Harnessing Open Internet Media Resources

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HARNESSING OPEN INTERNET MEDIA RESOURCES

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Abstract:
Academic librarians support the efforts of teaching and learning at our institutions. Media librarians select and acquire media that support and enhance an instructors’ mission to accomplish their goals. Though the use of moving images for pedagogy is not new, wading through the myriad of online moving image websites is a daunting task. This paper will explore how one altruistic institution and a hard working librarian produced a shareable global open resource of a moving image/hypermedia hub. This community college media librarian’s hypermedia resource of moving image websites, which uses SpringShare’s Content Management System (CMS) as a platform, has continued to yield both very good ROI and SROI (social return on investment). There is no need to sign-in for off campus access since this resource is not password protected. This makes this college’s centralized moving image hypermedia hub an online and distance education open access resource for anyone who finds it. Some sites found within it will let you to download, almost all will allow you to share, embed, mashup and/or remix as one sees fit. Thus empowering instructors to assign these before or after class, be it a face-to-face, a hybrid, or a distance learning class. One can incorporate the multidisciplinary media found into departmental/program/faculty webpages and/or a learning management system (LMS). Since presenting this project at the 2012 IFLA conference in Helsinki, the comparative cost and usage statistics of this hypermedia hub with those of our video databases demonstrate that this open education resource (OER) continues to be an altmetrically value added source for diverse multidisciplinary academic and non-academic audiences.

Keywords:
Moving image, video, hypermedia, OER, open access, teaching tool, blended classes, distance learning, hybrid classes, SROI, share, mashup, remix, ICT.

Introduction & Background
Academic librarians support the efforts of teaching and learning at our institutions. Media librarians select and acquire media that support and enhance an instructors’ mission to accomplish their goals. Though the use of moving images for pedagogy is not new, wading through the myriad of online moving image websites is a daunting task. This paper will explore how and why one altruistic institution and a hard working media librarian produced a shareable global open resource of a moving image/hypermedia hub. By harnessing online media resources for my teaching faculty, they do not have to rely on physical moving images formats as much. I did so to digitally support my college’s pedagogical needs for the many of face-to-face, blended/hybrid, and online classes my college offers.

When I first came to my community college of over twenty-three thousand students (as diverse as Manhattan is known for) as their media librarian over eight years ago, they had a collection mainly of VHS cassette tapes and a handful of DVDs. Our DVD collection has grown quite a bit but to gain access to the actual media, faculty and students alike need to fill out forms. Then they had to wait until a human looked at their form, have that or another human contact them to pick it up, they needed to come in again to pick it up, present their appropriate ID, then have their title for a stipulated amount of time. At that point in our college's history, very few of our college’s classrooms had a computer with an overhead projector to show their video. Therefore, faculty also had to arrange for the use of an audio/visual (A/V) cart, from a different department so their students could watch the video in their classroom. Afterwards, the instructors had to return both the media and its player to their respective departments. If they handed either back in late, fines were involved.

On the library side, the human component (aka: the library staff) had to keep good records of the media collections’ comings and goings to ensure its integrity. This entire process invited human error. Mistakes were made on all sides of the library/media triangle (faculty, library, and A/V) and our library was not alone in this drawn out scenario. Michael Miller of the University of Texas at San Antonio summed it
up well, “film and other forms of media were difficult to exploit”… “the employment of media resources in
college courses was frequently costly … and certainly burdensome and time-consuming” (2009). It was
cumbersome for us but not nearly as much as it was for the teaching faculty and the students. Then the
digital age came.

The Digital Age

Moving images as a teaching tool in the digital age came in two distinct parts—and each had its
drawbacks. The first part of the digital wave was when YouTube hit its stride in 2007. YouTube’s main
drawback was that instructors found their pre-video advertisements objectionable. TeacherTube and
similar sites at that time were not adequate for post-secondary teaching. So our faculty begrudgingly
continued to request DVDs. Thankfully our college had an electronic reserve (e-res) system where we
could upload a VHS or DVD title to our server and make each accessible from the library’s homepage
using separate passwords. This was somewhat of a ‘backdoor’ to digital moving images. Once uploaded,
students could watch it either on or off campus. The drawback to e-res was there was still a human
aspect of getting the title, making an appointment for its upload, and hoping there would be no glitches in
the uploading to or accessing from the e-res system.

The other part of the digital wave was when the database companies started offering purely video
databases. Three and half years ago my college first subscribed to its first moving image database, Films-
On-Demand at steep yearly rates. Though the faculty always wanted something like this, the titles and
subjects covered then were limited. Also, back then, this database was not as ‘friendly’ as it is now. It was
tricky to access and use both on and off campus and its statistics reflected this. We currently subscribe
to seven (still costly) video databases from Films-on -Demand and Alexander Street. These companies offer
wonderful titles on a variety subjects and topics in their databases. However, our statistics show that they
are still infrequently used; making their return-on-investment (ROI) not so good. Besides their great
expense, another drawback to these pure video databases is if we stopped subscribing to them, we have
nothing to show for it. We would have no additional DVDs or other saved formats of their film titles in our
collection. Our faculty wanted and needed something online; what they wanted and needed was
something digital. They wanted something downloadable/savable, accessible without a password, and
flexible to use and share.

The online moving image hub grew organically from a rather personal professional angle. By
2009/2010, through desperation and frustration, my college’s instructors started asking one by one if I
could recommend any online “non-YouTube” moving image internet site(s) for their subjects (mainly in the
social sciences). The fact that they asked meant either they could not find something good or they did not
have the time to look. This concurs with Miller’s claim that, “course-relevant video materials …are not
altogether simple to locate on the Internet (2009, p. 399). So I started looking, and the more I looked, the
more I found. I began bookmarking them until in no time, I had hundreds. I realized that instead of
emailing my latest finds of open internet media resources to the growing number of teaching faculty
asking for them, I should centralize the fruits of my research labors. This is when this media hub project
began in earnest.

The Platform

This second phase, researching for a platform, became the cornerstone the online media hub
project. I made a list of what I wanted both for myself and the future users of this media hub. Among my
requirements were that it should not require any sign-ins, user names, and passwords. This requirement,
as it turned out, made the resulting hypermedia hub a global resource or an open education resource
(OER). I needed a platform that I could manage from any computer and that has good technical support. I
also wanted a platform that would be easy for someone else to inherit should that become necessary.
Ease of use was another key factor of platform choice. Though I know how get around a computer just
fine-- I wanted a platform that did not require a steep learning curve. Not that I could not learn but my
other library duties and research responsibilities drove me to prioritize this factor into my decision. The
platform should be intuitive and not cost an arm and a leg. One other requirement was I did not want to
use something untried, untested, unproven or from a new digital blip-dot-com that could fold in few
months. My chief librarian’s main concern was the bottom line, its cost.

One platform stood out from all the rest. As a librarian, I was familiar with SpringShares’ content
management system (CMS), LibGuides. I found this platform ticked all my requirements boxes. My chair
was (and to be honest, still is) not a fan of LibGuides. He sees it as a wiki- platform that anybody may
participate in and anybody may change its content. We have agreed to disagree on this. Nevertheless,
the list of LibGuides’ users worldwide is very impressive [MIT, Oxford University, Abu Dhabi University,
City University of Hong Kong, Oulu University, to name just a few], it is inexpensive, one may sign in from any computer to manage your work, it has a fantastic support system, and you do not have to be a computer uber-geek to use it. In 2011, I applied for and received a grant from my university to investigate and assess an annotated webliography of moving image websites using LibGuides. When applying for this grant, I wrote of the need to accommodate different learning and teaching styles in the digital age and how online moving image websites may aid in this. I also wrote of the growth of distance and e-learning in higher education.

**Education Formats & the Digital Age: F2F, Blended/Hybrid, & e-Learning & ICTS & OERs**

During the time I amassed the hundreds of internet moving image websites, teaching and learning also moved into the digital age. The Vice President of Pearson Learning Solutions, Todd Hitchcock, said "learning is no longer limited to four walls—learning can happen anywhere … The growth of online learning underscores [the] need for quality, flexible education programs that meet the demands of our 21st century workforce" (2013). Whether they are traditional face-to-face, continuing education, hybrid, distance, e-learning, flipped, or blended classes— at some time they will all use or need information and communication technologies (ICTs) or open education resources (OERs).

Due in part to increasing popularity of online classes or e-learning, a collective consciousness gained momentum around 2009 regarding OERs. According to ()pen C()ntent.org OERs should be Reusable (freely usable), Redistributed (shareable), Revisable (adaptable), and Remixable (mash-able) for cultural, linguistic, technological, or other needs (Wiley, 2009). These OER ‘rights’ are also known as the 4Rs framework. In 2010, the United Nations Education, Scientific, and Cultural Organization (UNESCO) assistant director-general for education, Qian Tang, said that it is only natural that OERs were developing first at the higher education level. He said it was because “higher education plays a strategic role in anticipating change, stimulating innovation and driving human development, through both its teaching and research functions” (Tang, 2010). In 2012 UNESCO codified OERs as “[t]eaching, learning and research materials … that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.” This is part of the 2012 Paris UNESCO OER Declaration. This declaration allows educators to create educational content and make it freely available to learners throughout the world.

Interestingly, the 2012 stipulations of the UNESCO OER Declaration mirror the requirements I wanted for my college’s hypermedia hub. I was just trying to fill a void in my colleges’ pedagogical needs. In A UNESCO book on OERs, Jan Hylén said that one of the reasons individuals and institutions engage in OER projects is for altruism: that sharing knowledge keeps with the academic tradition. He also pointed out a karmic motive -- ‘that which you give, you receive back improved’ (2009, p.138). Building on this, Professor de Langen explains that there are also some slightly selfish reasons why individuals’ create an OER for non-monetary gain: reputation and academic interests. (See Fig. 1).

<table>
<thead>
<tr>
<th>Governments</th>
<th>Users</th>
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<tbody>
<tr>
<td>a. Sectoral arguments</td>
<td>a. Institutionalised user, educators/institutions, using the open educational resources in their own teachings</td>
</tr>
<tr>
<td>b. National arguments</td>
<td>b. Students and self-learners, who want to further their knowledge</td>
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<tr>
<th>Organizations</th>
<th>Individuals</th>
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<tr>
<td>a. The public good motive</td>
<td>a. Altruistic reasons</td>
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<td>b. The efficiency motive</td>
<td>b. Non-monetary gain</td>
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<td>c. The marketing motive</td>
<td>c. Commercial reasons</td>
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<td>d. Arguments of usefulness or costs</td>
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*Fig. 1: From: “Strategies for Sustainable Business Models for Open Educational Resources” by F.H.T de Langen (2013)*
I must admit that when I was researching, planning, finding funding, and finally implementing my media hub, I did not realize that I created a ‘classic’ OER.

**Media & Education**

In ten-years of tracking online learning in the United States, the Sloan Consortium found that the number of students taking at least one online course surpassed 6.7 million (Allen & Seaman, 2012). It follows that online learning and its necessary support components will grow in parallel to each other. In their chapter in *Advancing Knowledge and the Knowledge Economy*, Larsen and Vincent-Lancrin said that ICTs would be a “very powerful tool for diffusing knowledge and information. [They would be] a fundamental aspect of the education process… [and] they can play a pedagogic role that could in principle complement (or even compete with) the traditional practices of the education sector” (2005, p. 151). A 2012 whitepaper on e-learning, identified the five strategic shifts in the next generation of e-learning: active vs. passive learning; linear vs. non-linear (following predetermined syllabi or giving multiple paths to learning); increased social learning (collaborating and sharing knowledge informally with social networking); informal learning with spontaneous unstructured interactions in on-demand contexts; and mobile learning or ‘m-learning’ (Benchmark Learning). Instructors, no matter the education format, want their students to retain what they are taught. The debate between active and passive learning figures very much in how much media is used in all types of learning in education.

In an article on teaching online, Irma Sandercock depicted active versus passive learning with a triangle. The tip of her learning pyramid is where passive learning lies, where people only retain ten percent of what they read and twenty percent of what they hear. At the base lies active learning –defined as those that “do,” analyze, define, create, and evaluate, retain over ninety percent (2013). Extrapolating from her data, the use of videos in a class is in between active and passive learning, where people retain over fifty percent what they see and hear. This agrees with Michael Miller, a sociologist, who said that by “generating vivid and complex mental imagery,” multimedia can “markedly augment learning content” (2009). How our brains work when moving images are used tells why this is. However, Emily Moore cautions that there is a big difference between watching a video and learning something from it. Summarizing several documented scientific studies on core intelligences (verbal/linguistic, visual/spatial, musical/rhythmic, and emotional), Professor Emeritus of Biostatistics and Measurement at Johns Hopkins, Ronald Berk weighs in on this,

> When you watch a movie or TV program, superficial and even deep feelings and emotions are elicited, such as excitement, anger, laughter, relaxation, love, whimsy, or even boredom. These emotions are often triggered or heightened by the mood created by specific visual scenes, the actors, and/or the background music. A video can have a strong effect on your mind and senses. It is so powerful that you may download it off the Internet or order the DVD from Amazon along with the CD soundtrack so you can relive the entire experience over and over again. (2009, p. 2)

*Berk says* that watching video clips engages both of your brain’s hemispheres. The left hemisphere processes the dialogue, plot, rhythm, and lyrics, while the right hemisphere processes the visual images and auditory relationships (2009, p. 3). Put simply, moving images helps your retention and memory by engaging the whole of your brain.

Imagine you are a medical student reading about the basic medical procedures of phlebotomy. How different it would be trying to do it from written descriptions from a textbook versus viewing videos of phlebotomists in different blood drawing situations? Which medical student would have a sense of what to do in any situation? Many students find Shakespeare difficult to understand when they read his plays. This ‘perplexedness’ evaporates when they see a live or taped production. His words and meaning literally come alive. These experiential situations offer visual portrayals of concepts not always easy to grasp from a lecture or a reading. Shouldn’t then a student’s library offer a variety of visual tools available anytime, anywhere?

**Libraries in the Digital Age Go Surfing**

The American Library Association (ALA) recognizes that today’s society is a very visual one as compared to years ago. So much so that they asked the image resources group of the Association of Colleges and Research Libraries (ACRL, a division of the ALA) to itemize competency standards for visual literacy for higher education because “visual imagery is no longer supplemental to other forms of information” (Hattwig et al, 2011). One of these standards is how to find and access needed visual media
effectively and efficiently. Knowing that libraries need to serve a wide range of learners, the ALA also offers webinars on YouTube as a research and instruction tool (Cvetkovic & Anderson, 2011). All this tells librarians that open online media are or should be part of their domain.

In 2014, the Rutgers University media librarian wrote of how little is written in the literature on how faculty find moving image resources and what role the library plays. She found that most of the instructors surveyed use media six or more times per academic year in all their classes and that they require additional moving image titles as assignments (Otto, 2014). What made Otto’s paper interesting for this author was that it echoed one reason for the creation of my online media resource hub. Otto found that most of her faculty, still use the DVD physical media format out of necessity but want their media from digital sources (2014, p.127).

My community college will offer fifty-six online classes and an additional twenty-six hybrid ones besides the hundreds of ‘regular’ classes in the 2014 fall semester. As mentioned before, I created the moving image hub for my college’s faculty who want more than what the traditional librarian/gatekeeper offer in the way of videos. Steven J. Bell, the former ACRL president, says that librarians are no longer “gatekeepers.” He wrote about a talk he attended by Seth Godin (an author and entrepreneur) who appealed to the assembled academic librarians to become “gate openers.” Bell developed Godin’s entretry, explaining that as gate-openers, we, librarians, need to “deliver the resources they need for their learning, their research, their lifestyle, and their well-being” (Bell, 2012). I feel that my open hypermedia hub is even more necessary now that e-learning, hybrid courses, and distance learning are thriving in post-secondary education.

We know that videos will be used in all class types that our institutions offer. We also know that instructors will integrate them into their lessons to foster active learning and retention. It is up to the media librarians to make sure faculty have the titles and the delivery systems for their needs. Faculty no longer want the bureaucratic, human intense, requesting, picking up & returning of a physical piece of media. However, these alternative digital formats do not always keep good statistics of who is using which source and how it benefits their teaching goals. This makes justifying their existence challenging. The business of education requires assessments for its expenditures, therefore streaming databases, ICTs, and OERs need to have a good return on investment.

ROI / SROI

The methods for calculating Return-of-Investment (ROI) is rather complicated, but there are algorithms and formulas for it. According to the 2012 BenchMark whitepaper on e-learning, it is hard to assign traditional metrics of assessment if any particular ICT or OER improved learning outcomes, test scores, or if any part of it made an instructor ‘better.’ They do confess, however, “it is possible to make several observations that point either directly or indirectly to the ROI [institutions] can expect to achieve using next-generation e-Learning tools” (Benchmark Learning, 2012, p. 25). From ROI evolved another facet to figure out if a resource has any redeeming social qualities. Social Return on Investment (SROI) as defined by the London Business School is “a quantitative measurement of how effectively an organisation uses its capital and other resources to generate value for society.” Giving hard numbers for the SROI on something like the impact of use online resources for all learning types (F2F, blended, hybrid, online) is at best nebulous. A Dutch organization that tracks philanthropy describes SROI as a “particular language for communicating social economic and environmental value …it is a measurement and communication of non-financial values” (Scholten et al, 2006). They stress that SROI results have meaning in a comparative context and that their numbers are to support discussions around an enterprise’s impact or strategy (Scholten et al, p. 56). Though the core feature of SROI is its analysis of the social impact of a given expenditure, currently there are no standardized ways of reporting on its social value creation (Bosheim, 2012).

At the 78th Annual IFLA World Library and Information Congress in 2012, I presented the preliminary results of the usage statistics of the Moving Image/Hypermedia Hub versus the use of my college library’s two subscription streaming film databases. Given that SROI is a relative measurement tool and its indicators are flexible (Bosheim, 2012), I demonstrated the simplified SROI ratio of each resource over a four-month period by comparing the monies spent versus the number of views/sessions along with their accessibility attributes. (See Fig. 2).
The updated usage metrics of the same open internet media hub versus the now seven film databases at my college and their respective access sessions reveal lower SROI ratios for both than my initial study in 2012. Though prices came down a bit on film database subscriptions, they are still dear at nearly thirty thousand US dollars per annum. For that amount, we have fewer titles but in more disciplines from which faculty and students may choose. Yet the streaming video databases usage rates are still low. The cost of SpringShares’ LibGuides increased marginally and was also accessed less just like the subscription databases. (See fig.3). One may speculate that those needing media found either alternative sources online (after bookmarking from the media hub?) or from personal streaming subscriptions like NetFlix or HULU. Though it should be noted that the media hub’s SROI was still higher than that of the costly subscription databases. One factor, not in the SROI calculations of the media hub was the cost of the librarian’s time, which to be honest, was more a labor of love.

SUSTAINABILITY & CONCLUSIONS:

A good idea and a good resource is only as good as it can be sustained. Once past the development and pilot stages any project or resource to needs to have sustainable funding, continued technical maintenance, and of course, its contents should be updated on a regular basis. This in turn, means personnel, their compensation, perhaps collaboration with others for sources, co-production and sharing, and a model for management and control.

The proverb “there is no such thing such as a free lunch” applies also to open educational resources (OER). de Langen says that “sustainability should be about supporting the openness of educational resources, not about pushing it into a peripheral role” (2012). Being an librarian, and not an administrator, my viewpoint will differ from those who decide on budgetary items. I know that traditionally there are many funding sources and models in educational institutions. Some are private while others are public (such as city state, and federal) especially in a public university such as mine. The existence of the open internet media hub has three possible outcomes. One would be to have my library continue its platform’s cost. Another would be to let it ‘die a natural death.’ I came up with third option, a contingency plan to sustain the open internet media resource hub should it not become a permanent line in the library’s budget: let it be adopted. Like any desperate mother who cannot keep her child fed and cared for, I looked for another potential home for my ‘baby.’ Should my institution no longer support the platform, SpringShares’ LibGuides in their budget, there are a couple of senior sister colleges who use LibGuides within my university that expressed an interest in adopting and caring the media hub. They

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<thead>
<tr>
<th>Type of Media</th>
<th># of Titles Available</th>
<th>Cost</th>
<th>Ease of Access</th>
<th>SROI Ratio (simplified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Film Databases</td>
<td>25,753 titles</td>
<td>$4,348 (USD)</td>
<td>PW Protected off campus</td>
<td>18.60%</td>
</tr>
<tr>
<td>Moving Image Website Hub &amp; LibGuides®</td>
<td>Too many titles to count!</td>
<td>$1,200 (USD)</td>
<td>Available from any device with Web Access … ANYTIME, ANYWHERE</td>
<td>99.17%</td>
</tr>
<tr>
<td>Open Media Websites Hub &amp; LibGuides®</td>
<td>Too many titles to count!</td>
<td>$2,098 (USD)</td>
<td>Available from any device with Web Access … Anytime/Anywhere</td>
<td>13.06%</td>
</tr>
</tbody>
</table>

Fig. 2: From D. Coiffe 2012 IFLA Presentation, “Moving Image Websites & LibGuides: A Good Marriage.”

Fig. 3: Updated statistics from 2014 of the same open internet media hub and the seven current subscription databases.
have agreed to this because they see the value in having an open hub of online media websites available to all who find it. Their altruism may allow me to at least keep it in the ‘family.’

The digital age of media is here to stay. Its use is ubiquitous in education. Instructors use media in their classess to break up their class session to maximize interest, as a lesson guide or to flip their class, as a springboard for in-depth discussions and critical thinking, and/or to strengthen conceptual understanding (Hopkins, 2013). They want to use digital media. Institutions and libraries need to keep supplying the demand, but we need not do this alone. Should librarians get together and offer OERs in their specialties, we can have supported learning anywhere on our planet. As educators and gate openers, librarians will continue their noble charge supporting teaching and learning in, continuing education, traditional face-to-face, hybrid, distance, e-learning, flipped, and blended classes. Harnessing librarians' talents and knowledge resources will always be good SROI.

References


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