"OPEN CONTENT AND PUBLIC BROADCASTING"

The Charles Hotel, Cambridge, MA

EXECUTIVE SUMMARY

On September 19-21, 2006, the WGBH Educational Foundation hosted a conference on "Open Content and Public Broadcasting." With an initial grant from the William and Flora Hewlett Foundation and additional funding from the Corporation for Public Broadcasting, WGBH proposed the conference as a way to explore public broadcasting issues related to producing and distributing open access content across multiple platforms.

The conference grew out of the recognition that public broadcasting executives were interested in the Open Content movement, but were struggling to understand how it might both further public broadcasting's public service mission and support efforts to pursue strategic business models and sustainable solutions. The Open Content conference was designed to bring together key stakeholders in the public broadcasting system, academics who promoted Open Content in higher education, industry leaders in new media and technology, experts in intellectual property rights, and leaders in philanthropy. Together they examined existing models and efforts that might guide public broadcasting's entry into Open Content, possible barriers to adoption of Open Content models in public broadcasting, and opportunities to pursue.

This report looks at the events of the conference and the key points discussed. It summarizes the group's conclusions and presents recommendations from the WGBH planners.

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Funding for this conference was provided by The William and Flora Hewlett Foundation and The Corporation for Public Broadcasting





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BACKGROUND TO THE CONFERENCE

The goals of the Open Content conference were to:

- build awareness about open access opportunities and barriers for public broadcasting
- promote open and engaged discourse on issues of content sharing and re-use
- provide direct interactions between public broadcasting executives and industry experts
- identify areas of possible consensus and collaboration, as well as possible action steps
- engage potential funders to support movement towards Open Content in public broadcasting

Over a period of six months, a WGBH team designed the conference. The team consisted of Judith Vecchione, Executive Producer in WGBH's National Productions department and the conference producer; Sue Kantrowitz, Vice President and General Counsel; Annie Valva, Director of Research and Business Development at WGBH Interactive; Meredith Nierman, Assistant Program Manager for National Productions; and Jessica Cashdan, Director of New Initiatives in Foundation Development.

They examined past conferences, planned the panel topics, researched and discussed the most promising and most troubling issues for public broadcasters, and spoke with dozens of experts as they formulated the three-day conference.

Day One of the conference defined "Open Content" within the context of public broadcasting, examined its potential importance to public broadcasting, and included a keynote from BBC Creative Archive director Paul Gerhardt.

Day Two featured a series of panels on the intersection of Open Content and public broadcasting in four key areas: editorial content, implementation options, legal obstacles and remedies, and sustainable business models. The panelists compared the use of Open Content in formal, informal, and commercial settings, and the implications for policies and practice.

Day Three closed the conference with a panel that discussed potential models for Open Content in public broadcasting and a plenary session on next steps.

KEY FINDINGS

1. The broadcasters were very interested in the whole field of *digital access*, focusing closely on the examples that were presented, including Open Education Resources, presented by Marshall Smith and Ann Margulies; BBC Creative Archive, presented by Paul Gerhardt; Internet Archives, presented by Rick Prelinger; Radio Open Source, presented by Mary McGrath; PRX, presented by Jake Shapiro; and WGBH Lab Sandbox, presented by Jon Abbott.

Paul Gerhardt, Project Director of BBC Creative Archive, framed the issues raised by these examples in his keynote address.

Our message to all content owners, including all the rights owners in our programs, is uncompromising. We're saying that the greatest danger today to their property is not piracy. It's obscurity. It's being locked up. (Paul Gerhardt, BBC)

2. The group agreed that public broadcasting's *mission* is well aligned with the values of Open Content as a way to make knowledge "available throughout the world in a way that it hasn't been in the past" (Marshall Smith, Hewlett). Participants referred to public broadcasting's focus on "lifelong learning and qualities of craft" (Maria Thomas, NPR), and Paul Gerhardt discussed "public value" as another core concept for public broadcasting, in the U.S. and the U.K.

In simple terms, for us, this means: How can we provide more social and individual value to each member of the public in return for their payment of our licensing? We believe that access to our television and radio archives, which contain nearly one million program items can support a number of objectives, including stimulating creativity in our audience. It would also promote education training, a more sustained citizenship, and civil society. (Paul Gerhardt, BBC)

There were concerns expressed, however, that we needed to be clear what "free" and "open" access meant – as Dennis Haarsager (Washington State University) pointed out, there's "free as in free beer" and "free as in free speech." And, as James Boyle (Duke University) pointed out, it's not easy to envision a smooth transition to a full Open Content model for public broadcasting: the system's past experiences and cognitive biases don't push it towards openness, and there are substantial real-world obstacles, such as copyright laws, that are problematic.

3. The issue of how Open Content might impact the *trust* that is essential between journalists and sources was debated in the Editorial session:

In the long run, perhaps not immediately, I think if Open Content is applied to interviewees in controversial and sensitive situations, many would simply say no, not only to the use of their material for that purpose, but to the whole interview. And in the end, there could be less powerful content, or no content at all. We ask those who we film to trust us. We can keep this trust only if we take care of the materials that we produce. We take reasonable precautions to see that they're not misused or abused. So, I implore you to think hard about practical effects of embracing Open Content as a mantra to be applied to all content. (Louis Wiley, WGBH)

I'm not minimizing that your sources are going to get queasy at times... And maybe people, individuals, certainly most will not create stuff that's anywhere near the quality of what you do... But they're going to do things that make them more media literate, that they learn more from than others may learn from, themselves, and they will create things that we don't expect. And to me, the ceding of control to others for the uses that we don't anticipate are where we get the really interesting stuff. (Dan Gillmor, Center for Citizen Media)

Both these panelists agreed that there were cases in which full Open Content – allowing viewers to download, edit, and re-distribute materials – might have ethical or practical problems. An example was the deeply personal interview with the mother in Frontline's "The Taking of Logan Marr." On the other hand, some of the panelists felt that any materials of public figures should be fully open.

4. The role of *member stations* was repeatedly raised, as participants considered the ways in which Open Content would re-shape community relations in the member-based public broadcasting system. While some argued that stations will remain highly relevant in an Open Content environment, others suggested that the universality of the Web might mean that technically there wouldn't be a local role for stations.

Just because technology allows you to bypass local sources, that doesn't mean that's what people will want to do. Would they prefer to interact in a geographically-defined area? On Netflix you can find out what's most popular in the world. Maybe people would like to know what's most popular in their zip code. (John Boland, PBS)

A significant consideration for PBS is that it can't just be about producers and PBS engaging with end users. We must also facilitate the engagement of stations with their local communities and support their own media work. To that, we have been exploring how, in an Open Content world, PBS's backend system and tools for stations can be significantly expanded to provide a hub of aggregated access to Open Content, produced in relation to the properties PBS is distributing, and potentially other Open Content from within the system. This would allow all member stations to access a one-stop shop, to find Open Content assets that could be downloaded and used locally, and it would allow us some measure of aggregated tracking and usage of this Open Content. (Dave Johnston, PBS)

We've done some audience research, and public ownership is important and linked to local institutions. The term is customer care, and it needs to be built up at the local level. As stations are working through local strategies, they're working on their content role. Their privileged position is not going to be there for long (as sole distribution outlets) so curatorial and community partners are important. (Andrew Russell, CPB)

Paul Gerhardt mentioned this local/national issue as one that Creative Archive also saw as important. He discussed their regional initiative to place copies of BBC archivals in local libraries and communities, where citizens could have easiest access: "They can start to put their

memories, their photographs, their stories, and interleave them with content that's being collected by a public service broadcaster over many years."

5. Legal issues were a big concern for all of the participants, especially after the Legal session's presenters laid out the constraints that the law currently imposes. But as one speaker pointed out, these are issues that public broadcasting must get beyond because impediments like rights costs are irrelevant to audiences:

If I'm sitting in my living room, does it really matter how that content got to me, whether it came on my PDA, whether it came on cable, whether it came through satellite, whether it came through over-the-air broadcast? Does it matter? Why should it matter? And why should I pay separately for each one of those things, which is exactly what we now have to do? So, if I'm sitting in my living room, all I know at the end of the day is that I'm sitting in my living room watching television. It's only for my own personal consumption. I'm not selling it. I'm not engaging in any kind of commerce around that relationship with that content. (Sue Kantrowitz, WGBH)

Eric Saltzman (Creative Commons) framed it as a simple question: "What can you use, and is there a way to connect these people who are interested in using the work with people who had made it?" There was discussion of the Creative Commons licensing system, and how it might be good to develop a special Creative Commons license for public television's Open Content productions. Other suggestions for dealing with legal restrictions were a more robust assertion of Fair Use and efforts to change the restrictive laws by extending the public broadcasting exemption and compulsory licenses.

Leave the system as open as you can until your fear of openness positively screams, and then adjust downward to deal with particular dangers. Once you get the first problem, start ratcheting down. When Creative Commons was founded, we sat around, about four years ago, in a basement in Harvard having nightmares about the problems that Creative Commons would face. Almost all of the things we fantasized as dangers didn't come to pass. (James Boyle)

6. The discussion on *business models* was one of the most eagerly-awaited by public broadcasters, who felt they were already operating in a financially precarious universe. None of the panelists had complete business plans ready, but Jake Shapiro and Rick Prelinger offered their projects, PRX and Internet Archives, as models to consider:

"What we're doing here is using the free tier to promote the paid tier, and to some extent, the other way around as well, because when people see something in a paid context, they'll also search for it. " (Rick Prelinger)

Prelinger also urged public broadcasters to "Experiment! You can always go back if you have to," and Mitch Kapor of the Mozilla Foundation suggested that it might be possible even to look at commercial advertising as a revenue source, citing his foundation's funding model: "The Mozilla Foundation is an advertiser-supported medium, although people don't think of it that way, and when they do, they've generally found it non-objectionable." In the same panel,

however, Kapor suggested that public broadcasting might take a somewhat more cautious approach:

"You don't have to be a first mover. There's a lot of literature and innovation that suggests being a fast follower is as good or better than a first mover. There's a very high mortality rate to first movers. But fast followers who watch what's succeeding and pick up on it and build, typically for established institutions, do the best." (Mitch Kapor)

Partnerships and sustainability were discussed, with Peter Kaufman (Intelligent Television) urging the public broadcasters to "explore conversations, joint ventures, coproductions with other educational and cultural institutions that are grappling with the same challenges. Some of those institutions are experimenting in the same space and have significant funding." John Boland pointed out that there might be new opportunities for embedded underwriting credits in programs that are streamed, although not necessarily if they are also shared and edited.

I think it's really important to devise a strategy which carries all of the stakeholders in this process with you. Our experience has been that even the most trenchantly opposed commercial players in the marketplace can be won over. We were candid with them. We say, no, we didn't have all the answers to the concerns of rights holders. We didn't know what the impact on the market would be, but we wanted to find out, and we wanted to do it in partnership. (Paul Gerhardt)

7. With its limited resources, public broadcasting monitors its initiatives carefully, and the increasing disaggregation of audiences (broadcast, podcast, streaming, on demand, etc.) have made this more difficult. Jon Abbott identified the problem: "As we move into these new initiatives, how will we measure our success? Our *metrics* are all built on point-in-time metrics that show the reach for the event of the broadcast... How are we adequately valuing the new metrics, the sense of being interconnected as a public media resource over time, compared to the old metrics we had of how many people we reached at a moment in time?"

We have a legacy of measuring consumptions only. The new dimensions [for metrics] are, one, the degree to which we stimulate creative activity, and two, the amount we stimulate engagement or participation. (Andrew Russell)

We need to track everything we can think of (visitors, stories created by users, etc.) and have that data so when we understand what's accepted as success or impact we have the data. (John Boland)

This was another area in which participants suggested that partnering might be helpful. Anne Zeiser (WGBH) pointed out that the advertising and corporate worlds were deeply focused on social engagement at this time. She suggested that partnerships might mean that "others can carry some of the weight."

8. *Understanding online communities and technology* is critical to our ability to reach the new audiences that will come with Open Content initiatives.

Have the geeks in the room when you discuss the policy thing... Make stuff findable. (James Boyle)

We need to understand who is online and what are they doing there. We need to buy that data... Whatever we build has to have concrete plans to reach them, so they find us in Google and so our projects show up, like *Evolution*. (Lisa Cerqueira, WGBH)

NEXT STEPS

In the final sessions of the conference, participants agreed that public broadcasting had already entered the Open Content environment, defining Open Content as a continuum that extends from streaming programs (for Frontline and WGBH Teachers Domain, as examples), to soliciting viewer participation in content (at Radio Open Source), to offering archival materials to audiences to use and share (Internet Archive, Teachers Domain, WGBH Lab Sandbox), to other uses still to be discovered and implemented. The cumulative effect of these different initiatives is important.

We still have to remember, one of the roles in public media is that we have a megaphone. We still can create those events, whether it's looking at the stars or understanding Native American history, those galvanizing moments, that event that says, "Here's something you may not have known about or paid attention to. Come, have this first experience with it." (Curtis Wong, Microsoft)

The biggest challenge is that you actually go out there and make this content, and you make it completely wonderful and useful... Making these forms of digital content available, even when it's experimental, even when it's a Sandbox, or even when it's in the context of a limited Teacher's Domain right now at WGBH, I think that's an extremely important driver toward changing the law. (John Palfrey, Harvard University)

The group discussed a series of specific next steps that would be helpful. Some felt that *education-based and archive-based Open Content initiatives* would be the projects to start with; other suggested this would be only a small, first step.

It may be easiest to come in through the education door, take our first Open Content steps in education. The Internet doesn't need us, but people need quality, vetted materials, and we can provide this. So we should think about how to extend the compulsory license or however to reach to new platforms. (Andrew Russell)

If we could offer the public an archive from all the stations, that would be tremendous. Other initiatives are more for smaller audiences. This would be a national one. At the BBC they have decided to digitize a million hours. This is one of the most crucial things we could do. (Alison Smith, WGBH)

The main challenge, I think, for public broadcasting is to find ways to use its expertise, the enormous trust, and the fundraising capabilities to build on and provide platforms for peer production of public discourse, of education. Open Content understood as digitization and making available the existing content is part of that, but needs to be understood as part of, seeding that, as opposed to, "That's the project." Digitization of archives is important, expensive, hard, but transitional. The core problem is building platforms and the materials. (Yochai Benkler, Yale University)

There was a clear appetite for *new and broader efforts to institutionalize Open Content* through local and national public broadcasting projects.

In every gathering (like [PBS] Showcase or development conferences), we should have a portion of time dedicated to this and related topics. Also for stations, we should try to model some of these things, do initiatives as examples or case histories.... We need to think about what we can do for experiments and initiatives... There is content that is currently cleared, enough to get our feet wet. We need local initiatives also. Some of the large, "impossible dream" projects will take a long time, but to the extent we have the WGBH Lab or local initiatives in partnerships with libraries, museums, etc., there are possibilities to move more quickly. We will try to provide forums for these. (John Boland)

We have grants for digitization for 6-7,000 programs so now they're protected, but we have no way to use it. We would love to make them available for teachers, but don't have funding or mechanism to have teachers identify what content are or how applied. We would love to see wiki models so teachers could start to develop this, wade into the content. It's just been sitting there for 30 years. So, help in getting tools identified and deployed would be great. (Mike Clark, Kentucky ETV)

The combination of system support and high-level *leadership* was identified as critical.

How can we make it cool to use the public domain? How can we make it cool to use Open Content? (Rick Prelinger, Prelinger Archives)

I know you have enough things to do already, but I really wish we heard more from NPR, PBS, et cetera, in entering the copyright debate, not just to get exceptions or limitations that benefit public media, but in terms of dealing with the architecture more generally, because that's going to be the ecosystem in which you're embedded. Stuff is going to be washing in and washing out of your shows. It is to your advantage that both our copyright culture and our copyright laws be somewhat more rational. And a lot of it is the culture. It's the culture of fear. And what you need is someone to say, "Don't be ridiculous. Of course it's a Fair Use." (James Boyle)

I would plead for leadership somewhere, so not everyone has to try to do it on their own. And not get stuck in the mode of "that's the Newshour" and "that's NOVA," respecting those names as valuable but going beyond what we see them as, which is discrete Web sites and hours. National has the carrot and also the stick to herd the cats in this room -- and involve people who are not in this room. (Lee Banville, NewsHour)

I see Open Content as part of our larger audience engagement efforts, in education, content. I keep hearing tiers as the way to think about our work, understanding the relation between profession and amateur. The professional will distinguish us, it's nothing to move away from; but we also should find ways to bring in other voices. That's where funders and leadership at the national level will help us understand its broader application and risk. (Marita Rivero, WGBH)

We need to be the evangelists, and we need to get the system behind us, because there are people out there that are really doing interesting, creative work in the media. (Paula Kerger, PBS)

Finally, there were a series of cautions about moving too quickly, suggesting that *more discussions* would be needed to enable some parts of public broadcasting to embrace Open Content.

The case for public television has always been clear, it goes right to people's hearts. But I'm not sure we know what we bring to it that others don't. Wikipedia doesn't need us. Social democratization doesn't need public television. We need to ask this so we know why we have to do whatever it is. (Josh Nathan, WNET)

I would observe that things are moving quickly. When we first tried registration at WGBH Radio, people stopped listening. Now three years later we will try it again, because registration is standard. So I caution we may have to try this more than once. (Marita Rivero)

In nature, when you have one of these discontinuous changes that happen periodically, the native and dominant species in the "before" world ignore change at their own peril. And what seemed like some quantitative changes result in qualitative shifts.... So the dilemma for anyone who is an incumbent is, What do you do about this? And the problem is that the success factors, the very things that made one successful previously can now be the causes of failure... Some big implications: the biggest challenge is, overattachment to old method and mindset threaten survival. (Mitch Kapor)

Computation, storage, and communications capacity are the three elements in a network environment, the three physical capital elements necessary for a network environment. And every connected person -- somewhere between 600 million and a billion persons now -- has the access to the physical capital necessary to communicate, create, store, and exchange information, knowledge, and culture... What we're seeing today is decentralized social production emerging as an additional modality of information, knowledge, and cultural production alongside these others. And whenever you have a new model to a production, creating, it affects everything. It changes everyone's competitive environment. It changes the sort of opportunities. It changes what it is that people want and what they can do... The question I think that is important for PBS to think about is how non-profits do the same thing; how you adjust how you are, and what you do to plug into these materials. (Yochai Benkler)

CONCLUSIONS AND RECOMMENDATIONS

In today's rapidly shifting media environment, public broadcasting, like all of "traditional media," needs to look to the future. Public broadcasting has been a valued part of American culture and society for decades, and has many strengths to build on in this digital future. As Wikipedia's S. J. Klein said, "Public media possesses a powerful trade... If you look at 100 million people in the U.S. throwing stuff onto the Internet, there is a need for curation. They sometimes look for advice. People in this room represent the best skills in that, and you already have the respect of those communities."

The conference on "Open Content and Public Broadcasting" successfully drew together a large and diverse group to explore open access models for public broadcasting production and distribution. In pre-conference background materials and in lively discussions over three days, the group examined the unique barriers that public broadcasting faces in an Open Content environment and offered ideas for overcoming those obstacles.

The WGBH conference planners believe the conference built awareness and knowledge about Open Content among the public broadcasting leadership, and encouraged the development of new initiatives that will move the public broadcasting system towards significant Open Content projects. We offer the following three recommendations for next steps in creating Open Content services in public broadcasting.

- 1. Public broadcasting should encourage further discussions within the system about Open Content. To this end, WGBH is uploading audio from the September conference to the WGBH Forum Network site (www.forum-network.org/wgbh/forum.php?lecture_id=301), where it will be available to all Web users. We will share this conference report widely with colleagues at other stations and public broadcasting entities, and solicit responses that will help uncover the needs and concerns of all. Top leaders at PBS and CPB spoke at the conference about including Open Content in upcoming system gatherings, which would also encourage discourse.
- 2. Public broadcasting should develop and support pilot initiatives and experiments in Open Content and social media. School-based projects may be the easiest to focus on and are important to public broadcasting's mission; public broadcasting is proud to be a critical resource for teachers and will continue its efforts to serve them. But public broadcasting's educational mission also encompasses "lifelong learning," and we recommend that some of our pilot projects go beyond the classroom to offer creative and educational opportunities to the broader public. Some initial projects have been started (Radio Open Source, WGBH Lab Sandbox), but there is a need for further experimentation, with clear metrics, to establish successful models.
- 3. Viable economic models, for both the short- and long-term, will be critical. During the first period of pilots and experimentation, *public broadcasting should look to partner with foundations and others engaged in Open Content for initial support and to develop sustainable models for the future*. Participants at the conference noted that foundation support had been critical to the development of Open Content in education venues, and we recommend looking for similar partnerships for public broadcasting's efforts.

APPENDIX A: AGENDA FOR CONFERENCE

"Open Content and Public Broadcasting"

September 19-21, 2006 The Charles Hotel, Cambridge.

Tuesday, September 19

- 2:30 Conference Registration
- 3:00 **Welcome** from Henry Becton, President, WGBH; and Marshall Smith, The William and Flora Hewlett Foundation

Session 1. What is Open Content and Why Does It Matter to Public Broadcasting? The range of definitions of Open Content; exploration of Open Content practice today in America, including pilots projects by various public broadcasters; why Open Content matters to American broadcasting, and why it is difficult to figure out what Open Content can be; how Open Content speaks to public broadcasting's core mission and possible futures

Panel – Dennis Haarsager, Washington State University Public Broadcasting; James Boyle, Duke University

7:30 **Dinner**

Introduction – Paula Kerger, President, PBS *Keynote* – Paul Gerhardt, BBC Creative Archive

Wednesday, September 20

9:00 **Session 2. Editorial Issues - Content and Control:** defining the opportunities and risks from the producer's perspective, looking at special opportunities for educators (informal and formal), assessing new genres and formats for Open Content and the changing role of producers

Panel – Dan Gillmor, Center for Citizen Media; Mary McGrath, Radio Open Source; Louis Wiley, WGBH Frontline. Anne Margulies, MIT OpenCourseware

10:45 Session 3. Editorial Issues - Implementation: how Open Content production affects workflow and production, asset management, production efficiencies; evolutionary connections between traditional and Open Content production models Panel – Dave Johnston, PBS Interactive; Annie Valva, WGBH Interactive. Andy Carvin, NPR Digital Media

12:30 *Lunch*

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- 1:30 Session 4. The Legal Framework for Open Content Usage of Public Broadcasting Products: examination of existing issues and liabilities affecting the extension of public broadcasting works into Open Content, including third-party rights, back clearances for existing productions, future clearance models; discussion of efforts that are most promising to change these limits; additional issues such as privacy, age-appropriate access, copyright, etc.
 - Panel Sue Kantrowitz, WGBH Vice President/Legal Counsel; John Palfrey, Harvard Berkman Center; Eric Saltzman, Creative Commons
- 3:15 **Session 5. Business Models for the Future:** revenue models, including start-up costs, costs for incremental entry into Open Content, and special models for educator usages; risk analysis, including security and sustainability; creative partnerships for Open Content
 - Panel Jake Shapiro, PRX; Rick Prelinger, Internet Archives; Mitch Kapor, Mozilla Foundation

Thursday, September 21

- 9:00 **Session 6. Open Content Models for Public Broadcasting:** a summary of Wednesday's working sessions, identifying areas that public broadcasters think are most promising, areas of consensus and disagreement, best practices, guidelines and special considerations *Panel* Yochai Benkler, Yale University; Curtis Wong, Microsoft; Jon Abbott, WGBH Vice President/Chief Operating Officer
- 10:45 Session 7. Next Steps: concrete agenda items to move public broadcasting forward in the Open Content environment
 - Panel John Boland, Chief Content Officer, PBS; Andrew Russell, Vice President for Technology, CPB

APPENDIX B: LIST OF PARTICIPANTS

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Allan Pizzato

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Christopher Pullman

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Meredith Reece

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Marita Rivero

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Senior Vice President, Media Strategies, CPB

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Senior Manager, Media Strategies, CPB

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Creative Commons

Mark Samels

Executive Producer, American Experience, WGBH Boston

Jake Shapiro

Executive Director, PRX (Public Radio Exchange)

Alison Smith

Associate Director, Research and Stock Sales, WGBH Media Library, WGBH Boston

Marshall Smith

Education Program Director, The William and Flora Hewlett Foundation

Stephanie Stewart

Senior Producer, Boston Media Productions, WGBH Boston

Brigid Sullivan

Vice President for Children's Educational, and Interactive Programming, Media Access, WGBH Boston

Dan Thomas

Chief Operating Officer, TPT, Twin Cities Public Television

Maria Thomas

Vice President and General Manager, NPR Digital Media

Sharon Tiller

Senior Producer, Frontline, Series Executive Director, Frontline/World, WGBH Boston and KQED, San Francisco

Joseph Tovares

Executive Producer, La Plaza, WGBH, Boston

Devon Elyse Tutak

Research/Member Services Associate, Association of Public Television Stations

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Director, Research and Business Development, WGBH Interactive, WGBH Boston

Judith Vecchione

Executive Producer, National Productions, WGBH Boston

Benjamen Walker

Independent Producer, WGBH, NPR

Laura Walker

President and CEO, WNYC New York

Phoenix Wang

Education Program Officer, The William and Flora Hewlett Foundation

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Executive Editor, Frontline, WGBH Boston

Darleen Wilson

Director of Content for Integrated Media, WGBH Boston

Curtis Wong

Principal Researcher and Group Manager, Microsoft Next Media Research

Anne Zeiser

Director, National Strategic Marketing Communications, WGBH Boston

APPENDIX C: LIST OF MATERIALS PROVIDED IN ADVANCE TO CONFERENCE PARTICIPANTS

1. GLOSSARY

Except where indicated, all definitions derive from Wikipedia. Terms were edited for brevity and simplicity; this glossary is only meant for quick reference during the conference.

astroturfing

formal public relations campaigns which try to create the impression of being a spontaneous, grassroots behavior. The name comes from the artificial grass ("AstroTurf") and is a metaphor to indicate "fake grassroots," or "fake environmentalism." Astroturfing is used to disguise a political client's agenda or to orchestrate the actions of apparently diverse and geographically distributed individuals.

BitTorrent

a method of transferring files, primarily through peer-to-peer file distribution. It is designed to distribute large amounts of data widely without huge increases in costly server and bandwidth resources. Some sources claim that BitTorrent accounts for 35% of all traffic on the Internet. BitTorrent programs can prepare and transmit text, audio, video, encrypted content, and all other types of digital information. See **peer-to-peer.**

Blog, weblog, video blog, vlog

an online diary or personal log of thoughts published on a Web page. A typical blog is updated regularly and combines text, images, and links to other bogs and Web pages. Blogs are usually not reviewed or edited by outside writers, review boards, or subject to other kinds of journalistic oversight.

broadband

a transmission network with a bandwidth exceeding that of the telephone network. This includes line systems with a transmission rate of at least 1 MHz where the transmission may also occur via satellite, coaxial cable or fiber-optic cable.

compulsory license

license to use a patent, copyright or other exclusive right that the government forces the holder to grant to others.

Creative Archive

Set up by the BBC, the British Film Institute, Channel 4 and the Open University, the Creative Archive Licence Group makes their archive content (moving images, audio and stills) available for downloading under a single, shared-user license. Fully accessible only in the U.K, Creative Archive invites visitors to "share, watch, listen and re-use this content as a fuel for your own creative endeavours."

Creative Commons

A non-profit organization devoted to expanding the range of creative work available for others

legally to build upon and share. The intention is to avoid the problems that current copyright laws create for the sharing of information. The project provides several free licenses that copyright holders can use when releasing their works on the Web.

Digital Rights Management, DRM

any of several technologies used by publishers to control access to and usage of digital data (such as software, music, movies) and hardware. The term is often confused with copy protection and technical protection measures. These two terms refer to technologies that control or restrict the use of digital media content on electronic devices with such technologies installed, acting as components of a DRM design.

digitize/encode

the process of turning an analog signal into a digital representation of that signal; the scanning of analog sources, such as printed photos and taped video into computers for editing. Digitizing is the primary way of storing images in a form suitable for transmission and computer processing. The term is sometimes used to refer to importing footage into a computer via a cable. Technically, the footage is already digital so it is not being digitized but rather **encoded** into whatever format the software uses.

disintermediation

the removal of intermediaries in a supply chain: "cutting out the middle man." Instead of going through traditional distribution channels with some type of intermediary (a distributor, wholesaler, broker, or agent), companies deal with every customer directly, for example via the Internet. Disintermediation can also be initiated by consumers, who bypass the middlemen in order to buy directly from the manufacturer and so pay less.

download / upload / post

related terms used to describe the transfer of electronic data between two computers or similar systems. To *download* is to receive data from a remote system, such as a Web site, server, or other similar systems. To *upload* is to send data from a local system to a remote system. Downloading is often used to mean the massive retrieval of music, DVD movies, software, and more. By extension, an *upload* is any file that has been uploaded, particularly if it is awaiting the recipient's attention; a *download* is any file that is offered for downloading or that has been downloaded.

flash application, flash player, flash video

a file format used to deliver video and interactive applications over the Internet.

folksonomy

systems to organize and find content that are not as highly organized as formal taxonomies and, from an information scientist's point of view, are relatively unsophisticated. Folksonomies are popular on the Internet because they dramatically lower content categorization costs. This is because there is no complicated, hierarchically organized nomenclature to learn. One simply creates and applies **tags** (defined below) on the fly.

Instant Message, IM

a form of real-time communication between two or more people based on typed text conveyed via computers connected over a network such as the Internet. Popular instant messaging services on the public Internet include Qnext, Windows Live Messenger, AOL Instant Messenger, Yahoo! Messenger, Skype, Google Talk, .NET Messenger Service, Jabber, QQ, Excite/Pal iChat and ICQ.

IPTV (Internet Protocol Television)

content that is not delivered through traditional formats and cabling, but instead is received by the viewer through the technologies used for computer networks; a digital television service that is delivered using the Internet Protocol over a network infrastructure, which may include delivery by a broadband connection. For residential users, IPTV is often provided in conjunction with Video on Demand and may be bundled with Internet services such as Web access and VoIP, with the combination sometimes referred to as a Triple Play. In businesses, IPTV may be used to deliver television content over corporate LAN's and business networks.

long tail

A phrase coined by Chris Anderson, popularized in an article he wrote for *Wired* in October 2004. Anderson argued that products that are in low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current bestsellers and blockbusters, if the store or distribution channel is large enough. Examples of such megastores include Amazon.com and Netflix. A former Amazon employee described the Long Tail as follows: "We sold more books today that didn't sell at all yesterday than we sold today of all the books that did sell yesterday."

mashup

in music or video, a genre that consists entirely of parts of other songs or videos, edited to appear as one; in new media, a Web site or web application that combines content from more than one source. Chronologically, first there were **music mashups**, where two or more tracks are combined, often with one acapella track by one artist over a second backing track by another. Then there were **software mashups** in which two or more sets of data are combined over the Internet to create a new entity; an example would be overlaying houses for sale over a Google Map. Most recently the **video mashup** has become popular thanks to sites like YouTube.

meta-data

data that describe other data; descriptive information about the context, quality, and condition or characteristics of the data. Used for tagging, cataloging, archiving and finding assets.

mod

a modification of a game made by a player; also a modification of a story made by the audience (source: http://modfilms.com)

multicast

delivery of information to a group of destinations; typically used to refer to IP Multicast, which is a delivery method for efficiently sending data to multiple receivers at the same time on networks by way of a multicast destination address.

Multimedia Messaging Service (MMS)

a messaging system that allows users to send messages including multimedia files (images, audio, video, rich text), not just text messages as in Short Message Services (SMS). It is mainly deployed in cellular networks along with other messaging systems like SMS, Mobile Instant Messaging and Mobile E-Mail. See **Short Message Service** (**SMS**)

open content

any kind of creative work that is published in a format that explicitly allows the copying of the information. Technically, it is share-alike without any prohibitions; content is either in the public domain or under a license that offers open access.

open source

a program whose source code is available to the general public for use and/or modification from its original design, free of charge. Open source code is typically created as a collaborative effort.

participatory journalism / citizen journalism / grassroots journalism

the act of citizens "playing an active role in the process of collecting, reporting, analyzing and disseminating news and information... The intent of this participation is to provide independent, reliable, accurate, wide-ranging and relevant information that a democracy requires." (*We Media: How Audiences are Shaping the Future of News and Information*, Shayne Bowman and Chris Willis). It includes user comments attached to news stories, personal blogs, photos or video footage captured from personal mobile cameras, local news written by residents of a community, independent news and information Web sites (such as the Drudge Report), full-fledged participatory news sites (OhMyNews), and collaborative and contributory media sites (Slashdot, Kuro5hin).

participatory media

media such as blogs, wikis, RSS, tagging and social bookmarking, music-photo-video sharing, mashups, podcasts, and videoblogs that share three common, interrelated characteristics:

- they function as many-to-many media, broadcasting and receiving text, images, audio, video, etc. to and from every other person.
- their value and power derives from the active participation of many people.
- they create social networks that amplify information and communication to enable broader, faster, and lower cost coordination of activities.

peer-to-peer (P2P)

a computer network that relies primarily on the computing power and bandwidth of the participants in the network rather than concentrating it in a relatively low number of servers. P2P networks are typically used for connecting nodes via largely *ad hoc* connections. Sharing content files containing audio, video, data or anything in digital format is very common using P2P technology. Associated with P2P production are the concepts of peer governance (referring to the manner in which peer production projects are managed) and peer property (referring to the new type of licenses which recognize individual authorship but not exclusive property rights, such as the Creative Commons License).

Personal Digital Assistants (PDAs)

handheld devices that were originally designed as personal organizers, but became much more versatile over the years so they now can be used as a calculator, clock, or calendar; for playing computer games, accessing the Internet, sending and receiving E-mails; as a radio or stereo or mobile phone; for video recording, making notes, keeping an address book, and as a spreadsheet.

podcast, also vodcast

the method of distributing multimedia files, such as audio or video programs, over the Internet using syndication feeds, for playback on mobile devices and personal computers. Usually a podcast features one type of 'show', with new episodes released either sporadically or at planned intervals such as daily or weekly. In addition, there are podcast networks that feature multiple shows on the same feed.

public domain

knowledge and innovation (especially creative works such as writing, art, music, and inventions) which is freely available to the public, i.e., no person or legal entity can establish or maintain proprietary interests within a particular legal jurisdiction. This body of information and creativity is considered to be part of a common cultural and intellectual heritage, which, in general, anyone may use or exploit, whether for commercial or non-commercial purposes. If an item is not in the public domain, this may be the result of a proprietary interest as represented by a copyright or patent; however, when a work's copyright or patent restrictions expire, it enters the public domain and may be used by anyone for any purpose.

public media

in general, media whose mission is to serve or engage a public. Public media include traditional publicly-funded broadcasters and networks (such as local public TV and radio stations, National Public Radio, the Public Broadcasting Service, and the British Broadcasting Corporation) as well as public uses of new platforms and distribution mechanisms, such as the Internet, podcasting, blogging. Increasingly the term "public media" is less associated with taxpayer supported media; it may be for profit so long as its ultimate purpose is to serve the public and not to turn a profit.

rip, mix, burn

to rip means to copy; to mix means to re-edit or re-form however the user wants; to burn means to publish in a way that others can see and hear. (Lawrence Lessig, *The Future of Ideas*, p. 9)

RSS

a family of web feed formats; variously used to refer to the following standards: Really Simple Syndication (RSS 2.0), Rich Site Summary (RSS 0.91, RSS 1.0), RDF Site Summary (RSS 0.9 and 1.0). Typically, a content provider publishes a feed link on their site which users register with an aggregator program running on their own machines. When instructed, the aggregator asks all servers in its feed list if they have new content; if so, the aggregator either makes a note of the new content or downloads it. Aggregators can be check for new content periodically, which means users can be notified of new content or have content automatically downloaded without having to actively check for it.

Short Message Service (SMS)

a service available on most digital mobile phones, other mobile devices or desktop computers

that permits the sending of short messages (also known as text messages, or more colloquially SMS, texts or even txts) between other devices and even landline telephones. See **Multimedia Messaging Service (MMS)**

smart phone, sphone

any electronic handheld device that integrates the functionality of a mobile phone, personal digital assistant (PDA) or other information appliance. This is often achieved by adding telephone functions to an existing PDA (PDA Phone) or putting "smart" capabilities, such as PDA functions, into a mobile phone. The applications can be developed by the manufacturer of the handheld device, by the operator, or by any other third-party software developer.

social network

a social structure made of individuals or organizations that are connected through various familiarities ranging from casual acquaintance to close familial bonds. In the Internet, social networking refers to a category of applications that connect friends, business partners, or other individuals together using a variety of tools. Examples of social networking sites include http://www.MySpace.com, http://www.Friendster.com, <

streaming media

media that is consumed (read, heard, viewed) while it is being delivered; a technique for transferring data so that it can be processed as a steady and continuous stream usually over the internet in a continuous flow

tag

a keyword or descriptive term associated with an item as means of classification. Tags are usually chosen informally and personally by the author/creator of the item, not as part of some formally defined classification scheme. Typically, an item will have one or more "tags" associated with it, as part of some classification software or system. This allows for multiple "browseable paths" through the items which can quickly and easily be altered with minimal effort and planning.

Uniform Resource Locator, URL

a site "name" which identifies the site and provides a means of locating it by describing its network location.

Video on demand. VOD

systems that allow users to select and watch video content over a network as part of an interactive television system. VOD systems either "stream" content, allowing viewing while the video is being downloaded, or "download" it so the program is brought in its entirely to a set-top box before viewing starts. All download and some streaming video on demand systems provide the user with a large subset of VCR functionality including pause, fast forward, slow forward, etc. For streaming systems this requires more effort on the part of the server, and may also require greater network bandwidth.

viewer created / user created / user generated content

on-line content that is produced by users of Web sites, as opposed to traditional media producers

such as broadcasters and production companies. It reflects the democratization of media production through new technologies that are accessible and affordable. These include digital video, blogging, podcasting, mobile phone photography and wikis. Prominent examples of Web sites based on User Generated Content include Flickr, Friends Reunited, eBay, FourDocs and Wikipedia.

Web 2.0

a phrase coined by O'Reilly Media in 2004 to refer to a "second generation" of Internet-based services that let people collaborate and share information online in new ways such as social networking sites, wikis, communication tools, and folksonomies. It has become a popular, though ill-defined and often criticized, buzzword amongst the technical and marketing communities.

wiki

a type of Web site that allows visitors to easily add, remove, or otherwise edit and change content, sometimes without the need for registration. This ease of interaction and operation makes a wiki an effective tool for collaborative authoring. The term wiki can also refer to the collaborative software itself or to certain specific wiki sites, including online encyclopedias such as Wikipedia.

Wikipedia

a Web-based free-content multilingual encyclopedia project that exists as a wiki, a Web site that allows any visitor to freely edit its content. Wikipedia is written collaboratively by volunteers, allowing most articles to be changed by almost anyone with access to the Web site. Currently Wikipedia has more than 5 million articles in many languages, including more than 1.3 million in the English-language version, and it has been ranked among the top 20 most visited sites. There has been controversy over Wikipedia's reliability and accuracy, with the site receiving criticism for its susceptibility to vandalism, uneven quality and inconsistency, systemic bias, and preference for consensus or popularity over credentials.

2. Suggested Readings

WHERE WE ARE NOW

"Digital Future Initiative: Challenges & Opportunities for Public Service Media in the Digital Age," A report of the Digital Future Initiative Panel, December 15, 2005. Executive summary enclosed (10pp). Suggestions for ways that public broadcasting can and must re-invent itself in the digital future. Entire report (133pp) is available at: http://www.pbs.org/aboutpbs/news/dfi/Digital_Future_Initiative_Report.pdf

"Beyond Broadcast: Expanding Public Media in the Digital Age," by The Center for a Digital Democracy, February, 2006. Excerpt enclosed (7pp). A critique of the DFI panel report (the previous document). Entire document (57pp) is available at: http://www.democraticmedia.org/BB/BB.pdf

The Creative Archive Licence Group — a 2-page overview. Creative Archive is the Open Content initiative that may be closest to a model for us in public broadcasting. More detail is available at: http://creativearchive.bbc.co.uk

DIGITAL RIGHTS

Creative Commons — a 2-page overview of the Open Content license system. More detail is available at: http://wiki.creativecommons.org

"Repurposing and Rights: A Non-Profit Summit," a report by Patricia Aufderheide, The Center for Social Media, May 31, 2006. Excerpt enclosed (7pp). Entire report (10pp) is available at: http://www.centerforsocialmedia.org/resources/publications/repurposing_and_rights

"Digital Rights Management," by Cory Doctorow, June 17, 2004. Document enclosed (16pp). A provocative argument against DRM. Entire document is available at: http://www.changethis.com/pdf/4.03.DRM.pdf

CASE STUDIES

"The Digital Learning Challenge:Obstacles to Educational Uses of Copyrighted Material in the Digital Age," a white paper by The Berkman Center for Internet & Society at Harvard Law School, August, 2006. By William W. Fisher III, John G. Palfrey, Jr., and William McGeveran. These two excerpts (4 pp total) look at how current legal frameworks restrict public broadcasting's usage of materials in its programming, using WGBH as an example. Entire paper (117pp) is available at: http://cyber.law.harvard.edu/media/projects/education

"The WGBH Laboratory," by Elizabeth Angell. Enclosed (2pp). Available online at: http://www.centerforsocialmedia.org/resources/articles/the_wgbh_laboratory

"Open Content and the Emerging Global Meta-University," by Charles M. Vest, President Emeritus of the Massachusetts Institute of Technology. *EDUCAUSE Review*, vol. 41, no. 3 (May/June 2006): 18–30. This 1-page excerpt reports on the impact of MIT OpenCourseWare, one of the major Open Content initiatives in higher education. The entire article (7pp) is available at: http://www.educause.edu/apps/er/erm06/erm063.asp

"A Step Closer: Vanderbilt's Open Web Project and the Future of Public Media," by John Cheney. A 1-page description of the Open Web project at Vanderbilt Television News Archives, with a note about its income-generating effect, is enclosed. See also: http://www.centerforsocialmedia.org/resources/articles/vanderbilts_open_web_project

WHY IT MATTERS

"New Media to Take Full Control in 2006," by Diane Mermigas, *The Hollywood Reporter*, Jan. 3, 2006. This 3-page article on how digital broadband technology is "turning business dynamics inside out" in the entertainment and media industry.

http://www.hollywoodreporter.com/thr/columns/mermigas_display.jsp?vnu_content_id=100177 2565

"We The Media: Grassroots Journalism by the People, for the People" by Dan Gillmor, published by O'Reilly Media, Inc., 2004. Excerpt enclosed (10pp) presents a "toolkit" for the "expanding, thriving [digital] ecosystem." Entire book (320pp) available at: http://wethemedia.oreilly.com

"The Wealth of Networks: How Social Production Transforms Markets and Freedom," by Yochai Benkler, published by the Yale University Press. This 4-page excerpt derives from Benkler's first chapter where he discusses some of the next steps in the digital transformation such as the "networked information economy." Entire book (528pp) can be downloaded at: http://www.benkler.org/wealth_of_networks

3. Additional Readings – Books, articles, downloadable documents

BOOKS

The Long Tail: Why the Future of Business is Selling Less of More, by Chris Anderson, published by Hyperion, 2006. Wired editor Anderson declares the death of "common culture"—and insists that it's for the best. Not long ago, smash hits existed largely because of scarcity: with a finite number of bookstore shelves and theaters and CD racks, it was "only sensible to fill them with the titles that will sell best." Today, Web sites and online retailers offer seemingly infinite inventory. The result is the "shattering of the mainstream into a zillion different cultural shards," creating market opportunities for those who cast a wide net and deemphasize the search for blockbusters. Original article available at: http://www.wired.com/wired/archive/12.10/tail_pr.html

Blog: http://longtail.typepad.com/the_long_tail

The Wealth of Networks: How Social Production Transforms Markets and Freedom, by Yochai Benkler, published by Yale University Press, 2006. In presenting this comprehensive social theory of the Internet and the networked information economy, Benkler describes the changing patterns of information, knowledge, and cultural production, and shows that how information and knowledge are made available can either limit or enlarge the ways people create and express themselves. He describes the range of legal and policy choices that confront us and maintains that there is much to be gained—or lost—by the decisions we make today. Downloadable at: http://www.benkler.org/wealth_of_networks/index.php/Download_PDFs_of_the_book

The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail, by Clayton Christiansen, published Harvard Business School Press, 1997. Christensen writes about why the best-managed companies in all industries, from hard drives to consumer retailing, are susceptible to failure, in spite of their attention to customers and continual investment in new technology. This book introduced the term "disruptive technology," which, in his sequel, The Innovator's Solution, Christensen replaced with the term "disruptive innovation" because he recognized that

few technologies are intrinsically disruptive or sustaining in character: it is strategy that creates the disruptive impact.

Promises to Keep: Technology, Law, and the Future of Entertainment, by William W. Fisher III, published by Stanford University Press, 2004. Both the creators and the consumers of entertainment products stand to benefit enormously from the new systems. But, according to Fisher, we have failed so far to capitalize on these opportunities. Instead, energy has been devoted to interpreting or changing legal rules in hopes of defending older business models against the threats posed by the new technologies. He presents three alternative proposals, each involving a combination of legal reforms and new business models, for moving forward more productively.

The World is Flat: A Brief History of the 21st Century, by Thomas L. Friedman, published by Farrar, Strauss and Giroux, 2005. Friedman deals with a concept he calls "flattening," where production is dominated by complex supply chains based on value-added services. In this process, products in all industries are leveraged through competitive commoditization and producers can benefit by using labor and services in emerging markets like India and China. Friedman argues that this is a process by which individuals as well as companies become empowered.

The Tipping Point: How Little Things Can Make a Big Difference, by Malcolm Gladwell, published by Back Bay Books, 2002. Gladwell introduces the particular personality types who are natural pollinators of new ideas and trends, the people who create the phenomenon of word of mouth. He analyzes fashion trends, smoking, children's television, direct mail and the early days of the American Revolution for clues about making ideas "infectious," and visits a religious commune, a successful high-tech company, and one of the world's greatest salesmen to show how to start and sustain social epidemics.

Ambient Findability: What We Find Changes Who We Become, by Peter Morville, published by O'Reilly Media, Inc, 2005. Morville describes the future of information and connectivity, examining how the melding of innovations like GIS and the Internet will impact the global marketplace and society at large in the 21st century. See also: http://www.findability.org

The Cathedral & the Bazaar: Musings on Linux & Open Source by an Accidental Revolutionary, by Eric S. Raymond, published by O'Reilly Media, Inc, 2001. This book is considered a key tract on open source software, the premise for Open Content. Raymond argues that "users" should be treated like co-developers, with access to the source code of the software. Having more co-developers increases the rate at which the software evolves, as users submit additions, code fixes, bug reports, documentation etc. Most contents of this "evolving" book can be downloaded at http://www.catb.org/~esr/writings/cathedral-bazaar/

The Wisdom of Crowds, by James Surowiecki, published by Doubleday, 2004. New Yorker business columnist James Surowiecki explores a deceptively simple idea: Large groups of people are *smarter* than an elite few, no matter how brilliant–better at solving problems, fostering innovation, coming to wise decisions, even predicting the future.

ARTICLES

"Amateur Hour: Journalism Without Journalists," by Nicholas Lehmann, The New Yorker, August 7, 2006, http://www.newyorker.com/fact/content/articles/060807fa_fact1

"Beyond Broadcast: Reinventing Public Media in a Participatory Culture," May 12-13, 2006, Harvard Law School.

http://www.centerforsocialmedia.org/resources/publications/beyond_broadcast_report/

"Deep Focus: The Future of Independent Media," by Andrew Blau, GBN Global Business Network, September, 2004. http://communitymediareview.org

"Grassroots journalism: Actual content vs. shining ideal," by Tom Grubisich, USC Annenberg Online Review, http://www.ojr.org/ojr/stories/051006/

"Outside the Box," by Peter Grant, The Wall Street Journal, December 19, 2005. www.ptv-agc.org/OutsidetheBox.pdf

"The Infinite Album," by Eric Steuer, Wired Magazine, September 2006, http://www.wired.com/wired/archive/14.09/beck.html

"The New Deal, How Digital Platforms Change Negotiations between Public Media and Independent Producers." Report by Patricia Aufderheide, Forward by Sally Jo Fifer, Center for Social Media, June, 2006. http://www.centerforsocialmedia.org/files/pdf/NewDeal1.pdf

"Two-way is the Route to Publicness: When Geeks Meet Wonks," by Steve Behrens. *Current*, May 30, 2006. http://www.current.org/web/web0610beyond.shtml

4. Online Resources

A few examples, not meant to be an exhaustive list. See also URLs on suggested reading lists.

Meeting notes and streaming video from past Open Content conferences focusing on public broadcasting

http://commons.wikimedia.org/wiki/The Economics of Open Content Symposium 2006

http://forum.wgbh.org/wgbh/forum.php?lecture id=0197

http://www.beyondbroadcast.net/blog

http://cosl.usu.edu/conferences/opened2006

[coming up September 27-29, 2006]

Examples of Open Content Licenses

http://creativecommons.org

http://creativearchive.bbc.co.uk

http://en.wikipedia.org/wiki/GNU General Public License

http://www.bittorrent.com/license.html

Examples of mashups & remixes

http://ccmixter.org/

http://modfilms.com/archives/20040210_network.html

http://remixablefilms.multiply.com

http://theforce.net/fanfilms

Examples of user-generated and/or user-uploaded content

http://www.ourmedia.org

http://www.youtube.com

http://video.google.com

http://www.revver.com

http://www.odeo.com

http://participatoryculture.org

http://www.getdemocracy.com

http://www.current.tv

http://www.rocketboom.com/vlog

Funding for this conference was provided by The William and Flora Hewlett Foundation and The Corporation for Public Broadcasting



