes'.

But of course you are interpreting the word 'specified' to mean 'citation instructions'. What good grounds are there for this interpretation? Especially given that 99 percent of CC-By resources do not provide 'instructions'.

This problem is the sort that doesn't exist until a lawyer finds it. It is a case of using the letter of the license to act against the spirit of the license. This is far too common in the world of law and licenses. It is certainly not a problem specific to CC-By.

Third, in the preface to the draft I described a family of scenarios in which the requirement for Attribution is effectively a form of discrimination against people and groups of people.

Of course, as you say, "political and other messages could be embedded in Attribution requirements." I would even go so far as to suggest that political and other messages might be embedded in the content itself! But I digress.

If the requirement of posting content is to post a message contrary to your own interests, then don't post it. It seems farfetched to expect that the creation of another license will change the intent - and the tactics - of organizations intending to put political messages into their licenses.

Fourth and finally, in the context of open education we don't need an attribution requirement embedded in the license. We have a citation culture... Attribution is a social norm in the academy (as well as a matter of policy), and we can depend on this social norm and existing policies to encourage proper citation.

That's a noble sentiment but demonstrably false.

The sentiment requires the isolation of an academic culture from the wider, more commercial, culture that surrounds it. But in the internet era, these cultures are thoroughly mixed. Academic content is considered fair game by people poised to copy - with or without attribution - for commercial profit in exclusive markets.

Moreover, if attribution is the norm in the academy, then posting a requirement that use of my work be attributed is, in fact, the norm. It should not change any *academic* use of my work.

And again I iterate that the only people harmed by CC-NC-By are commercial exploiters who seek to cordon off the market for academic content as their own and to systematically loot it for their own benefit and at the expense of people who most need free - and *noncommercial* - content.

Moncton, August 11, 2007

Criticizing the Cape Town Declaration

Re: [The Cape Town Open Education Declaration](http://www.capetowndeclaration.org/) (<http://www.capetowndeclaration.org/>)

Normally I would expect to enthusiastically add my name to a document supporting free access to open learning resources. This is certainly a cause I have worked toward all my life, one that is expressed in the [statement of principle on my home page](#), one that characterizes the papers I write, the software I code, the speeches I give.

But I find myself at odds with the declaration written by a group of mostly American academics and advocates invited by a foundation to a private meeting in South Africa to author a "fixed and final" declaration on open educational resources. Although not invited to the Cape Town meeting, I was able to discuss the document with the organizers a few weeks ago. Yet I find that none of the concerns I raised have been addressed.

The result, I believe, is a flawed document - flawed, not simply because it does not adhere to what many would consider to be fundamental to free and open learning, but flawed because it betrays the process and the spirit of the movement.

I do not believe that a panel of hand-picked representatives representing overwhelmingly a certain commercial perspective is qualified or able to speak on behalf of the rest of us. The very people they name - "learners, educators, trainers, authors, schools, colleges, universities, publishers, unions, professional societies, policymakers, governments, foundations and others" - are mostly nowhere present in these deliberations. And the remainder of society - who are not stakeholders, Properly So-Called - are nowhere to be found.

The first, and most fundamental, recommendation I made with respect to this document was to open it up. Don't have a single document that your chosen few sign, I suggested, leaving everyone else to either follow quietly along with the 'received wisdom' or be cast off the boat. Put the document into a wiki page - maybe even a Wikipedia page - and let the community as a whole have its way with it for a while. Take it around to conferences and meetings on the five continents, where people who aren't lucky enough to have a friend in the Foundation can also have a say.

The document will be officially 'launched' in January, having only been circulated on the UNESCO Open Educational Resources mailing list (and perhaps elsewhere (update: on [David Wiley's blog](#))) thus far. So there is still time. It could still be a people's document, and not one showered down to us like some gift from on high.

So why am I so critical of this document? What sort of changes do I think a wider community would make? There are many, but allow me to highlight some of the most fundamental.

First, the document promotes a view of learning rooted almost completely in the educational system. We do not get any sense from the document that students can or should learn on their own, or that this movement is even for students at all. The focus is on *educators* sharing with each other.

"Educators worldwide are developing a vast pool of educational resources on the Internet, open and free for all to use. These educators are creating a world where each and every person on earth can access and contribute to the sum of all human knowledge."

There is no sense of the possibility, much less the desirability, of this development being fostered by, for the benefit of, people other than educators. I would like to think and hope that we *all* are creating this world. I would like to think that the tradition of "sharing good ideas" is something that all people, not just educators, have in common.

More significantly, dividing the world in this way almost immediately creates practical problems. The document tells us that the open education movement "is built on the belief that everyone should have the freedom to use, customize, improve and redistribute educational resources without constraint."

This significantly limits the domain of knowledge under discussion, as it contemplates only "educational resources". Oh! What a far cry from the rather more laudable [objective of Wikipedia](#): "*Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge.*"

Second, and related, the document fosters a particular culture of learning, one where content is provided and licensed by content producers, and then consumed in a particular way by learners.

The document refers to the "global collection of open educational resources has created fertile ground for this effort," describing not the many individual creations made by people with no connection whatsoever to the education industry, the billions of web pages, Flickr images, YouTube videos, and the like, but rather the resources produced explicitly for educational purposes.

Instead, the document refers specifically to "openly licensed course materials, lesson plans, textbooks, games, software and other materials that support teaching and learning." While a defender of the document might say that personal learning is not excluded, it is clear that the focus is elsewhere. It is clear in this document that pedagogy, not empowerment, is the focus.

Third, the document advocates a form of 'open' that explicitly encourages the closing and blocking of access to education through the commercialization of these resources. The meaning of the catchphrase about "differences among licensing schemes for open resources creat(ing) confusion and incompatibility" is made explicit in the [FAQ](#): "we believe that open education and open educational resources are very much compatible with the business of commercial publishing."

This is not so, and in fact the majority of resources licensed under an 'open' license are licensed for *non-commercial* use. The view expressed by this particular group of especially selected representatives is in fact a *minority* position. When people talk about 'open' educational resources, they do not normally mean something they have to pay some publishing company in order to access.

The sort of model envisioned by the authors of this document should be understood very precisely when considering the actions they advocate in the document.

When the authors say "creating and using open resources should be considered integral to education and should be supported and rewarded accordingly," what do they mean? The idea of "reward", which is not integral to any concept of free and open learning, is introduced with puzzling nuance.

When the authors say, "we call on educators, authors, publishers and institutions to release their resources openly," what they *mean* is that everybody should make their materials freely available for commercial exploitation. By 'release', we should be clear, the authors mean "publish," emphasizing the producer-consumer model of learning.

A similar line of criticism applies to the third recommendation. We see governments encouraged to produce educational resources and to release them under a license that allows them to be commercially exploited. There is no provision in the licensing recommended to ensure that they be made *freely accessible to all learners*; we trust to luck (and charity) to ensure that this happens.

The signatories of the document want to share their commercial model of learning with the world. "We have the opportunity to engage entrepreneurs and publishers who are developing innovative open business models," they write, with no apparent understanding that it is this activity that is precisely what is hindering free and open access to learning today.

The nature of knowledge and learning - as with anything else - is such that it acquires value to vendors not from abundance but from scarcity. And indeed, in a condition of actual abundance, which is very much the position we find ourselves in today, the only commercial value that may be derived from knowledge and learning is through the creation of artificial scarcities. The *first* action of any company seeking to be 'entrepreneurial' will be to seek to block access to free and open learning, to work, in other words, exactly contrary to the interests of learners.

The point is, knowledge and learning and not things that *belong* to someone. Knowledge and learning and the birthright of every human being, a cultural heritage shared by all, and like the commons, access to that birthright isn't granted like some act of charity or sold like some act of commerce. You don't 'give' what doesn't belong to you, you don't 'sell' what doesn't belong to you. We do not need to engage in some special act of *creation* to produce this heritage; it is already there. We need only remove the barriers to access, the presumption that knowledge and learning are owned and possessed, that they are some sort of *property*.

A document intended to support free and open learning should not take the perspective of the educator, it should not take the perspective of the service provider, and it should not take the perspective of the provider. It should take the perspective of the learner - which is to say, *all of us* - and it should say, unambiguously:

We seek a society where knowledge and learning are public goods, freely created and shared, not hoarded or withheld in order to extract wealth or influence.

The Cape Town Declaration does not contain these words, because there was nobody there to speak them, and nobody there willing to hear them.

For all its pretension that learning should be "embracing educational practices built around collaboration, discovery and the creation of knowledge; and inviting peers and colleagues to get involved" the process that produced this document does not one that. In this way, it betrays the spirit of open learning as actually engaged by practitioners today.

If there is anything that could be thought of as a truism in contemporary education, it is the idea that we are all learners and that we are all teachers. The idea of lifelong learning makes explicit the former idea, and the principles of learner-centered, constructive and inquiry-based learning make explicit the latter. Knowledge - particularly social and public knowledge - is not something that is produced by a hothouse meeting of experts, but rather, is produced through a process of dialogue and conversation.

It was explained to me that the process of a small, select group was chosen because of the difficulties inherent in convincing a large group to agree. But it is not clear that agreement is needed, not clear that the creation of *this sort* of document is what the movement needs most. And as at least one attendee at the meeting can attest, the wild uncooperative community at large *can* produce agreement on a document - it can produce agreement on a whole *Encyclopedia* of them.

The community as a whole may produce agreement - but it would be the sort of agreement, if at all, that is unmanageable, uncontrolled, one that suits the wider population very well but which is rather less appropriate to serve the rather more narrow interests of the foundations and the institutions represented by the signatories.

Moncton, November 29, 2007

Another Kick at the 'Free Content' Cat

From discussions on the WikiEducator mailing list:

Someone commented,

"MIT's OCW materials use the NC restriction and therefore do not qualify as free content under the free cultural works definition. The access may be open -- but they are certainly not free materials :-)"

I replied:

This is written as though it is a simple *fait accompli*. But there is a significant body of opinion (at least, to me) that says that materials may be 'free' and licensed as 'non-commercial' -- and indeed, that when materials are used commercially (eg., sold) they are by definition *not* free.

I was asked, as a follow-up, by Leo Wong:

MIT OCW is something interesting for me coz they are doing some translation project here in Mainland China called OOPS , but don't know why they are translating the MIT "free content"

What do you think of the translation ? Do you think it is a big of waste of time or just something they could invest the time doing something else ?

Still not sure I understand the meaning of NC , and why NC is not good for free content ?

My response:

I am aware of OOPS, I have met Luc Chu, who is based in Taipei, and I have been to visit them in Taiwan.

I think that the translation effort is well worth the time, as the OCW materials are high-quality materials, and the materials, which are made available free of charge, would be of benefit to the millions of people who speak Chinese who are studying those topics.

The OOPS project is a community-based project, where the materials are placed into a wiki and are translated by a community of volunteers.

To me, this is the essence of free content, and the model to be encouraged, since it is sustainable, and does not require a continual infusion of large amounts of money - public, private, or otherwise - to keep it progressing.

Just as an addendum, since you ask,

Still not sure I understand the meaning of NC , and why NC is not good for free content ?

This is a good example of why, in my view, the NC license is more 'free' for content.

Suppose OCW is licensed to allow commercial use. Some company comes along and spends a lot of money to translate the materials into Chinese. Then, in order to recover their investment, they sell the materials in China.

The result?

- this remains the only translation into Chinese, since people say there is 'no point' translating the materials a second time
- hence, for Chinese speakers, the **only** access to these materials is through purchase

I would add that if there is any danger of people producing free Chinese versions of the materials, such a company would have a significant incentive to block that effort. Such efforts are blocked in numerous ways:

- the company will 'lock down' the content it distributed (in., eg., proprietary formats, such as is used by the Kindle) so people can't simply copy it
- the company would raise doubts about the quality of the free translation
- the company would obtain exclusive distributorship of the material in Chinese markets, such as universities
- questions would be raised about the legality of the free translation
- if officials can be bribed, the people doing the free translation can be harassed or imprisoned
- technical requirements (such as standards compliance, or content registration, or digital rights enforcement) can be imposed on all content, which only the commercial company can afford

I could go on at length.

The end result is, if content is licensed under 'CC-BY-SA', the result is inevitably that the majority of people in the world must pay for access to that content. And that is not what I call 'free'.

Chris Harvey wrote:

I think he supports open access and perhaps open source and freebie software. Free software is a matter of freedom not price.

I am well aware of the distinction between 'free as in freedom' and 'free as in beer'. I support 'free as in freedom'.

My objection to commercial use is that it is a business model supported by **denying** access to resources. If a resource must be purchased before it may be used, then it is not free in either sense. A person does not have the freedom to use, modify, etc., something he or she must buy.

I appreciate that many of the other conditions of the free culture license - such as the use of non-proprietary media - serve to mitigate the excesses of commercial sales of open content. My belief is that

the full set of such stipulations, crafted so as to close all loopholes, would be tantamount to the 'non-commercial' clause.

Moncton, May 30, 2008

SELF: Building Knowledge in Freedom

Summary of a talk by Wouter Tebbins at the Free Knowledge, Free Technology conference.

There is an abundance of free software today. So why aren't people using it?

- lack of awareness
- perceived lack of (internal) tech support
- lack of qualified teachers - eg. not even 10 percent of NL teachers could give examples
- lack of education and training materials

The SELF project was an attempt to respond to this. It was intended to bring people together, to foster the collaborative development of educational materials, and do develop community and a critical stance. Seven institutions were founding partners, under the European Union's Sixth Framework.

SELF has produced:

- a selection of open standards for SELF
- a legal policy for SELF, including a definition of 'educational materials' (those materials in education that can be used without restriction, modified and distributed freely)
- a survey of existing educational materials on free software
- a quality assessment framework - guaranteeing quality is impossible in a community platform, but you can have quality indicators (there is a session on this)
- a platform for resource distribution

The SELF platform - [here it is](http://beta.selfplatform.eu/SELF) <http://beta.selfplatform.eu/SELF> - is a place to distribute the educational materials. It allows users to create, remix, translate and modify educational materials collaboratively. Unlike Wikipedia, which has a linear version history, SELF allows for the creation of 'plural views' on the same topic, as well as different levels of instruction on the same topic, or different pedagogical approaches. There is no 'neutral point of view' as there is in Wikipedia.

What is a 'learning material'? We see it as a composite object, consisting of other objects, which may include lessons, tests, bibliographies, activities, etc. Those various components compose the learning material. The idea is that lessons produced in one place - on copyleft, say - can be reused in various learning materials. The format for learning materials used is SCORM.

SELF promotes the idea of exchanging learning materials with other platforms, so materials can be imported or exported. So if you had systems like Moodle and Sakai, you can export materials from self and import them into the LMS. Or the other way around.

(diagram on SELF workflow)

One of the main challenges of community driven content is quality assessment. We think the way forward is to have people perform activities in the SELF platform, and then from those activities, infer quality. For example, the number of times people put a material on a bookshelf, or use it in a course - that suggests the popularity of those materials. Over time, the people who produced those resources will build up a reputation.

SELF can be downloaded as free software: <http://savannah.nongnu.org/projects/self-platform>

Work to be done includes platform development, server maintenance, creation of learning materials, research into quality assessment, maintenance and application of legal policies (eg., what happens if people begin uploading restricted materials), and communication.

Barcelona, July 16, 2008

Mixing Content

Here is some [OCW Content](#):

A powerful programming language is more than just a means for instructing a computer to perform tasks. The language also serves as a framework within which we organize our ideas about processes. Thus, when we describe a language, we should pay particular attention to the means that the language provides for combining simple ideas to form more complex ideas. Every powerful language has three mechanisms for accomplishing this:

primitive expressions, which represent the simplest entities the language is concerned with, **means of combination**, by which compound elements are built from simpler ones, and **means of abstraction**, by which compound elements can be named and manipulated as units.

In programming, we deal with two kinds of elements: procedures and data. (Later we will discover that they are really not so distinct.) Informally, data is "stuff" that we want to manipulate, and procedures are descriptions of the rules for manipulating the data. Thus, any powerful programming language should be able to describe primitive data and primitive procedures and should have methods for combining and abstracting procedures and data.

In this chapter we will deal only with simple numerical data so that we can focus on the rules for building procedures.⁴ In later chapters we will see that these same rules allow us to build procedures to manipulate compound data as well.

And here is some [Wikipedia content](#):

Good style, being a subjective matter, is difficult to concretely categorize; however, there are several elements common to a large number of programming styles. The issues usually considered as part of programming style include the layout of the source code, including indentation; the use of white space around operators and keywords; the capitalization or otherwise of keywords and variable names; the style and spelling of user-defined identifiers, such as function, procedure and variable names; the use and style of [comments](#); and the use or avoidance of programming constructs themselves (such as [GOTO](#) statements).

Code appearance

Programming styles commonly deal with the appearance of source code, with the goal of improving the readability of the program. However, with the advent of software that formats source code automatically, the focus on appearance will likely yield to a greater focus on naming, logic, and higher techniques. As a practical point, using a computer to format source code saves time, and it is possible to then enforce company-wide standards without [debates](#).

Indenting

[Indent styles](#) assist in identifying control flow and blocks of code. In programming languages that use indentation to delimit logical blocks of code, indentation style directly affects the behaviour of the resulting program. In other languages, such as those that use brackets to delimit code blocks, the indentation style does not directly affect the product. Instead, using a logical and consistent indentation style makes code more readable.

They are mixed. And posted online.

Now [if David Wiley is right](#), the heavens should open up and rain on me.

Waiting...

See, it *doesn't matter* if I take two bits of open content and mix them in this very obviously bloggish small-scale non-commercial way. Nobody on either license *cares*.

The license isn't just the text. It's in the intention, the interpretation, and the enforcement of the text.

Moncton, October 14, 2007

Understanding Me

Responding to David Wiley, [Misunderstanding Stephen](http://opencontent.org/blog/archives/381) <http://opencontent.org/blog/archives/381> (and a chance to use a McLuhan title as a post title).

1. Mixing Licenses

David writes,

"When a group of learners who are in no way affiliated with a company or any other for-profit organization are prevented from remixing OERs by the copyleft provisions in the GFDL and the CC-By-SA or the CC-By-NC-SA, how is it that this is only a problem for commercial exploiters of open content?"

Leaving aside all the presumption packed implicitly into this statement with phrases like 'group of learners'... Here is my counterexample: <http://halfanhour.blogspot.com/2007/10/mixing-content.html>

"Are you saying it's ok for these learners to violate the license terms, because no one will care since they're not making any money?"

Yes. Because there is no reasonable interpretation of those terms that would see them applied against individual students creating their own learning content for their own personal (and sometimes shared) use.

Now note, that this is *very* different from the corporate learning we see, eg., on a university campus. If the 'group of students' has enrolled in a class, and paid their thousands of dollars of tuition, and is being required to perform such actions, all bets are off. One of the license holders *might* sue the university.

And let me put this point even more forcefully: has there *ever* been a lawsuit over remixing GFDL materials with any CC materials licensed with the SA clause? Has there ever been such a lawsuit that did *not* involve a commercial entity? Should such a lawsuit ever be filed, can you see it not involving a commercial entity?

One (just one) of the places we find ourselves in disagreement is with what appears to be the presumption that you have accepted, that the prohibitions that govern corporate and commercial conduct also apply, and apply with equal force and sanction, to private and noncommercial behaviour. This is a doctrine copyright holders have worked very hard to get pundits to accept, and they have done so by repeating it over and over for decades. But it remains not true - but I am, it appears, the only voice in your world that says otherwise, which renders the point not merely controversial but quite literally incomprehensible to you.

OK, new point, because I don't want to get the separate points confused with each other...

2. The Principle of Use

Next issue:

"And, while I'm asking Stephen to explain things to me, why is it that he seems to think 'open' should really mean 'closed?' In other words, why is it that "open" should mean 'open to everyone except for some people' - specifically, companies? Why should we exclude anyone from what we're trying to do?"

First, some preliminaries, to lay out some important groundwork.

(a) Companies are not people. I know that there is a legal fiction, the 'corporate person', but it nonetheless remains the fact that, if I bar a corporation from using something, it does not follow that I have barred any person from doing something.

(b) The prohibition of a certain type of use is not the prohibition of any use. The statement being made is the non-commercial clause *excludes* people from using the content. This is flat-out false. People - even people in corporations - can use the content. They do so all the time - they read Wikipedia, they cut and paste CC photos, the works. What is prohibited is not 'use' but rather, a certain type of use.

(Now the usual dodge here is to throw out some pseudo-jurisprudence here ('pseudo' because I don't think it has ever been tested in court) to the effect that 'corporate use' prohibits, not a certain type of use (specifically, 'commercial use') but use by a certain type of entity, specifically, a corporation - but even so, this does not prohibit use by people who work for a corporation, it prohibits only use while they are performing their corporate duties - which is, again, a prohibition of a type of use).

So I am saying that 'NC' prohibits a certain type of use. And we ask, well, what type of use is that?

And my answer is very simple and very obvious:

It is the type of use that consists completely and solely of blocking other people from using the same thing.

EVERY thing a corporation does with content is consistent with non-commercial use up to the point where they block access to it and start charging money for it. The ONLY thing that differentiates commercial and noncommercial use is that commercial use consists of blocking people from using things.

What this means is that, except with respect to commercial use, GFDL and the CC-By-SA or the CC-By-NC-SA are logically identical. They are both statements to the effect that 'you shall not block anyone from using this content'.

To take this even a step further, strictly speaking, open licenses that allow commercial use embody a contradiction. They are saying "'you shall not block anyone from using this content' and 'you may block some people from using this content'". Anything follows from a contradiction, which is why it is so easy to make it look like GFDL and CC-BY-SA are inconsistent.

The presumption behind a license like GFDL is that the blocking use (ie., charging money for access) will not eliminate the (contradictory) open use. They can charge a fee for the content, but the people can always find the content for free and use it that way. You can charge people for a Linux distro, but people can always use it for free.

Except... except...

It never works out that way. The commercial publishers always find a way to make sure that the *only* way you can get access to the free content is by paying for it. The *only* original is in a museum, which charges admission, and prohibits photos. The *only* access is through an online repository that carries commercial copies of things only. The material is part of a university course, for which you must pay tuition to attend. Unrelated laws exist, that require payment for free content (patents on the statement saying 'this content is free' for example). The list goes on.

Dave continues, "Of course, this hasn't been the case for RedHat and Linux, and it won't be the case for open content and commercial publishers who get involved in it."

I think this is a very interesting test case to watch. We've seen a number of companies now try to create a business model by creating exclusivity around open source content. Red hat. SuSe. Ubuntu. My projection is that as these companies consolidate, it will become harder and harder to find free versions of the software. You will (for example) be able to download the software, but only if you agree to pay for a 'service agreement'. Or you will always have to pay for media, such as the plastic CD (or the magazine to which it has been attached). And of course, stores will offer the boxed version for \$49.95 - but will never be giving out the free version.

OK, onto the next point...

3. Essentialism and Pragmatism

Next bit...

"These statements are probably both very true. But neither of these lobbying activities will increase or decrease in correlation to commercial companies' abilities to distribute open content, and so these are completely irrelevant."

The point, of course, is not that lobbying will increase or decrease, but rather, that even though they could use all of the BBC's content for free themselves, what they *really* want is to block access to content. Because their business model depends on blocking access.

But this points (very indirectly, so don't worry about the connection) to a fundamental distinction between David Wiley and myself.

Specifically (to use really bad lables): Wiley is an essentialist while I am a pragmatist (NOT a pragmatist).

What does that mean? I can illustrate the distinction by talking about how we determine the meanings of words.

An essentialist will say that the meaning of the word is in the word itself; that the word is, fully and completely, its own meaning. That the truth of a sentence containing the word will be determined in one and only one way, with a fixed result. An example of essentialist thinking is Tarski's theory of truth: "The sentence 'snow is white' is true if and only if snow is white." An example of an essentialist theory of naming is Saul Kripke's *Naming and Necessity*.

A pragmatist, on the other hand, believes that meaning varies with, and is determined by, use. In other words, the meaning of the word isn't in the word at all, but is rather determined solely by how we use it. How do we know, for example, what the word 'safe' means? A person says 'the ice is safe' and then proceeds to walk on the ice across the lake. Wittgenstein's work, especially *Philosophical Investigations*, describes the theory of meaning as use. (And you may want to look at Kripke's *Wittgenstein on Rules and Private Language*).

Now, I am not saying that David is an essentialist with respect to the meaning of words. He is a very sophisticated thinker, and is well aware of the way meanings can vary and fluctuate over time. He will have, at a minimum, an account that explains this fluctuation, even if he does not believe that it is the basis of meaning.

But he is an essentialist in other areas. I will name two. Now of course only Wiley can explain Wiley, so I am subject to correction here. But this is what I am seeing at the moment.

1. Where is the 'learning' in learning objects? An essentialist will argue, that in order for something to be a learning object, it must contain certain specific features. What these features amount to vary depending on the person talking, but they will say (for example) that the learning object must contain learning objectives, it must embody pedagogical theory, it must contain assessment... whatever.

But I respond, what makes a learning object a 'learning' object is not the nature of an object, but rather, how it is used. On my view, anything can be a learning object - even (to cite a famous example) a scrap of tissue paper. But as soon as it is used in a learning context, it *acquires* the property of being a learning object.

That's a core distinction between an essentialist and a pragmatist theory. To the essentialist, a thing is what it is. But to a pragmatist, a thing can change what it is over time, even if it never changes internally or physically.

There is a core consequence to the two approaches as well. Essentialists often believe that categorization and segmentation are fundamental. An essentialist will believe, for example, that we should have 'learning object repositories' and not just 'object repositories'. That there should be 'learning games' or 'serious games' as opposed to 'games we play for fun'.

The creation of taxonomies is a common tool for the essentialist. Taxonomies - categorizations - reveal (it is presumed) something underlying about the nature of the things being studied - whether it is resources, processes, or people.

2. Where is the 'legal' in law? An essentialist will argue that the word of the law is what defines 'legal' and 'illegal'. He will agree that this can be clarified and contextualized by jurisprudence and common law, but not that actions can be variously legal or illegal under a single extant statement of law (ie., under a single text of the law, plus text of interpretations and decisions).

A pragmatist will argue, however, that what makes something legal or not legal has much more to do with conditions and circumstances than it has to do with the text of the law. For one thing, the text underdetermines possible resolutions, which is why we need to go with intangibles like 'intent'. And for another, a law is composed of two major components: the text of the law, and the enforcement (or the 'use') of the law.

Nowhere is this more evident than in Biblical law. As has been often pointed out by pundits (including my own post, 'The 57 Commandments' <http://www.downes.ca/post/113>) the law, as stated in the Bible, contains constraints that are not enforced today, not even by the most devout. People are no longer put to death for cursing their father. We no longer have slavery and bride-prices. Law - even Biblical law - is interpreted. It varies. It depends on context, even though the words remain the same. And it is, and it is intended, not to be followed, but to be used.

Now - again - the only person who can say David Wiley is an essentialist is David Wiley. But from where I sit, this is where our divisions lie. When we talk about how learning ought to be organized, how open educational resources ought to be conceived, and developed, and delivered, how licenses ought to be understood and interpreted, Wiley will fall on the side of the nature of the thing itself, while I will fall on the side of use and consequences. Such, at least, is my take on the situation (which contains enormous room for error).

4. Trademarks

Fourth comment...

On trademarks, David (interestingly) takes the 'use' position. So it appears: "(Trademarking) only prevents you and I from using them on the cover of our own technology books, which we would likely do to try to confuse the public about the origin of the books."

Quite so. But we would then be mistaken, wouldn't we, if we depicted this as an issue about the content. Because there are two ways to look at a violation of trademark law:

1. As the use of a certain type of content in a certain situation ('on the cover of a textbook, as David represented it).
2. As an intent to fraudulently represent yourself as someone else (usually for the purpose of commerce).

We can see quite clearly that what is prohibited in the second case has nothing to do with the actual content of the name or symbol, but rather to the criminal use to which it is put.

But it is pretty easy, even in this light, to see the sense of the first interpretation. Because when one of the O'Reilly diagrams is placed on a technology textbook, it is not really reasonable to interpret such use as anything other than fraudulent.

Why would I make such a fine-grained distinction?

Because of the interpretation. In the first case, O'Reilly *owns* a certain right, specifically, the use of certain content in certain circumstances. It has become O'Reilly's property. But in the second, O'Reilly doesn't come to own anything. The enforcement of the law has nothing to do with O'Reilly - it has everything to do with the fraudulent intent of the other party.

All of that said, let me dispense with some of the argumentation on trademarks:

David writes, "O'Reilly puts a lot of brain power and resources into their marketing. Why should I be able to come along and both (a) confuse the consumer and (b) ruin their reputation with a shoddy book that looks like they produced it?"

I certainly agree that one person (or company, for that matter) should not be able to fraudulently misrepresent itself as another.

But - and David should know this - the amount of work and resources they put into their marketing have nothing to do with this. A person could put an equal amount of resources and brainpower into misrepresenting themselves as someone else, but this investment doesn't somehow buy them immunity from fraud laws.

I have put very little effort into creating my own 'brand' - absolutely no marketing dollars, for example. The same is true of most people. But it is still illegal to fraudulently represent yourself as me, or as anyone else.

David mentions the incentives argument in this context. I have nothing against incentives. People should be paid for work (the BIG question, in my mind, is whether people should work to be paid - is our society based on extortion, in which you MUST work, or else you die, or is it based on freedom, where each person has a right to a certain share of the wealth - but that's WAY off topic).

I also have nothing against ownership over something you create. I built a set of bookshelves in my dining room - those are mine, you can't simply walk in and take them. I wrote this paragraph. It is not only mine, in the sense that you can't claim ownership over it, but it is mine, in the sense that you cannot represent yourself as having written it.

But I make a strong distinction between claiming ownership over what you have created, and claiming ownership over what you have not created. And MOST of the paragraph above is not my own creation. None of the words were created by me. The grammar and syntax I use wasn't created by me. Numerous

turns of phrases are not original to me. The ideas have been expressed by others as well. According to Google, the sentence "I wrote this paragraph" has been written 11,500 times previously - what gall to claim that it is mine!

When we look at what was created, in any given creation, such a minute portion of it was actually created by the originator, that the assertion of ownership over it, ought to be thought of as the exception, rather than the rule. And - again - our understanding of copyright ought to be not the *ownership* by one over some content or property, but rather, the intent and USE of the other, to fraudulently misrepresent themselves.

The 'ownership' of a copyright has nothing to do with the content. It has everything to do with the USE of the content by others. That's why we can avoid questions of what part of the content is actually original, what part is 'essentially' owned, and focus instead on how other people use that content. If the other person is attempting to fraudulently misrepresent themselves, then copyright has been violated.

We used to have pretty clear understanding of this. We used to understand that, while a company couldn't copy songs and sell them in stores, it was perfectly OK for you and your friends to share songs taped from the radio among yourselves. Somewhere along the line, 'commercial use' and 'personal use' got confused, as though they were the same thing, because the focus shifted from use to 'content' and 'law'. And that's when they started suing grandmothers and infants and college students.

This statement of options simply misrepresents the situation:

"There are three possible choices when it comes to using a public domain work as a symbol for your product - whether for-profit or otherwise (let's keep in mind that not-for-profits trademark slogans and artwork and other things as well). One - no one should ever be allowed to do so, regardless of what benefit might be realized. Two - first person to do so should receive some protection against masqueraders. Three - there should be no restrictions at all with regard to this specific use of public domain works, regardless of what harm may occur."

This statement of options treats the symbol as something that can be something that can come to be owned. But in fact, what we ought to be saying is that anyone can USE any symbol, but that no person (or corporation) can MISREPRESENT themselves as another person (or corporation).

This raises another point where we have disagreed in the past (and it's related to the essentialist-pragmaticist distinction I drew above). On Wiley's view, there is some set of rules that we can draft that governs behaviour (and what is legal) in a certain domain. But on my view, the distinction between 'allowed' and 'not allowed' cannot be expressed as a set of rules (and that, indeed, drafting more rules makes it MORE likely, not less likely, that the intent of our rules will be subverted).

David concludes this bit, "Stephen will likely disagree, but I believe situation Two (which happens to be the current situation) is the most reasonable."

In fact I actually go along with situation two, but my reading of it is completely different. There is no sense in which being the 'first' to use a symbol confers some sort of right or ownership over that symbol

(if this were true, many of the brand names, images and slogans we know today would be illegal - there is NO WAY these companies were the first to use these to market themselves - the world didn't begin twenty years ago).

The second option is the one that is preferred because it is the one that comes closest to making the statement that "You should not misrepresent yourself as someone else." But this statement is contrary to the intent of Wiley's three-part distinction. He is talking about how we ought to allocate property. I am talking about what constitutes illegal conduct.

Two very very different worlds. No wonder he finds me incomprehensible.

Moncton, October 14, 2007

OERs – Moving On

Some commentary to the UNESCO OER discussion list ([unesco-oer-access](#)).

I won't linger too much on this, but just to comment on Tom's thoughts...

First, the basic premise appears to me to be correct. We need to think of the structure of open educational resources as evolving to something beyond the current 'virtual textbook' or even the 'virtual learning package' model now being employed.

Yes, I understand, that learning materials are being produced in some sort of packaged format in order to adapt to lower bandwidth environments, where they will have to be distributed, not by internet, but by CD or even paper. But at the same time, it would be wise to plan for a world in which better bandwidth is becoming more widely available. And this means planning for a time when learning materials are not merely content packages, but rather, points in learning environments that can be manipulated and exchanged.

Second, and in particular, when planning for a broader bandwidth environment, we need I think to consider the desirability and effectiveness of community-based resources. I have addressed this in previous work.

The current model, where academic content is produced and packaged (at great expense) by universities and publishers in developed countries, and then distributed (as a gift) to people in other nations, is a model that has several weaknesses. First, it directs funding for learning resources to the institutions that least need additional funding. Second, it does not support the development and sustainability of similar institutions in the other countries. Third, the materials produced either reflect the culture and values of those that produced them, or must be (and additional time and expense) be 'localized' for wide use. And fourth, the production of large and static learning materials is at odds with an information environment favouring smaller and much more dynamic units of learning.

Consequently, I have argued that we should address our attention to the development of skills and capacities to enable locally-based learning communities to produce their own learning resources, contributing as equal partners in a worldwide knowledge exchange.

Third, while it is true that we need to be looking beyond current (computer) technologies, we should not be lulled into believing that mobile phones, no matter how widespread the devices, are a suitable alternative for the delivery of online learning. First of all, mobile phones have significant bandwidth limitations, and even phones with good 3G access will have difficulty playing videos or downloading larger content. Second, small mobile devices pose significant usability challenges, so much so that sites offering mobile content are encouraged to synch these accounts with web accounts in order to enable users to enter data and upload photos.

Mobile devices are not suitable for the creation or consumption of large and complex information entities. And third, mobile devices, unlike computer systems, are controlled by the access providers, which increases costs and places barriers in the way of the use of open source applications and free content. This explains why they are being relentlessly promoted as an alternative to genuinely free and open access to information, but also why they should not be accepted as such.

Moncton, April 29, 2009

The DNC Kindle Plan

Not that it needs to be said, but...

Responding to [Democratic Group's Proposal: Give Each Student a Kindle](http://bits.blogs.nytimes.com/2009/07/14/democratic-groups-proposal-give-each-student-a-kindle/) (<http://bits.blogs.nytimes.com/2009/07/14/democratic-groups-proposal-give-each-student-a-kindle/>)

The idea is a bad idea, not because paper texts are less expensive or any great shakes – they're not – but because the Kindle is bad overpriced and inefficient technology.

Providing students with netbooks (or having them buy their own, for those of you who think any government expense is communism) will provide free access to the world's literature without Kindle's proprietary technology, invasive content management, and high costs.

When textbooks – especially at higher education levels – can cost \$100, the savings of a \$250 netbook become apparent – but only if you're not paying \$99 for the electronic version of the textbook. Electronic media works only if costs for digital materials are substantially less than paper materials.

And they can be. Indeed, the cost for most digital materials is tending toward zero. Only when a distributor can lock you into a proprietary platform does the cost remain high. Open access materials – everything from Project Gutenberg to Wikipedia to Media Awareness Network – will deliver the savings Kindle cannot.

Moncton, July 18, 2009

Open Content, Enclosure and Conversion

This post is a [reply to David Wiley](#), the latest installment in our ongoing discussion about the use of the Non-Commercial (NC) clause in Creative Commons licenses.

(<http://opencontent.org/blog/archives/697>)

There is not an easy way to approach these issues because there is such a lack of common understanding on so many of the points. Indeed, one of the challenges is to arrive at a definition of an open license that allows for such agreement.

I say 'definition of an open license' because I now believe that it is possible to arrive at one. But I think it will take a meticulous reworking of a number of the key concepts in order to arrive at this understanding.

Freedom

One point of agreement I think we can find is in our support for 'free content', in the sense of 'freedom' expressed by Richard Stallman. By 'free as in freedom' he means the following [four freedoms](#) (<http://www.gnu.org/philosophy/free-sw.html>)

The freedom to run the program, for any purpose (freedom 0).

The freedom to study how the program works, and adapt it to your needs (freedom 1). Access to the source code is a precondition for this.

The freedom to redistribute copies so you can help your neighbor (freedom 2).

The freedom to improve the program, and release your improvements (and modified versions in general) to the public, so that the whole community benefits (freedom 3). Access to the source code is a precondition for this.

Now it is evident that by content we don't mean (exactly) 'software'. So the freedoms are not an exact match, and as [Stallman himself](#) says, you can't blindly generalize from software freedoms to other freedoms.

Nonetheless, we can invoke the *spirit* of the four freedoms to come to some sort of understanding of the content regime we would like to foster: one in which we are able to access (consume?) the content, for any purpose, one in which the source (or encoding) of the content is accessible (ie., non-proprietary), one in which we can share content, and one in which we can modify the content.

Content which respects the spirit of these four freedoms has come to be called *open content*, and that content intended specifically for educational purposes has come to be called *open educational resources*. The connection is with the term 'open source', which has come frequently to stand for (what Stallman means by) 'free content'.

No doubt Stallman would prefer that we use the terms 'free content' and 'free educational resources', and there is a good argument for that. But the use of the word 'open' is well-entrenched, and we'll use it here to mean the same thing as 'free', as discussed above.

Point of View

The four freedoms listed above can be interpreted from different perspectives. This will become very evident in the discussion below. For the sake of the current discussion, I would like to identify two major points of view:

- the content provider - that is, the person who currently possesses the content, and would like to use or share it
- the content consumer, that is, the person who does not yet have the content in his or her possession, and who would like to access the content

This distinction is important because there are two ways we can emphasize the impact of the four freedoms on content. The first emphasizes access, that is, that there ought not be any barriers to reading, running, or consuming the content. The second emphasizes use, that is, that there ought not be any limitation on how content is used.

One way of characterizing the point of disagreement is to characterize it as difference in point of view. Specifically, my own view involves an emphasis on access, such that content is not 'free' if there are conditions or constraints that prevent or impair one's ability to read, run or consume content. However, Wiley's view (from my perspective - he is free to characterize this differently) involves an emphasis on use, such that content is not 'free' if there are conditions or constraints that prevent or impair some use of content.

Both perspectives live happily together, except for one point of collision: the commercial use of content. Because, on the one hand, the commercial use of content (for example, offering it for sale) can create conditions or constraints that prevent or impair one's ability to read, run or consume that content. And on the other hand, the constraint to non-commercial use of content creates conditions or constraints that prevent or impair some use of content, specifically, commercial use.

That said, each of these perspectives also includes a countervailing perspective. On the one hand, proponents of commercial content may argue that commercialization does not prevent access, because non-commercial sources of content remain available. And proponents of open access argue that the commercialization of content is not actually a 'use' of content, but rather, merely the enclosure of content behind a barrier or wall.

Commercial Use: Agency

Whether or not a conflict in the different perspectives of 'free content' depends critically on what we mean by 'commercial use'. It is evident from the mere existence of the [Creative Commons survey](#) that there is considerable uncertainty on the subject.

I commend Creative Commons on its efforts to clarify the issue. The question of what constitutes 'commercial use' is replete with grey areas. [For example](#), 'Is it allowed to show e.g. a CC-licensed photo

on a webpage which also includes ads to the side if the image uses the 'non-commercial' clause?" We cannot reply simply on the 'verdict' rendered by Lawrence Lessig in such cases. We need some clearer understanding.

In order to narrow the range of disagreement, it is useful to divide the set of possible definitions of 'commercial use' into two major categories:

- first, the use of the resource by a 'commercial' organization (this definition parallels the definition of 'educational use' as 'use by an educational organization') such as a commercial publisher, content vendor, or the like, and
- second, the use of the resource in a commercial manner, regardless of the identity of the person or organization using the resource

This distinction is necessary because there is a class of arguments that depend on the characterization of the agency performing the use (such as [non-profit](#) or [journalist](#)) rather than the use itself. We see this in the [Creative Commons guidelines](#): "Allowable NC users are: (a) an Individual (b) a Non-profit educational institution/library, (c) a Non-profit organization as defined under US or equivalent law... (etc.)."

But it should be clear that we can draw no clear correlation between the nature of the use and the nature of the user. Governments, normally non-commercial users, can engage in commercial activities, such as selling data or charging tolls. And people working for corporations can make non-commercial uses, for example, by merely reading a resource.

As in the case of 'educational use', the wording of the Creative Commons guidelines contains a particularly American bias, as though we can identify a 'use' with the type of 'user'. But these guidelines are quite arguably in error. We should not identify 'commercial use' with 'commercial organization' any more than we should identify 'educational use' with 'educational organization'.

The designation of 'commercial' must refer to a type of *activity*. This is merely a recognition of the success of the commercial sphere, a success so profound that commercial use of resources permeates every sector of society, from individuals running ads on blogs to non-profits selling reports or t-shirts to companies charging subscriptions or running ads.

It is good that Creative Commons is reconsidering its definition. The disastrous interpretation authored by an anonymous contributor, offers no help whatsoever, is not part of the license, and should (and would) carry no legal force, save perhaps in the United States.

Commercial Use: Characteristic Properties

In this section I would like to argue for the possible contentious position that what we should want to characterize as 'commercial use' is not in fact a *use* of the resource at all, but rather, as suggested above, a practice of *enclosing* the resource.

The key to understanding this lies in understanding that the nature of the use is not dependent on the user. A person working for a corporation can engage in quite innocent and non-commercial uses of content; indeed, this is the *most common* use of content, by corporate and non-corporate users alike.

The question of 'commercial use', indeed, comes up only from the perspective of a content provider, as described above, and never from the perspective of a content consumer. And, indeed, the typing of a use as 'commercial' occurs only in the context of redistribution.

It is this sort of consideration, in my view, that leads David Wiley to say that "the ShareAlike clause is the root of the license compatibility problem - not the NC clause." And I certainly agree to a certain degree - that it is in the (putative) *sharing* of the content that the impact of the non-commercial clause is felt. I will return to the question of the Share-Alike condition below, and focus on the ideas of sharing in particular for the moment.

In particular, I want to be clear, that some types of sharing constitute commercial use, and some types of sharing constitute non-commercial use.

What types of sharing constitute commercial use?

- the charging of a subscription fee to access content
- the charging of a tuition fee to access content
- the placement of advertising on a resource
- the requirement that one become a member of an association
- the requirement that the consumer provide information, which will later be sold
- the requirement that a person purchase a device or viewer

This list could probably be extended. But the general gist is clear:

Sharing constitutes 'commercial use' if and only if conditions are placed on access to the resource in such a way that access is possible only if the sharer receives compensation for having shared the resource.

In other words, commercial use isn't actually 'use' of the resource at all, in any straightforward sense, but rather, is the *enclosure* of that resource, where the purpose of the enclosure is to provide some (financial) benefit to the provider.

From these considerations, the reader should be able to see plainly the basis for my advocacy of the non-commercial clause. From the perspective of the consumer, the placement of conditions on access creates a barrier to access, one that entails that the resource is no longer free.

Now recognize that opponents may say that this is not necessarily the case, that if the resource is licensed under Creative Commons and yet used commercially, that there will always be some free (as in the sense above) way to access the resource.

But, there is nothing in Creative Commons that makes this the case - nothing in Creative Commons that would ensure that such a resource can be freely accessed. It could easily be that the *only* way to access such a resource would be to pay for it, one way or another.

Sharing, Combining and Conversion

Before dealing with the problem of enclosure, I would like to address directly the suggestion that the 'Share Alike' (SA) clause is the source of the difficulties.

To me, it is evident that, no matter what they may say, the authors of the [CCLearn Report](#) find the non-commercial (NC) clause, not the SA clause, to be the source of the problem. I realize that, as Wiley says, "the license compatibility section of the report is very clear in stating that the ShareAlike clause is the root of the license compatibility problem - not the NC clause."

However, when we get to what the authors actually recommend, they write: "Therefore, the standard terms of copyright licenses associated with OERs should permit adaptation and translation in ways that allow OERs to be combined, shared, adapted, and recombined without restriction. The license that achieves this purpose most effectively is the Creative Commons Attribution Only (CC BY) license." Why eliminate the NC clause if you don't think that NC is the problem?

In fact, the elimination of SA allows the resource not only to be distributed commercially, it allows attribution to be removed, and indeed, allows it to be distributed under any license whatsoever. It is hard to see how any license that allows such reuse could be construed as 'free' under the definition outlined above.

Let us look, for a moment, at the origin of the SA clause. As Richard Stallman and Eben Moglen [write](#), "The 'share and share alike' or 'copyleft' aspect of the GPL is its most important functional characteristic." The reason for this is that, without the copyleft provision, a software developer could take some GPL code and incorporate it into his own commercial and proprietary product. Under extreme conditions, he could claim ownership over this code, and even litigate in order to prevent its original con-commercial usage.

It is exactly this sort of process SA restricts in the case of Creative Commons licensed content. Here's Wiley again: "By-SA can't be recombined with By-NC-SA, neither By-SA nor By-NC-SA can be combined with the GFDL, and any public domain or CC By licensed resource remixed with By-SA, By-NC-SA, or GFDL licensed resources is forcibly converted to those terms (as part of the larger remix - the original remains unchanged, of course)."

Now let's understand what this means. It means that, if I have created a resource that I license as Non-Commercial, a person cannot combine my resource with some work of their own to produce a new resource that can be used commercially. The SA clause, in effect, prevents people from subverting the intent of the original NC condition. Remove the SA, and you may as well remove NC, because there are no restrictions on how the combined work can be used at all.

This is depicted as the compatibility problem, or even as [CC Infighting](#). But it is, in fact, nothing of the sort.

The Share-Alike license does nothing to prohibit an NC work from being used in conjunction with a non-NC work. For example, a page of readings provided to a student could link to one of my essays, licensed

under CC-NC-By-SA and one of David Wiley's, licensed under CC-By. There is nothing incompatible about the licenses, *unless* one wants to convert the NC content into commercial content.

In short, SA doesn't prevent you from *using* NC content, it only prevents you from *converting* it into non-NC content through some process of combining or merging.

This is (interestingly) *exactly* how it works in the world of software. A developer cannot *merge* GPL software into some proprietary application, thus producing a proprietary application. But they can use a proprietary application - Cold Fusion, say, in combination with an open source application (Apache, say) to create a new product or service.

So why can't content developers work with commercial and NC content in this way? Why can't they continue to respect the original conditions of the license? There is no good reason - *unless* they want to enclose the original NC content. Unless they want to convert the NC content into commercial content, and restrict access to it, contravening the author's intentions.

Wiley depicts SA thus: "In this sense of copyleft's unyielding, unapologetic, impatient, forcible conversion approach to interacting with materials that use a kinder, gentler license, we may appropriately call copyleft clauses the 'Spanish Inquisition of the open education movement.'" This is, frankly, ridiculous.

Share-Alike is not the problem. Share-Alike is what ensures that material created under the NC license remains under the NC license. And it is NC, not Share-Alike, that opponents really wish to suppress. NC, not SA, that they feel is the 'Spanish Inquisition of the open education movement'. Because, you see, they don't want *open education* at all - but rather, education that was formerly open, but which is now enclosed, which now may be purchased only at a price.

Enclosure

The first part of Wiley's objection to my position concerns the definition of 'non-commercial'. It is my hope that the discussion above has elucidated my meaning to a significant degree. While I agree that there is possibly not a widespread understanding of the term (the survey results may provide some indication) there should be no particular constraint preventing us from *agreeing* that this is what is meant by 'commercial' use: the enclosure of content behind some commercial barrier.

By identifying 'commercial' use as 'enclosure' I need now to address directly the second part of Wiley's argument: "I have never understood (and I really, deeply, sincerely do want to understand) Stephen's line of argument describing how OERs licensed with, say, the CC By-SA license (lacking the NC clause), can be cordoned off by for-profit interests."

Let me explain. Suppose a person, Fred, creates a resource called 'XYZ'. And suppose Fred posts XYZ on his own website and licenses it CC By-SA.

Cordoning can be created very simply. A third party, Omniplex, can copy Fred's resource and place it on their own website. Omniplex then creates the cordoning by requiring that a person purchase a

subscription to their website in order to view the resource. For clarity, we'll call this new instance of the resource XYZ-c.

Now the response is very clear. It may be true that XYZ-c has been cordoned by Omniplex. But so long as XYZ is available on Fred's website, anyone can access XYZ. So XYZ isn't really cordoned off, just one instance of it is. And people who access the resource, on seeing the CC By-SA license, could take the cordoned version and place it on any other website. Right?

Quite so. But we must now understand, Omniplex's biggest competition is now Fred, the original source of XYZ in the first place. Anything that can be done to ensure that users access XYZ-c, and not XYZ, will be in Omniplex's corporate interests. And, in fact, XYZ-c has an arsenal of resources at its disposal to ensure that this is the case.

This is just a partial list of the strategies that are employed by agencies in the position of Omniplex:

- *a climate of litigation* is created such that, only content from trusted corporations, such as Omniplex, can be 'known' to be copied legally, such that users no longer trust that they have the right to use Fred's XYZ, but trust XYZ-c. Or Fred is required to license DRM software in order to 'prove' that the resource is legitimately distributed

- *legal and other overheads* can force Fred's website off the air - for example, threats of legal action from Omniplex, threats of civil or criminal action on unrelated matters, lawsuits (justified or not) from anti file-sharing agencies, DOS attacks, domain squatting, and more

- *SEO manipulation* - Omniplex not only employs an array of spammers to ensure premium placement for XYZ-c, these same tactics are used to push down Fred's Google rank by discrediting him; Omnicorp also has the resources, where Fred does not, to purchase search engine placement

- *exclusivity of market* - in the same way you'll never find free books in the bookstore, Omniplex would like to set up online markets where only XYZ-c, and never XYZ, is listed

- *formal requirement* - tuition required to enrol in an accredited course needed for a degree pays, in part, for instances of XYZ-c. Or, students are required to purchase XYZ-c from an 'official' marketplace (so-called to prevent 'piracy')

- *proprietary platform* - in some environment - Amazon Kindle, say - only XYZ-c is available; XYZ is not available, because the owners of the proprietary platform will not license Fred to place it there

Now what should be emphasized here is that this is only a *partial* list of tactics that Omniplex could use. What is significant here is that, once it obtains the right to offer XYZ-c, an enclosed version of XYZ, it has considerable incentive to ensure that XYZ is sunk out of view, or preferably, made difficult or impossible to legally obtain.

It should be noted that there is *nothing* in Creative Commons, over and above the NC clause, that prevents this. As soon as content can be legally enclosed, it is as though a veritable horde or commercial

providers descends on it, converting it into spam-bait, converting it into Google-ad carriers, converting it into subscription content - and each and every one of them engaged in the common interest of ensuring that the original sinks from sight and disappears.

Again, perspective is useful here. Wiley writes:

"The Open Learning pilot at BYU that will launch in January will be using the CC By-SA license. We own the copyrights on the material we will be sharing, which is why we can set the terms of the license they will be distributed under. There is nothing any corporation, entity, or individual can do to strip us of our rights, to prevent us from distributing our material, or to interfere with our provision of free educational materials to the world in any way. And any corporation, entity, or individual that would ever try to modify and then charge a fee for our materials is required by the SA clause on our materials to simultaneously freely license their derivatives under the same CC By-SA."

Quite so. BYU's rights remain completely untouched by any commercialization of its materials.

But, unless they agree to put it into a proprietary format, or to place it into an exclusive (pay) marketplace, it will not be offered on (say) Kindle or iTunes, etc. (Please note that even if these marketplaces offer free content, were they to gain anything like a strong market share the free content would disappear, just as it does in bookstores).

Unless BYU agrees to license its material to a commercial carrier, and support it with advertisements, then it will be impacted by selective content metering, the unbalanced web distribution what may result after the failure of net neutrality.

Unless BYU licenses DRM technology from ContentGuard, and unless BYU enters into legal agreements with all its authors, it runs the risk of being identified as a distributor of pirated material, or worse, those that reuse BYU's materials run the risk of being accused of piracy, as they will be unable to prove (through some licensing system) that they are using the material legally.

And that's just BYU. Its users are in an even worse position.

It's quite true that BYU currently receives good Google rankings. But this is only because Google is not competing with BYU. Companies that offer products or services that compete with Google are demoted in search rankings. Google's Knol - despite having no initial linkage or credibility - vaulted to the top of search engine rankings, well above the original locations of CC licensed materials.

Users of BYU materials would never find it under such conditions. They could only obtain the Google-supported versions. So, they would have to view the Google ads and subject their browsing to Google analytics, after being required to log in using their Google IDs.

Even worse is the plight of people who are unable to access BYUs materials in their original online format. These are people who do not have internet access, or whose government blocks BYU (and other educational providers, such as Amnesty International or UNICEF).

These people can access BYU content only through commercial cellphone services, or on commercial DVDs or in print. These are expensive - ironically, the poorest people in the world are paying the highest price. And yet, the providers of this content are lobbying the government *against* internet access because it is a form of unfair competition. Because it threatens their business model.

Just the way commercial education and television providers took legal action to prevent the BBC from putting educational materials online. Just as ISPs - who had no intention of providing open access - took legal action against cities who wanted to provide free public wireless internet.

It is, quite frankly, beyond me how anyone can look at all comprehensively at the state of commercialism and the internet and expect any other outcome. Anyone who expects any other outcome is living in fantasyland. There is *no domain*, where commercial activity was allowed without restraint, where the commercializers did not take over and ultimately wreck the domain.

Grounds For Agreement

I suggested at the top of this article that there may be room for some sort of *rapprochement* between David Wiley and myself on this issue. Because, after all, we in fact are on the same side, both working toward the development and distribution of free (open) content and educational resources.

Let me begin by being clear about my position on commercialism.

- first, it doesn't bother me at all if a person or an organization makes money by adding value to work that I (or anyone else) has created. This is, indeed, the foundation of the productive economy, the idea that, by producing value, a person is rewarded

- but second, it *does* bother me if a person or organization makes money by *subtracting* value from work that I (or anyone else) has produced, by limiting access to it, by making it more difficult to obtain, by casting doubt or legal concerns about its use

People should not be rewarded for making free things more scarce. Especially when society as a whole benefits so much from their abundance, the creation of artificial scarcities, whether through law, litigation or technology, is a fundamentally destructive and hurtful activity. People should be punished for creating scarcities, not rewarded, as such is the source of illusive, and ill-gotten wealth, founded on misery and deprivation rather than growth and development.

The grounds for agreement are thus these: if we could build these into the license, then the non-commercial clause would not be needed.

It's important to note that these conditions are already in the GPL. Not only is the principle of copyleft embedded in the license, so also are the mechanisms that make it impossible to prevent a person from using the software. By ensuring that the software user always has access to the source, and that no subsequent development can hide the source, there is no way to create an exclusive commercial marketplace.

The [GNU Free Documentation License](#) (GFDL) attempts to recognize this. "If you publish or distribute Opaque copies of the Document numbering more than 100, you must either include a machine-readable Transparent copy along with each Opaque copy, or state in or with each Opaque copy a computer-network location from which the general network-using public has access to download using public-standard network protocols a complete Transparent copy of the Document, free of added material."

In other words, the GFDL attempts to create a condition that would prevent enclosure by at least some of the mechanisms mentioned above. By requiring an "opaque copy" the GFDL prohibits the wholesale and exclusive copying in a proprietary format. People using "public-standard network protocols" must be able to access the content.

David Wiley's [Open Publication License](#) also contains text to address some of the issues raised here. For example, "Mere aggregation of Open Publication works or a portion of an Open Publication work with other works or programs on the same media shall not cause this license to apply to those other works." Mere aggregation does not cause conversion. And additionally, the license requires that, if a modification is made, that the location of the original be identified in the modification.

And the licensing condition he adopts for [Flat World Knowledge](#) - the [CC By-NC-SA Plus](#) license - also recognizes these concerns. The 'plus' is a commercialization license, with conditions: "it will grant blanket permissions for anyone and everyone to make Commercial Use of FWK-published textbook materials in the context of the FWK Marketplace." *Within the FWK Marketplace*. Why? Because the biggest threat to FWK is some commercial entity coming along, taking all their content, and creating a competing, closed and completely commercial marketplace.

So I think that Wiley *recognizes* the grounds I have for concern. Where we have a disagreement is regarding the best way to address them. I have - for lack of anything other than a blunt instrument - opted for Creative Commons Non-Commercial. Wiley has both written his own license and worked with an amended version of Creative Commons.

What Next?

I think we need to recognize that Creative Commons was never more than a placeholder for the sort of arrangement we really wanted some time in the future. A placeholder that would allow people to share their work in the absence of a commons that wouldn't be immediately set upon and destroyed by commercial interests.

But Creative Commons is on the verge of outliving its usefulness. The idea that there would be distinct CC licenses for each of 200 jurisdictions was a non-starter. The possibility of commercial CC licenses will destroy the common currency of open (free) content. And the idea of *codification* itself, of there being a legal statement of what is allowed, was probably misplaced.

What we want is not some narrowly defined legal text that will give abusers loopholes through which to crawl, but rather, a more generally defined *statement of intent* that can be *interpreted* by the court, not circumvented by legal (or technological) trickery. After all, ethical and charitable behaviour can never be legislated as a set of principles or laws, but can only exist as the result of a good intent, a frame of mind.

We abstain from murder, not because there's a law against it, but because it is *wrong*.

So we want, I think, something like a 'free content declaration', a statement we can link to that identifies our desire, as providers of open content, to ensure that it remains open. In other words, I think now that Wiley's approach of creating a separate license will be better, in the long run, than following (and being bound by) the Creative Commons license.

We want, in common, to say, I think, that by identifying our content as 'free content', we want:

- to ensure that any person is able to access this content - to read it, or view it, or play it, as the case may be - which means that free content itself must be in some sort of public-standard network protocols
- to have the source of this content - a link back to the original which is always available *as an alternative* to the shared, or copied version
- to allow people to share this content, to make it available in different formats and in different places, but *not* to create conditions or an environment where access to the original content is impaired, or access to the extant content is not free, not open
- to allow people to build upon this content, to improve it, and to share these improvements under whatever license they wish, *provided* that such improvements provide direct, accessible and unimpeded access to the original content

Now these conditions are very general, and are not intended to be the 'letter of the law'. They are expressed as intentions, to be interpreted, not as principles to be defined. And we can, from the discussion above, discern that intent: it is our desire that content not be enclosed, but rather, be set free.

I believe that *something like this* is the common ground on which David Wiley's and my views of open content rest, and hope that some such statement is the foundation on which we can progress in the future.

Moncton, December 22, 2008

Open Educational Resources: A Definition

The Definition

Open educational resources are materials used to support education that may be freely accessed, reused, modified and shared by anyone.

Stephen H. Foerster wrote:

This is simple, accurate, and effective. I'm not sure I'd really support the idea of an "official" definition, but when I have reason to describe succinctly what OER means, I'd personally be happy to use this version
(<http://lists.esn.org.za/pipermail/oer-forum/2011-July/000616.html>)

I don't support the idea of an 'official' definition either. I was moved to offer this by [Chris Pegler's post](#) that suggested a short succinct account of OERs would be needed for pragmatic purposes, such as introducing the concept quickly to people unfamiliar with them.

The statement takes the classic three-part form of definition:

1. Name the entity ("Open educational resources")
2. State what larger class of entity the entity belongs to ("are materials used to support education")
3. State how they are distinct from other members of that larger class of entities ("that may be freely accessed, reused, modified and shared by anyone")

This definition avoids needless redundancies. Specifically, it avoids phrases like "digital or non-digital" which, on examination, mean the same as "everything". It also avoids formulations like "OERs are resources that..." because this has the form "resources are resources", which is not helpful.

The nature of the larger class of entities

The nature of the larger class of entities is described *functionally*, rather than essentially. By that, what I mean is that I have taken a term (materials) that is vague about the nature of the entity, and specified it according to how the entity is **used**, or in other words, by the 'function' to which the entity is put.

- Why do we prefer to define the larger class of entities functionally? Because the idea of a definition is to capture what *won't change* about the entity. File formats change, media change. What doesn't change is what we want to be able to do with the entities, which in this case is to use them to support education.

(There was a whole debate in the late 90s and early 00s about 'what is a learning object' that dragged on needlessly because people tried to define the *kind* of object (reusable, discoverable, digital, object-oriented, whatever) rather than how the object was used. So my thinking here is, let's avoid that.

(Pragmatism does not mesh well with essentialism.)

- Why did I use the word 'education' rather than 'learning'. Because I wanted to capture not only the activities of those people who are engaged in learning, but also those people who intend to support learning - in other words, those who intend to educate. By using 'education' therefore I am referring (roughly) to both teachers and students, where by using 'learning' I would be referring only to students.

The statement of how they are distinct

- The statement of how they are distinct is stated as a modality, rather than essentially. That is, it describes what people *may* do with the entities. So again we are not trying to describe the *nature* of the objects - we don't care - but rather, what functions the objects support (as some might say, what are the 'affordances' of the objects).

Why do we prefer to describe how they are distinct as a modality? For the same reason as above, we want to is to capture what *won't change* about the entity. Media change, markets change, institutions change. What doesn't change is what we want to be able to do with the entities, which in this case is to access them, reuse them, modify them and share them.

The statement has two distinct parts: 1. A statement of what people we are talking about, in this case, "anybody", and 2. What they can do (access, reuse, modify and share).

- Though typically omitted from accounts of OERs, the reference to 'anybody' is important. I want to be clear in this definition that we are referring not only to education providers, not only to teachers, not only to enrolled students, but to *anybody*, the entire population of humans. To me, this is the key part of the objective of the OER movement, the key point where it becomes more than just a technical discipline and embraces some sort of wider vision or idealism. It's the reason I support OERs.

- The reference to "access, reuse, modify and share" is partially adapted from [Wiley's account](#) referenced [here](#), which in turn is roughly modeled on [Stallman's four freedoms](#). It is also partially adapted from Creative Commons. But it also incorporates some things I think are important:

Access - is most frequently left off the definition of OERs, and yet is the most important. Nothing else follows if you cannot access the resource, that is to say, obtain the resource (or a copy of the resource) for oneself. Fundamental to a resource being open, in my mind, is the ability of anyone to access it. This is what allows us to say that things like YouTube videos are at least *partially* open - whatever else their flaws, at least we can access them.

Use - is most frequently stated. I've chosen a deliberately vague verb here, because use varies depending on the resource. To use software, for example, we 'run' software, which is the first of

Stallman's four freedoms. Or we may use a resource by reading it, studying it, watching it, playing it, whatever. Wiley's definition demands the freedom to 'reuse', which is a narrower definition of 'use'.

Modify - is explicit all definitions. Wiley describes it in two ways, to "revise" and "remix". Stallman refers only to the ability to "modify" a resource. Creative Commons has a "derivatives" clause but is otherwise silent on modification.

Share - is again explicit in all definitions. Wiley describes the freedom "to share copies of the original content, your revisions, or your remixes with others." Stallman describes the rights to "redistribute copies" and "distribute copies of your modified versions". Creative Commons addresses sharing under the 'share alike' clause, which mixes two separate concepts. Since here we are merely defining OERs, and not creating licenses, we can simply use the term "share".

A Note on Conversion

The definition of OERs is silent on the question of conversion, and deliberately so. Conversion is not a matter of definition, but a matter of licensing. Please allow me to explain.

The 'conversion' of an open educational resource is a modification of the resource, or conditions related to the resource, such that it is in some way transformed from being an open educational resource to something that is not an open educational resource. I describe it at length above (Reusable Media, Social Software and Openness in Education).

The license attached to an open educational resource determines whether or not the author will allow it to be converted into a non-open resource. My own view is that OERs should not be licensed in such a way as to allow conversion. Other people, for reasons of their own, disagree. That's fine, but what I reject is the suggestion that a resource is not an OER unless it is licensed in such a way as to allow conversion.

What makes material used for learning an OER is not the license it carries with it, but rather, whether it allows anyone to access, use, modify and share the material.

File Formats

Having offered my commentary on the definition, I would like now to offer a few words on how the definition as proposed applies specifically to the issue of file formats.

Consider a statement like the following, [asserted in this case](#) by Wayne Macintosh:

If these projects used open licenses and open file formats, the digital objects would still be around for continuous improvement and reuse.

The point of the statement is to focus on the nature of the resources, and to argue that if the resources were of the right nature - that is, in the correct file format, and with the correct license, then the digital objects would still be around.

But, and this is a key point: the openness of the object is not in the object.

The openness, rather, is in what one can do with the object. If the user can do everything stipulated in the definition - access, use, modify, share - then the nature of the object becomes irrelevant. The reason why proprietary file formats are discouraged is because people using open source software cannot open them, edit them, share them. But the very same formats, if accessible via open source software, renders them open.

This has in fact happened. Formats such as PDF, SWF and DOC were at one time impenetrable, and useless to people running Linux. Today, it is the rare Linux user who is unable to access, download, read or play, modify and share resources in those formats. Yes, it requires some skill, but everything requires some skill.

Finally, the purpose of a functional definition - one based on the ability of a person to access, use, modify and share the resource - is that it enables a simple empirical test. Instead of metaphysical discussions about the nature of an object, we simply ask, "Can a person access the object, can a person use the object, etc.?", and on being shown that they can, conclude that the resource is open.

"Freely"

I deliberately inserted the word "freely" into the definition. Carolina Rossini, [for example, writes](#), "The word 'freely' however has always brought tons of problems in every area of free culture in regard to its accurate concept. Below, it feels like it refers to 'gratis'"

It does, and necessarily so, because with enough money any person can access, use, modify and share any resource, and the meaning of 'open' collapses into meaninglessness. If a person really wants to access an Acme proprietary format (say) all the person needs to do is buy the company and all secrets will be revealed. Other companies grant access for lesser amounts of money, by way of licenses.

The purpose of the word 'freely' in the definition is intended to stipulate that the resource may be access without conditions. This, by the definition, means without payment. Not 'payment at a reasonable cost'. Not 'payment to access but freedom to redistribute'. So yes, it involves the sense of gratis as well as the sense of *libre*. Because you cannot put a financial cost on free as in freedom. If you have to pay a poll tax, it is not freedom. It's freedom for those who can afford it.

'Freedom of access without conditions' entails a lot, and it extends far beyond mere access to the resource. One of the most correct things Wayne Macintosh has been saying here is that supporters of OERs should be looking beyond the OER movement specifically.

In the world of print publications, 'freedom of access' meant the institution of libraries and reading rooms. 'Freedom of access' meant universal public education in support of literacy. These were, quite rightly, viewed as guarantors of freedom and democracy. In the world of electronic media, we require the equivalent; in Canada, we built a network of 'Community Access Points' in libraries in every city and town in the country, and computer education has become part of universal public education in our country.

Yes, people will want to sell copies of openly licensed materials, and to build business models around these materials. I don't have a problem with that, but we need to understand that this is sometimes a process of conversion of a resource from open to non-open. Because it is no longer open if the only way to access a resource is to pay money for it.

How can commercialization co-exist with open educational resources? If we use the functional definition, then we have an answer. If a person can still freely access, use, modify and share a resource, then commercial use has not converted an open resource into a closed resource. But if access, use, modification and sharing are impaired, by whatever mechanism, then conversion has taken place, and the resource is no longer open.

Moncton, July 11, 2011

Learning and Ownership

Responding to [Tony Karrer](http://elearningtech.blogspot.com/2007/06/ple-pwle-discussion-contiunes-corporate.html) (http://elearningtech.blogspot.com/2007/06/ple-pwle-discussion-contiunes-corporate.html)

Good post and a useful summary.

First..

You write, "Clearly a corporation has a reasonable expectation that work done while they are paying you should be done on their behalf. They should have rights to the end work product."

It's not so simple as this.

Someone pays me to produce x, and they expect to obtain the rights to x. OK. But when I pay somebody to produce a newspaper, then why don't I get the rights when I buy it?

Mere payment does not confer transfer of rights, and therefore, the fact of such payment does not denote a certain type of ownership.

Moreover...

Like many employees, the work I produce belongs to my employer whether or not it is produced at the office. If I have an idea in the shower, and it relates to my work, then my employer owns it.

Yet my employer requires that I fill out time cards (SAP Sigma time recording, actually, one of the most useless applications ever deployed inside a corporate firewall). Thus, my employer is very explicitly not paying me while I am a home taking a shower.

Hence, non-payment does not denote non-ownership either.

'Ownership' is a legal construct, not a causal one. People can come into, and out of, ownership of various things - including their own ideas - for a variety of reasons. Payment is only one factor, and is neither a necessary nor a sufficient condition.

Second..

There are different things that can be owned, in the context of our current discussion.

We can talk about the ownership of specific entities, such as blog posts.

Or we could talk about the ownership of the ideas contained in those blog posts.

Some things, no matter how produced, are not owned by the employer.

I state, for example, on my blog that "I am a socialist." This thought is not owned by the employer (though the post in which it is expressed may be owned, even though my employer may wish it wasn't).

I built bookshelves for my dining room. Even if some of the work was done on employer time, or with employer tools, the employer does not own my bookshelves, because it is the wrong type of thing (note this changes if I am employed as a carpenter, not a researcher).

Third...

Some things cannot be owned.

Owning humans, for example, is illegal. The ownership of a human is called 'slavery', and even if a substantial sum of money is paid, no ownership can be exerted in this way (the closest you can come is the 'personal services contract', of Wayne Gretzky fame).

Can parts of humans, therefore, be owned? In some cases, they evidently can. If a person steals a kidney from a hospital, it is considered theft, which can exist only if the kidney were owned.

Can one person 'own' another person's learning? That is the crux of the debate here.

It does not follow that, simply because the employer is paying the employee, that the employer has a claim to 'own' the person's learning.

Indeed, if a person's learning is 'personal', an aspect of the self, then there is a strong argument, rooted in the argument against slavery, that an employer cannot own a person's learning, for a person's learning is inseparable from the self.

But against that, it may be that a person's learning is more like a kidney, part of the self, but separable and transferable.

Fourth...

What is it to 'own learning'? There are several distinct possibilities...

On the one hand, it may be to own the products of learning - the notebooks and tests and other artifacts.

On the other hand, it may be to own the knowledge or IP that was (if you will) 'transferred' (if you are a constructivist you need to depict the learning as the product of 'work for hire').

Moreover, it may be to own the 'process' of learning - that is, to dictate and determine the manner in which learning will take place, whether it be by reading, taking a class, watching a video, and so forth.

It may also be to own the 'content' of learning, that is to say, to be able to determine what will be, and what will not be, learned. My employer, for example, may require that I study Adam Smith and not Karl Marx (lest I become an employer-owned socialist).

And finally, it may be to own the learning environment - the classroom, the books, the learning environment, and the rest (though, manifestly, not the teachers).

Fifth...

Let me ask: if the self is produced via (the content of and the process of) learning, then isn't the ownership of (the content of and the process of) learning the same as ownership of the self?

I am not talking about the ownership of the artifacts - of the output of learning, or the materials used for learning. I am talking about the learning itself.

By analogy: if 'you are what you eat', then isn't the employer attempting to own what you 'are' by controlling what you eat?

We (mostly) wouldn't tolerate this, would we? If McDonald's required that its staff eat Big Macs for lunch, we would consider this abuse, would we not?

If my employer attempts to force me to learn Adam Smith, and not Karl Marx, isn't that the same as my employer forcing me to eat Big Macs, and not whole wheat bread? Isn't this my employer trying to own *who I am*?

The mere fact that my employer is paying me does not (automatically) entitle my employer to ownership over my learning.

There are (to my knowledge) no legal constructs granting ownership over 'learning' (in the sense of 'what is learned' and 'how it is learned'). That's why I can keep reading Karl Marx, even though my employer doesn't like it.

Sixth...

The 'personal learning environment' (as a concept) is an *explicit assertion* that learning (as opposed to the artifacts of learning) is owned by the person, not the employer.

To define learning is to define the self, which is why learning must be personal, and manifestly, must never be owned by the employer.

This is why the attempt to define the personal learning environment as something provided by, and owned by, the employer, is contrary to the concept of the PLE.

It is an attempt to create a legal construct in which a new type of ownership is created, ownership over one's learning.

The very tool - the PLE - that is intended to liberate us, could be used instead to enslave us.

There is to me a very clear line of demarcation here.

On the one hand, there is a perspective that is essentially supportive of personal learning, that supports learning, that supports personal development.

And on the other hand, there is a perspective that is essentially supportive of employer ownership, one that is essentially opposed to personal learning, one that views persons as employees to be shaped and moulded according to corporate objectives.

It's a question of ownership; there isn't a middle ground. A person's learning can be owned by the person, or the employer, but not both, for should there ever occur a dispute - whether or not to study Karl Marx, say - one, or the other, must prevail.

Seventh...

Can we remain silent on the question of ownership? Can we not describe the PLE as a list of features only, the way we could (say) describe a word processor?

No. Because the list of features that characterizes a PLE is inseparable from the question of ownership.

For example: one feature of the PLE is that 'the person can choose which learning materials (or learning feeds) to subscribe to).

If the person *cannot* choose - if ownership over this function is instead vested in the employer, then it is not a PLE.

An analogy: we cannot describe a set of behaviours as 'driving a car' if the function of 'steering' is controlled by some other person.

(It is worth noting that these considerations apply equally in the world of formal learning. If a person is not allowed (by the college or by the school board) to access certain learning materials, then the tool they are using is not a PLE (it is an LMS)).

Moncton, June 16, 2007

Copyright Consultation Submission

My name is Stephen Downes. I am a senior research officer with the Learning and Collaborative Technologies Group at the National Research Council. For the last fifteen years I have worked as in the field of online learning at NRC, Athabasca University, Assiniboine Community College and the University of Alberta. My submission is based on my personal experiences as a student, and later, an instructor in Canada's educational system, and as an expert in the fields of education and technology. Additional background and credentials may be found at my website, <http://www.downes.ca>

I have a background not only as a researcher, not only as a student and instructor, but also in policy and administration. I covered access issues as a student journalist, and later, was president of the Graduate Students Association, serving on the University of Alberta's Board of Governors for two years. In addition, I also served on Athabasca University's Governing Council. I have sat on academic councils at Alberta, Athabasca, and Assiniboine Community College. I have developed and delivered online courses and programs, written educational software, and author one of the world's most widely read newsletters in the field, OLDaily.

My involvement with copyright is directly related to my work as an author and a researcher in the field of online learning. Copyright issues pose probably the greatest challenge to the provision of learning online and to the improvement of access to educational opportunities for all Canadians. Academic institutions and their staff are not only one of the greatest consumers of copyright materials, they are also among the largest producers of such materials as well. It is an ongoing challenge to find ways not only to provide access to learning materials, but to do so in a sustainable manner.

Underlying Principles

Before addressing the questions specifically put to Canadians in this consultation exercise, I would like to outline what I think ought to be the principles underlying copyright and related legislation in Canada.

We understand, I believe, that the purpose of copyright is in part personal and in part social. On the personal side, it is the intent of copyright legislation to protect the interests of people who create original works of art and literature, to ensure that they receive fair compensation for their work, and are not deprived of the opportunity to earn a livelihood through their work. And on the social side, it is the intent of copyright legislation to foster the creation of original work, to engender the creativity that forms the foundation of economic and cultural activity in society.

As both creators of content and the societies they live in have an interest in protecting the rights of content creators, both content creators and society as a whole have an interest in protecting the rights of people who use that content. The interest of society in fostering the creation of content exists only to the degree members of society are able to access and use that content. And the protection of the author who creates content extends to the ability of the author to acquire and reuse content. For

neither author nor content user lives in isolation: we all build on each other's work, and all interact in a national conversation which must, if it is to exist at all, include mechanisms for content to flow freely.

Additionally, it is important, I think, to ensure that the application of copyright legislation applies strictly and solely to those objectives outlined above. The creation of copyright legislation that is too wide, or too narrow, in scope, may result in the use of that legislation for purposes other than the protection of an author's interests or the fostering of more creativity in society. It is not the purpose of copyright to protect specific pecuniary interests, to protect specific business models, to substitute for the regulation of criticism, parody or reference.

No person, I think, disagrees with the fundamental principle copyright, that the creator of an original work obtains, by virtue of that creative act, certain rights and protections regarding that particular work. But such rights and protections are limited. The creation of original work can occur *only* within a social content, *only* through the re-use of existing words, concepts, images or artifacts, and is therefore the originality in any given work is *limited* to that part *actually* created by the author, and is not to be used as a mechanism to extend the author's other rights and privileges in society, nor to facilitate, through the process of creation, the ownership of ideas, concepts, words or images, that *already* exist in society.

The intent of copyright is to protect and encourage the act of *creation*, and not to facilitate a process of *appropriation* of pre-existing goods.

How Copyright Affects Me

As mentioned above, my interest in copyright relates to my interest in education and in the process of academic teaching and research generally. It relates to my interests as a student, who would like to benefit from the promises of a quality education, to my interests as a teacher, who would like to be able to present students with the best and most authoritative educational content, and to my interests as a writer and researcher, who would like to benefit from my creative activities and original creations.

A person cannot learn in isolation. He or she needs not only a society within which to learn and a field of study to learn about, but also creative content of some form or another in order to facilitate learning. In traditional learning, this content consists of books and lectures. But in less traditional forms of learning, such as self-learning, it may include a wide range of teaching materials, conversations with cohorts, interaction with other materials, and participation in a content-laden milieu generally.

In short, without access to this content, in one form or another, there is no learning. This is a situation I found myself in earlier in my life, as an adult student attempting to complete my diploma at night school in Ottawa, or later as a provisional student at the University of Calgary attempting to earn my first degree. To make my way in life, I needed to access an education, but the alternatives for me were limited, and expensive. To this day, at the age of 50, I still owe money on my student loans. And with the costs to society in supporting high school and university access increasing every year, this is a situation which is not improving, but only getting worse.

In my work since then I have attempted to devise and support mechanisms using new technology in order to help someone without access to high school or university facilitate and support his or her own

education, whether this be by a limited access to the system supplemented by self-study, or whether it be by means of a completely autonomous form of learning. In these efforts I have found the single greatest impediment to be copyright law.

The impact of laws intended to protect one form of content – that content produced by an author and distributed for compensation by a publisher – impact all forms of content. My desire, for example, to distribute my own work freely and openly is hampered by such laws, not because I am attempting to violate such laws, but because I must incur substantial overhead created by such laws, from the need to pay for digital rights management or access control technology, to the risk of responding to lawsuits or legal actions intended to prevent the distribution of a competitive product.

Indeed, for me, perhaps the greatest impact of copyright law has been the imposition of what amounts to a commercial logic on my own personal and *non-commercial* activities. It has always been, for example, my right as an owner of something to share it with my friends; this was a right granted by the doctrine of first sale, and it essentially granted that what I bought and paid for was mine to do with as I please. Now it might be one thing if I wished to set up some commercial activity revolving around the distribution of copyright material, but this is not the case. The trend in discussions of copyright has been to collapse this distinction, to treat every activity of mine, commercial or otherwise, as though it *were* a commercial activity.

We need to support the capacity of people to act privately, charitably, or educationally without creating a presupposition that all such acts are at the same time instances of acting commercially. As an individual, I am quite happy to let the commercial sector operate according to its own laws and assumptions, but I wish to preserve the right to conduct my life outside that sector. If I don't use commercial product, and don't engage in commercial activity, then I should not be governed by commercial law, and not subject to the same sort of risk and liabilities as a commercial entity.

This position, to me, makes intuitive sense. If I'm just talking with my friends, I should be able to use trademarked terms like Coca Cola or Aspirin with impunity. I should be able to repeat a phrase I read from a book, or describe the action I saw at the baseball game. If it's just me in my living room, I should be able to play my DVD or the hockey game and invite my friends. If I am not charging any money, I should be able to loan a book to a friend, share a recipe, or exchange photographs of the Eiffel Tower. It doesn't matter where these activities take place, whether they are at home or in my personal web space. It's not commercial, it's personal and private, educational or non-profit, and it should be exempt from the strict domain of copyright legislation.

Modernizing Copyright Laws

Since copyright law was last considered, a technological revolution has taken place. Applications and capacities that were formally available only to professionals are not in the hands of individuals. We have advanced from the era of vinyl albums, newspapers and Polaroid photos to MP3 audio, personal web sites and photo albums on Flickr. A single person, someone like Craig Newmark, for example, can with a simple computer application undermine an entire sector his Craigslist application provides online for free classified advertisements that people use to support the entire newspaper industry.

This is not illegal; it is to be celebrated. There is nothing which protects the right of newspapers to be the sole purveyors of classified advertisements. Newmark may have brought an entire industry to its knees, but it was through a process of *invention*, not appropriation. The same has been true of industries throughout history. Nobody today seeks to protect the horseshoe industry from cars, the ice industry from refrigerators or the passenger steamship industry from airplanes.

It should therefore be understood, and regarded as a principle, that *the new inventions are not the same thing as that which they replaced*. An MP3 recording is *not* the same thing as a vinyl album, a personal blog is *not* the same thing as a newspaper, and a digital photo is *not* the same thing as a Polaroid. These entities are new creations, and have properties and characteristics in their own right, and not as a consequence of the properties and characteristics of the entities they displace.

Why is this important? It is because, for example, ‘publishing a blog’ is *not* the same as ‘publishing a newspaper’. The former is a personal act of content recording and sharing, an act that is, for the most part, educational and non-commercial. The latter is a commercial act, an endeavour to earn money by the reproduction of original content. So there can be differences between an original activity and its online replacement. This is true for any online activity. Online learning may replace classroom learning, for example, but it’s not the same as classroom learning. Online video may replace television, but it’s not the *same* as television.

Therefore, the modernization of copyright law cannot be and should not be the mere application of law that existed in the previous domain to activity that occurs in the replacement domain.

Take online video sharing and television broadcasting, for example. In the case of television, content is regulated by the CRTC, and (among other provisions) there is a requirement that a certain amount of Canadian content be broadcast. It would not make sense, and is certainly not automatically true, that Canadian content provisions ought to apply to online video sharing activities. Despite superficial similarities, and despite the fact that the one is replacing the other, the same law *does not obviously* apply to the new technology.

In applying copyright legislation to new technology, therefore, the principle of transference of existing law from the old domain to the new domain cannot be applied. It must be recognized that the new technology is a new creation, and therefore, any new legislation applied to that technology ought to be applied strictly and solely on the basis of its own merits. And these merits, in turn, must be based on the underlying principles of copyright legislation: to protect the interests of the content creator, and to foster creative activities in society.

In the first case, we must allow that the needs of the content creator may be protected in new ways. The copyright levy applied to blank media is an innovative example of this principle. With new recordable media, such as cassette tapes, becoming widespread, it was recognized that content creators could be compensated just as effectively by applying a levy on blank media, as by applying royalties to content sales. A levy on blank media recognized a fundamental property of blank media, and that is, that people would use it to record content. Rather than attempting to prohibit such activities, the legislation proposed to allow them, and focus on protecting author interests. There is no reason why similar

provisions cannot be taken in the case of digital media. If we understand that, just as the act of *copying* is inherent in blank media, the act of *publishing* is inherent in digital media, then an act that seeks to reward content contributors, rather than prohibit publishing, would be more appropriate.

And in the second case, it must be understood that new technology may lower the barrier to content creation, and therefore, that the need to compensate content creators to the same extent is no longer necessary. Take photography, for example. Today, a digital camera and free Flickr account replace thousands of dollars of photography equipment and even more in development and photo editing gear. The barrier to creating high quality photographs has been lowered a hundredfold, a thousand-fold. It follows, therefore, that society does not need the *same* degree of stimulus in order to encourage the creation of new photographic works.

We live in an era of proliferation of original content from all sectors of society. The need to foster the creation of such content may, in some cases, be hampered by a rigid application of copyright law, rather than enhanced by it. A requirement, for example, that any person viewing Flickr pay the photographer (or obtain a distinct license waiving the requirement) would be unreasonable. A person *creating* original text, or photographs, or other content, must realize that the *value* and the *uniqueness* of this content is not the same as it was even ten years ago, and that therefore the interest in society of protecting this content, and ensuring financial reward, is correspondingly less.

In a world characterized by a massive and freely shared proliferation of content, the need for restrictive laws intended to encourage the creation of content is correspondingly lower. Copyright legislation ought to apply to those areas in which creativity is *scarce*, not abundant. Copyright law should certainly not be extended to incorporate new types of content (such as, say, recipes, or fashion ideas) which are already abundant, and which show no signs of becoming scarce.

Unless there is a direct reference to the scarcity of creativity in an area, vigorous copyright protection in that area cannot be justified, for there is no need to promote creativity, and there is no inherent value in the creation to protect.

Withstanding the Test of Time

It seems likely that technology will continue to change, probably at an even more accelerated pace, and that therefore copyright legislation that refers to specific technologies or specific activities will tend to fall out of date and irrelevant or worse.

Moreover, there is additionally the danger, suggested in the formulation of this discussion point, that existing Canadian values and interests may be threatened by outdated and inflexible copyright legislation.

The discussion point, however, begs the question: what constitutes Canadian values and interests. Even a document such as the Charter of Rights and Freedoms constitutes only a partial declaration. The interests and values of Canadians are not represented in any legislation, in any body of writing, but rather, in the acts and activities of Canadians themselves.

And if anything resembling this statement is true, then it must be conceded, that the interests and values of Canadians include massive sharing and creation of content in all forms and across all media. Any legislation passed regarding copyright cannot merely represent the interests of a specific lobby, or even an external lobby, against the day-to-day activities and beliefs of Canadians. If the outcome of a law in Canada is (as it was in the U.S.) that the greater proportion of the population becomes criminals, then it is manifest that such a law does *not* represent the values and interests of Canadians.

That said, Canadians, through successive elections and legislation through 140 years, have represented their will to live in a constitutional democracy, one where the guiding principle of law is justice as fairness, where inherent in justice is the agreement of those governed in a system of law that applies to all, equally, across the land, of fundamental rights and privileges, and not merely those enshrined and not just law but also those enshrined in action, in the fundamental freedoms characteristic of a democracy, of speech, of association, of thought and belief, of the press, but also the right to an education, to safety and security of person and property, to health and health care, to support and freedom from destitution, want, poverty and starvation.

The values and interests of Canadians, in other words, are not primary economic and commercial; indeed, they are probably as far from economic and commercial as one can get. I think that, while Canadians recognize and respect the need for and desirability of, economic and commercial activity, they understand this to be the *means* of obtaining a just and satisfying social order, and not the ends or objectives of one.

That said, it follows that the creation of copyright legislation that will stand the test of time and preserve the values and interests of Canadians ought to satisfy the following criteria:

First, the legislation ought to be based in the purpose, not the application, of copyright. While the execution of copyright may require some enabling legislation in order to clarify process and meaning, such legislation ought to be, and to be seen as being, subservient to the legislation expressing purpose and intent. In particular, it must be stressed in this legislation that the intent is to protect some *particular* rights of content creators (and not to grant a wide array of unrestricted rights), and that the purpose of the legislation is to *promote* creativity.

Second, this statement of purpose and intent is sometimes expressed by other writers as being a *balance* between the interests of content creators and the interests of consumers. While the principle of balance is a valuable one, it must be recognized that the over-riding principle is not to create balance, but rather, that balance is a way of achieving the over-riding principle. This is important because, in some cases, the balance is shifted. When the value of content changes, and therefore, the economic interest of the creator changes, then the balance changes. And when the barriers to creativity change, and when therefore the need to foster creation changes, then the balance also changes. We would not create legislation requiring a special levy on cars in order to balance their use with the interests of horseshoe makers. Balance is, and must be, subservient to the underlying principles of copyright legislation.

Third, copyright legislation itself exacts a price, creating a need for legislation and enforcement, and a risk of infringement and sanction, and therefore must be weighed against other social goods in society, widely construed. For example, the principle that copyright ought to promote creativity does not mean the need to promote creativity *at any price*. These other social goods ought to be construed widely, as including not merely the rights and responsibilities enshrined in law, but the wider social good as instantiated in the acts and beliefs of Canadians. Enabling legislation, especially, ought to be framed in such a way so as to maximize contributions to the public good, widely construed, and to minimize harms.

Fourth, copyright legislation must be clear and easily comprehended by all Canadians, so that it is apparent to them whether or not the law accords with their wishes as a society, and respects Canadian rights and interests, and so Canadians can tell using the clarity of common sense rather than the concision of legal assistance whether or not they are in compliance with, or in breach of, the legislation.

Fifth, clarity is not the same as precise definition, and legislators should resist the urge to be specific and narrow in their definition of the terms and statements of the legislation. The more rigid the definitions employed by the legislation, the more terms their definitions must contain, and the less common-sense and comprehensible the legislation. It is more important to allow for discretion and latitude, especially with respect to protection of the social good or Canadian values and interests, than to narrow the definition in law.

Sixth, the nature of sanctions and penalties, should any be deemed necessary, should be such as to reduce the risk of private, accidental or innocent violation, and focused specifically against deliberate and commercial violation. It should not be possible to financially ruin a person, or create a criminal record, out of private and innocent blog posts, application usage, or normal day-to-day practice in one's personal and professional lives. The risks inherent in copyright violation ought to be such that, only deliberate or fraudulent violation should merit penalty at all, or at the very least, penalty of any significant size. And such should be the case both in civil and criminal law.

It may be argued, "the law is the law", and so the scale, method or intent of the violation should not matter. However, if there is no difference between innocent action and deliberate violation, then there is no reason for a person to do anything other than deliberate violation. Consider the case of Pirate Bay or Joel Tenenbaum: these are people who, on realizing they would face the same sanction no matter what their intent, opted to deliberately and flagrantly violate copyright. *Punishing the innocent creates criminals.*

Seventh, and in a related point, there ought to be fairness of process and right of defense against accusations of copyright violations. The cases we have seen recently, where large corporations employ lawyers and the possibility of significant penalty, and in all cases significant legal expense, to undertake legally dubious action against people who are unable to mount a defense, ought to offend any person with a belief in the principle of justice as fairness and in the right to equality and the possibility of a defense before the law. Massive legal actions, either civil or criminal, ought to be prohibited, and the

question of a wanton and deliberate violation of copyright referred to an enforcement agency, such as the police, rather left to the agency of the aggrieved party.

This is necessary for two reasons. The first, and most obvious, is that a person has the right to representation, and to a fair hearing, in matters before the courts initiated by government entities, such as the police, and thus, fairness of trial, even in cases of wanton disregard for copyright, is more likely. But secondly, less apparently, but perhaps even more significantly, it must be possible to *launch* a defense of one's copyright, to *enforce* one's copyright, without resorting to expensive civil proceedings. We do not require the victim of a robbery to sue the robber – and, indeed, we discourage vigilante resolution of such cases – and the same ought to be the case for copyright.

This will be a very difficult task, as it is not easy to provide fairness before the courts, and minimization of risk for the innocent, without at the same time imposing on them significant legal and other costs.

But if so, then, in the principle of justice as fairness, the presumption of validity of claim (that is, the presumption of innocence in a defense, the presumption of violation in an action) must lie with the *least advantaged* of the litigants (call this the 'presumption for the least advantaged'). The capacity of a large company, or a government agency, to bring considerable resources to bear in an effort to make their case, must *weight against them*, and create a presumption in favour of the other litigant. Poverty is the best defense a copier has that he or she has not created a commercial enterprise out of it, or that a content creator has that he or she has not seen the profits from the creation; wealth is, by contrast, evidence that no harm has occurred.

Incentive to Create

From the days of the Statute of Anne, copyright legislation has had as its foundation the desire of society for foster innovation and creativity. It is not enough, in other words, simply to protect the interests of rights-holders, but also, to create an environment which will, by ensuring some return on investments in training and creativity, foster the production of new and original material.

This principle is often described as creating an 'incentive to create'. The idea is that, without the protections created by legislation, a person would not find it worthwhile to spend the time to create original and creative work that is valued by society. The incentive can be viewed as primarily (but not entirely) a financial incentive. The reasoning typically expressed is that artists should be paid for their work, that they deserve fair compensation.

Nobody denies that artists should be compensated for their work. But inherent in the concept of the artist is the idea that the work being compensated should be both scarce and valuable, and that it should represent some significant effort on the part of the artist, either through the training and practice necessary to acquire a skill, or a persistence and craft required to produce the work itself.

Society, for example, has no interest in subsidizing the creation of children's crayon drawings. Nor does it see the value in underwriting the neighbourhood gossip, painting the house, mowing the lawn, or any of a million other common and mundane acts of creativity. It is not necessary, nor desirable, to provide

incentives to people to create things they *would create anyways*, things that *anyone can create*, or things that are *not worth creating*.

To be sure, this is a judgement call, but the notion that every act of creativity merits and deserves the full protection of the law is manifestly nonsensical. It seems that, at a minimum, a creation is worth protecting if, and only if, other things being equal, it would have some *monetary value*. This condition provides a simple and intuitive test that determines what should be protected:

First, if a creative work is being offered for sale, and *sold*, for financial compensation, then it has monetary value, and merits the protection of copyright legislation; and

Second, if a creative work is being offered for free, and is taken by a second party and in some way used to create or generate revenue (either by being sold, or by advertising something being sold, or in some other manner raising revenue), then it has monetary value, and merits the protection of copyright.

This is an important test because it not only speaks to whether or not a work has monetary value, it also helps reasonably assess the amount of that value. A song, for example, is worth 99 cents a copy if, and only if, it actually sells for 99 cents. And the cumulative value of sales of that song amounts only to the number of copies of that song, other things being equal, would have been sold.

We must in our discussions avoid the tendency, so common (and so natural) from the perspective of artists and publishers, to *overvalue* the work being protected, and therefore, to overstate the need for protection, and more, to overstate the need for penalties and compensation for copyright violations.

Creating Actual Value

In addition to these considerations, we need also in order to justify legislation be able to show that the protections being proposed *actually* provide the desired financial return, and hence, incentive. This is not a trivial requirement. It is been asserted by many that original creations that are *not* protected by copyright can return as much, if not more, revenue to the creator as creations that are protected. The distribution – permitted or otherwise – of copyright material enables the artist to either sell more copies of the work, or to attract more revenues to other activities, such as concerts or public lectures.

It may be said that it ought to be up to the creator of the work whether or not it may be copied and distributed. But this is not an inherent right, rather, it is a right *granted* by the state as a form of protection in order to encourage creativity, and it ought therefore to be contingent upon actually encouraging creativity. We can grant that an artist may have a *prima facie* right to control distribution of his or her works, but also that they are not in a position to claim damages if their income has actually increased as a result of the unauthorized distribution of those works.

Encouraging creativity, in other words, requires that the artist be able to *show harm* to his or her income, and that this harm be a direct result of the *copying*, and not as a result of the mundane nature of the creation.

This criterion also plays a significant role in determining the nature and extent of copyright. It stretches one's credulity, for example, to say that on one hand the legislation is required to encourage creativity, and on the other, that protection ought to continue to exist almost a century after the death of the artist. Though the principle is not based on simple cause and effect, we nonetheless want to point out that no incentive will be sufficient to induce an artist to create a new work 90 years after his death.

The interpretation of the premise of 'incentive to create', and consequent extension of the terms of copyright, have been premised on the idea that *any* incentive to create justifies the existence of legislation to protect that incentive, with the result that very minor incentives, such as provision for the income of one's grandchildren, now factor into the contemplation of copyright terms.

Such incentives, however, ought not be viewed in isolation. For concordant with any extension of a copyright term is a *cost* to society as a whole, a cost it pays in order to obtain from it the benefit of newly created works, a cost in the form of limited access to and use of the created work. Such a cost can be significant, especially as after a certain time creative works become a part of our culture, with references to and uses of everything from Mickey Mouse to 'Happy Birthday' common and everyday occurrences. When we must pay to use, and to reuse, core elements of our culture, then we must be sure that the value returned for such payment is substantial, and in such a calculation the incentive created must equal the cost that results.

It is not even remotely clear that society obtains sufficient benefit to justify significant extension of the term of copyright. This is especially the case when, from a *Canadian* perspective, these copyrights are held by agencies outside the country. Every Canadian child sings 'Happy Birthday', it is embedded in our culture, but to record such an event, a Canadian filmmaker must pay a royalty to a foreign rights holder.

For the application of copyright to a creative work, the work must stand the test of *novelty*. The work must be relatively recent, relatively new. This becomes even more important when ideas and concepts permeate society at an ever more rapid pace. It's ironic – when it took a long time for a song or a piece of writing to circulate through society, the term of copyright was short. Now that something can be on everyone's lips in a matter of days, the term has been extended to almost a century.

In a rapidly accelerated information society, terms of copyright should not be extended, they should be shortened. The incentive to create exists only to the point that a work, concept or idea reaches ubiquity; at any point after this time, we continue to pay a cost, but are no longer receiving a benefit. There is no reason to extend a copyright beyond a person's lifetime; indeed, there is no need to extend copyright beyond a few years, such as the 14 years traditionally observed.

Comparison With Alternatives

With respect to the fostering of innovation and creativity, it should be noted that copyright legislation is only one of many mechanisms available for this purpose. Indeed, for most people in the world, innovation and creativity persist even though no protection in copyright exists at all. People performing work for hire, for example, surrender their copyright as a condition of employment. Carpenters and trades people surrender copyright through sale of services rather than product. Friends and neighbours

who decorate their houses, paint murals, create gardens, and engage in many more such acts, do so only to make their homes and communities more pleasant.

If we recognize that the awarding of a copyright is not free, but rather, a form of subsidy in which society grants a limited monopoly to an artist in exchanged for a hoped-for increase in productivity in that sector, then we can reasonably begin to compare copyright directly with these other forms of incentive and stimulation. Government can pay for the creation of original works directly, for example – and, indeed, does so through agencies such as the National Film Board or the National Research Council, the Canada Council, and numerous other agencies, grant programs, tax credits and incentives. Governments have a wide range of incentives to create and distribute information, from the need to educate the population to provide safety advice to promote and advance the culture.

Similar incentives exist in the private sector. Companies create and distribute advertising material, advocacy literature, media and other studies, guides and help sheets, product comparison reports, and much more. In no cases do the artists creating such work retain the copyright, and yet, they are compensated for their work. Incentives for the private production of material include everything from advertising to public information and public safety to philanthropy.

Copyright legislation, in other words, must not merely create an incentive. It must be a *more effective* way of creating an incentive than other alternatives. Copyright legislation creates significant overhead, a class of criminal legislation, and increased risk and deterrence, enforcement and litigation costs, and other encumbrances on society. It is a heavy-handed solution to a problem that might be much more simply and cheaply solved with a funding program.

To speak of a particular example with which I am familiar, take, for example, the production of educational materials. The single greatest cost facing people who wish to offer learning opportunities online (such as, say, M.I.T.'s Open CourseWare) is the cost of clearing copyright. Educators must negotiate a maze of conflicting licenses, incompatible access provisions and technologies, and assume substantial risk of litigation. How much easier would it be to have existing employees who are already creating these materials to offer them free online to all Canadians instead of free to publishers?

In the field of educational materials, at least, copyright protections for content providers have not produced innovation and creativity; they have created a crisis. The costs of educational materials continue to increase far beyond the students' capacity to pay, and at the lower grades materials costs continue to create a greater and greater burden on the taxpayer.

Other submissions will to this consultation process will have called for an elimination of Crown Copyright. This is a good place to echo such a call, in the context of a clear justification for such an action. The elimination of Crown Copyright allows educational institutions to begin immediately to take advantage of the many resources produced in the day-to-day activities of government, and to potentially benefit from a constructive effort to produce learning and educational materials that may be used by all students and teachers without fear of violating copyright or the expense of copying with increasingly onerous and expensive conditions of access.

Minimizing the Cost

One final matter under the heading of innovation and creativity needs to be considered, and that is the question of the *disincentive* copyright creates.

The requirements of complying with copyright law, especially when this law extends into wider and wider realms of activity, permeating not only commercial activity, but even private correspondences and creative activities, creates a *significant overhead* that must be borne by anyone wishing to engage in a creative activity.

This is especially the case because, as noted above, no creative act occurs in isolation. Creativity and innovation is largely a process of reuse and repurposing, of (as Newton famously said) “standing on the shoulders of giants.” The writer rarely invents many new words in his work, but rather, reuses those that have already been created. The artist copies scenes, or imagines scenes compiled from his own memories, or his own understanding from the sciences of nature, biology and physics. Common themes, or tropes, can be found throughout literature, film and theatre.

The greater the constraint on reuse and repurposing, the greater the cost of compliance with copyright, and hence, the greater the disincentive created by copyright. Indeed, it is arguable that the intent of copyright was never to restrict and discourage this sort of reuse, but rather, to protect only exact copies of the works being protected. This original intent, however, is under significant stress, as copyright is interpreted (at least by the owners) as protection against any sort of use, mention, reference, or reconsideration not only of the actual instance of a work but also of the concept or idea expressed in the work.

In law, in Canada, there exists the provision of fair dealing, which is intended to protect those uses of a work that are not simple copies of the work for commercial gain, and to enable reuse of concepts or ideas, extraction of excerpts, especially for academic, critical or satirical purposes, and the like.

These provisions need to be clearly enacted in law, and not represented as exceptions to copyright protection, but rather, as forms of protection that are *not granted* to rights holders. Specifically, it ought to be clear in law that it is the obligation of the rights holder to show that a use of the material is *not* covered under a provision of fair dealing, rather than the obligation of the other party to show that it is. In other words, a *prima facie* defense of ‘fair dealing’ ought to be sufficient under law absent significant and compelling evidence to the contrary.

American law invokes four major principles of fair use, which are applicable in the Canadian context:

1. the purpose and character of the use
2. the nature of the copyrighted work
3. the amount and substantiality of the portion taken, and

4. the effect of the use upon the potential market.

These principles, liberally interpreted (as has not always been the case in American jurisprudence) offer a reasonable characterization of the rights not granted to copyright holders.

The first principle requires that the work in some way be transformed. This principle is invoked to support the parody, satire or criticism of the work. It should not be necessary that the text be changed in order to constitute a transformative use. Criticism, through extensive citation, needs to be permitted, and constitutes a transformation of the *intent* of the work. In short, copyright needs to be understood as protecting works as they were created, but to allow that *new works can be created out of old works*.

The second principle requires in essence that the work being protected be creative. Thus we hear argued (though this position has been challenged recently) that data cannot be copyrighted. It is important to preserve this provision. In particular, we need to explicitly recognize that *all* creative work builds on something else, and this includes the present work that has been copyrighted. Copyright should not extend to the entire work being protected, but rather, *only that part of the work that is an original creation*. Copyright law must not be used to enable the expropriation or mining out of the public domain pre-existing facts, data, contents, words, ideas, or anything else.

The third principle preserves the principle of *reference*. This is an essential principle in academia, as it is necessary to create something new by not only building upon, but also by citing and quoting segments of the copyright work. It is also a principle employed in the arts, where something created by one person is taken, in part, to be built upon as part of another creation.

Finally, fourth, as mentioned above, there must be some actual *harm* created by the use. Such allegations are by definition counterfactual, as they appeal to revenues that would have occurred had the alleged infringement not occurred. It is necessary that such counterfactuals be supported in fact, and not speculation, that (for example) potential sales lost express what *would have been* actual sales, and not simply a tabulation based on number of copies made. After all, the number of people who use a product when it is free always exceeds the number of people who would use a product when it is offered for a price.

Ownership and Rights to Access

In Canadian law, there ought to be a fifth principle of fair dealing, which expresses the right of a purchaser to retain ownership of, and use of, something he or she has purchased. This is especially the case if the value of the purchased product is substantial.

Consider, for example, a music library consisting of 5,000 songs – the content of a typical iPod, for example. At the current market price of \$0.99 a song, this represents an investment of almost \$5,000. Such an investment might be typical of a lifetime's accumulation of music by an average listener. An iPod, however, valued at about \$300, has a lifetime that can be measured in months. To cite my own case, since I began listening to digital music around the year 2000, I have owned a Creative Zen, an iRiver, two iPod nanos and three iPod classics. Each of these has, for one reason or another, failed. In

each case, I reloaded my music collection onto the new device from my backup files on my computer or directly from CD.

It is not reasonable to expect people to reacquire their music collection each time they acquire a new playing device. Such a policy would mean that my \$5,000 music collection actually cost me \$35,000. It is hard to justify such an additional expense, multiplied by the Canadian population, under the aegis of fostering creativity and innovation. It would be (far) cheaper to simply have the Canadian government pay musicians directly and collect their salaries in taxes.

In today's electronic age, people who would once have had one content device – a book, say, or a record player – now own numerous playback devices, media in multiple formats, and devices that are almost disposable in nature. The concept of the ownership of 'a copy' of a work must be interpreted to mean, not one copy per device, but rather, one copy *per person*. Owning a copy of a work, if it is to preserve any meaningful sense of ownership, must include the right to move that copy from one device to another, from one format to another, and to keep multiple *instances* of the copy in order to ensure its integrity.

Finally, in a matter related to ownership, is the existence and proliferation of what have come to be known as 'digital locks'. Under other copyright legislation, specifically, the American DMCA, and the Canadian Bill C-61, it becomes a crime to break such digital locks.

This is a provision that offends sensibilities. No person would be allowed to sell you a vacuum cleaner with the provision that, under penalty of law, you are not allowed to open the case. If you have bought and paid for a vacuum cleaner, there is no sense to be made of the concept of unauthorized access to that vacuum cleaner.

The intent of digital locks is to prevent infringements of the rights holder's copyright, and specifically, to prevent illegal copying and sharing of the contents of the file. However, the very fact that it is a lock means that it prevents a wide range of legal activities, and in particular, prevents you from exercising rights you have as not simply as an owner of the content, but as a *user* of the content (in other words, the provisions of fair dealing are not contingent on ownership, but rather, may be exercised by any person with access to the content).

Insofar as it is necessary to have a provision protecting digital locks – indeed, if such a provision is necessary at all – it ought to prohibit only *illegal* uses of the content, and not legal uses. No penalty exists under law for breaking into locked buildings that you already own, or removing a lock improperly placed barring access to a public space such as a road or a park. Nor should the circumvention of digital locks for legal purposes be illegal.

Other writers will have listed the exceptions that should exist in anti-circumvention legislation. I hold the opposite view. Such legislation ought specifically to enumerate the cases in which it applied. It should state for example, that it is illegal to circumvent a digital lock *in order to make counterfeit copies, or in order to view private use data*, and the like.

It is important that this applies not only to the *action* of circumvention of digital locks, but also to *devices* or software that can be used to circumvent locks. Again, it would be absurd to make wire-cutters illegal on the ground that they can be used to steal bicycles, and indeed, their use to break locks is illegal *only if* the intent is, in fact, to steal the bicycle. Similarly, the same logic ought to apply to software that opens digital locks.

This morning, for example, prior to finishing this article, I had to download and install a tool called chkrootkit on my web server, because I feared that a person had hacked my computer and installed a rootkit, which would have allowed the hacker full access to my web server, passwords, and confidential data. In fact, chkrootkit detected an intrusion, which I repaired. To do so, however, it had to cut through digital locks *the hacker had installed* on my machine. It would be absurd to make my actions of this morning illegal, absurd to make it illegal to prevent a hacker from attacking my own web server. Intent matters, and law that ignores intent is law that protects criminals.

There should be no need for special provisions for digital locks. Some people can sell locks, other people can sell lock-cutters, and the use of either depends on the *legality of the intent* and not the specific action of creating, or breaking, a lock.

Competition and Investment

We have heard a great deal above about the need to create incentives for innovation and creativity, and the need to understand that such incentives have a cost, and must return an investment on that cost, and moreover, offer a higher rate of return than less costly (and less intrusive) measures.

This section, though, deals more specific with Canada's relation to the rest of the world, and specifically, "to have a modern copyright framework that strengthens Canada's global competitive position and allows us to attract tourists, talent, investments and high-paying jobs to Canada."

My own experience in the field of research and development is that strong IP protection, including copyright, tends to protect the "haves", at the expense of the "have-nots". That nations with an already accumulated base of IP tend to stress protection, and countries without such a base, and without a capacity to produce one, tend to stress less stringent protections.

My observation is that Canada falls into the latter category. A simple company like IBM or Microsoft will outproduce all of Canada in patents, while major corporations like Disney or Universal produce more copyright content than the entire Canadian publishing industry.

In that context, it seems folly to protect their interests, at the expense of ours.

Again, it is a question of balance. These companies, and these countries, invest in this country, help foster innovation here, and create value. Each movie shot in Toronto or Vancouver, no matter where the copyright lies, results in value for Canadians. Such agencies require as a condition for their participation in the Canadian economy certain protections, which create a certain cost to Canadian artists and industries, and we must balance the protections being requested against the revenues being generated, not just in the short term, but through the life of the copyright.

It is desirable to harmonize Canadian copyright legislation with the rest of the world, if only to remove the potential of a foreign industry to lobby for special consideration, but there is not unanimity in the rest of the world, nor is the status of the rest of the world likely to remain static. China, for example, can be expected to shift its stance toward greater and greater protection as it accumulates a larger share of IP. We should attempt to take advantage of China's interests now, in order to protect our own interests later.

Canada will never be a primary producer of copyright content, and should be wary of the promises made by content producers in support of more stringent copyright legislation. Our interests align more readily with smaller nations and developing nations, with, in other words, major consumers of copyright content, rather than producers of copyright content. To pretend that greater protection will grow our industry to a greater status is a mistake; greater protection merely entrenches the status of (foreign) incumbents, and prevents Canadian industry from leveraging work done in other jurisdictions.

Unfortunately, I share with many Canadians the belief that the financial interests of these foreign content producers are well-represented on Parliament Hill, and that their campaign contributions on occasion speak louder than the national interest in MPs' offices. I hope that this is not one of those cases.

Digital Economy

I consider the fundamental principle that will support of a digital economy (other than the question of incentives, discussed at length above), to be the principle of fairness.

What does this entail? Some basic considerations appear especially relevant:

First, *people should not be punished for innocent acts*. This principle applies above, in the use of circumvention for legal purposes, such as accessing your own content. But in general, copyright provisions ought not to attack practices, but *harms*.

Second, *people should not be responsible for the actions of others*. It is unreasonable to hold someone to account for behaviour they have no control over (or no control without significant expense and inconvenience).

Third, people should *have the right to due process*, and specifically, to respond to accusations and to be free of penalty until the accusations have been proven. This should be evident and apparent, but we have seen in recent years an increase in penalties taken – such as removal from search engines, or take-downs of websites – based on *accusations* rather than due process.

The instantiation of these principles yields the following recommendations:

Safe Harbour: there should be a “safe harbour” for Internet intermediaries supported by a “notice and notice” takedown system. As Michael Geist writes, “The creation of a legal safe harbour that protects Internet intermediaries from liability for the actions of their users is critically important to foster a robust and vibrant online world. Indeed, without such protections, intermediaries (which include Internet service providers, search engines, video sites, blog hosts, and individual bloggers) frequently

remove legitimate content in the face of legal threats. Canadian law should include an explicit safe harbour that insulates intermediaries from liability where they follow a prescribed model that balances the interests of users and content owners. The ideal Canadian model would be a ‘notice and notice’ system that has been used successfully for many years on an informal basis.”

This is a principle that protects the carriers of content from the implications of the content of that content. It is not reasonable to hold the telephone company responsible for subversive phone calls or the post office responsible for the transport of illegal artifacts. Compliance with such legislation would bankrupt the phone company or the post office. In a similar manner, it is not reasonable to hold internet service providers liable for the actions of their users.

Safe harbour ought to extend to search engines. The provider of a search engine should not be held liable for the actions of a person to whom the search engine links (nor would we convict the phone company because the phone book contained a listing to the local bookie).

Inducement: there should be no penalty, or provision in law, regarding an ‘inducement to breach copyright’. Such legislation is dangerous, because it opens people to prosecution based on what *could* happen or what *could* be done with content, applications or services they provide.

Reject a Three-Strikes System: quoting Michael Geist again: “Several countries have begun to consider establishing a “three-strikes and you’re out system” that removes Internet access based on unproven allegations of infringement. Attempts at three-strikes systems have struck out in virtually every country where they have been raised. Internet access is far too important to establish a system that would cut off access based on unproven allegations of infringement. The proposals raise a host of due process and constitutional concerns and should be rejected as a possible alternative for Canada.”

No Exception for Education

Any proposed ‘exception for education’ should be rejected. Such proposals treat ‘education’ to be strictly and solely the domain of educational institutions. However, increasingly, people want to use internet technologies to support their own learning informally.

An ‘exception for education’ creates a cost that must be borne by self-learners that need not be paid by educational institutions. This entrenches the position of institutions charging tuition in exchange for privileged access and use of copyright content, without essentially improving access to education.

Contract and Copyright

To quote Michael Geist: “The use of contractual terms to effectively void privacy protection or basic copyright user rights has become all too common with cases such as the Sony rootkit providing a classic example of how contractual terms that quash important legal rights are buried beneath the ‘I agree’ button.

Governments are understandably loath to intervene in privately negotiated contracts. However, not every contract or contractual term is enforceable - there are certain terms (and certain contracts) which run counter to important public policy goals that will often be rendered unenforceable by a sympathetic

court. On this particular issue, we should not wait for the courts to intervene. Rather, Canada should identify the core protections and policies that underlie the copyright balance and establish rules that prohibit attempts to ‘contract out’ of such terms.”

In other words, it should be understood as a fundamental principle that the rights of Canadians are not for sale, and cannot be abridged merely through a simple contract or sale. The wording of ‘click-through’ licenses and ‘terms of use’ should not be sufficient to extinguish rights inherent under fair dealing provisions.

Moncton, September 11, 2009

Open Source Assessment

This has come up in a couple of places lately, and I'd like to get the concept down on paper (as it were) so people has a sense of what I mean when I talk about 'open source assessment'.

The conversation comes up in the context of open educational resources (OERs). When posed the question in Winnipeg regarding what I thought the ideal open online course would look like, my eventual response was that it would not look like a course at all, just the assessment.

The reasoning was this: were students given the opportunity to attempt the assessment, without the requirement that they sit through lectures or otherwise proprietary forms of learning, then they would create their own learning resources.

Certainly, educational institutions could continue to offer guidance and support - professors, for example, could post guides and resources - but these would not constitute any sort of required reading, and could indeed be taken by students and incorporated into their own support materials.

This is the sort of system I have been talking about when I talk about open educational resources. Instead of envisioning a system that focuses on producers (such as universities and publishers) who produce resources that consumers (students and other learners) consume, we think of a system where communities produce and consume their own resources.

So far so good. But where does this leave assessment? It remains a barrier for students. Even where assessment-only processes are in place, it costs quite a bit to access them, in the form of examination fees. So should knowledge be available to everyone, and credentials only to those who can afford them? That doesn't sound like a very good solution.

In Holland I encountered a person from an organization that does nothing but test students. This is the sort of thing I long ago predicted (in my 1998 Future of Online Learning) so I wasn't that surprised. But when I pressed the discussion the gulf between different models of assessment became apparent.

Designers of learning resources, for example, have only the vaguest of indication of what will be on the test. They have a general idea of the subject area and recommendations for reading resources. Why not list the exact questions, I asked? Because they would just memorize the answers, I was told. I was unsure how this varied from the current system, except for the amount of stuff that must be memorized.

As I think about it, I realize that what we have in assessment is now an exact analogy to what we have in software or learning content. We have proprietary tests or examinations, the content of which is held to be secret by the publishers. You cannot share the contents of these tests (at least, not openly). Only specially licensed institutions can offer the tests. The tests cost money.

There is a range here. Because a widespread test like the SAT is hard to keep secret, various training materials and programs exist. The commercial packages give students who can afford them an advantage. Other tests, which are more specialized, are much more jealously guarded.

There are several things at work here:

- first, the openness of the tests. Without a public examination of the questions, how can we be sure they are reliable? We are forced to rely on 'peer reviews' or similar closed and expert-based evaluation mechanisms.

- second, the fact that they are tests. It is not clear that offering tests is the best way to evaluate learning. Just like teaching has for generations depended on the lecture, so also assessment has for generations depended on the test. If the system were opened up, would we see better post-industrial mechanisms of assessment?

- third, there is the question of who is doing the assessing. Again, the people (or machines) that grade the assessments work in secret. It is expert-based, which creates a resource bottleneck. The criteria they use are not always apparent (and there is no shortage of literature pointing to the randomness of the grading). There is an analogy here with peer-review processes (as compared to recommender system processes).

- fourth, the testing industry is a closed market. Universities and colleges have a virtual monopoly over degrees. Other certifications are similarly based on a closed network of providers. This creates what might be considered an artificial scarcity, driving up the cost.

The proposition here is that, if the assessment of learning becomes an open, and community, enterprise, rather than closed and proprietary, then the cost of assessment would be reduced and the quality (and fairness) of assessment would be increased, thus making credentialing accessible.

We now turn to the question of what such a system would look like. Here I want to point to a line of demarcation that will characterize future debate in the field.

What constitutes achievement in a field? What constitutes, for example, 'being a physicist'? As I discussed a few days ago, it is not reducible to a set of necessary and sufficient conditions (we can't find a list of competences, for example, or course outcomes, etc., that will define a physicist).

This is important, of course, because there is a whole movement in development today around the question of competences. The idea here is that accomplishment in specific disciplines - first-year math, say - can be characterized as mastery of a set of competences.

This is a *reductive* theory of assessment. It is the theory that the assessment of a big thing can be reduced to the assessment of a set of (necessary and sufficient) little things. It is a *standards-based* theory of assessment. It suggests that we can *measure* accomplishment by testing for accomplishment of a predefined set of learning objectives.

Left to its own devices, though, an open system of assessment is more likely to become non-reductive and non-standards based. *Even if* we consider the mastery of a subject or field of study to consist of the accomplishment of smaller components, there will be no widespread agreement on what those components are, much less how to measure them or how to test for them.

Consequently, instead of very specific forms of evaluation, intended to measure particular competences, a wide variety of assessment methods will be devised. Assessment in such an environment might not even be subject-related. We won't think of, say, a person who has mastered 'physics'. Rather, we might say that they 'know how to use a scanning electron microscope' or 'developed a foundational idea'.

While assessment in a standards-based system depends on measurement, in a non-reductive system accomplishment in a discipline is *recognized*. The process is not one of counting achievements but rather of *seeing* that a person has mastered a discipline.

We are certainly familiar with the use of recognition, rather than measurement, as a means of evaluating achievement. Ludwig Wittgenstein is 'recognized' as a great philosopher, for example. He didn't pass a series of tests to prove this. Mahatma Gandhi is 'recognized' as a great leader. We didn't count successful election results or measure his economic output to determine his stature.

In a more mundane manner, professors typically 'recognize' an A paper. They don't measure the number of salient points made nor do they count spelling errors. This is the purpose of an oral exam at the end of a higher degree program. Everything else is used to create hurdles for the student to pass. But this final process involves one of 'seeing' that a person is the master of the field they profess to be.

What we can expect in an open system of assessment is that achievement will be in some way 'recognized' by a community. This removes assessment from the hands of 'experts' who continue to 'measure' achievement. And it places assessment into the hands of the wider community. Individuals will be accorded credentials as they are recognized, by the community, to deserve them.

How does this happen? It breaks down into two parts:

- first, a mechanism whereby a person's accomplishments may be displayed and observed.
- second, a mechanism which constitutes the actual recognition of those accomplishments.

We have already seen quite a bit of work devoted to the first part. We have seen, for example, describe the creation of e-portfolios, intended a place where a person can showcase their best work.

The concept of the portfolio is drawn from the artistic community and will typically be applied in cases where the accomplishments are creative and content-based. In other disciplines, where the accomplishments resemble more the development of skills rather than of creations, accomplishments will resemble more the completion of tasks, like 'quests' or 'levels' in online games, say.

Eventually, over time, a person will accumulate a 'profile' (much as described in 'Resource Profiles'). We can see this already in systems like Yahoo Games, where an individual's profile lists the games they play and the tournaments they've won.

For the most part, recognition will be informal rather than formal. People can look at the individual's profile and make a direct assessment of the person's credentials. This direct assessment may well replace the short-hand we use today, in the form of degrees.

In other cases, the evaluation of achievement will resemble more a reputation system. Through some combination of inputs, from a more or less define community, a person may achieve a composite score called a 'reputation'. This will vary from community to community. The score will never be the final word (especially so long as such systems can be gamed) but can be used to identify leaders in a field. Technorati's 'authority' system is a very crude and overly global attempt to accomplish such a thing.

In still other cases, organizations - such as universities, professional associations, governments and companies - may grant specific credentials. In such cases, the person may put forward their portfolios and profiles for consideration for the credential. This will be a public process, with everyone able to view the presentation. Institutions will be called to account for what the public may view to be fair or unfair assessments. Institutions will, over time, accumulate their own reputations. The value of a degree will not be based on its cost, as is the case currently, but on the level of achievement required.

Most of the latter part of this post consists of speculation, based on models we have already seen implemented on the web. But the speculation nonetheless point to a credible alternative to proprietary testing systems. Specifically:

- credentials are not reduced to necessary and sufficient conditions (competences). Any body of achievement may be posited as evidence for a credential.
- these bodies of achievement - profiles and portfolios - result from interactions with a wide range of agencies and represent a person's creative and skill-based capacities
- considerations of these achievements for credentials are open, that is, the public at large may view the profiles and portfolios being accepted, and rejected, for given credentials
- there is no monopoly on the offering of credentials; any agency may offer credentials, and credibility of the agency will be based on the fairness of the process and the difficulty of the achievement

Yes, this is a very different picture of assessment than we have today. It replaces a system in which a single set of standards was applied to the population as a whole. This was an appropriate system when it was not possible for people to view, and assess, a person's accomplishments directly. No such limitation will exist in the future, and hence, there is no need to continue to judge humans as 'grade A', 'grade B' and 'grade C'.

Claiming Ephemeral Media

Responding to [Boone Gorges](#) and [D'Arcy Norman](#), both of whom talk about recovering their content from the hosted sites and silos online.

It's interesting watching this because for me the reverse is the problem – I already self-host most of my stuff, which creates a challenge getting it into the stream that other people use (and listening to that stream, because so much of it is siloed, and increasingly so).

At this point, I host my own website (and I really must learn about security certificates and such) and my own email server (which has led me to learn far more than I want about authentication and spam-blocking services). My website is also, by design, my bookmarks server and my email server. And I use my own RSS to publish (no Feedburner).

I use Twitterfeed <http://twitterfeed.com/> to send my OLDaily posts to Twitter (I use a separate 'oldaily' identity <http://twitter.com/oldaily> because I'm sure my regular Twitter followers don't want the additional traffic of a half dozen OLDaily tweets a day. And I use something else – I've honestly forgotten what it is, but it still works – to send Twitter posts into Facebook. In other words, I use the hosted services as a way of relaying my content, not as a primary interface.

This does make moving the traffic the other way an issue. I subscribe to some Twitter feeds, and these go right into my website database. Blogs and Flickr and such I can subscribe to directly via RSS. I haven't figured out Facebook yet, and because it's such a silo, I rarely use it. The same with most Google services, which again involve auth tokens, secret keys, and all the rest of it. I send photos to Flickr because I don't feel like hosting the bandwidth (and I do like making my photos searchable; Google image search is a good 12 months behind, always) but I have an excellent backup photo library (which doubles as my screen saver). And I use a hosted service for my radio station, which is OK, because it has no listeners and I'm just building it up anyways.

The result, I think, is that some people perceive me as being stand-offish and uninvolved. It's not through choice. If people want to converse in an environment that basically owns all their data, I can't stop them, but I've been through this before – remember HotWired Threads, anyone? – and don't feel like going through the grief again.

I think that's the most difficult part of reclaiming ephemeral media. The silos have made people feel as though they have to be there, and the people there are complicit in making those who don't play in the sandbox feel like outcasts. Are you ready to have people act as though you've dropped off the grid?

Moncton, Friday, May 27, 2011

The Argument Against Usage Based Billing

Responding to [David Eaves](#)

(<http://eaves.ca/2011/02/03/why-the-crtc-was-right-on-user-based-billing/>)

Well, I don't agree with you that the roads should be tolled, and for the same sort of reasons I don't support usage based billing for internet services.

But before that main argument, let me reiterate the point made by some commenters, that what has transpired in the era of UBB in Canada thus far is blatant gouging by the ISPs. As [reported](#) in the Globe and Mail today, the cost for ISPs is as low as 3 cents per gigabyte, while providers like Rogers are turning around and charging consumers \$5 for that gigabyte. They could raise their rate \$10 a month, thus allowing consumers an additional 300+ gigabytes a month, a limit that would never likely be reached.

Additionally, a secondary point to the main argument is that the charging of bandwidth fees are in response, not to the cost of providing bandwidth, but rather, their desire to eliminate the competition. ISPs in Canada are content providers as well. So services like Netflix pose direct competition to the content end of their business. So the rates are increased in order to establish an ISP content monopoly. Such conditions are not conducive the creation of new industry, especially in internet content and services, and this will have a double impact when the inevitable happens under the current realm of CRTC-non-regulation and the ISPs are sold to American interests.

But the main point about UBB, as with tolls on the roads, is that it's an inefficient cost-allocation mechanism that creates a drain on the economy, with no gain in productivity. The imposition of tolls on roads requires the creation of an infrastructure to collect these tolls. This infrastructure does not produce any wealth; it merely drains it.

Moreover, it makes the roads less usable. That's why tolls are actually used only in a few places, on major highways. Anything like an actual toll on all roads would be so cumbersome as to render road traffic entirely unusable. Similar tolls on the internet, which while they may appear to be simple and straightforward, like a highway toll, risk becoming a cumbersome overhead, as providers in our unregulated and non-net-neutral internet reach special deals with various providers. This means that each stream of internet traffic would be billed differently, which in turn entails an entire overhead for monitoring and managing those streams.

Finally, because of the overhead, and because of borrowing costs required in order to acquire and establish a UBB internet, the tolls may never actually serve their purpose. Just like highway management companies (or many other private enterprises that begin as privatization but evolve into PPPs) the proprietors will return to the government well for subsidies and additional funding again and again. Like

the managers of the Saint John Harbour Bridge toll, they will collect money for 25 years and actually lose ground, the entire total having gone to pay back overhead.

David Eaves replies:

Stephen - I confess being surprised to read this from you. I think the idea that tolls are inefficient as a system is a weird logic - especially when applied to roads! (I'm open to the possibility that they may be inefficient for monitoring internet traffic). But electronic tolls on highways have made the system very efficient, and London's downtown toll is one of the great success stories of modern urban planning. That said I can't speak to the Saint John harbour toll... but when you have a scarce resource you need to find a way to allocate it (or create incentives to increase the amount of it) and I don't see that part of the discussion taking place.

I think we are aligned though around wanting a fair price for access - so I'd love for there to be a fair usage based billing rate. Indeed, looking at the Globe article you referenced, that fact was raised by the commenter who talked about the price. Yes, it only costs a few pennies to deliver a gigabyte, but it doesn't cost a few pennies to deliver an additional gigabyte.

Scotia Capital analyst Jeff Fan said that if the government tears down the usage-based billing decision, it would essentially break the link between Internet traffic volume and revenues, and could discourage network investments by large telecom and cable companies.

Mr. Fan added that current estimates – that it costs less than a penny to transport a gigabyte of data, while companies such as Bell want to charge as much as \$2.50 per gigabyte when customers go over their limits – may not hold true as traffic increases on networks where there is no investment.

“Without building more capacity, that math, or that cost-per-bit, probably wouldn't be sustainable,” Mr. Fan said. “It's become political, but I'm not sure the politicians have thought things through.”

Again, I think we are mostly aligned. And I'm open to the possibility that tolling on the internet may not be efficient, but haven't seen evidence of that yet, and I'm not finding the claim that isn't efficient for roads persuasive.

My response

The London system isn't exactly an example of usage based billing. It doesn't measure, for example, how many kilometers you drive, so a fleet-based vehicle making deliveries pays exactly the same amount as a vehicle driving a block into the ring and then parking (actually, the fleet vehicles pay less). Traffic that originates and stays within the zone is not (apparently) billed at all.

Meanwhile, we could question how efficient the system is. "TfL's annual report for 2006–7 shows that revenues from the congestion charge were £252.4m over the financial year, representing 8.5% of TfL's annual revenues. More than half of this was spent on the cost of running the toll system, at £130.1

million. Once other charges were deducted, the congestion charge brought in an annual operating net income of £89.1m for TfL." <http://en.wikipedia.org/wiki/L...> Certainly, as a mechanism for *paying* for roads, it would be a miserable failure.

Moreover, this does not take into account much of the inefficiency that has simply been offloaded. Leaving aside the financial encumbrance of paying the toll (which can be significant - 2,000 pounds for 200 days of work-day travel in a year) drivers must also manage to pay tolls their own way, paying the charge online, by SMS text message, in certain shops, or by phone. If you don't pay, you have to pay a fine - and a significant percentage of the revenues are based on fines, a testament to how inefficient the payment system is. And if you pay but were not detected as having used the road, there's no refund.

Of course, the *purpose* of the London toll isn't to pay for the roads, it's to reduce congestion. That's why it can be so inefficient and still be claimed to be a success. Indeed, it becomes successful by being inefficient, as it forces a higher toll, resulting in less traffic (and I would imagine a significantly different demographic of traffic as well; no doubt it keeps the riff-raff out).

Now this seems to resonate with what you say: "when you have a scarce resource you need to find a way to allocate it." Quite so. Economics wouldn't exist without such a requirement. But there is scarcity, and then there's scarcity. It is arguable that space for traffic in downtown London was genuinely scarce - you couldn't alleviate it by building more capacity, so it becomes necessary to regulate it by other means. But bandwidth, it could be argued, is not scarce, at least, not in this way. The current supply of bandwidth is such that it costs only 3 cents a gigabyte to provide. Traffic levels are nowhere what they would need to be in order to justify metered-billing at all, much less the current rates being charged by ISPs.

It is arguable, therefore - and I would argue - that insofar as there is a scarcity of bandwidth, it is an *artificial* scarcity. It is in the interests of ISPs to ensure that there is a limited supply of bandwidth, in order to be able to justify charging higher rates.

But even more to the point - ISPs traditionally charged for band *width* - that is, for a pipe of a certain size. That is what I (ostensively) buy when I buy internet access at home; that is what subcontractors literally buy. It was like buying a cable package, or telephone service. It didn't matter how much or how little TV you watch, or how many phone calls you made, you were paying for the *channel*

But what has happened is that ISPs started charging more than one customer for the same bandwidth. Using techniques like traffic shaping, throttling and metering, they could *say* they were selling x bandwidth, but actually allocate less than x bandwidth per customer. This worked fine until customers started to actually use the bandwidth they were paying for. Then the ISPs were caught in their own practices, and that's where the bandwidth 'shortage' originated.

The suggestion now seems to be that ISPs should be rewarded for this practice. Fair enough; we could raise the cost for band *width* up to what it actually costs to provide that bandwidth. Nobody would complain about that. Except - the rates charged to consumers are *still* well above what it actually costs to provide the bandwidth, 10 to 40 times as much.

The other argument is that non-UBB would create a disincentive on the part of ISPs to invest in new bandwidth. Of course, uttering anything that increases costs and reduces revenues is interpreted by business as a "disincentive", so the flat "disincentive" argument is a bit disingenuous. The real question is whether it is **enough** of a disincentive to cause ISPs to cease investing in bandwidth.

Well, suppose it is. Then we (as a nation) could provide the next bit of bandwidth the way we provided the last bit - by building it as a government infrastructure project (a la CANARIE and similar programs, or via crown corporations, a la the old government telecoms). Because the reason the "additional gigabyte" costs so much more than the current gigabyte is that there was a significant social investment in bandwidth, which was inherited by the ISPs (that's why a lot of people feel that UBB is to a certain degree a betrayal of trust).

There was a proposal, in the last days of the Chretien administration, before we got the pro-business Martin and Harper governments, to engage in a national broadband program. As I recall, the pricetag was \$10 billion. Cheaper, in other words, than the much less useful F-35 jets. This was shelved when Martin took power, and we never did see the expected expansion of capacity that we expected. ISPs simply reaped the windfall until usage increased. Then they said there's a bandwidth shortage.

Meanwhile, ISPs were not deterred from **investing** during this time. Rather, they decided that they didn't need to invest in bandwidth; for them, it was effectively free (for consumers, of course, it was a rapidly increasing expense). Instead, they borrowed and spent billions acquiring each other. The empires of Bell-Globe, Rogers and Telus were built almost entirely on credit. And it is **that** rather than infrastructure that we are being asked to subsidize.

If the same logic could take place in roads, it would be as though the government gave me a freeway system, which I sold to municipalities as 6-lane freeways, but actually delivered 4-lane freeways with a reduction in speed limit to 45 mph, and then borrowed money to acquire additional freeways from other owners (who got their freeways from their governments), spent nothing on the construction of new freeways, and then, when traffic on the freeway network threatened to approach what I was selling it for, demanded that a system be put into place to charge individual drivers for each kilometer they drove (with the entire cost of the metering system also to be borne by the drivers), so I wouldn't actually need to increase capacity, on the grounds that it would be a 'disincentive' to invest in new capacity to do otherwise.

It's a very bad idea, and UBB rewards ISPs for some very questionable business practices, meanwhile punishing the taxpayers who basically funded this entire infrastructure in the first place.

Moncton, Thursday, February 03, 2011

The Open Journal Format

For some time I have been thinking of launching a journal. Because I think that when people talk about 'peer reviewed publications' they have a point, and that point is, that a piece of writing is not merely popular, but also, respected and recognized by a particular academic community.

We need such mechanisms because there is too much to read, too much even in narrowly defined disciplines. And there is no particular mechanism for identifying that which is important within a particular discipline. The popularity-based systems, like Slashdot and Digg, cater to certain communities, sure, but tend, eventually, to what we might call a scholarship of the middle - no particular discipline, no particular level of quality, no particular virtue.

That is not to discount the systems whereby content is selected and reified by the masses. I am a regular reader of such lists and they are a constant source of amazement and amusement. High quality content does get selected by the crowd, but not all of it, and not reliably within a certain discipline.

Historically, as I mentioned, content selection for academic materials has been by means of 'peer review'. The process varies across journals, but in its most [typical instantiation](#), proceeds as follows: a writer submits a manuscript to an editor, who reads it. The editor, at his or her discretion, sends the manuscript to a small committee of reviewers. The reviewers rate the submission for appropriateness for publication. They will often recommend changes and improvements. A final version is drafted, and it is typeset and published.

There are, in my view, two major weaknesses of this approach:

First, it proceeds in secret. The manuscript is not viewed by the reading public until after it has been selected. That it is being considered for publication is not known. Thus, if a manuscript is submitted and rejected, it may never see the light of day. This is wasteful. And it results in the very real possibility that higher quality works might never be seen because they did not pass the scrutiny of a few people.

Second, the decision is made by only a small number of people. Very few people actually review manuscripts; typically three or four. If these people are not attentive to the material they are reviewing, they may accept substandard material, or reject high quality material, simply because they were not paying attention. Having material reviewed by a wider number of people reduces this likelihood. It creates the possibility for buzz around a selection, a conversation that will result in its being not only improved but also brought to the attention of reviewers.

So how do we fix these things? The approach is to decouple access from review. Specifically, authors' manuscripts ought to be easily and widely accessible prior to publication. In this way they can be read by a large number of people. This does not mean that all people read all articles; there is no need for that. But it does mean that the typical article would be read by well more than three people.

Once access has been enabled, then we need to develop a review process. The problem (in my view) with sites like Slashdot and Digg is that a resource rockets from access to acceptability with virtually no restraints. Insofar as there is a community, it is like they are a pack, jumping from one popular thing to the next, with no sense of direction or consistency.

Also, there is no sense of 'peers' in this process. There's no sense that the submissions have been evaluated by people who have demonstrated their commitment to a certain subject area or background or expertise in the field. It's one thing to say "The Golden Age of Palaeontology" was popular; it is quite another to say that it was popular among palaeontologists.

But what constitutes 'being a palaeontologist'? Traditionally, we have required some sort of certification. A person needs to become a PhD in palaeontology. Then they need to be selected by an editor of a journal to sit on a review board. This qualifies them to review publications in palaeontology.

There is merit to this approach. We have it on good grounds that the person is very likely an expert in the field. They have passed a rigorous and formal course of study. They have been subjected to examination, and have the academic credentials to prove it. Very often, they will also hold a position at a university or a research institute. By the time they are selected to become a member of a review committee (and eventually, an editorial board) they will have successfully published a number of articles, establishing their importance in the field.

This approach has served us well historically, however, there are signs of strains. It takes a long time to earn a PhD, under fairly restrictive circumstances. New disciplines and technologies are being developed so rapidly that by the time a person becomes an expert in one thing, it has been replaced by another, which didn't even exist at the time she began her studies. The membership of peer review committees adds to this ossification; their expertise may be of disciplines that have long since come and gone.

Moreover, even if the academic route is a reliable means of establishing expertise, it is no longer the only one. We are seeing with increasing frequency people establish expertise outside their domains or disciplines. We are seeing people, through a process of self-education and public practice, become well established and well respected even in academic fields.

In some cases this is by necessity; it costs a great deal to earn a PhD, much more than the cost of a computer and internet access, and so the informal route is the only means available. This is the case for the majority of people in the world.

And in other cases it is by choice, as no PhD programs exist in a new area of study or invention. This was the case, for example, in internet technology. It had to be built, first, before people could become experts in it, while the people who built it became experts by building it.

So we need to allow for the likelihood that there is a great deal of expertise in the world that exists outside the domains of the traditional academic community. That the path of obtaining a PhD is one way to establish one's expertise, but not the only way. And that there will exist people who can quite

genuinely be called experts in practitioner communities, self-selected or intentional communities, communities of practice, and elsewhere.

It is with these thoughts in mind that I have, over time, been thinking of the appropriate sorts of mechanisms for the management of academic journals. And so it seems a good time now to suggest how I think what I'll call 'the open journal format' should proceed.

I call the system 'open journals' not to confuse them with 'open access journals' but to stress that much the same principles are being applied. An open journal will be at heart an open access journal, but in addition, the process of selecting and reviewing articles for submission will also be open.

Here, then, is the process:

People write articles and post them online. They may be blog posts. They may be contributions to discussion lists. They may be comments or web pages. It doesn't matter how the content has been published online, simply that it be published online, be [licensed](#) in such a way that would allow publication in the journal, and be accessible to whomever wants to read it.

Typically a journal would have a 'subscription list' consisting of a set of RSS feeds recommended by its members. The list, available as an OPML file, would allow readers to subscribe RSS feeds from the larger writing community that produces content relevant to journal readers. The list could be subscribed as a single feed. An example of this is the Edu_RSS feed. Readers can consult a single source, selecting from the hundreds of posts created every month, to find the few that ought to be included in the journal.

A journal's 'readers' nominate an article for submission. To 'nominate' an article is to bring it to the attention of the editor and other readers. People may become journal 'readers' by registering at the journal (other journals may allow at their discretion for anonymous 'readers').

There are various ways to manage nomination. It is important to keep it fairly simple, and at the same time, to allow for buzz and community to develop around an article and around a readership in general. Typical process would resemble a 'del.icio.us' or 'Digg' style mechanism, where readers could '+1' an article, and participate or discuss the article. Another mechanism may be to read readers' blogs and count the number of members that link to the article.

The journal's 'members' select from the nominated articles those articles that they think should be published.

What is a 'member' of the journal? Simply - the founder of the journal plus any person who has had an article previously published in the journal.

To be a member of a journal (I will capitalize this from now on) is not only to have had something published in the journal, but also to have been recognized as a 'peer' by the other authors who have had something published.

The selection process is therefore two-fold: members are selecting not only a submission, but also the person. This means that to a degree, the candidate's previous body of work will be assessed as well as the actual submission. The role is not of 'gatekeeping' but of recognition.

Members' votes are public, and they would typically comment on the accepted submissions, perhaps suggesting improvements. The number of articles published each month would vary, depending on the members' selections, but would typically be small. The top five vote-getters, say.

The submission is prepared for publication. It is submitted into the [journal editing system](#), spelling and grammar are checked, links to references confirmed, and the like. Galleys are created for the print edition (which will be published at a print-on-demand service such as Lulu). The author, in consultation with the editor and members, may make changes to the original submission at this point. The issue appears as an open access publication on the web.

The idea of such a system is that there are things that balance the journal between popularity and rigor.

It is possible for a journal to become too much of a clique, for the members to select only each others' papers. If so, then the people who are being left out can found their own journal. Because nominations are public, it will be easily evident which journal is the most difficult to get into because of quality, and which are the most difficult to get into because of exclusivity.

Will this work? I think it will. It might not work for any particular journal - some journals may simply not attract readership because the writers admitted were not of a high quality, or because the members make poor choices, or because the subject area is simply not useful or inappropriate. It will take a certain amount of momentum to launch a journal, a momentum that can be gained only by having qualified people and quality ideas to begin with.

I realize that similar projects have been tried by others. I am especially aware of [David Wiley's attempt](#) - and this is very similar to that. With one exception - that it draws from content that people have *already posted*. There is no particular danger of 'rejection', no chance that your submission won't see the light of day, because you don't even submit it. The process of recognition and nomination is undertaken entirely by your readers.

I am seriously considering this. I invite your comments.

Moncton, September 07, 2007

On Open Access

Responding to [Stevan Harnad](#), who writes of [Jason Baird Jackson](#) that he is "giving the wrong advice on Open Access, recommending a strategy that has not only been tried and has failed and been superseded already, but a strategy that, with some reflection, could have been seen to be wrong-headed without even having to be tried:

- Choose not to submit scholarly journal articles or other works to publications owned by for-profit firms.
- Say no, when asked to undertake peer-review work on a book or article manuscript that has been submitted for publication by a for-profit publisher or a journal under the control of a commercial publisher.
- Do not seek or accept the editorship of a journal owned or under the control of a commercial publisher.
- Do not take on the role of series editor for a book series being published by a for-profit publisher.
- Turn down invitations to join the editorial boards of commercially published journals or book series."

In my own career, I have mostly followed the five suggestions offered by Jackson. Not completely, but nobody would confuse me with a researcher who is writing for publication in major journals.

I made this decision deliberately, and accepted the unquestionable impact it had on my career, because I am unwilling to support an industry that makes its money by denying people access to scientific and academic literature, literature that the people have already paid for and which they ought, for many reasons, to be in full possession.

I have also lobbied my own institutions (the National Research Council of Canada) and funders to adopt OA mandates. It's not an either-or. You can do both. My lobbying has not suffered for my decision to publish (mostly) in open access form on my own website. Only my career has.

I understand and accept the position of some that it is faster and more economical to work with existing publishers in an effort to convince them to (eventually) allow scientific material to be posted in institutional archives. Not everyone is in the same position that I'm in, nor of the same mindset.

But to suggest the strategy I have adopted "has not only been tried and has failed and been superseded already, but a strategy that, with some reflection, could have been seen to be wrong-headed without even having to be tried" is, as the other commenter wrote, churlish.

My strategy has not failed. Instead, it has led me to an alternative, a remarkable, interesting and *different* kind of career as an academic. Yes, if you're just trying to do more of the same, the alternative route may be seen as a failure. But if you are looking to engage with the full possibilities of online and open online access, then liaison with the publishers is a millstone.

I fully accept the fact that many, or most, academics do not wish to embrace this sort of open access. I would ask that those of us who have be respected as advocating a genuine form of open access, and not proponents of a mistake.

Moncton, October 21, 2009

The OER Debate, In Full

Over the last couple of weeks I participated in a debate on whether OER projects should favour commercial use. The debate, [available on the WSIS Community Platform](#), was quite an interesting debate, but there were numerous complaints from people who wanted to read and comment that the debate platform was inaccessible, that it was not possible to simply read a post and comment without going through a laborious vetting process by UNESCO staff. So I've decided to post the entire debate, from beginning to end, including postings, comments and everything, on this blog. Enjoy, and feel free to comment as you wish at the conclusion of the post. – May 9, 2011

Day One

Debate introduction



Moderator

[Wayne Mackintosh](#)

The concept of Open Education Resources (OER) is firmly based on the educational value of sharing knowledge. A key issue in the open education arena is whether OER should favour commercial use. It is a complex topic which incorporates multiple perspectives and questions in relation to commercial use of OER, for example:

- Should OER protect the future freedoms of users and creators or the resources themselves?
- What are the implications of license choice and the sustainability of OER?
- How does license choice impact on the pragmatic considerations of reuse and re-purposing learning materials?
- What are the moral considerations associated with sharing OER?

This debate and discussion aims to tap into the experience of OER thought leaders and practitioners. The purpose is to tease out the key issues to support informed decision-making on intellectual property rights for OER. We encourage all participants to vote and post your thoughts, questions, ideas and relevant experiences for nurturing sustainable OER futures.

DayTwo

Pro



Opening statement

[David Wiley](#)

The question of this debate, “Should OER favour commercial use?”, can be answered many ways. Rather than make a moral or ethical argument, I will provide an opening statement which problematizes the mechanism by which commercial uses are disallowed. In other words, I will answer “Yes” on technical grounds. The moral argument can be nuanced and difficult to win. The technical argument is straightforward and unassailable.

I believe, for a variety of reasons, that Creative Commons licenses that include the Non-Commercial clause should not be used. There is, however, one important family of cases where NC-bearing licenses are completely appropriate. In fact, this family of cases is why the NC clause exists. Some history is in order to substantiate this claim.

The first open source-style license for educational materials and other non-software content was the Open Content License, released July 14, 1998. It was a simple adaptation of the GPL that I made while I was a PhD student at BYU. The OCL removed software-specific terminology from the GPL and tried to make the license apply to a broader range of creative works. After a few months, however, I became concerned because adoption of the license wasn’t great. I was particularly disappointed that there wasn’t a single research article, textbook, or other bit of traditional educational material (that I could find) licensed under the OCL.

Early in 1999 I reached out to Eric Raymond, Tim O’Reilly, and others for help thinking through how to solve the adoption problem. I asked Tim specifically, ‘You’re a commercial publisher – what would it take for you to publish a book under an open license?’ Tim responded, ‘After I spend tens of thousands of dollars paying an author, paying for editorial and design, etc., the next publisher down the road can’t be allowed to reprint my book and sell it for \$10 less than me. That would put me out of business.’

On June 8, 1999 I released the Open Publication License. The OPL was not a minor modification of the GPL. The OPL was truly innovative in that, in addition to requiring citation of the original author as source, it contained two license options that authors could choose to invoke or not invoke. The first option restricted users’ abilities to creative derivative works. The second option disallowed “any publication of this work or derivative works in whole or in part in standard (paper) book form for commercial purposes.”

Adoption was much better with the new license. O'Reilly published several books using the OPL, including Eric Raymond's seminal collection of articles, *The Cathedral and the Bazaar*. RedHat published the documentation for their products under the OPL up until 2010. In 2000 I published my first book using the OPL, free online and pay for print. Both O'Reilly and my publisher used the Non-Commercial option of the OPL on the books they published openly.

Copyright is supposedly a necessary evil – it creates a monopoly on who can make copies (which is bad) in order to provide incentives to authors to produce creative works (which is good). The Non-Commercial clause is a similar evil – it creates a monopoly on who can sell copies (which is bad) in order to provide incentives for individuals and organizations that make a living from their creative works to share them openly (which is good). I recognized early on that without this protection mechanism there would be far fewer open educational resources in the world.

In the opening paragraph of this opening statement I said that there exists a family of cases where NC-bearing licenses are completely appropriate. This is that family of cases – cases where the work to be openly licensed was created by individuals or organizations that make a living from their creative works. Personally, I can't think of other circumstances where using the NC clause is appropriate. Let me explain further.

The student of open content licensing will recognize the OPL structure (mandatory attribution with options addressing derivative works and commercial use) is the same structure that Creative Commons employed when it launched three years later in 2002. (To be more exact, in version 1.0 of the Creative Commons licenses Attribution was an option, too. It wasn't until version 2.0 of the CC licenses (May 24, 2004) that attribution became mandatory on every license. So, the OPL structure precedes the current CC structure by about five years.)

When Creative Commons published its first licenses in 2002, I was relieved. I'm not a lawyer, and who knows how the OCL or OPL would have held up in court? Probably not very well. I was happy to post a big message on opencontent.org declaring that everyone should stop using the OCL and OPL and should begin using the CC licenses. After all, they were lawyers, and had taken the OPL structure and created a far better legal instrument.

However, in retrospect Creative Commons made a mistake in generalizing the Non-Commercial clause of a publication license – defined very narrowly in terms of print publication – into a general purpose Non-Commercial clause in a general purpose license. The problem with this generalization is that, once removed from the specific use case for which it was intended, "Non-Commercial" no longer has a meaning.

In 2007 I was amused to find the following contradiction. Creative Commons posted a "Proposed Best Practice Guidelines To Clarify The Meaning Of 'Noncommercial' In The Creative Commons Licenses" which included the following logic:

(1) Is the person making use of an NC-licensed work an "allowable NC user" under the noncommercial license condition?

Allowable NC users are:

(a) an Individual (b) a Nonprofit educational institution/library, (c) a Nonprofit organization as defined under US or equivalent law [1], (together with (1) and (2) “allowable NC users”) (d) A commercial copy shop, ISP, search engine, content aggregator, blog aggregator site or similar service provider who, in the course of providing a service at the direction of the allowable NC user, may exercise a right licensed under the Creative Commons license.

(i) No. License violation – this is not a noncommercial use.

(ii) Yes. Continue to Question B.

This sounded slightly diametrically opposed to MIT OpenCourseWare’s official “Interpretation of ‘Non-commercial’”:

Determination of commercial vs. non-commercial purpose is based on the use, not the user. Materials may be used by individuals, institutions, governments, corporations, or other business whether for-profit or non-profit so long as the use itself is not a commercialization of the materials or a use that is directly intended to generate sales or profit.

When I pointed out this contradiction, guess who blinked? Creative Commons pulled the well-researched draft guidelines off their website. Both unable and unwilling to define the terms of its own license clause, in 2009 Creative Commons undertook a survey of the community to try to understand what other people and institutions thought Non-Commercial meant. The results were predictable. From the [Executive Summary](#):

Perceptions of the many use cases studied suggest that with the exception of uses that earn users money or involve advertising... there is more uncertainty than clarity around whether specific uses of online content are commercial or noncommercial.

In his book *The Wealth of Networks*, Benkler [characterizes](#) the Creative Commons project as follows:

The Creative Commons is an initiative to develop a series of licenses that allow individuals who create information, knowledge, and culture to attach simple licenses that define what others may, or may not, do with their work. The innovation represented by these licenses relative to the background copyright system is that they make it trivial for people to give others permission to use their creations.

As Yochai says, the innovation is supposed to be that the licenses make it trivial for you to define what others may, or may not, do with a work. Of course, the case with the NC clause is that it does not make it trivial to define what others may or may not do. It only makes it trivial to *appear* that you are doing so. Adam Bosworth once [recounted](#) asking Lessig about: the provision in many Creative Commons licenses that indicates content may not be used for ‘Commercial Use’. I asked, what is Commercial Use? Does reposting to a blog that has ads violate the copyright license? Larry Lessig’s answer was basically, “I don’t know”.

If a lawyer of the caliber of Larry Lessig does not know what NC means, how is your run-of-the-mill user supposed to understand what s/he may or may not do with a NC-licensed work? The only answer is, of course, that they must read the full Terms of Use on the site. The lack of a clear, official definition of NC from Creative Commons transports us backwards in time to a day when site owners were required to write their own terms of use (in this case, their own definition of NC), and when site users were required to read them in detail. In other words, the lack of a clear, official definition of NC destroys the very innovation that Creative Commons licenses are trying to provide.

Should OER favour commercial use? Yes, in part because there is no trivial mechanism for excluding commercial uses.

And what about the family of cases in which using an NC clause is appropriate? Unfortunately, these individuals and organizations have no other choice but the nontrivial one - using the NC clause and authoring their own accompanying definition, which users must read and understand before they can safely exercise any of the rights granted in the license.

(Another interesting implication of the NC definition problem is this: Take the case of two OERs using the BY-NC-SA license. If each author has created a unique definition of Non-Commercial, are the two OERs remix-compatible under the terms of the SA clause in the BY-NC-SA license? I believe the answer is "no," but leave the proof as an exercise for the reader.)

Contra



Opening statement

[Stephen Downes](#)

It was in 1995 when I first aspired to demonstrate the suitability of the World Wide Web for educational materials and in demonstration of this I posted a document I had authored a couple of years previous for my students at Grande Prairie Regional College, *Stephen's Guide to the Logical Fallacies*. This work – and none of my work in educational technology since – remains my most enduring and popular work on the web.

There not being a Creative Commons at the time, and the Gnu Free Documentation License being four years in the future (Stallman, 1999) I by necessity created my own copyright notice. I didn't name it or propagate it or try to create a movement out of it; I simply declared how I wish my work to be used. Here's what the copyright notice stated:

Stephen's Guide to the Logical Fallacies (hereafter referred to as "the Guide") is copyright to Stephen Downes, Brandon, Manitoba, Canada. Any person may reproduce this Guide, in whole or in part, for any purpose, provided the following conditions are met:

1. That the author, Stephen Downes (stephen@downes.ca) be notified by email or in writing.
2. That no money is charged for access to the content of this site. Money may be charged for:
 - reproduction costs, if the Guide is printed and distributed on paper
 - course fees, if the Guide is used as supplementary or resource material in a course
3. That this copyright provision be included in all publications of this Guide.

Note: the purpose of this copyright is not to restrict use of or access to this Guide. In fact, the opposite is the case. The purpose of this copyright is to ensure that the contents of the Guide remain freely accessible to all persons in perpetuity.(Downes, 1998)

I've updated the URL and email address over the years but otherwise this text is unaltered from the original posting in 1995. The original notice also included explicit permission to link, to create mirrors (subject to the main copyright notice), and an expression of limited liability.

I thought then and I think to this day that this was a pretty good set of conditions. If I regretted any of the provisions, it was the requirement for notification, however, the posting of a single email message was never an onerous burden for use, and it allowed me to justify the continued maintenance of the site. What moreover was the case was that my intent was clear. "The purpose of this copyright is to ensure that the contents of the Guide remain freely accessible to all persons in perpetuity."

I find it a point well worth making that there is an entire history of open source and open licensing that originated outside the Berkeley-Stanford-Harvard nexus that is now regarded as authoritative. I had based my own copyright statement loosely on the licenses that prevailed at the time in the world of Multi-User Dungeons, and in particular, as an effort to improve upon the license authored by George Reese (Descartes of Borg) for the Nightmare MudLib, a body of code I had used for a number of years in various academic pursuits. As the Wikipedia stub(Wikipedia, 2011) notes, "Technically, Nightmare 3 was released under a pre-Open Source open source license. In other words, it predates the concept of open source but was available for use and modification free of charge consistent with modern Open Source principles."

The licensing arrangements for MudLibs were created, not with coders and programmers in mind, but with MUD players. As George Reese writes,

Since all drivers except DGD were derived from LPMud 3.0, they all require a copyright at least as strict as that one, which basically states that you can use the server as you like, so long as you do not make a profit off of its use. Most current servers have much more strict and explicitly copyrights. On top of that, many of the mudlibs which exist also have similar copyrights. To require money of your players is therefore a violation of international copyright laws. DGD requires licensing through a third party company.(Reese, 1998)

Lars Pensjö, who wrote the original LPMud(Bartle, 2003, p. 11) in 1989, wanted to ensure free access to MUDs for the players. As the original MUDOS license stated, "Permission is granted to extend and modify the source code provided subject to the restriction that the source code may not be used in any way whatsoever for monetary gain."(mwiley, 1999) As the discussion makes clear, this is not a

prohibition against the recovery of reasonable expenses. It is intended mostly as a prohibition against one person using another person's work for *profit*.

Why was this important? The reasons become clearer when we fast-forward twenty years into the future and look at what has become of the online multi-player role-playing environment. The license conditions weren't respected. As Richard Tew (Donky) writes, "That's the thing with releasing mudlibs, people make a few trivial changes and then decide that it has changed so much that it is effectively something completely new." (Tew, 2010) After appropriating the idea and (often) the source code, the commercial sector came to dominate the world of multi-player role-playing games. Today, if you want to play, you pay.

My observation, through not only the history of MUDs but through the history of online software and content in general, is that unless the non-commercial clause is stated and enforced, a set of two major phenomena occurs: *conversion*, and *enclosure*.

By *conversion* what I mean is essentially the appropriation of free and open content and resources by commercial providers. The intent of these providers is to obtain whatever may be found for free, and to convert it to commercial advantage. It is an old phenomenon. John Locke describes the principles behind conversion as follows:

Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state nature hath placed it in, it hath by this labour something annexed to it, that excludes the common right of other men: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to... (Locke, 2010, pp. Chapter 5, Section 27)

The software created by hackers and volunteers, the content placed on the web by authors and professors, the styles cultures and mannerisms on people on the street – all these and more are thought of as being in a 'state of nature' by commercial providers. Through the slightest of effort, these words are appropriated, and converted into property, as though a man were harvesting an apple from a tree in the commons.

The phenomenon of conversion would be innocuous enough, were it not for the second phenomenon, that of *enclosure*. Having created a commercial product, the provider now finds that his primary competition stems from the original non-commercial alternative. Hence, it is necessary to in some way make access to the original, non-commercial source more difficult, if not impossible.

For a graphic illustration of this phenomenon, it is worth attempting to locate the citation just referenced from John Locke. Employ the following search text in Google: "locke 'removes out of the state of nature'". This is a very precise search and should take us straight to the original source, which is public domain (having been published in 1690) and freely available on the web, via the Gutenberg Project.

For me, this original simply does not appear in the search results (your results may vary slightly, as Google localizes search results; I have attached a screen shot below). There is one WordPress blog post, and then a series of essay-writing and term-paper authoring services. Through the use of search engine optimization (SEO) commercial providers have made it impossible to locate the original on the web; searchers must know to go directly to Gutenberg and locate the material from among the 30,000 books published on that website (and if it's not among the 30,000, then I don't know what searchers can do).

In a paper I presented at one of David Wiley's Open Education conferences (Downes, Reusable Media, Social Software and Openness in Education, 2004) I described a number of the common practices of enclosure, all prevalent in today's commercial online environment:

Lock-Out – the imposition of subscription fees or similar access barriers to the environment in which the free resource is located. This is classic 'enclosure', the placing of a fence around the public domain resource. Lock-outs include tuition fees, subscription fees, or the placement of authentication or rights management systems onto public domain content. Search your local bookstore for the public domain version of Locke's *Second Treatise*; you won't find it. Free publications are banned in bookstores.

Lock-in – a cousin of lock-out, lock-in involves the committing of users to a particular technology which then becomes expensive or difficult to stop using, which in turn enables the charging of fees for access to public domain materials. The classic example of lock-in today is the Kindle or iTunes marketplace, which become increasingly entrenched as the only way to access contents.

High Bar – this is the creation of difficult or expensive hurdles against the *provision* of free or open content; the high bar is intended to prevent distribution of content in the first place. In the educational space, the requirement that content must meet rigid format specifications (such as, say, IEEE-LOM's 67 metadata elements) is an example of high bar.

Flooding – this is the enclosure practice employed in the Google search results. It becomes impossible to find the original free resource when the market is flooded with commercial alternatives.

Legal Risk – this is a variation of the 'fear uncertainty doubt' (FUD) tactic that is employed against free software. Essentially, the provider of free or public domain content is threatened with the possibility of a lawsuit unless certain conditions are met. Of course, the conditions can never be met; what is important is not that the provider satisfy the conditions but rather that they be held under threat of lawsuit. The present attack on fair use, which clouds fundamental rights with the cost of enforcing them, is an example of the legal risk method of enclosure.

I did not have all of these conditions were in mind when I wrote my first copyright license, but enough of them were to cause me to want to protect my work against the possibility of commercial exploitation. The current legal environment, in which students are charged millions of dollars for sharing song, in which patent and trademark lawsuits mar the distribution and use of educational software, in which students are forced to pay every higher tuitions to access the intellectual heritage that ought to be the birthright of all humanity, these are the conditions that demand, for me at least, the use of the non-commercial clause in my copyright statement.

As they say, your results may vary. Your motivation, and your experience, may prompt you to follow a different course. I do not desire to speak for others.

But nor either will I suffer my own approach to content licensing, an approach well-rooted in history and experience, as in some sense *not free*. And I beg the reader to consider one final matter. And that is, between the two schools of content and resource licensing I have described in this short post, there is a significant difference in *perspective*:

On the one hand, from the Berkeley-Stanford-Harvard set, a perspective primarily motivated by, and expressing the needs of, the *owners* of content and resources, however obtained, to a maximally free use of those resources to whatever purpose, including commercial exploitation, and

On the other hand, from the students, writers and hackers, a perspective primarily motivated by, and expressing the needs of, the *creators and users* of these contents and resources, where the purpose is, and always was, the direct expression of creativity and culture from one to the next to the next, without the barriers imposed by commercial exploitation.

I am not on the side of the owners. I do not believe (Downes, Copyright, Thics and Theft, 2003) and have never believed that these owners are in legitimate and honest possession of the full body of material they now purport to sell; they have, as Tew states, made a few trivial changes, and called it their own. They are free, in my mind, to sell their labour honestly, like the rest of us, but they are not free, in my mind, to hold the rest of us hostage in order to enable themselves to do so.

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Comments



[Muvaffak Gozaydin](#)

- 1.- The purpose of OER is free education for everyone in the world. Its weakness is quality.
- 2.- Any free organisation any project cannot be sustainable. Period. There is a cost to implement the project. Nobody, no organisation can carry that cost forever.
- 3.- EDUCATION is not a commercial activity. Therefore it is a duty of the governments everywhere in the world. When education becomes a commercial activity, quality diminishes, targets bended.
- 4.- Unfortunately there is a law of nature. Supply and demand. As long as there will be demand for education there will be supply to it. But we have to prevent commercial education as much as possible or at least to control its quality and aims .
- 5.- ONLINE Education is the solution for the world education.
ONLINE is for SHARE. (Obama said at Carnegie Mellon 8 months ago)
 All online contents in the worlds should be shared by the world .
 SHARING costs are nill as long as they are shared by millions. That nominal cost should be born by users not free. ONLINE should not be commercial. Up to now ONLINE could not prove its virtuedue to commercial cheap online courses.
- 6.- Best OER now is www.academicearth.org providing access to all best universities of the world free.It is open to 7 billion people of the world.That model should be supported, sponsored to extend its coverage of their courses and universities. Plus they should charge \$ 10 per course for sustainability. It is a working model . It proved itself. There is no need to look for new models and waste money . And it is not commercial at all .



[Muvaffak Gozaydin](#)

The courses at www.academicearth.org can be adopted by any university in the world. The adopting university can assign an online instructor to it, gives credits for registered student, counts those credits toward a degree they confer.

The cost to adopting university is now zero. I suggest they should pay \$ 10 per course so that academicearth can expand itself with more courses and universities.

- 1.- Adopting university increases its quality by top noch Universities online courses

- 2.- University saves money from providing classroom, full time professors
- 3.- Communities have some saving too. Less traffic, less parking lots, less pollution, Academicearth needs to add some universities like Northwestern, University of Wisconsin, University of Illinois, Penn State, Boston University, University of Texas even University of Nebraska is needed. Not all students can go to Harvard or Stanford .



[Anil Prasad](#)

My first perception is that open knowledge can be used to build a livelihood that is suitable for a civilized society. But fortune hunting using the open knowledge will make it cease to be open.



[Joris Komen](#)

In casting a vote of 'no', I am troubled by your semantics - the word 'favour' would seem to suggest that the commercialising of open educational resources should be promoted 'over' another model of use. Is a commercial use model really the 'favourite' model in the realm of OER development? I would say 'NO'; it goes against the spirit of every open access model for education I've been involved in since the advent of internet and more importantly, that of wiki media!

Not that I object to the recovery of cost in any model of use - but that's not necessarily commercial, that's plain common sense. However, the moment this model adds an insidious 'profit' margin to pay for someone's new toyota landcruiser under the veil of not-for-profit cost 'recovery' then it's not up my street!



[Ed Bice](#)

Great post/argument, David. I would be more bold, however, in making the claim that embracing derivative commercial uses of OER is a good thing in itself, and not simply a position we should take

based on the legal complexities of defining/enforcing an NC license.



[Armando Altamira](#)

I agree with Joris Komin.



[Jacky Hood](#)

There are only four ways in which people can share the services and objects they create:

- * by trade (i.e., commerce)
- * by charity of the producer
- * by third party subsidization (e.g. advertising, grants, donations)
- * by force (theft, slavery, confiscation, taxation)

Trade starts as barter but soon a medium of exchange emerges. At that point, one party buys (receives the services or goods) and the other sells (receives the exchange medium). The medium is usually currency but it can be gold, diamonds, cigarettes, candy, carbon credits, frequent flier miles, coupons, or anything that has recognized value and lasts for awhile.

Both parties profit in barter and currency exchanges. They each value what they receive more than what they give up. The person receiving currency takes the greater risk because the value of the currency could go down before it can be used to purchase goods or services.

Even if the marginal cost of the next instance of a good or service is very low: e.g. pharmaceuticals and digital materials, it is the initial creation of the good or service that must be rewarded with other goods/services or a medium of exchange.

Third party models work in some cases but they remove some of the decision-making from the buyer and seller.

Force is the method favored by those that say education is a 'right'. Rights are restraints on others. For example, a person's right to life, liberty, and property means that others must refrain from violence, imprisonment, and theft. To say that someone has a 'right' to goods or services means someone else has an obligation to provide those goods or services without compensation, i.e., the producer (or third party payer) has his/her rights violated.

The best business model for open educational resources is very-low-price, very-high-volume. Digital goods have a global market and so volume can be very high. With very high volume, prices can be quite low, on the order of pennies.

The difficulty is finding a payment method that does not cost more than the item being sold. Here we can turn to the telephone companies. A telephone operating company executive once told me, "We are not a phone company; we are a billing company." The phone companies have reduced the cost of billing to a fraction of a cent. There are many other benefits to delivering OER on phones, including the fact that people expect Internet content to be free but expect to pay for content on phones.

The very best reason that OER should be a commercial endeavor is because both producers and consumers of educational resources deserve respect. Producers should not be seen as people whose creations are not good enough to receive something in return. OER consumers should not be objects of pity and charity.

So what does it mean for the producer to both receive compensation for his/her output and for that output to be 'open'? The seller is allowing non-traditional uses of the output, e.g. making copies, remixing, etc.

In a sense, using OER is like renting a car. Some rental car companies say 'you cannot go out of the country; you cannot drive off-road, etc.' An 'open' rental company puts fewer restrictions on the renter.

My husband and I once bought a house with a covenant that said we would never create alcoholic drinks on the premises.

A producer of OER certainly has the right to refuse commercial use of the output. However, the output's spread will be very limited. Commerce and trade cause services and goods to keep moving. Restrictions stop that movement. A house with covenants will be harder to rent out or sell. Instructors and students will reject OER with restrictions (NC, ND, SA) in favor of those with CC BY licenses.

Regards,

Jacky Hood

Director, College Open Textbooks

<http://collegeopentextbooks.org>

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[Ahrash](#)

I am also interested in getting clarification on the specific meaning of the word "favour" in this debate. Among the many different definitions of "favour" are these two contrasting meanings: "to prefer" versus "to accommodate." These different meanings have very different implications for the purpose of this debate, as the former definition implies that OER are created with an intention and preference for commercialization, whereas the latter implies that OER are created with no prejudices regarding desirable forms of future use, whether commercial or non-commercial. Can someone clarify which meaning we are debating here?



[Stephen Downes](#)

Responding to Jacky Hood, who says:

- > Force is the method favored by those that say education is a 'right'.
- > OER should be a commercial endeavor

It would be interesting to see how commercial endeavours functioned without some sort of property rights that protect the ownership of those who have something to sell. If the owner is not able to protect their goods by force, either directly or through a proxy (usually government) then it is not possible to require a commercial transaction; the other person just takes what they need.

It is very misrepresentative to suggest that those people working for rights are engaged in some sort of enterprise requiring force while those engaged in trade and commerce are not. My observation is that the police and security guards are generally protecting those who *have*, and not those who *need*.



[Stephen Downes](#)

Responding to Ahrash:

> Among the many different definitions of "favour" are these two contrasting meanings: "to prefer" versus "to accommodate."

There isn't any widely used sense of 'favour' that means merely 'to accommodate'. The sense of 'favour' used here is one that, as the word suggest, implies a preference or inclination toward.



[Wayne Mackintosh](#)

In response to Ahrash and Stephen's clarification:

I believe the intention with the formulation, as Stephen has articulated, was to imply preference or inclination toward.

As an open debate about things open -- I have indicated to both debaters that they are free to post comments and join discussions on the floor.



[Steve Foerster](#)

I think it's unfortuante that more OER proponents don't see commercial entities not as a threat, but instead as a useful vector for transmitting awareness about the materials we're developing. In the long run, we have as much to gain from the relationship as they. I elaborate [here](#).

--Steve--

Day Three

[Position of the house](#)



Opening statement

[Wayne Mackintosh](#)

A key issue in the open education arena is whether OER should favour commercial use.

The concept of open education resources (OER) encapsulates a simple but powerful idea that the world's knowledge is a public good and that the open web provides an extraordinary opportunity for everyone to share, use, and reuse knowledge. Many teachers around the world are working at the heart of the educational endeavour, that, is to share knowledge freely.

UNESCO brings you a global opportunity to share and invites you to:

- **Read** and reflect;
- **Cast a vote** to share how you feel (or change your vote as your own thinking matures);
- **Post a comment** to enrich our connected experience.

Don't be missed by your absence and join in the "debate" .

OER provides the means to unleash the educational potential for sharing. Educators can dedicate learning resources to the public domain or release these materials under an intellectual property license that permits their free use or re-purposing by others. The advent of open content licensing has facilitated a change in educational culture from one of copyright restrictions to a culture of permissions for learning.

Through Creative Commons, educators and educational institutions now have greater choice in expressing and implementing the permissions they deem fair and reasonable by choosing one of six creative commons licenses.

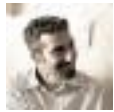
A key issue in the open education arena is whether OER should favour commercial use. This is a complex topic involving a wide range of perspectives which suggests a continuum of considerations rather than a definitive binary answer.

UNESCO is fortunate to tap into the knowledge, experience and foresight of two open education pioneers to delve into and interrogate the nuances of perspective regarding commercial permissions for OER and to share this with educators worldwide. Stephen Downes is considered by many to have put the "e" into eLearning and is well known for his daily newsletter, OLDaily, which is distributed to thousands of educators worldwide. David Wiley has been at the forefront of the open content movement inspiring the development of the Open Publication License, which predated the Creative Commons licenses providing a groundbreaking milestone for educators to license their works openly. We will bring multiple perspectives to the table from OER practitioners and we encourage you to add your own perspectives by commenting on the discussions.

This discussion will roughly mirror the structure of an Oxford-style debate. However, in the pursuit of improved understanding of a complex topic the participants will be the ultimate winners by virtue of engagement.

I look forward to a productive, engaging and enriching experience. Your votes and comments represent a stream of digital consciousness in changing our world for the better -- through degrees of openness in education.

Guests (opening phase)



Guest statement (opening phase)

[Ahrash Bissell](#)

Monterey Institute for Technology and Education (MITE) is an independent non-profit organization pioneering a financially sustainable model for the development and distribution of high quality OER. Ahrash Bissel, Project Manager at MITE provides insights into their current thinking on license choices.

The Monterey Institute for Technology and Education (MITE) seeks to meet society's need for access to effective, high-quality educational opportunities in an era of rapid economic, social, and personal change. As a freestanding non-profit institution, MITE sustains its activities through fees paid by institutional members to receive full and customized access to all of the materials hosted or developed by MITE. Individuals can access all of these same materials for free through a web portal called Hippocampus. Like so many organizations involved in the production and distribution of open educational resources (OER), MITE continues to experiment with licensing models that are legally, technologically, and fiscally prudent, given shared aspirations for the promise of OER and a desire to facilitate educational innovation and improvement globally.

The opinions expressed here are reflective of the thinking within MITE, but MITE's current production processes are in transition and do not yet match the opinions expressed here. Overall, MITE does not believe that the non-commercial (NC) term, as currently employed by Creative Commons (CC) and other open licenses, is appropriate for OER. We have two specific concerns about its applicability to OER which we share here.

1) The meaning of non-commercial is unclear, especially for educational and other non-profit institutions.

In education, the vast majority of the involved institutions are non-profits, and traditionally these non-profits spend some portion of their operating budgets to pay for resources and services developed by

third parties. Of course, these same non-profits would like to minimize the money they spend on such things, so there is a clear incentive for such institutions to use low-cost or free materials if available.

The NC restriction, such as the version available for some CC licenses, is subject to a great degree of interpretation. One possible interpretation is that NC-licensed materials are free for any non-profit institution to use in any manner, including hosting the content on their servers, embedding the content in other applications, and even perhaps redistributing the content for a fee (e.g., for cost-recovery). The presumption is that as long as no profit is being made, which by definition should not be occurring within a non-profit institution, then the NC term poses no constraints. The problem here is that commercial activity is not synonymous with profit-making activity. In most cases, non-profit institutions are still engaged in commerce, just not with a profit motivation. One could also argue that individuals engage in commerce whenever they share information, whether or not profits or any money-exchange are involved. Thus, it is unclear how the NC restriction works in education, both because it can be insufficient to enable content-producers to protect their investments from commercial (albeit non-profit) activities, and conversely because it can be too restrictive in terms of the rights granted, especially to individuals.

2) The non-commercial term is a hedge on openness, preventing the emergence of a truly global learning commons and viable sustainability strategies.

For the vast majority of users of educational resources, copyright is only a concern to the extent that it prevents easy access to materials. But publishing and distributing resources via the Internet provides for easy, and often free, access by default. No changes to the copyright status of a resource is necessary for these access benefits to accrue. Therefore, the crucial difference for OER resides in the permissions to adapt and republish resources, especially if that permission is being granted universally.

Consequently, we should seek to provide OER under the simplest terms possible, since any constraints on adaptation and republication will require potential users to become fluent in copyright laws, and further to assume any risks from misinterpreting or stretching the intent of the license.

From this perspective, then, any license other than CC BY (and CC BY-SA in those specific cases where the license has become a mechanism for enforcing community norms) is simply a restrictive license, whether it is CC or not. There may be some signaling benefits to using a standardized license over a *sui generis* (or custom) license, but the signals are also confused since most people do not realize that there are many different CC licenses and are likely to presume that all CC-licensed works are provided under the same terms. We believe that this signaling confusion, coupled with the tendency for organizations to rely on restrictive licensing to hedge their bets on OER, has hampered the growth and impact of the OER effort.

Therefore, we do not believe that the NC term should be applied to OER. In addition to applying a CC BY license, we would argue that OER producers should release OER honestly, meaning they should also

strive to publish their OER in formats and via distribution channels that enable people to exercise the rights granted by the license. If there are reasons for organizations to retain greater rights to some of their materials, then use a custom license or retain all rights. If a CC license must be used, plan to take great pains to clarify that such restricted materials do not possess the same open characteristics of the materials licensed CC BY. For the typical user, the differences among restrictive CC licenses (meaning those with the NC, ND, and even SA terms) and custom licenses are meaningless in all cases, the restrictions require them to worry about improper usage of the materials, remixability conflicts with other content, and other challenges which hamper the utility of the materials.



Guest statement (opening phase)

[Erik Möller](#)

Inspired by the free culture and the free and open source software movement, the Wikimedia Foundation, home to Wikipedia, do not permit the use of the non-commercial or no-derivatives restrictions in their licensing policy. Erik Möller, Deputy Director of the Wikimedia Foundation explains why.

Individuals and organizations alike are subject to cognitive biases, and one of the most common biases is loss aversion: We value that which we think we may lose more highly than that which we think we may gain. It is of crucial importance to the success of the open education movement that the normal bias of loss aversion is countered with rational and wise policies which maximize the public benefit of sharing by minimizing legal restrictions on re-use.

All Wikimedia Foundation projects, including Wikipedia, are governed by a licensing policy approved by the organization's Board of Trustees. Text is licensed under the Creative Commons Attribution Share-Alike License; images can be licensed under any terms compatible with the Definition of Free Cultural Works (<http://freedomdefined.org/>), which excludes licenses that prevent derivatives or commercial use.

As a result of this licensing policy, educational resources under terms which restrict commercial use or prohibit derivatives are not open from Wikimedia's point of view, and cannot be used in Wikimedia projects. Given the global significance of Wikimedia's projects (which reach more than 400 million people every month), this in and of itself is arguably a pragmatic reason to steer away from any restrictive licensing for educational resources which are meant to be widely shared and built upon.

Wikimedia's policy is inspired by the free software and open source movement, which has long established that restrictions against “fields of endeavor” are not in the spirit of openness. For example,

the Open Source Definition states:

“The license must not restrict anyone from making use of the program in a specific field of endeavor. For example, it may not restrict the program from being used in a business, or from being used for genetic research. Rationale: The major intention of this clause is to prohibit license traps that prevent open source from being used commercially. We want commercial users to join our community, not feel excluded from it.”

Beyond Wikimedia, prohibitions of commercial use or derivative works prevent valid and important uses of educational resources, often in ways which are far from intuitively obvious. For example, the most widely used publishing platforms like YouTube and WordPress are advertising-supported. A 2009 survey by Creative Commons found that “more than 6 in 10 of both creators and users .. consider uses in connection with online advertising to be 'definitely' commercial even if money made from the ads only covers the cost of website hosting.”

In other words, the license restriction assumes a clear distinction between commercial and noncommercial transactions, while the world wide web has evolved into a space where commercial and noncommercial activities blend all the time. The restriction therefore creates fear, uncertainty and doubt among re-users, and prevents many beneficial uses entirely. For example, offline copies of Wikipedia content have been made and sold commercially in developing countries with limited Internet connectivity.

Restrictions on the creation of derivatives can have similar unanticipated effects. For example, the Creative Commons ND licenses explicitly state that “synchronization of the Work in timed-relation with a moving image” constitutes a prohibited derivative work. In other words, uses in slideshows and videos become impossible. The ND restriction also prevents translations, making educational resources under such terms useless to most of the planet.

Instead of focusing on intent, the Creative Commons "Share-Alike" provision focuses on the actual end result of any transaction, noncommercial or not: Only if improvements to a work are shared under the same terms as the original, the resulting derivative work can be distributed in compliance with the license. This licensing regime aims to maximize distribution, re-use and sharing. Restrictive licensing regimes, on the other hand, are self-defeating -- they fail to realize a large part of the promise of Open Educational Resources.



Guest statement (opening phase)

[Lisa Petrides](#)

I have perhaps a unique vantage point as both a researcher in the field of OER and a provider of OER professional development; as well as a provider of metadata through our open knowledge network, OERCommons.org, which aggregates metadata from over 350 content partners around the world. At ISKME, this three-pronged approach (research, professional development, and knowledge network) has led us to become increasingly agnostic to the issue of alternative licensing—as our goal has been to engage as many educators as possible—and to not exclude those who do not necessarily agree with our license choice.

This has become increasingly difficult, as commercial versus non-commercial use of OER is perhaps one of the most contentious issues in the OER community today. At one point early on in the life of OER Commons, it was suggested that we only aggregate metadata for CC BY licensed material. However, we realized that would exclude about 90 percent of our content partners. And to me, the most effective way to build awareness and increase use of OER is by meeting people where they are. It has been shown in other areas (music and photography) that people are likely to become more liberal in granting additional rights for their material over time—it would be great to see if this happens with OER as well, but a) it is too soon to tell, and b) it may be that the pressure to select the “right” license is one of the factors preventing people from entering the OER space in the first place.

In the creation of OER Commons nearly 4 years ago, we found most potential content partners we approached were unfamiliar with anything other than traditional all rights reserved copyright, so we worked to educate and introduce Creative Commons (CC) licenses within our trainings. Yet while the majority of people in the education sector today still have never heard of CC (typically when I ask a room of educators if they know what CC is, about 1-5 percent raise their hands), what is common among them is a strong desire to share, and to make their materials openly available, free of charge to anyone that wants to use them for education purposes. I guess the question is, is that enough?

In dozens of OER workshops each year—which emphasize not only the advantage of free and openly available materials, but also show how OER can be used as a vehicle for disseminating more flexible, adaptable curricula that supports learner-centric approaches—we have observed a strong desire among teachers for their materials to be made freely available, forever. These “mainstream” educators, meaning, educators who will likely never write a book, create a business, or receive grant funding to produce resources, simply want to share materials with others, but don’t wish for others to be able to make money off of what they have produced. It isn’t based on a desire to prohibit others to earn a living, but simply that they see their work as tax-payer funded for the public good, and believe what they do should always be freely available, not repackaged for sale. You might think this naïve, but they simply don’t care about compatible licenses, how OER Commons might be sustainable in the future, or whether or not the textbook lobby is trying to discourage the use of OER. So, as currently defined, it seems that the NC license is likely to be the most popular choice in the near future, at least among every day educators—the group that will likely define the tipping point for OER use.



Guest statement (opening phase)

[Neil Butcher](#)

OER Africa's approach to licensing:

OER Africa is an initiative of Saide (www.saide.org.za). OER Africa's mission is to establish vibrant networks of African OER practitioners by connecting like-minded educators from across the continent to develop, share, and adapt OER to meet the education needs of African societies. By creating and sustaining human networks of collaboration – face-to-face and online – OER Africa aims to enable African educators to harness the power of OER, develop their capacity, and become integrated into the emerging global OER networks as active participants rather than passive consumers. OER Africa is working in the higher education sector, in partnership with several universities across the continent. For more information on what we are doing, you can visit www.oerafrica.org.

From this perspective, there are two aspects to our approach to licensing: first, our internal approach within Saide and, second, the advice we provide to universities and academics with which we work.

Our own approach has been defined in the form of a Saide policy on open licensing, which emerged through an internal consultation process. As licensing of Intellectual Property is central to the OER concept, Saide has adopted, as a default licence for all products produced through its various projects and engagements, a Creative Commons (BY) licence. The following caveats should be noted however:

1. Such a licence does not apply to any projects where a client has a specific request for a different arrangement included in its terms of contract. However, in instances where licences are not specified, Saide encourages – particularly within the donor community – inclusion of this licence provision in contracts.
2. The Creative Commons (BY) licence has been chosen as the default licence because it is the most open of all the CC licences. Effectively, all it requires a user to do is attribute the original authorship of the materials when using or adapting them, but otherwise leaves them free to adapt them as they deem necessary and use them in whatever way they wish. There may be instances where it is necessary to add further restrictions within the CC licence framework (possible applying a Non-Commercial restriction to prevent commercial use of materials, a Share-Alike restriction to require people adapting materials to release the adapted resource under a similar licence, or a restriction to prevent adaptation of the resource). However, imposition of additional restrictions will be managed as exclusions rather than as a matter of policy in order to ensure the maximum possible openness wherever possible.

To facilitate sharing of its materials, Saide works to ensure that every document released for distribution via the Internet (both through the Saide and OER Africa web platforms):

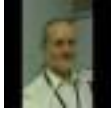
1. Indicates the licensing conditions of the resources clearly on the first page of the document and in the footer on every page.
2. Ensure that resources are appropriately branded on every page to attribute the origin of the document correctly. In many instances, this simply requires incorporation of a Saide logo, but more complex arrangements are sometimes required in the event of resources that have been co-produced with other parties.

The focus of this work is to ensure that attribution is easy to retain as our materials are circulated more widely.

In terms of advice to universities and academics, a first point of principle is that we seek to avoid ‘telling people what to do’. Although many people involved in the world of OER have very strong perspectives on which open licences are ‘best’ and why this is so, our experience is that people typically do not respond well to dogmatic attempts to impose such ‘best practices’. As importantly, we have discovered through our work that early discussions about the technicalities of licensing issues often detract from the wider conversation about the educational, economic and marketing benefits of sharing and using open content. Consequently, our approach during early phases of interaction with university partners and with interested academics has been to raise awareness about the existence of alternative licensing options to all-rights reserved copyright. In particular, we describe the Creative Commons licensing framework and its different licensing options, as this is the most commonly used licensing framework for OER. During early advocacy and awareness-raising, we are careful not to present such overviews in a form that implies recommendation of specific licensing choices.

As our partnerships develop, we then offer support to our partners in helping to make and – more importantly – to operationalize – licensing decisions. Where specific advice is requested on which licence is best, we explain our own position and why we have chosen the Creative Commons (BY) licence as our preferred one, while also noting the space that our Saide policy creates for application of different licences where circumstances arise. From such a platform, we hopefully have enabled a conversation to take place which enables institutions to begin defining their own policies on open licensing, informed, but not dictated, by our experiences. On this basis, we are now seeing that various African universities have made good progress with developing and approving policies that provide for open licensing of their educational materials.

[Comments](#)



[Kim Tucker](#)

In my opinion, the most efficient way of addressing the considerable educational and sustainable development challenges we face globally, is for users of OER to be free to use the learning resources for any purpose and be free to adapt them (e.g. translate, localise, recontextualise, ...), and be free to make a living by offering such services (translation, etc.) to society, and by enabling wider access to the knowledge (e.g. by selling OER and derived works on media or in forms accessible to learners).

Such freedom, Stephen et al, also means that NGOs, government departments, commercial organisations, individuals, local communities (or anyone) are free to make a plan to make the resources available to learners and to society _gratis_ in a scalable and sustainable manner.

If you are worried about commercial exploitation, then use cc-by-sa to ensure the results of the above process of continuous improvement carry the same freedoms to future learners, educators and others. The emergent commercial competition would be on (e.g.) offering better translation services, more efficient dissemination services, lower cost media options, better customisation of learning resources, learning design innovation, etc. - with each incremental improvement being shared back to society.

For more on this perspective and some historical background (from free software, through open source software to OER and libre knowledge) see:

http://wikieducator.org/Say_libre



[Draper Darren](#)

I've argued in favor of the NC clause (contra commercial use in OER) fairly extensively in the preliminary and culminating posts of this recent series that identifies some of the dilemmas inherent to openness in education.

<http://drapestakes.blogspot.com/search/label/Dilemmas%20of%20Openness>

Naturally, I welcome any push-back and other constructive feedback related to these ideas. Are there any dilemmas I may have missed?



[Geoff Cain](#)

Favoring commercial use IS a restriction. The proponents of commercial use are writing about this as if some right is being taken away. If it is the right to silo learning for profit, then I hope this will eventually be the case. The commercial companies have had their chance and they have shown us how inflated prices can get and how [corporate control does not always equal the best learning materials](#). There are plenty of teaching and learning models that have not relied on money to move them forward. Few people without a direct corporate interest would believe that the publishing companies have our students' best interests at heart.



[FATHI ESSALMI](#)

I think that OER favour commercial use. Besides, two things have to be considered:

Reward of the learning object creator will motivate him/her. So, he/she will create more learning objects. In addition, he/she will be requested for qualified learning objects.

A high cost of learning object could decrease their use when considering that not all learners could pay for the use of learning objects.



[Anthony F. Camiller](#)

I would like to approach this topic from a more ideological view, than from a technical license view. I start from the general principle, that content should be free - the essential concept that the collective knowledge of humanity should be accessible by the same group.

The fullest embodiment of such a principle, is that any individual should be able to access and make use of any content at will, including, in my opinion, commercial uses. Part of the rationale for this, is that production of content for commercial uses has long been a driver of continued innovation in our societies, and as science grows increasingly more complex, the idea of the independent 'hobbyist' inventors becomes ever-more fanciful.

The principle of equity on the other hand, dictates that any content-creator deserves fair compensation for their work. In line with the above principles, use of their work should be free - but this does not exclude them being compensated fairly where such work generates profit. The problem which remains is defining 'fair' - a topic which was initially addressed by patent law and subsequent case law. Unfortunately, decades of lobbying by content-firms has shifted this concept more and more in favour of the content-producer, and away from the public-good, destroying the balance on which the whole system was built.

Thus, it is no longer a situation of defining only what commercial-use *means* - to move forward, we need new models for what commercial-use *entails*- to create a new 21st century balance between the rights of the public and the rights of the author.



[Wayne Mackintosh](#)

A gift of knowledge

Resources to learn more about Creative Commons licenses in education

If you are new to the OER world and want to learn more about the specific terms of the licenses being discussed in this debate, please consult this tutorial:

- [Creative Commons unplugged](#)

We acknowledge the support from UNESCO and the collaborative teamwork of volunteers from the [OER Foundation](#), [WikiEducator](#), the [OpenCourseWare Consortium](#) and [Creative Commons](#) who developed these learning materials. They are licensed under a CC-BY license.

Day Four

Position of the house



Moderator's response phase remarks

[Wayne Mackintosh](#)

Our primary debaters have provided a well-founded basis to tease out key issues whether OER should favour commercial use. We are now moving into the response phase where we can delve deeper into the issues.

David Wiley, steering well clear of any moral or ethical position, has argued that on technical grounds the Non-commercial (NC) clause generates a number of non-trivial issues relating to what others may, or may not, do with a work – restricting the intended advantages of open content licensing.

Stephen Downes has argued that **without** the NC clause, OER producers and users are exposed to the risks of *conversion (appropriation of open content by commercial providers)*, and *enclosure (e.g. where distributors lock-out, lock-in or raise the bar to use, reuse and re-purposing of OER)*.

Leading OER practitioners have shared their thoughts on preferred license choices, including:

- **Ahrash Bissell**, Project manager at the Monterey Institute for Technology and Education (MITE) provided insight into their current thinking about open license choices within an organisation which aims to ensure a sustainable model for OER design, development and distribution.
- **Erik Möller**, Deputy Director of the Wikimedia Foundation, which hosts the the popular Wikipedia website, explained how the free culture and the free and open source software movement has informed their license policy.
- **Lisa Petrides**, Founder and Director of Institute for the Study of Knowledge Management in Education who host the oercommons.org suggested that the NC license is likely to be the most popular choice in the near future.
- **Neil Butcher**, OER strategist at OER Africa, explained the approach they have adopted to help African universities to take informed decisions about open content licenses.

So what do educators say?

The [OER Foundation](#) recently hosted the inaugural [Open Content Licensing for Educators](#) workshop and sought the opinion of participants regarding what permissions they deemed fair and reasonable with reference to sharing educational materials.

96% of respondents agreed that content generated from taxpayer revenue should be released freely and 92% of the respondents agreed that educators should share their teaching materials freely. Only a small majority (51%) of the respondents felt that everyone should have the right to earn a living, including the right to make money from free content distributed on the Internet. (You can [download](#) a copy of these survey results).

This is only a small sample of teachers, lecturers and trainers.

- **What do you think?**
- **Are these survey results representative of the wider education population?**

Let us know by casting your vote, but more importantly posting comments on the debate site about what you think.

I encourage you to read the rebuttals carefully and to contribute to our collective understanding of the OER movement in relation to the question: ***Should OER favour commercial use?***

Together, we are building sustainable futures for education.

Pro



Response statement

[David Wiley](#)

I always have had, and always will have, great respect for Stephen. I find deep intellectual value in my many debates with him, which is why I continue to engage in them.

I expect that Stephen can produce additional examples, but I have to point out a technical problem with his enclosure example for the sake of readers.

For a graphic illustration of this phenomenon, it is worth attempting to locate the citation just referenced from John Locke. Employ the following search text in Google: “locke ‘removes out of the state of nature’”. This is a very precise search and should take us straight to the original source, which is

public domain (having been published in 1690) and freely available on the web, via the Gutenberg Project.

For me, this original simply does not appear in the search results (your results may vary slightly, as Google localizes search results; I have attached a screen shot below). There is one WordPress blog post, and then a series of essay-writing and term-paper authoring services. Through the use of search engine optimization (SEO) commercial providers have made it impossible to locate the original on the web; searchers must know to go directly to Gutenberg and locate the material from among the 30,000 books published on that website (and if it's not among the 30,000, then I don't know what searchers can do).

The reason the quote is so difficult to find is that it has been inadvertently misquoted. If you search Google for "Locke 'removes out of the state *that* nature'" you will find that several of the results on the front page of Google link straight to copies of the original source.

Now, on with the meat of the response...

Stephen's statements regarding enclosure are the real intellectual workhorse of his statement in favour of the NC clause. And let's be clear that each of the mechanisms of enclosure Stephen lists in his opening statement (the list is reproduced below) are genuine risks. However, some of them are not specific to OER. And for those that are specific to OER, I believe there are alternative ways we can deal with these risks (as opposed to applying the Non-Commercial clause). And, due to technical problems with the NC clause outlined in my opening statement, I believe that the alternative mechanisms are better.

Let's look at each of the mechanisms in more detail.

- *Lock-Out* – the imposition of subscription fees or similar access barriers to the environment in which the free resource is located. This is classic 'enclosure', the placing of a fence around the public domain resource. Lock-outs include tuition fees, subscription fees, or the placement of authentication or rights management systems onto public domain content. Search your local bookstore for the public domain version of Locke's *Second Treatise*; you won't find it. Free publications are banned in bookstores.

Bookstores, by the nature of their being stores, are places where things are sold. We should no more expect to find free books in a bookstore than we should expect to find bicycles in a bookstore. If you choose to open a business or run a website, no one else has the right to tell you what it should include.

There are two very real lockout mechanisms associated with accessing OER which are provided online. The first mechanism is the cost of hardware capable of accessing the internet, regardless of whether the schematics and source code for the hardware are openly licensed or proprietary. If you can't afford to purchase a computer, tablet, or smart phone, it can be difficult for you to access OER online. The second lockout mechanism is the subscription fee most people pay in order to access the internet. Even if your friend gives you an old hand-me-down computer, you may still be unable to afford to pay for internet

service.

While these two lockout mechanisms are real, they are fundamental digital divide issues and are not specific to the provision of or access to OER. These lockout mechanisms are very real, and people are working directly on diminishing their influence, but they probably don't belong in a discussion about commercial use of OER.

- *Lock-in* – a cousin of lock-out, lock-in involves the committing of users to a particular technology which then becomes expensive or difficult to stop using, which in turn enables the charging of fees for access to public domain materials. The classic example of lock-in today is the Kindle or iTunes marketplace, which become increasingly entrenched as the only way to access contents.

Lock-in is a genuine risk to people who either aren't educated on the issues or aren't paying attention. If you're not careful, it is absolutely possible to allow a person or organization to back you into a corner. Amazon's use of the proprietary .azw format for their ebooks is an excellent example. Once you've purchased 100 books in this format, it becomes very expensive to move to another device which does not support this format. However, if you're educated about the issues and paying attention you will likely purchase ebooks that use an open standard like ePub.

While lockout mechanisms are beyond the individual's control (because they're implemented by someone else), lock-in mechanisms only work when we let them (e.g., when we choose to purchase an ebook from Amazon instead of another provider). The best answer to lock-in problems is better education and raising public awareness of the issues.

If we are to believe the argument that the Kindle and iTunes stores (and similar mechanisms) are becoming the only ways to access content, then we should immediately accept that placing an NC clause on content we wish to share is a death sentence. There is good reason to believe that no NC content will be distributed through these channels. Either the argument is faulty and there will always be viable alternative distribution mechanisms in which NC-licensed content can travel, or the NC clause is ineffective as a defense against lock-in.

- *High Bar* – this is the creation of difficult or expensive hurdles against the *provision* of free or open content; the high bar is intended to prevent distribution of content in the first place. In the educational space, the requirement that content must meet rigid format specifications (such as, say, IEEE-LOM's 67 metadata elements) is an example of high bar.

To the best of my knowledge, the only requirement for sharing OER online is access to a computer with an internet connection and some very basic skills (which, while very real requirements, I do not believe meet the standard of being a "high bar"). Anyone can share OER through freely available hosting services like Wordpress.com or YouTube. Requirements for conformance with complicated e-learning standards like LOM or SCORM only come into play when trying to sell content (because customers may demand it) or when seeking funding for help sharing OER (though even the U.S. Department of Labor backed off its SCORM requirement in their recent TAA grant once the community spoke up).

It is true that OER shared by people with more expertise in creating and curating metadata, optimizing SEO, etc., will be easier to find than OER shared by people without these skills. This is why it will continue to be important for platforms like Wordpress to automate (or lower the barrier of participation as much as possible) the effective use of these standards for people without technical expertise. RSS did not gain its broad adoption because it was so simple for the average person to create. RSS gained its broad adoption because tool providers figured out how to largely automate both the creation and the consumption of information provided in compliance with this specification.

All that said, the NC clause in no way mediates the “high bar” risk, and it probably doesn’t belong in a discussion about the commercial use of OER.

- *Flooding* – this is the enclosure practice employed in the Google search results. It becomes impossible to find the original free resource when the market is flooded with commercial alternatives.

Not if you use the Advanced Search tool provided by Google itself, which allows you to search only the universe of openly licensed materials. Again, this risk is best mitigated by education and public awareness, not the application of the NC clause.

Additionally, there is no reason that the OER community cannot engage in the “flooding” tactic. Sometimes the best defense is a strong offense.

- *Legal Risk* – this is a variation of the ‘fear uncertainty doubt’ (FUD) tactic that is employed against free software. Essentially, the provider of free or public domain content is threatened with the possibility of a lawsuit unless certain conditions are met. Of course, the conditions can never be met; what is important is not that the provider satisfy the conditions but rather that they be held under threat of lawsuit. The present attack on fair use, which clouds fundamental rights with the cost of enforcing them, is an example of the legal risk method of enclosure.

How does the NC clause mitigate against this risk? It does not. A multi-national corporation with billions of dollars at its disposal can still appropriate your materials however they please and drag out the litigation until you can no longer afford to pursue it. Bad actors will be bad actors. The legal risk is definitely a real risk, but it is a symptom of deeper problems with modern society and cannot be helped by applying an NC clause. International legal reforms combined with an international rediscovery of basic morality are the only answers to this risk.

I also want to respond to the difference in perspective Stephen mentions at the end of his post. He characterizes the differences in perspective of those who license content as:

- On the one hand, from the Berkeley-Stanford-Harvard set, a perspective primarily motivated by, and expressing the needs of, the *owners* of content and resources, however obtained, to a maximally free use of those resources to whatever purpose, including commercial exploitation, and

- On the other hand, from the students, writers and hackers, a perspective primarily motivated by, and expressing the needs of, the *creators and users* of these contents and resources, where the purpose is, and always was, the direct expression of creativity and culture from one to the next to the next, without the barriers imposed by commercial exploitation.

While it is in vogue to criticize institutions and side with hackers, I don't think this is the right way of looking at the problem. In fact, I don't believe it's the right problem at all. In my mind, the biggest difference in licensing perspectives in the OER community is linked to the SA clause - the primary cause of license incompatibilities I described in my opening statement.

The difference in perspective among those who favor the BY-SA license and those who favor the BY license comes down to a simple question: do we choose to privilege people, or do we choose to privilege content? In the SA model, we privilege content (we guarantee that content stays in the commons) at the cost of author freedom (to choose which license to use with derivatives). In the BY model, we privilege people (we guarantee their freedom to choose what which license to use for derivatives) at the risk that some derivative works may leave the commons (be copyrighted).

So should we privilege people or content? For me, this is a very simple question. Content is simply a means to the end of supporting people's learning. Content is never the end in itself. The idea that we might privilege content over people is frightening to me. As educators, people should always be the first, most important focus of everything we do.

Additionally, in the context of current realities where the majority of the OER in the world are being produced by the so-called "developed world," the propensity to use the SA clause is even more sinister. With SA we once again find the "developed world" mandating solutions for the "developing world" by saying "if you adapt our open educational resources for use in your country, you are required to license them the way we tell you to. Because we know what's best." The SA clause is simply a new form of Imperialism, and has no place in a global network of generous, sharing people.

Contra



Response statement

[Stephen Downes](#)

David Wiley makes a nice point, correcting my misquote of Locke's *Second Treatise* and suggesting this fixes the problem of enclosure I described in my opening paper. But does it? Let's look at the results given by Google for the [search](#) "Locke 'removes out of the state *that* nature'":

- Postings of excerpts by professors on class websites – [Hanover](#), [Mandell](#)
- Political activist sites – [constitution.org](#), [LONANG](#), [jim.com](#) (the only complete copy), the [founders' constitution](#)
- Ad-supported sites – [Chuck Brahma](#), [Lapham's](#),
- Text copied from publishers – the [prenhall](#) site, the [Nozick book review](#) site

Though we no longer have essay authoring services represented, we nonetheless are faced with an enclosure in progress, and significantly, no link to the Gutenberg library or any other citeable open access source.

And the example of Locke's *Second Treatise* is kind to Wiley's position. Search for something that does not have an academic or political nature, and prepare to be swamped with commercial results. This comment from Peter Yared at Media Beat is typical: "If you search for any topic that is monetizable, such as 'iPod Connectivity' or 'Futon Filling', you will see pages and pages of search results selling products and very few that actually answer your query." (Yared, 2011) We all know this is happening, we can all see it for ourselves.

And I think there's a substantial point to be made out of that observation. Lisa Petrides sums it up nicely. "Educators... simply want to share materials with others, but don't wish for others to be able to make money off of what they have produced. It isn't based on a desire to prohibit others to earn a living, but simply that they see their work as tax-payer funded for the public good, and believe what they do should always be freely available, not repackaged for sale." (Petrides, 2011)

But let's go back to the beginning and consider David Wiley's defense of the position. (Wiley, 2011) There is a technical argument in favour of commercial-friendly licensing, he writes, that is "straightforward and unassailable." The technical argument is based on what appears to be a contradiction between different understandings of the meaning of 'commercial' in Creative Commons licenses, specifically:

- Commercial, in the sense of commercial *users* of the content, specifically, individuals, nonprofit organizations or institutions, or commercial copy shops performing work for some noncommercial user, and
- Commercial, in the sense of commercial *use* of the content, such as charging fees for access, attaching advertisements to content, and the like.

Wiley writes, "If a lawyer of the caliber of Larry Lessig does not know what NC means, how is your run-of-the-mill user supposed to understand what s/he may or may not do with a NC-licensed work?"

I am not an expert, but my understanding is that the distinction between commercial and non-commercial *entities*, as opposed to *use*, is a particularly American distinction. It echoes the disagreement Wiley and I had regarding the proposal that there be an education-specific Creative Commons license. (Wiley, Open Education License Draft, 2007) The proposal, which I opposed, (Downes, 2004) was that content could be licensed for educational use only, where this was defined as use by an

educational organization such as a school, college, university, or other NGO. My objection at the time was that such a requirement favoured institutions that charged money for access to resources, and created a bias against providers of educational material for informal, individual and home use.

But it's one thing to say that a lawyer is confused, and quite another to say that people are confused. In Wiley's own text, he was perfectly clear about what *people* believed was meant by commercial and non-commercial: "uses that earn users money or involve advertising..." The broad strokes of what is understood by non-commercial are understood by all, and if lawyers encounter difficulty pinning down an exact definition, well, that is what lawyers are paid to do. But our response here should be to do what Creative Commons did and abandon any attempt to define 'commercial' according to whether a *user* is a commercial enterprise, and to look instead at the use.

Then the question of whether an act of copying falls under the non-commercial clause becomes a very simple question: are you trying to make money off some else's freely contributed work? If the answer is "yes" then you are violating the "noncommercial use" clause. If the answer is "no", then you aren't. And if you're trying to find a narrow interpretation, or a nuance, or a loophole, or some other condition only a lawyer could misunderstand in order to allow your use of noncommercial material in some way that might be deemed commercial use, then you're probably violating the clause. It's the old saying, "if you have to ask whether you're breaking the rule, you're breaking the rule."

But if there is a need for another litmus test to determine whether or not a use is a commercial use, then we can return to the original desire of those authoring non-commercial clauses into their licenses, the desire for free and unfettered access. It is in fact this condition I apply to materials I am considering for linking in OLDaily. Basically, the condition is this: if the reader can directly access the materials without restraint, then the use is non-commercial. Otherwise, it is commercial.

By focusing on the imposition of access controls on content, I avoid distracting myself with the *reason* for the access controls (who am I to try to read someone's mind? If they're trying to enclose content for any purpose, whether to charge money, collect emails, force people to view ads, keep stuff private, whatever, then it's *commercial* – they seek some personal gain, which they will obtain through restricting access, which is the basis for *commerce*, including but not limited to commerce having directly to do with money). In other words, *commercial use is the act of restricting access*.

Dissemblance hangs on nuance. The numerous proponents of commercial use in this forum all in one way or another argue that they are in the business of providing open access. Yet they all in one way or another have based a business practice of extracting money from people who wish to access these open materials. The expect – indeed, they *require* – that materials be contributed by users with no conditions on commercial use whatsoever, and they translate this into a mechanism for sustaining their own enterprise.

The argument, such as is stated by Erik Möller, is that such conditions, "prohibitions of commercial use

or derivative works prevent valid and important uses of educational resources.” (Möller, 2011) But if we examine these “valid and important” uses, we find they depend on mechanisms for restricting access. Möller provides his own example: “the most widely used publishing platforms like YouTube and WordPress are advertising-supported.”

Quite so. And YouTube will vigorously resist efforts to harvest and display YouTube content in alternative venues. YouTube’s terms of service stipulates, “You agree not to distribute in any medium any part of the Service or the Content without YouTube's prior written authorization.” YouTube has become one of the sole sources of online video precisely by *preventing use* of those videos elsewhere; that’s how it is able to sustain itself through advertising, sales of user data, and the like. Flickr, Facebook, Twitter and the rest of these services have similarly restrictive conditions in their terms of service. *It doesn’t matter* how users license their content on these sites; they are locked down for exclusive commercial use by the owner.

Geoff Cain makes the point nicely in his comment. “Favoring commercial use IS a restriction. The proponents of commercial use are writing about this as if some right is being taken away. If it is the right to silo learning for profit, then I hope this will eventually be the case.”

Ahrash Bissell, writing for the Monterey Institute for Technology and Education (MITE), expresses the same sort of concern David Wiley does. “The meaning of non-commercial is unclear,” he writes, “especially for educational and other non-profit institutions.” For example, “One possible interpretation is that NC-licensed materials are free for any non-profit institution to use in any manner, including hosting the content on their servers, embedding the content in other applications, and even perhaps redistributing the content for a fee (e.g., for cost-recovery).”

Again, notice the nuance. The intent, toward which we work though each successive phrase in the paragraph, is to raise revenue for the institution by restricting access. The defense of this strategy is the argument on grounds that *it’s not clear* whether the use is commercial or non-commercial. But there are in fact two very clear alternative strategies MITE could use to employ open educational resources:

- It could mount those resources on a public web server, open for all to use, to access, and to copy resources for their own use, or,
- It could mount those resources on a server which restricts access in some way in order to benefit the institution or its tuition-paying students

Yes, the lawyers could get into agonizing arguments about the nuance of whether the latter action is commercial or non-commercial. But the relevant fact, from the perspective of the people who actually employ the non-commercial clause, is that access is being restricted. MITE could very easily host the materials in such a way that all can access them, thereby enjoying the benefits of free and open educational resources, without violating the authors’ intents that they be freely shared.

The “truly global learning commons” that Ahrash Bissell writes about, and which is heartily endorsed here, will emerge only with individuals and institutions *stop* restricting access for personal or

institutional gain.

Downes, S. (2004, May 5). *Free for Education Home Page*. Retrieved April 20, 2011, from Stephen's Web: <http://www.downes.ca/post/7159>

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Petrides, L. (2011, April 19). *Guest statement (opening phase)*. Retrieved April 20, 2011, from WSIS Platform of Communities: <http://www.wsis-community.org/pg/debates/group:14358/phase/251476/252289>

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Yared, P. (2011, January 12). *Google already knows its search sucks (and is working to fix it)*. Retrieved April 20, 2011, from Media Beat: <http://venturebeat.com/2011/01/12/google-search/>

[Comments](#)



[Abel Caine](#)

These are absolutely brilliant responses.

Abel

UNESCO OER Programme



[Steve Foerster](#)

Stephen Downes mentions the old saying, “if you have to ask whether you’re breaking the rule, you’re breaking the rule.”

Thank goodness in legal matters that this isn't true! For example, if those of us in the U.S. who are keen on fair use followed this rule of thumb, there would be nothing left of this important exception to

copyright. Courts come up with all sorts of interpretations of law and contract that normal people would find counterintuitive. David Wiley's point stands that if even Professor Lessig can't define it clearly, the rest of us shouldn't be expected to do so. Or, put more dramatically, "we know it when we see it" is the enemy of the rule of law.



[Kim Tucker](#)

David Wiley wrote:

"In the SA model, we privilege content (we guarantee that content stays in the commons) at the cost of author freedom (to choose which license to use with derivatives)."

I see it differently, you cannot generalise about the "the SA model" in that way.

With the NC-SA combination a *restriction* is being imposed on how future derived works may be used by people (only for non-commercial purposes).

With CC-BY-SA freedom is being ensured in how future derived works may be used - freedom to use, learn with, adapt and share to help your neighbour, community and for the benefit of society.

The Share Alike clause in CC-BY-SA reads:

"Share Alike — If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one."

A "similar license" would be similar in intent - a license which perpetuates the freedoms in derived works.

CC-BY embraces these freedoms but permits derived works to be licensed in ways which restrict people in terms of being able to access the resources, and in how they may be used and shared. There are many who will abuse that 'privilege'.

As you indicate, CC-BY resources may be incorporated and mixed into derived works under a wider variety of licenses. The benefit is that more people are likely to use and adapt the resource (more channels for sharing the knowledge). However, as you point out, this includes "the risk that some derivative works may leave the commons (be copyrighted)".

Don't underestimate this risk. The observations with Google (one of many companies offering such 'search' services) is just the beginning. Automated search and aggregation services are becoming increasingly sophisticated. Use of CC-BY-SA and similar licenses which perpetuate freedom to use, adapt and share is one strategy for safeguarding the commons and protecting against its enclosure.

On a scale for freedom in the global knowledge society - inclusivity and freedom to participate - the Creative Commons licenses peak at CC-BY-SA (in the current state of copyright law).



[Wayne Mackintosh](#)

A reflection on why our discussions on open content licensing are so important.

In a closed digital world, it now becomes necessary to label children who share contemporary social experiences and culture as thieves. Corporates need to depict "children" having their heads bashed with a mallet for sharing.

How did we allow this to happen?

http://www.youtube.com/watch?v=lnzDjH1-9Ns&feature=player_embedded

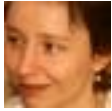


[Nagarjuna G](#)

This debate of "commercial" vs "non-commercial" diverts the attention from the core issue: which is the freedom to use a cultural product (OER being one) for forwarding culture. Once we grant this freedom, we also grant the freedom to an user to e.g. spread the cultural product. If an agency or a person would earn some compensation for spreading the cultural product, it is not a sin. On the other hand if we do not allow this to happen, we are blocking its spread. In a collaborative space, contacting the various copyright holders to obtain copyright permissions for someone who wants to spread the work, is painful. Therefore, they will not do it, unless the work is developed as a single or a few authors. This will make all collaboratively produced NC works will remain within one narrow medium. So, I plead not to use the terms like commercial or non-commercial, but use the fundamental social methods of forwarding a cultural product, which happens when another agent uses it. This use in most cases is the use to interpret OER, to understand it, to share it, to re-interpret it (to modify it), and share it again. This cultural dynamism will be blocked if we use NC clause. So, it is wise to protect the OER by allowing any kind of use as long as the other clauses of the license such as SA are imposed.

The wisdom of the very first zeroeth level freedom as defined by Richard Stallman, and how this is widely used for both free software as well as free knowledge (Wikipedia) is what will be dumped if we choose NC condition.

The other point to keep in mind is, if we use NC condition we will be making OER non-usable in other collaborative projects like Wikipedia, Wikibooks, etc.



[Maria Droujkova](#)

When I search for non-enclosed items, I add these terms: download, free, open, "full text", online. In my experience, kids learn these and other more content-specific techniques for finding open content within their first months or years of using the Internet.

It would be easier if all online entities were meta-tagged like Flickr objects, of course, by how open they are. Meanwhile, keyword search works well enough for most purposes. [Here is the search I used](#) to find the Locke treatise in question, linked from the first hit on the result page.

On the other hand, when searching for commercial objects, add some of these keywords to the search: price, buy, "compare prices". Ironically, I can't find any objects to buy for Locke, at least not on the first pages of these searches: I keep finding free resources, though one of the pages was also selling an ebook they provided in html for free (probably with better pagination), another subscription to a journal from which the article it had came, etc.



[Peter Rawsthorne](#)

when I consider the negative impact private HE institutions can have on learning.

<http://www.pbs.org/wgbh/pages/frontline/collegeinc/view/>

<http://www.nytimes.com/2007/02/11/education/11phoenix.html>

And the absurd profits these institutions are making combined with the large amount of student debt being created... these two are directly tied.

<http://www.ibtimes.com/articles/95633/20101228/student-debt-crisis-threatens-us-economy.htm>

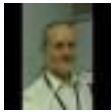
<http://isis.sauder.ubc.ca/media/blog/student-debt-a-growing-problem-in-canada/>

When I also consider the legislative changes that can (and will) increase the barriers to materials I believe we should keep OER non-commercial. And forces within commercialization will ALWAYS be lobbying to restrict access.

<http://www.michaelgeist.ca/content/view/5479/125/>

Commercial interests in education will have a negative impact on access. We need to keep commercial interests out of OER and shift our focus to quality. I hedge that if we spent as much time focusing on how to build quality OER rather than copyright issues we could create an educational movement that would make commercial interests irrelevant.

I'm voting NO... more on these topics as this debate continues. Thanks to WSIS for putting all this together...



[Kim Tucker](#)

Vote: "Should OER favour commercial use?" - NO - I don't think **any** particular type of use should be "favoured".

But a "NO" vote implies I am in favour of using NC - I am not!

"Should OER 'accommodate' commercial use?" - YES - I'll go with this interpretation as I cannot change my vote to "Abstain".

Taking Nagarjuna G's point further (wrt knowledge):

What *opportunities* arise with freedom?

The pro-freedom perspective highlights an invitation and an opportunity for absolutely anyone to participate in co-creating the highest quality of learning/knowledge resources that will always be in the commons with the [oft quoted freedoms](#). (IMO, [CC-BY-SA](#) is the best CC license in this respect).

For Peter Rawsthorne and others:

Be careul not to mix issues. Trying to punish commercial or private institutions (etc.) by insisting on NC

use only will disempower and discourage them (and others) from making valuable contributions and slow their transition into the OER world (with more open and innovative business models). The implications may go much deeper: pre-empting scalable solutions to global education issues.



[Peter Rawsthorne](#)

Kim,

I agree with your first statement. I found the question rather vague... what is favour? At first I also wanted an "Abstain". To be honest, I'm really close to sitting on the fence on this; Mostly, because I believe given fair-use / fair-dealings [an independent adult learner can ignore copyright](#). I think this is an issue for the institutions to work out among themselves with the commercial entities, publishers, etc... I really don't think the adult learner should concern themselves with copyright issues. Read the above embedded link...

On the issue of punishing commercial or private institutions. I don't see it as such... it is more about trust. Commercial entities / institutions are opportunistic and will act in ways of self interest, and they will lobby their interests to gov't. I believe the links provided in my previous comment provide good examples of how commercial for profit HE institutions will conduct themselves. In particular, this post regarding Canada's copyright modernization act that could trump educational fair-dealings.

<http://www.michaelgeist.ca/content/view/5479/125/>

I'm willing to have my opinion swayed... could anyone provide some examples of commercial interests contributing any substantial (and quality) amount of OER using a CC-BY-SA? With the amount of time OER has been around there must be some good examples... Or have we seen a commercial entity using some CC-BY-SA content, reusing it, improving it and releasing it back as CC-BY-SA?

Day Five

Guests (response phase)



Guest statement (response phase)

[Neeru Khosla](#)

CK-12 believes that licensing should be a choice that should include the non-commercial clause.

Openness is frame of mind – a commitment to doing things with the idea of sharing and letting others use that work for their needs. This is the easy part. The hard part is reaching consensus on the licensing.

The *Open Educational Resources (OER)* group has been debating this issue for some time now and is divided in spirit. The Creative Commons (CC) license is the chosen license by the group but the challenge has been in choosing from adopting the many versions of this license. Fortunately or unfortunately, CC allows for **choice** in licensing. It stipulates that you can operate under any kind of license – free to use; modify the content, as long as you attribute the creator, etc.

If there are choices available then why shouldn't these choices be available to both the users and providers? The mandate to stick to one form -- "commercial" -- amounts to "dictatorship." It goes completely against spirit of "openness" to insist that "this house believes in doing things one way and only one way, and you have to abide by the rule of the house." *OERs are not just one house but instead are many houses that make a village, and will thrive as a village.*

We at CK-12 Foundation have invested heavily in our projects and operate under the Creative Commons NonCommercial-ShareAlike (<http://creativecommons.org/licenses/by-nc-sa/3.0/>) license. If, as an OER, we are asking people to "pay back" by a "share-alike philosophy" then this should also apply to "royalty sharing." Most OERs do not have a sales force or any marketing budgets. Therefore, if someone is going to commercialize our product, we should have the right to share in the revenues. Many other major OER projects have invested heavily and have adopted the same license – Carnegie Mellon University, the Open Learning Initiative, MIT's OpenCourseWare, and the Khan Academy. Non-commercial does not change in any way the usage conditions for the very people who need these materials the most and rely on our content to be provided free of charge.

What must also be given due consideration is that OERs have been struggling to be taken seriously, as for-profit organizations question our robustness, quality and sustainability. These non-profits claim that if there are no revenues, then OERs cannot produce high-quality and sustainable content. I ask you, why not allow OERs a chance to survive and ensure that we can keep on contributing? Why do people assume that because something is free it is therefore worthless or of lower quality?

OERs are confusing "feel good" and "self promoting" attitudes by saying to all "we are going to help you by letting you make money on us." In reality this action is condescending to the people on the receiving end and turns them into "dependents."

The most dignified way to impact social change is not to keep filling peoples' begging bowls but rather to empower them. Commercialization should not be structured in such way as to be unfair by leaving out the people who put in the most effort in creating the content.



Guest statement (response phase)

[Robin Day](#)

Reflections on adopting a Creative Commons Attribution IP policy at Otago Polytechnic.

[Otago Polytechnic](#) is a vocational education institution which provides quality skills for a wide range of applied and professional careers in the Dunedin and wider Otago region as well as some significant national programmes in New Zealand. Otago Polytechnic is New Zealand's first signatory of the [Cape Town Open Education Declaration](#) and is one of the first post-secondary institutions in the world to adopt a default Creative Commons Attribution intellectual property (IP) policy.

Prior to the adoption of this open policy, the Polytechnic did not have a formal IP policy in place and the executive leadership team saw the need to address this as it looked to opportunities to lever off the IP being created by staff and students. Previously, the IP and copyright of teaching materials created by our staff during the course of employment was assigned to the institution under “all-rights reserved” in accordance with the New Zealand Copyright Act 1994. The Executive commenced with a consultation process with staff and students to develop an appropriate IP position for a digital age.

Two years of consultation and discussion followed with significant input coming from those with a high stake in IP – the staff in the schools of, Fine Art, Design and Information Technology who were the main creators of new and applied ideas and products in the institution. Phil Ker (the Chief Executive) and I engaged with those interested, meeting and involving them with the drafting and redrafting of the policy to reach a position that was appropriate, sensible and practical. It was clear from the onset that this was an area of important to staff and students and that there were very high stakes in this academically.

During the consultation period, where the initial position put was that the institution held rights over IP through the employment relationship and for students by view of the fact that their IP was supported by staff input, some staff were saying things like, “You’re not owning my thinking! If that’s the case, I’ll do what’s required for my job and do my really creative thinking at home!” Some students also protested that in that case, they’d do what was required to get a qualification, but would keep their best work to themselves because they wanted to be able to set up their own companies to develop their ideas after they finished study and not be restricted by the Polytechnic having the say in how they would do this.” (Note in the final policy: our organisation does not assert copyright on student work and they remain the owners of their IP and our role is to be guardian of this in protecting the students rights, this position was also adopted in a parallel policy that addressed Maori IP where a partnership model is adopted. This

was negotiated with local Iwi). From an educational perspective, it seemed that a policy of taking ownership of people's IP could constrain learning and knowledge development. This raised for me major concerns over the quality and standards of education and the desire to provide an education that enable students to succeed and do their best thinking in this endeavour.

After considerable debate and consideration in 2008 we adopted a default Creative Commons Attribution licensing policy where the IP of teaching materials are co-owned by the institution and their creators. In this way, the organisation protects its investment in teaching materials while providing recognition and the permissions for creators to choose how to use their IP freely. In the early days, some critics felt that the organisation would lose students by opening up its teaching materials, and that we would also lose potential commercial opportunities through the sale of IP. However, neither have occurred. We have not recorded any substantive changes to student enrolment trends at the Polytechnic since going open. On the contrary, the accrued institutional benefits have exceeded expectations resulting in a significantly raised international profile and collaboration potential for a small regional institution. We have also become much more collaborative with other institutions around the sharing of quality teaching and learning materials and research opportunities. Our approach fits with the New Zealand Government's Open Access Licensing (NZGOAL) framework which encourages open licensing of creative works funded through taxpayer dollars.

We are not opposed to commercial uses of our openly licensed IP. In fact, this is a potential revenue source for collaborations with the private sector, which in our case, will be reinvested back into improving our learning services at the Polytechnic. Our open IP policy is also well aligned with our institutional strategy of education for sustainability. After all, OER is a sustainable and renewable resource.

Our open strategy has prepared us for our role as anchor partner in planning the [OER university](#) concept. The OER university concept is an international innovation partnership which will provide free access to high quality OER courses with student support provided through a global network of volunteers. Students can be assessed for a fee by participating institutions and earn a credible credential. Combined with [Capable NZ](#), our prior learning assessment (PLA) and work based learning centre using PLA, OER provides opportunities for Otago Polytechnic to further improve access to learning, especially for students where barriers to access currently exclude them from the more traditional modes of educational delivery as part of our strategic vision to engage better with our community.

As a publicly funded institution, we believe OER is the means by which education at all levels can be more accessible, more affordable and more efficient. This is indeed a very exciting time for us as we progress these initiatives working with others in an open environment.

[Comments](#)



[Jacky Hood](#)

The real difficulty is that the attribution (BY) part of the CC BY license is not being well-used by creators and adopters. If the attribution makes it perfectly clear how and where the original creators' work can be accessed, then no derivative can take away the market from the original creator unless that derivative has significant added value in content, access, technology, cost, etc. If an entity has made the license more restrictive or increased the price, adopters will avoid the derivative and go to the original.

On the other hand, a commercial entity that adds content, photos, layout, mobile formats, tools (highlighting, notetaking, student social networks), bound copies, and more, the market will gravitate to the derivative, even if that derivative has a more restrictive license and costs more. This is how the open software market works and this will also work for OER.

With a CC BY license on the original work, instructors will pull content from the originals and put that content into their presentations, learning management systems, etc. Students will go to the derivatives that cost a little but offer more attractive layout, highlighting, note-taking, student social networks, mobile versions, and/or convenient, well-designed bound copies.

Creators who wish to obtain revenues for their creations should license the **content** CC BY and then create their own derivatives in highly usable formats that have either more restrictive licenses or restricted access.

We struggle in College Open Textbooks to get instructors to adopt open textbooks. (We have more luck with smaller OER.) Confusing licenses and access methods are a major cause of resistance. Quality is another issue and that will never be high until all creators (authors, layout artists, editors, fact-checkers, photographers, illustrators, publishers, printers, marketers, etc.) can receive revenues. Allowing instructors to use content freely in their classes while charging students small fees for access on various devices, intelligent reader software, and bound textbooks will provide the revenues needed for creators while protecting instructors from copyright infringement.

We need a separate debate on ND (no derivatives) licensing. This license is far more harmful than NC and even more confusing to creators and users. Many creators think that omitting ND will allow others to change the **original** work. Other creators do not realize that the ND restriction means that an instructor cannot use a subset of the original work (e.g. inserting a few chapters from a textbook into a learning management system). ND can work for very small resources, e.g. a photograph or short lesson. Anything longer with an ND license will simply not get used.

Open resources need both creators and users. Revenues must be obtained for creators. Users must be able to afford the resource and understand the licensing. CC BY is the licensing that will serve both sides of the market.



[Mokurai](#)

You ask:

Cast your vote (if you haven't done so yet) and share your thoughts by posting a comment:

- What would you recommend for the executive leadership at your institution?

We are firmly committed to Free Software and Creative Commons content. However, we work with commercial entities to find a mixed business model that allows students access to content, while allowing the companies to sell materials and services (such as training) to government agencies and ministries. We also work with those who want to put their materials under other licenses, including GPL, or release them into the Public Domain, so far as that is possible.

- If an executive manager, what do you think?

Project Manager, Replacing Textbooks (with OERs)

Sugar Labs

Free textbook replacement OERs in every subject, for every age or grade level, for every country, in every language needed.

- Has your leadership considered open content licensing? If not why?

From the beginning.

- What aspects of the contributions from our guest contributors would you recommend for your own institution?

We have been satisfied with our policies. Although we recognize that everyone involved must make a separate and individual judgment on the morality and practicality of Free and Open licensing, we have had those discussions among ourselves, and are embarked on the execution phase.

- Other thoughts

Computers with free OERs cost much less than textbooks. I don't think this works for computers and commercial OERs, judging by the prices I have seen. It is equally important to us that Free licenses allow students and teachers to improve OERs, and permit adaptation to local requirements, translation, and remixing as needed. None of this is easy or convenient for commercial products.



[John Stampe](#)

I have been following this debate with interest as to see if I could be persuaded to support the pro camp, but after listening to this debate I voted NO.

Most of the debaters and guests did not directly address the actual question: should we favor commercial use? I take favor means to give commercial use preference. None of the participants have convinced me that we should prefer commercial.

The whole point of OER was to get beyond the commercial closed culture that existed (and for the most part still exists).

Commercial use is about making money, not about open education. Just take a look at commercial textbooks. Commercial use (of anything) is all about control, including control of information.

I think the issue is that if we believe in open education then the resources used must not only be open, but must remain open forever.

As to which license to use I agree with Kim Tucker's comment that the SA clause of the CC-BY-SA is adequate, but I respect those who use the NC clause (and which I also used to use).

Day Six

[Position of the house](#)



Moderator's closing phase remarks

[Wayne Mackintosh](#)

Welcome to the closing phase of our inaugural OER debate on the UNESCO platform. Our debaters have prepared sterling and compelling closing statements.

The debate is now "*up close and personal*" in the sense that we have moved from the generic opening statements, to institutional perspectives and now focusing on the individual.

Tell us what you think by posting a comment and enriching the experience for all.

- What licence would **you** recommend (or use) for your creative works and why?
- When remixing OER, what licenses do you target when searching for OER.
- In your view, is it OK to apply a more restrictive license or NC restriction to derivative works based on the most open license (eg CC-BY)?

Let's work together in building a thriving OER ecosystem!

Pro



Closing statement

[David Wiley](#)

In closing, I want to make three more points.

First, as the field matures, people and projects' choice of default licenses tends toward more openness. (I'm following the [definition](#) of "open" in "open content" here.)

Flickr is the single largest collection of openly licensed material in the world where contributors have the freedom to choose the open license applied to their contributions. This collection can be analyzed in order to understand broad trends in licensing behavior. In 2005 I wrote a [paper](#) examining the occurrence of different CC licenses on Flickr. The table below compares those 2005 data with the same data from 2011.

License	2005 Photos	2005 %	2011 Photos	2011 %	% Change
BY	339K	9%	25,6m	14%	+4%

BY-SA	271K	7%	16,3m	8%	+1%
BY-NC	502K	14%	24,8m	13%	-1%
BY-ND	100K	2%	9,0m	4%	+2%
BY-NC-SA	1,2m	34%	52,9m	29%	-5%
BY-NC-ND	1,0m	30%	53,4m	29%	-1%

The biggest loser over the last six years has been BY-NC-SA (down 5% as a proportion of all CC licensed photos). The biggest winner has been BY (up 4% as a proportion of all CC licensed photos). These changes have occurred while the total number of CC licensed photos on Flickr grew from 3.5M in 2005 to 182M CC licensed photos today.

We can see the same trend in large institutional OER initiatives as well. MIT OCW, now ten years old, uses the BY-NC-SA license. The Open Course Library initiative in Washington state, launching this summer, uses the BY license; the Open High School of Utah, which launched its OER collection last summer, applies a BY license to all the materials its teachers create; etc. Clearly, the OER community writ large is slowly iterating toward openness.

Second, as I pointed out in my opening statement, there are several technical problems with the NC language of the Creative Commons licenses. These problems are insurmountable if a licensor hopes to reduce the friction involved in the reuse / revision / remixing / redistribution of their OER. These technical problems all come down to definition. The license document itself provides no definition of commercial use, and (as I excerpted in my opening statement) the authors of the license cannot define it either. This results in two major categories of problem.

Underspecification problems. Because Noncommercial is not defined, almost anyone who is serious about obeying the law (which is generally something we encourage) will, in the last analysis, likely steer clear of making any use of NC licensed OER. We could identify 1,000 examples from the real world. Here's one:

A nonprofit organization provides BY-NC-SA licensed textbooks which are formatted appropriately for printing. A school district decides to adopt these books, but after doing their homework and reading the NC clause asks itself, "can we legally send these textbooks to a print-on-demand vendor, who we will have to pay for printing the textbooks?"

Many would argue that they cannot, because you can be sure the vendor will profit from printing the BY-NC-SA material. "No, that one's ok," you may say. But that's what you say, not what the license says, and may or may not be what a judge says. Who knows? Want to roll the dice and find out? With fines of

\$250,000 per instance of illegally sharing a \$0.99 song online, what do you think the punishment would be for misappropriating a \$50 textbook? Want to expose your credit history to that kind of risk? How about your university's endowment? How about your employer's pension plan?

If there's one thing we know about copyright lawsuits, it's that their disproportional stupidity never ceases to amaze. And that's what you'll have if you violate someone's CC license language - a copyright lawsuit. If you or your employer are risk averse to any degree, you're just going to skip using the textbooks in the example. And don't think about hiring a temp to do the printing in-house - they would be getting paid specifically to print the books. That's a possible violation, too!

(In fact, I see a possibility for a whole new kind of troll here - a distant relative to the patent troll. This would be the NC troll - an institution who creates and distributes NC licensed material, tracking carefully who visits and uses it, and then sues people who they deem to have violated the NC terms. Of course, they'll wait until someone with deep pockets like Google or Stanford has done it before they spring the first one. It's a whole new business model for OER, brought to you by the NC clause!)

Overspecification problems. Some institutions understand that the intent of open licenses is to reduce friction in the system. (What is "friction?" It's the pain, hassle, and cost of trying to get permission. When something is CC licensed, you should never have to ask permission - because the sole purpose of the license is to tell you what permissions you have. If you have to ask for a clarification about permissions, the license has failed to accomplish its primary purpose.) In order to reduce friction, these institutions create and publish their own definition of "What Noncommercial Means to Me." This way, the CC license continues to remove friction from the system because people know (without asking!) what they do and don't have permission to do.

Now let's take the case of two OERs licensed BY-NC-SA. The author of OER number one has created and published a definition of Noncommercial in order to keep the reuse / revise / remix / redistribute friction as low as possible. The author of OER number two has done the same.

Author one has written a clear and concise document defining commercial use according to the nature of the use (essentially, is someone trying to sell the OER?). For example, a for-profit entity cannot try to sell the OER, but is perfectly free to use it internally to train its employees.

Author two has written a clear and concise document defining commercial use according to the nature of the user. This definition states that use by individuals is fine, but use by any kind of institution (including non-profit institutions) is a no-no.

Now, can these OER be remixed together? No. The definitions of NC are contradictory, and there is no way to BY-NC-SA license the remix in a way that simultaneously incorporates both definitions (and this incorporation is a requirement of the SA clause). In cases where the definitions of NC for two OER are different but complementary, a remixed OER could theoretically be released under a BY-NC-SA license

that incorporates both definitions. But can you see that this starts to get confusing? And that this mechanism serves to withhold more and more rights? This scenario not only fails to decrease friction, it seems to add it to the system. Each and every OER whose author creates a unique definition of NC eventually gets remixed into a corner from which it cannot emerge.

In short, underspecification (failing to create a boutique definition of commercial use) requires potential remixers to contact you for clarification. In this sense, underspecification is equivalent to retaining traditional copyright on your materials. Overspecification (creating a boutique definition of commercial use) inevitably sinks remixes of your OER into a black hole from which they cannot emerge.

Third, and most importantly, there is no place in the open education community for intolerance (did that sentence contradict itself?). If people or institutions that are new to OER want to adopt the NC clause, we should not belittle them, shame them, or torment them. We should consistently teach and inform them in a supporting and friendly manner. History shows that eventually they will make their way toward greater openness.

If people or institutions that have been members of the OER community for a long time choose to use the NC clause, we should not judge them harshly either. We should by all means continue to explain and expound the many problems their license choice creates for other members of the community. However, each and every member of this community should be a true friend to every other. And like every good friend should, after we have done our level best to explain why this new girlfriend or haircut is a terrible idea, it is our duty to support them in whatever choice they make.

In summary, there will soon be enough BY licensed OER in the world that the BY-SA, BY-NC-SA, and other more restrictively licensed OER won't matter that much. We might adapt the famous statement, "the Internet interprets censorship as damage and routes around it" to read "the OER community interprets restrictive licenses as damage and routes around them." Just as the open source software community recreates restrictively licensed products like Microsoft Office, the OER community will recreate existing online courses, textbooks, and other materials licensed BY-NC-SA or BY-SA and license these new materials CC BY. It's happening already.

Contra



Closing statement

[Stephen Downes](#)

To date we have heard from a variety of organizations urging that developers of OERs adopt a

commercial-friendly license. We have not heard so much from individuals (except perhaps those trying to figure out how to post a response to this forum).

The vast majority of individuals do not want to commercialize their educational resources. Most people are happy just posting articles to their blog sites or uploading photos to Flickr or Picasa.

Commercialization gets them into a world of licenses and royalties and lawyers. Most people can do without that sort of grief.

When asked, the majority of people want to apply a non-commercial license to their work. On Flickr, for example, three times more Creative Commons licensed photos employ the 'non-commercial' clause than some commercial-friendly license. (Flickr, 2011) Surveys of academics, such as the Oak Law Project survey, show a similar trend, a strong and consistent preference for non-commercial reuse of academic content. (Austin, David, & Heffernan, 2008) Major OER initiatives, such as MIT's OpenCourseWare, are licensed using the non-commercial clause. (MIT, 2011)

Yes, if you ask a lawyer (or if a lawyer asks you (Creative Commons, 2008)) then the term 'non-commercial' may appear confusing. Ask a lawyer whether the sky is blue and you will be asked for a definition of 'blue' and after the argument agreeing that you cannot distinguish it from 'green' or 'grue'. (Goodman, 1965) But there is a sense of non-commercial that is intuitively obvious, a sense that I have developed through these three contributions, a sense based on the *use* of a resource, and specifically, a use that *blocks access* to that resource.

When you grant access to a resource only on condition of some sort of payment, whether in direct cash payment, or in terms of services or endeavours, or agreement to be subject to advertising and other messaging, then you are blocking access to the resource. And there is a non-trivial mass of people in the world who do not want access to their work blocked. They want their work to circulate *freely*. They want to *share* their work. They want to provide *access* to knowledge and information.

In his guest comment, Ahrash Bissell stated that the "non-commercial term is a hedge on openness, preventing the emergence of a truly global learning commons and viable sustainability strategies." These two claims form the core of opposition to the non-commercial clause. But neither claim is rooted in fact, and in the case of both, the opposite is true.

It is a hedge on openness, not when you declare that the resources are intended for non-commercial use, but rather, when you attach a price-tag to putatively 'open' resources. People understand a Creative Commons license, and quite rightly so, as meaning that they do *not* have to pay for the use of the resource. The existence of a price-tag is akin to the existence of some stranger walking into your town and declaring that he owns the air, and that you must pay.

It prevents the emergence of a global learning commons, not when you ensure that all resources are freely and openly available, but when you lock them inside a fence and demand that all comers pay a fee for access. The barriers of commerce – not merely the financial cost, but the commercial overhead

of contracts and agreements, licensing and payments, enforcement mechanisms and more – are barriers to a global learning commons. Those agitating for commercial use of open educational resources desire something quite different, a global learning *marketplace*.

There may indeed be a day when we can entrust access to learning to the marketplace, but in a world where the market finds it tolerable to render impoverished a full third of humanity, that day is not yet today. The market serves only those with means, and provides nothing to those without means, and yet it is those without means who have the greatest need for learning (amongst other needs, many even more pressing, that the marketplace also fails to provide).

David Wiley argues that the non-commercial clause is no hedge against the mechanisms of conversion and enclosure I describe in my previous post. He writes, “this risk is best mitigated by education and public awareness, not the application of the NC clause.” How ironic that those most in need of “education and public awareness” are those least able to afford it. Yes, you can learn how to avoid paying if you are willing to pay to learn how to avoid paying. That is why the rich continue to avoid paying, and the poor continue to pay (the same logic applies in income tax law, where deductions are available to help the poor, but are accessible only to those able to afford tax lawyers).

But in fact, a non-commercial clause, where ‘commercial’ means something like ‘a use of a resource that *blocks access* to that resource’, is an effective barrier against the harms caused conversion and enclosure. Interpreted thus, the non-commercial clause says, in effect, that you *cannot* convert open content into private property, and that you *cannot* thereby enforce rights of ownership, such as the blocking of access, over it. The resource *remains free*, a subject of public trust, not private ownership.

There is a place for private ownership, a place for marketplaces, and a place for commercial educational resources, both open and otherwise. But any economy fails, including an educational economy, that consists solely of the commercial. There must be a space for any person, and for all persons, to perform some deed, create some product, or teach some knowledge, *for the common good*, not subject to by trade and other commercial considerations.

The exercise of our creative arts in this public space is the very foundation of freedom, and the suggestion that these must be bought and sold in order to be free is the deepest misunderstanding of freedom of them all.

Austin, A., David, N., & Heffernan, M. (2008). *Academic Authorship, Publishing Agreements, and Open Access: Survey Results*. Brisbane: Queensland University of Technology.

Creative Commons. (2008, November 25). *Non-Commercial study questionnaire*. Retrieved April 26, 2011, from Creative Commons: <https://creativecommons.org/weblog/entry/11045>

Flickr. (2011). *Creative Commons*. Retrieved April 26, 2011, from Flickr: <http://www.flickr.com/creativecommons/>

Goodman, N. (1965). *Fact, Fiction and Forecast*. Indianapolis: Bobbs-Merrill.

MIT. (2011). *Privacy and Terms of Use*. Retrieved April 26, 2011, from OpenCourseWare:

<http://ocw.mit.edu/terms/>

Comments



Jacky Hood

Another irony: The commercial publishers of open resources (Flat World Knowledge, Eleven Learning) use the Non-Commercial (NC) license and those who believe in sharing (notably Connexions) use CC BY. Anyone who wants his/her materials freely shared should use a CC BY license and make it easy to gain access. If someone else creates a derivative of those works, adds NC, and restricts access, learners can simply go to the original source. If the derivative has compelling advantages, then the learner can choose to go to the trouble or cost of gaining access.



Peter Rawsthorne

I want to thank everyone who has contributed to this oxford-style debate, both invited contributors and commentors. I also want to thank WSIS for creating the space for this event. Thank-you.

I have listened and read David Wiley and Stephen Downes go "head-to-head" on this and similar topics in the past. And thanks to both of them for thier boldness and thoroughness. After years of struggling with the issue I believe it has never been so clear to me as it is now. Lurking upon and commenting within this debate has been an excellent personal learning experience. And is very well aligned with some of my current writings on the subject; <http://criticaltechnology.blogspot.com/search/label/fair-dealing>.

What has emerged for me is as follows;

1. There are two distinct views that are present (though unrepresented) in this debate and I believe they have different and opposing interests.

- **Independent Learner (adult or otherwise):** I consider this collective of individuals as the largest block of OER consumers and creators. In my opinion, from an educational resource consumer perspective, they can almost completely ignore copyright due to fair-dealing / fair-use (All they need to do is honour the BY). And > 70% want to contribute with a NC license. I appreciate Stephens reference to flickr on this. The independent learner (whether self-directed or institutionalized) is the target group for OER creation and consumption. All mass collaboration projects are examples of this, and its success. - I feel this group was under represented in this debate.
 - **Institutional Faculty, Staff and Employees:** This group is restrained by thier being associated with large institutions (whether public, private, commercial, academic, gov't; they are NOT independent learners) And they have to work within the guidelines (and legalities) of their institutions and cannot claim fair-use / fair-dealing. And cannot publically encourage their students to claim fair-dealing / fair-use.
2. both institutions and individuals should be left to decide the licensing scheme they would like to use by choosing one that would best support thier values and mission. Dictating the licensing scheme keeps people from contributing to OER.
 3. we still need to be very weary of commercial interests impacting access to educational resources, cause they will come at it from many different directions. This Michael Geist post titled, "Q. Do Digital Locks Trump Educational Fair Dealing? A. Yes." pretty much sums it up for me, and is why I have voted **NO** for OER to favour commercial use.
<http://www.michaelgeist.ca/content/view/5479/125/>

Suggestion: Next time a similar debate is run please invite a few copyright lawyers with differing views (include fair dealing / fair use perspectives) and invite a selection of independent learners from different age groups.



[Charlie Lowe](#)

This has been an interesting debate about the broad use of noncommercial in Creative Common licenses. A useful future discussion would be the commerical advantages or detriments of CC-BY vs CC-BY-SA. There are very different opinions in the OER community about these two licenses, as for instance was raised by Kim Tucker's critique of David Wiley's content/commons vs people/freedom principles of CC-BY vs CC-BY-SA, and much more to discuss.

For instance, that binary thinking breaks down when examined closely, for the difference is that in CC-BY-SA, one is required to continue to use the same license with the aim of building a commons where all content is licensed CC-BY-SA. On the other hand, the obvious goal for CC-BY is the same: build a

commons where all the content is licensed CC-BY. Only, instead of by legal methods, the user is to be persuaded by an idealistic moral high ground, one that is a little shaky; the idea that people are granted "freedom" to do whatever they want with CC-BY, while also saying everyone should use CC-BY. The implication for any CC-BY licensed content: "If you use my work, you have the freedom to choose whatever license you like to relicense it, but the right choice is CC-BY." A gift with strings attached.

And with Stephen's original examples of conversion and enclosure, when one splits the Berkeley/Harvard dichotomy and examines copyleft vs. non-copyleft licensing in the open source community and their effects, there is evidence to suggest that commercial interests, who embrace open source development themselves, may also work against conversion and enclosure. A recent example: the history of OpenOffice and the fork to LibreOffice. Due to Sun's exploitive management of the community, and Oracle's potential additional misuse, commercial interests such as Novell helped to split the community off and form the LibreOffice project. The end result is that now Oracle is abandoning the OpenOffice project, and the community is more "free" of commercial exploitation than before. Moreover, there is also evidence to suggest that non-copyleft licenses, such as the BSD, have been a great failure for preventing enclosure and conversion that is detrimental to the production of open source software, Unix being a prime example.

I'll admit my bias for CC-BY-SA due to my understanding of open source development. It would be great to hear, though, counter arguments for CC-BY and promotion of commercial participation. To date, one of the arguments for CC-BY is that it is more attractive to commercial interests than CC-BY-SA. But as I have made clear in a recent article ("Considerations for Creative Commons Licensing of Open Educational Resources: The Value of Copyleft"), each encourages different types of commercial participation, and CC-BY-SA may be more beneficial to the production of OER in the long term. The CC-BY side of the argument needs to be qualified more to be useful.



[Cable](#)

I think Jacky nailed it. We use CC BY at the Washington State Board for Community & Technical Colleges.... in our [Open Course Library](#) project and in our system-wide [Open Policy](#). Our intent is to share - and to make our open content as re-mixable and as re-usable as possible And if others can commercialize our content, that helps me "sell" (no pun intended) to our business community and many politicians. I find, after enough conversation, everyone has a reason to love OER ... as a policy guy trying to help folks find that reason ... CC BY gives me (and most important, others) the most degrees of freedom.



[Jacky Hood](#)

Many thanks to the organizers, presenters, respondents, and hundreds (I am sure) who watched and pondered this important debate.

I hope that everyone will join the upcoming OER debate at eLearning Africa. The topic is probably even more controversial. "The eLearning Africa 2011 Debate, traditionally a very lively, parliamentary-style discussion, will address the following motion: 'This house believes that the OER movement is fundamentally flawed because it is based on the false assumption that educational institutions are willing to share resources freely and openly.' "

Post comments at http://www.elearning-africa.com/eLA_Newsportal/is-the-oer-movement-flawed-join-the-debate/ or attend in person in Tanzania on May 27.

Also, if you missed last year's debate, watch the archives. Everyone on both sides is pro-OER but the 'cons' do a great job of playing devil's advocate.

Part 1 is not available but it had no real content

Part 2: <http://www.youtube.com/watch?v=gbyuuuPDctw&feature=related>

Part 3: <http://www.youtube.com/watch?v=C5uRon0L3Bg&feature=related>

Part 4: <http://www.youtube.com/watch?v=JGN4-jnd6kc&feature=related>

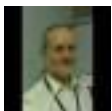
Part 5: <http://www.youtube.com/watch?v=K5lalv2D3Z8&feature=related>

Part 6: <http://www.youtube.com/watch?v=KLCN7IT4-SU&feature=related>

Best wishes and thanks again,

Jacky Hood, Coordinator, Open Doors Group

http://opendoorsgroup.org/?page_id=5



[Kim Tucker](#)

Hi all,

> What licence would you recommend (or use)

> for your creative works and why?

Usually CC BY-SA so that:

- Absolutely everyone has the freedom to use, copy, distribute, adapt, enhance, share their enhancements and collaborate on improving quality and reach of the resources.
- People are free to find innovative ways of raising funds and offering professional services to help themselves, their neighbours and their communities in this way.
 - e.g. free to make an economically viable plan to make the locally adaptable libre learning resources available gratis (free of charge).
- We can look forward to value-adding contributions being released with the same freedoms attached, so that the cooperative process continues in a culture of cooperation and sharing.
- People wanting to make a living through free/libre and open educational resources will be drawn to more sustainable (in the deep sense) business models:
 - i.e. Not by selling non-rivalrous resources (e.g. digital copies and access/ licenses to use closed resources) while consuming rivalrous resources through their profits and generating waste.
 - e.g. By selling their know-how (time) (services such as translation, localisation, custom packaging, learning design innovation, training, support, distribution, ...) while covering costs.
- A libre (free as in freedom) culture of sharing and collaboration may thrive and be protected against [threats](#) from powerful players in the media and software industries with vested interests in restricting people and enclosing knowledge and culture.

The share-alike strategy is needed for as long as [copyright law is out of step](#) with the digital age precipitating [threats](#) to a free culture.

> When remixing OER, what licenses do you

> target when searching for OER.

PD, CC0, CC BY, CC BY-SA - since these may be mixed into CC BY-SA works.

> In your view, is it OK to apply a more restrictive

> license or NC restriction to derivative works based

> on the most open license (eg CC-BY)?

First note that CC BY is being misleadingly touted as the "most open" CC license with SA being lumped with NC as another "restriction". See my posting on [this page](#) beginning "David Wiley wrote: ...": with CC BY-SA, the SA is an assurance of freedom to co-create into the future, not a "restriction".

Some say, we can always make a version of a CC BY resource by slapping a CC BY-SA license over it (perhaps with some modification). You could do that, but it would be too late. Using CC BY (or CC0) leads to a situation that is inde'fence'able (sorry, the stable door analogy doesn't work): the resources may be

enclosed (with access and usage restrictions) and these non-libre versions may later dominate the education space. i.e. the cc-by resources of the OER community become the foundation content of education enclosures.

So, rephrasing to be more specific to this debate:

- > In your view, is it OK to apply the NC restriction
- > to derivative works based on CC-BY?

This is legally permissible and the original authors have granted that permission by using cc-by. Who would do this (apply NC) and why?

One answer is (e.g.) someone (say, Company X) developing custom learning resources professionally to earn a living. The NC clause effectively means "only we may make money with these resources, you may not unless we give you permission".

If sufficient value has been added, people will buy.

The NC clause supposedly helps the producers retain market share while they get their return on investment.

Note that others are free to develop similar resources with the same and other base cc-by materials, so any competitive advantage in the resources themselves is likely to be lost in shorter time frames than the duration of copyright terms (at least 70 years, see [A brief history of copyright](#)). Rapid innovation cycles and healthy competition.

The NC clause also limits the potential benefits of peer production. In this respect it would be wise for Company X to re-release the resources without the NC restriction asap once they've "broken even" or if a competing product (perhaps a libre alternative) pre-empts returns on investment. Or perhaps sooner still if the competitive edge rests in skills and know-how (the services offered). In this case, the re-license re-release delay tends to zero. Who needs enclosures? Localisation and Company X's other services are always required, and enhanced sooner the sooner peer production comes into effect.

Company X might as well use CC BY-SA for their improved version immediately and continue providing great professional services while reaping the benefits of peer production in the continuous collaborative improvement of the resources. More rapid innovation cycles and healthy co-opetition.

Another class of people (or institutions) who like the NC clause are those who seem to be saying "We own this resource, we may or may not be making money out of it, but you may not (we are exercising our power to stop you from doing so)". In some cases these are public funded institutions established to educate and empower people to be able to contribute to the economy and development of the country. Is it right for these institutions to restrict usage of that knowledge or of the OER produced by the institution (to NC use)? Are there grounds for a policy of freedom with publicly funded OER?

Legally and with the authors' permissions, it is "OK" "to apply the NC restriction to derivative works based on CC-BY", but doing so is not conducive to peer production and co-creation of a sustainable services based OER ecosystem. For this the best approach is to use CC-BY-SA.

> Let's work together in building a thriving OER ecosystem!

The Creative Commons licenses emerged from the Free Culture movement largely inspired by the [free software](#) movement and Lessig's work on free culture (e.g. [Free Culture](#) book). The OER movement has been influenced more strongly by the commercially motivated "[open source](#)" position and has [missed the point](#) (as illustrated in this debate to some extent).

The result is "continuous confusion", contradictory and pointless debates, like this one and the one scheduled for e-learning Africa (respectively). The mind set remains rooted in flawed concepts such as buying and selling "[intellectual property](#)" in a world where an author's freedom of license choice is seen as more important than freedom itself.

Education should be founded on ethics rather than pragmatics and commercialisation. Focus on our freedom to cooperate in achieving the [libre knowledge vision](#):

Knowledge for all, freedom to learn, towards collective wisdom.
Enabling communities to empower themselves with knowledge.

A plea: be inclusive and instrumental in co-creating a business environment in which ethics is a competitive advantage, and encourage sustainable models for peer production of quality learning resources for all.

It is time for prominent members of the OER community to stand up for freedom, talk about "libre resources", educate the community about [the threats](#) to a free culture and the opportunities such a culture enables for education for all (freedom to learn).

Strategy:

In the current situation, with copyright law as it is, CC-BY-SA is the most "pro-freedom" license in common usage (e.g. [Wikipedia](#), [WikiEducator](#), [LeMill](#), ...). I suggest more people use it and the OER leaders start promoting CC-BY-SA as the "pro-freedom" license.

That is not to say that we should stop using CC-BY. A dual strategy is in order. CC-BY resources will be drawn into the enclosures and in turn draw people out of them. If you value a free culture and freedom to learn, use CC-BY-SA, especially if you have produced something really special.

With thanks to all :-)

PS Re the debate at e-Learning Africa:

'This house believes that the OER movement is fundamentally flawed because it is based on the false assumption that educational institutions are willing to share resources freely and openly.' The OER movement is fundamentally flawed but it is not based on that assumption which is an easily testable assertion. Rather, conduct a workshop to produce a plan of how a free culture of African educators can collaborate to out-compete the vendors of closed knowledge products on display at the expo (with locally adapted relevant libre learning resources).



[Khuzaima Abdul-Haleem Jallad](#)

Salam to ALL,

OER being commercialized is a wonderful concept and I trust ALL should think positively towards this initiative. Almost everything, commercial or otherwise can be found and cracked. Let's not allow others the pleasure of hacking our masterpieces. Let's give it to the public or private sectors openly!



[castfel](#)

... for me, is clear beyond functional considerations, which should be stored in this space a building "open" to resources for education, the opposite is the marketing ...

Day Seven



Winner announcement

[Wayne Mackintosh](#)

OER is based on a simple but powerful idea that the world's knowledge is a public good to be shared for the benefit of society.

This debate has confirmed that the question of whether OER should favour commercial use is a complex topic involving a wide range of perspectives, justifications and opinions from a variety of different contexts. Clearly there is a continuum of considerations rather than a definitive binary answer.



Opinion is divided. 57% of respondents have voted in favour of commercially friendly Creative Commons licenses. Nonetheless, a large proportion of respondents (43%) have voted in favour of using the non-commercial restriction.

In the OER world, there's more which binds us together than holds us apart. Notwithstanding the diversity of opinion, both sides of the house are united in a shared vision, namely that learning resources should be shared at no cost to the learner. However, we may differ in the our preferred strategies for implementing and nurturing the development of a sustainable OER ecosystem.

The concept of "freedom of speech" encompasses an educational responsibility to respect the views individuals hold and the choices they make. This inaugural debate of the UNESCO OER community has generated a wealth of perspectives to assist educators and educational institutions to take informed decisions about license choices.

Weighing up the evidence, we should declare our learners as the ultimate winners of our debate. In conclusion, I paraphrase Edmund Burke: "All that is necessary for the closed and unsustainable education systems to triumph is for good organisations to do nothing." Let's take up our collective responsibility to lead OER futures.

Looking forward to the next UNESCO OER community debate!

Posted by Downes at [10:45 AM](#)  

[2 comments:](#)

[Steve Foerster](#) said...

Thank you very much for collating this, and for participating in the debate. I don't understand why there was such a pointless barrier to participation. It would seem to be easier simply to let everyone in and then evict anyone who acts contrary to reasonable terms of service. But artificial exclusion is part of the international bureaucratic mindset, I suppose....

[Sunday, May 08, 2011](#) 



[Teemu Leinonen](#) said...

Thank you Stephen for sharing this. Good discussion, indeed. - Teemu L.

[Monday, May 09, 2011](#) 

Open Education and Market Forces

Posted to the UNESCO OER Discussion list, in response to the following exchange between Steve Foerster and Franco:

Foerster: Education is an important service,

Franco: Education is a service? It is a huge mistake to consider education as a market commodity: Education is a human right.

Foerster: These aren't incompatible positions. One describes the level of importance it has. The other explains how it can be provided most effectively.

I think the point being made is that education is not something that is simply bought and sold, as a commodity, but rather something a society does to advance its own objectives. That it is, therefore, something too important to be left to the whims of the marketplace. And that the content of an education cannot be determined merely by economic pressures, but by the wider set of values of a society as a whole.

A private company traded on the stock exchange is required by law to maximize profits for shareholders. This often works to the detriment of society as a whole - McDonald's, for example, maximizes profits by selling people fat and salt, while Coca Cola maximizes profits by selling people flavoured sugar water. We allow this not because it's more efficient, but because as a society we respect the choices people make. But by the same token, we do not allow people to bottle and sell poison as food. If allowed, free enterprise would undoubtedly offer such a product (generally to be given as gifts, I would imagine). But the social harm that would be caused outweighs the profits to be made.

Most societies have decided that the management of education is too important to be left to private enterprise, that there would be too many poison pills to swallow, and that society would be irreparably damaged as a result. That even if private enterprise were to be able to manage education more efficiently, the product offered would be harmful to society. The United States is almost unique in its belief that these services can be managed by private enterprise. The current crisis in the U.S. education system is good evidence of that, as private educators attempt to finish off the public education system it has been attacking for some decades now.

I get frustrated when I see the same sort of argument posted here or in similar forums (there was a recent troll in WikiEducator to the same effect recently). Education isn't about making money; the provision of an education isn't about charity or philanthropy. The large cash donations provided (with strings) by people like Gates or Zuckerberg do more harm than good. The fostering of an educational resources regime where publishers and academics produce, and everyone else consumes, at once promotes their business objectives and undermines our social objectives and disempowers learners as a whole.

We need and must recognize that open educational resources are at once both the product and the property of those people who are intended to learn from them. That our role, as a wider society, ought not to be to shower free resources upon people, in the hope of somehow lifting them up and maybe enlightening them, and certainty of creating lifelong customers, but rather in the fostering of a social, legal and cultural climate where people are empowered and encouraged to create and share artifacts of their own learning. To do any less is to cheat them not only out of their own education but also of their own social values and cultural heritage. The goods Bill Gates or Mark Zuckerberg would deliver will not do as a substitute for a free and freely-formed curriculum, no matter what the price.

Follow-up. The comments are Foerster's.

On 10/11/2010 11:36 PM, Steve Foerster wrote:

Hi Stephen, The ideological difference we seem to have here is that I don't believe that decisions are made by "society" or that "society" has values. Instead I see there being networks of individuals, who make individual decisions based on their different goals and values. Similarly, events, policies, and so forth are neither good nor bad for "society", most are presumably good for some individuals and bad for others.

I am well known in my own circles for advocating a network view of society. So this is not the difference that we are having. I also agree that society is made up of a network of individuals, who make decisions individually. And when I speak of a 'decision made by society' what I am describing is an emergent phenomenon, a pattern that though attributed to society as a whole, and recognizable only when viewing society as a whole, nonetheless represents a set of individual decisions, as we would see when, for example, a flock of sparrows suddenly changes direction in mid-flight.

This description of society as a network does not counter the assertions I made in my previous email; indeed, it supports them. When I describe the decisions made in a society, I am describing the wider set of decisions - social, cultural, political, economic. The market-based approach you described in your previous email, however, takes into account only economic decisions. This, because of the extreme inequality of economic power in some societies, distorts the depiction of what we would call the decisions made 'by society', greatly weighing it in favour of the rich. Thus, the patterns found in the network as a whole are determined by only a few, who distort the network to support their own individual self-interest (this is how they became rich in the first place).

When making decisions about education, if we attend only to economic decision-making, and not the other sorts of social, cultural and political decision-making, we are establishing a framework for policy that is at the outset distorted in favour of a subset of society, and in all probability harmful to society as a whole. It diminishes to insignificance the wider social, cultural and political wishes of society, as expressed by the individual decisions of members of society participating (as well as they can) in this network.

The argument from the perspective of individual freedom is not an argument in favour of market determination of educational policy; it is an argument against it.

It's interesting that you note that the Americans are unique in believing that education can be provided privately. This is much more the case at the higher education level than at the primary and secondary levels, and sure enough our universities habitually top international rankings, while our primary and secondary schools fare poorly against other developed countries' systems.

One of the characteristics of a system managed by economic priorities, rather than social, cultural and political priorities, is that it amasses wealth and influence in a few. We see this most clearly economically, where the United States also has the most billionaires in the world. And that is why we also see a number of elite post-secondary institutions located in the United States. I have no doubt that if we looked for them, we would also find the most elite primary and secondary schools in the United States, though they prefer to operate under the radar.

But what is very good for some operates at the detriment to the larger whole. As noted, the primary and secondary system is in trouble in the United States. The higher education system is also not healthy. Though there is no shortage of MBAs and lawyers in the U.S., there is a chronic shortage of science, technology, engineering and mathematics graduates. And even when it is operating as it should, the American system offers a post-secondary education to much fewer of its citizens than Canada. And when looked at from the perspective of graduates per per-capita GDP, a measure that takes national wealth into account, the U.S. fares poorly against a number of countries. Here is the 'educational index'(1) of various countries

US	7.5
Canada	11.0
Ireland	9.2
Japan	10.4
Finland	9.5
Australia	7.5
France	6.8
Italy	3.4

So it cannot be argued that the American system of offering post-secondary education is the most successful at serving the needs of its citizens. It is already the case that the United States is trailing those countries that it trails (not coincidentally) in PISA rankings. (2)

*Now, with all that said, I'm not saying that all education *has* to be about the profit motive.*

And let me be very clear in saying that education should not be subject to the profit motive, that even in cases where private suppliers are involved, these suppliers should be subject to a set of constraints determined by a wider range of decision-making, and not purely market factors.

There's obviously a role for non-profit action in a marketplace.

I do not deny this. I expect commercial companies to continue to manufacture chalk brushes, computers, bricks and windows, and a wide variety of other materials purchased and used by the educational system.

In particular, I was drawn to OERs in part because of my dislike for commercial textbook and journal publishers. In an era when online collaboration is readily accessible, I see them as an unnecessary middleman that offers little.

In this we agree.

But we need to be clear. There are different models of supporting OERs in education. For example:

- a. the private sector creates OERs, which are purchased by public institutions and distributed for free to students (this is in fact how library books and primary school textbooks are sources in Canada today)
- b. the private sector creates OERs, which are purchased by charities and distributed for free to students (this is the philanthropic model; notice how the 'purchase' decision-making has shifted from public to private institutions)
- c. the public sector (i.e., governments, colleges and universities) produces OERs directly, and distributes them for free to students (this is the non-commercial institutional model of OER production in the favour of many today)
- d. the public sector (i.e., governments, colleges and universities) produces OERs directly, and they are distributed to both commercial and non-commercial education providers (this is the model that requires CC-By licensing, specifically to allow commercial companies to resell OERs at a profit)

The model I advocate is none of these. The model I advocate is:

- e. (i) the production of OERs is crowd-sourced; public institutions provide policies, (ii) resources and tools to support this production; resources are vetted and selected through a society-wide network-filter process (which is the natural point at which qualified and expert review takes place) and (iii) distributed through the educational process itself.

We don't agree that open educational resources should be the property of those who learn from them, since I don't accept that ideas should be property at all.

Probably more accurately, you support a licensing scheme consistent with model (c), above. But note that in option (e) resources may remain the property of those who produced them, and may be distributed through a variety of licenses, including CC-NC. Because there is no need for commercial providers to be implicated in the production and distribution of educational resources at all, there is no need for licensing that supports commercial distribution.

But I do appreciate your vision of this movement being geared toward creating a collaborative culture in which all can participate rather than just a top down curriculum delivery system. It almost sounds like a free market. :-)

It is exactly a free market, but with the following vital caveats:

1. It is composed not simply of economic decision-making, but of social, cultural and political decision-making. That is the point of the society-wide vetting process (stage (ii) in my model). Decisions about the selection of learning resources are not made on the basis of economic considerations, or even partisan political considerations, but as the result of the wider variety of factors deemed important by society as a whole.
2. The network structure itself is tended and maintained. Free market capitalism may form a network-like decision-making process, but as suggested above, the network is distorted and ultimately damaged by participants with excess wealth, and therefore, excess control. Just as excesses in capital markets ought to be managed through taxation and regulation, so also constraints ought to be placed into educational content networks, precisely in order to ensure that the networks are stable, and promote the maximum participation from all sectors of society.

-- Stephen

(1) Educational index = GDP per capita divided by percent of population with PSE, x 10,000

US GDPpC: 49K %Edu: 37 %Edu/GDPpC: 7.5 e-4 (ie., 0.0007)

Canada 38K 42 11 e-4 (ie., 0.0011)

Figures from

http://en.wikipedia.org/wiki/List_of_countries_by_GDP_%28PPP%29_per_capita

and http://www.nationmaster.com/graph/edu_edu_att_ter-education-educational-attainment-tertiary

(2) PISA rankings http://en.wikipedia.org/wiki/Programme_for_International_Student_Assessment

Moncton, Tuesday, October 12, 2010

Paying For Art

denherr [asks](http://www.downes.ca/post/52203) (<http://www.downes.ca/post/52203>)

How is an artist, such as a musician or writer supported to create and contribute if his creations have no economic value, and his individual creativity is limitlessly remashed into collective works? How does he feed himself? I love learning from your free presentations but where ultimately does the money(or oil) come from for your beer and your plane tickets to the conferences all over the world?

denherr, this is an old argument, but in brief, there are many ways to pay artists without levying a per-play or subscription fee on works, and without requiring royalties. In fact, most people in the world manage to make a living without these special privileges.

Take a brick-layer, for example. Every work he creates is an original work, but he doesn't get a patent or copyright for it, can't prevent other people from copying it or selling it or giving it to friends, etc. A brick-layer is paid for the time he lays bricks.

A chef, even a famous chef who creates unique dishes, is in the same situation. Recipes are shared freely and are almost never owned (indeed, cuisine would cease to exist if no person could duplicate a recipe). Chefs don't charge royalties, don't get copyrights, and yet make a very good living.

The people who write technical documents, who create commercial jungles, who do graphic arts or commercial work are also in the same situation. They again must surrender any royalties or rights to the work they create. But they do not die of starvation or fail to pay the rent. They make very good, sometimes even wealthy, salaries.

The situation where nobody pays a musician or artist except by buying individual copies of his or her work is unique. It probably wouldn't exist at all, except that it was created by music and book publishers as a means of underpaying artists (most of whom actually do struggle to make a living - so much for the beneficial effects of copyrights and royalties!).

If it weren't for the whole publishing and copyright mess we find ourselves in, artists would probably make very good livings, earning and keeping the entire profits from their live shows (instead of repaying advances they had to obtain from their publishers). Fans and patrons would pay for specific works, and people would line up to pay enough money to sponsor, say, new Lady Gaga song.

Most people in the world get paid for the time and effort they put into something. There's no reason artists can't be paid this way, except for the fact that publishers want to keep ripping them off.

This is how I get paid. I don't sit on my work and demand royalties; I share it as widely and freely as I can. This has resulted over the years in my being hired for a series of positions where I am paid to create

even more work and share it (though occasionally my employers grumble that they should sit on the work and collect royalties, not realizing that this would in fact restrict my ability to create new work).

By sharing my work freely, people around the world are able to see it, and they willingly pay for me to come and speak to them. I do not collect speaker fees, but I do require that they pay my expenses, because otherwise I could not afford to travel to their cities. We both benefit, because I then use these trips to produce work that we share with other people around the world, and the cycle continues.

You might think, it's not a very good deal for some organization to pay several thousand dollars to fly me to their city. But consider the cost were they to buy books from me instead. They could get maybe 30 or 40 copies of an academic text for the same amount. This way, they get all my content I ever create for free, as many copies as they would ever need. It's actually an excellent deal for me.

What does my employer get? My employer is the government of Canada (it might have been some company, or a university; it just happens to be the government). They get the reputation from sponsoring my work, they get significant input into what I work on and where I work, they get me to contribute some of my work to Canadian companies (resulting in outcomes like [this](#)). I promote Canadian culture and values in Canada and around the world, stimulating business (and maybe even tourism) for Canada. It's a good deal for my employer.

What don't I get? Filthy rich. There's never going to be a million dollar payday in my life - no album that goes platinum, no book that hits the best-seller list. But you know what? I'm OK with that - because giving up the decent life I have for a longshot like fame and riches is a sucker's game. And for those of us who do anything outside popular culture - anything philosophical, academic, esoteric, radical or fringe - fame and fortune will never ever happen. Not only would I have to give up my nice home and salary, I would have to give up the things that really matter to me - my art, my creativity - to play this sucker's game. It's not worth it.

So that's how artists can be paid. We can pay them the same way we pay bricklayers, the same way we pay chefs, the same way we pay me. And what we get for that, I would wager, would be a beautiful thing.

Moncton, Friday, April 23, 2010

We Learn

"If we are not careful," [warns Michael Feldstein](#), "open education may actually end up reinforcing economic divides."

(http://mfeldstein.com/thoughts_on_anya_kamenetz_and_the_open_education_movement/)

He explains, "It's easy for those of us in the open education movement to see our work in opposition to proprietary technology companies, proprietary textbook companies, and the gatekeepers in the university system. But it's not the 'evil' LMS companies, or the 'evil' textbook companies, or the 'evil' administrators and bureaucrats that are failing these students. It is all of us."

Really? Even those working in the edupunk movement - the subject of this post - who are doing everything they can to throw open the gates of learning to all comers? Even the people trying to free learning from the shackles of publishers and vendors that are trying to destroy public education and lock down all learning content? I would like to have it explained to me *in what way* it is "all of us". What are we not doing?

Feldstein [responds](#), (<http://www.downes.ca/post/52115>) "You seem to have missed the main point of my post. The millions of learners I am talking about will not magically learn just because we make resources freely available.. My point is that edupunk and OER do nothing, in and of themselves, to help these student leap the chasm that they will have to leap in order to further their education. Pretending otherwise is pernicious."

First of all (I write back to him), I did not misunderstand the point of the post. I know that this is what you're saying.

My response is predicated on what seems to be the presumption in your post that, though OER and edupunk do not provide the support these students need, corporations and institutions *are* providing that support.

So my first line of response is to reject that presumption. The reason we have so many students who are utterly unable to learn for themselves is precisely *because* of corporations and institutions.

They are not providing help. They are actively hindering it. It is in their interests to keep students dependent and unable to learn for themselves. They actively act against attempts to provide this support.

The other part of your argument, the part you stress here is the proposition that edupunk and OER do not, by themselves, provide the support students need in order to learn for themselves.

But this is to raise the [same point raised](#) by David Wiley and invites the same sort of answer I gave there.

In particular, "So long as we depict open learning as some form of 'independent study, then yeah, it will appeal only to the fifteen percent of people that likes to study.

"But mostly the people behind open education – the technologists, at least – the administrators remain institution-bound – depict it as anything *but* 'independent study'. It's depicted as more like creating art and music and games and other content, activities that engage far more than some elite fifteen percent, and when sufficiently equitable, attracts something more like 85 percent than 15 percent."

If you get beyond the characterization of open education as an alternative *institutional* response, and see it in its much more true light as a set of mechanisms to encourage and allow creativity, engagement, and empowerment, then you locate in edupunk and OER the missing elements.

The problem with depicting edupunk as **only** the provision of free resources is that you ignore the forces and mechanisms put into place to put those resources there in the first place.

And while David Wiley and others talking about more traditional OER (eg. [here](#)) the approach I and the edupunks take is that these resources are produced by the members of the community themselves.

As I [said here](#) "the functions of production and consumption need to be collapsed, that the distinction between producers and consumers need to be collapsed. The use of a learning resource, through adaptation and repurposing, becomes the production of another resource."

Edupunk, and for that matter OER, are not and should not be thought of in the context of the traditional educational model, where students are passive recipients of 'instruction' and 'support' and 'learning resources'. Rather, it is the much more active conception where students are engaged in the actual creation of those resources.

Now to return to my original point, this is exactly what corporations and institutions do **not** want edupunks and proponents of OERs to do, and they have expended a great deal of effort to ensure that this does not become the mainstream of learning, to ensure students remain passive and disempowered.

They through fear, uncertainty and doubt into potential supporters by raising the sceptre of copyright infringement, patent challenges, and dangerous content, so much so that material that is not professionally produced are deemed too dangerous to be used in education, and connections to distributed networks of resources are so risky they must be blocked in companies and educational institutions.

They redirect those people who are actually good of heart and want to contribute to OERs toward a model that emphasizes production and publication by institutions, and employ foundations and funding agencies to guide this effort, and perhaps incidentally (though not so far successfully) to flood the market with institutional OERs that would eliminate the need for community produced OERs.

They attempt to co-opt nascent OER initiatives by directing them toward commercial enterprise, arguing that resources must allow commercial licensing, and directing production toward enterprises and initiatives that must receive seed funding and draw a return on that investment through the conversion of OERs into commodities.

And they foster a sense of incapacity in opinion and the media to suggest to students themselves that they are incapable of independent action without the comforting support of corporations and institutions, that they are simply not capable of learning from themselves. From the first utterance that "OCW is not an MIT education" the suggestion has been that education must need be a high-priced endeavour, available, really, only to those willing to pay the price.

In fact, what we see on the internet, and especially (albeit constrained) in web 2.0 services, a blossoming of creativity and initiative. Even if this currently represents only a minority of the population (and studies, depending on how you look at them, argue both ways) it seems clear that this is something that has taken hold and is in the process of becoming mainstream.

It is activity and work that is taking place outside educational institutions, and would, if it could (and often does), take place outside the corporate environment.

It is the world of [mashups](#), of [deviant art](#), of [self-help discussion groups](#), of [environmental activism](#) and [pirates](#), of [self-managed learning](#), of [hobbyists](#), of [hackers](#), of [open source programmers](#), and on and more and more.

Don't tell me none of this exists.

If you care to say all of this is not providing the support students need, make the point. But I think we cannot start from the presumption that edupunk and OER are doing nothing to support, motivate, scaffold and empower students. Quite the opposite.

Moncton, Friday, April 02, 2010