

JISC

Film &
Sound | Think
Tank

Film and Sound in Higher and Further Education

A progress report with ten strategic recommendations

View online at <http://filmandsoundthinktank.jisc.ac.uk>

Paul Gerhardt and Peter B Kaufman



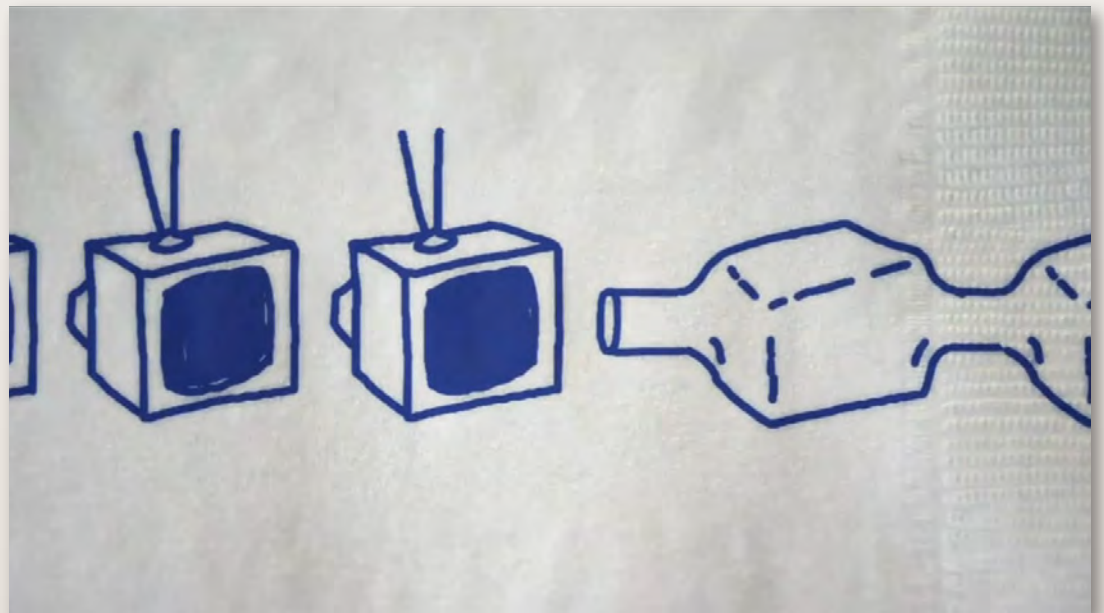
Table of Contents

I. Introduction: Our Media Environment.....	3
II. Our New Educational Imperative.....	6
A. The Technology of Disruption is Ubiquitous	6
B. The Digital Public Space and the Learning Commons	7
III. JISC Film & Sound Think Tank Activities, 2008–2010	8
IV. Strategic Recommendations	11
1. Extend Awareness	11
2. Enable Resource Discovery	12
3. Clear Rights, Facilitate Use	15
4. Build a Citation System	17
5. Work with Primary Sources	18
6. Build Digital Literacy	20
7. Open National Collections.....	21
8. Fund New Productions	24
9. Establish an Integrated Media Service for Higher Education	25
10. Call Together a Summit on Video and Education	27
V. Summary of Recommendations	28
Acknowledgments	29
About the Authors	29

I. Introduction: Our Media Environment

The equivalent of 16 billion DVDs' worth of media will be crisscrossing the internet every month and some 15 billion networked computers, phones, and other devices will be in operation around the globe.

Media permeates modern life: video, audio, images, tweets, posts, feeds, and apps cascade across our screens, lenses, and speakers. By 2014, according to Cisco, video will exceed 91% of global consumer traffic on the internet. Eleven billion square feet of screens will be in operation worldwide – enough to encircle the Earth's surface 50 times over. The equivalent of 16 billion DVDs' worth of media will be crisscrossing the internet every month and some 15 billion networked computers, phones, and other devices will be in operation around the globe. Such is the demand for mobility and media personalisation – from students especially – and such the declining costs of digital memory, that Google's engineers have predicted that by 2020 or so all the media ever created will be able to be stored and played on a device the size of an iPhone.¹



CISCO newsroom video, 2010

http://newsroom.cisco.com/dlls/2010/ts_111510.html

For those involved in culture and education, a growing challenge is how to make the traditional worlds of teaching and learning – and audiovisual production – relevant for students who come to class in many cases already media-literate. The typical education consumer now is changing from someone who was satisfied by text and rote learning perhaps ten years ago into someone who looks to learn from and produce with the gamut of rich media available in his or her daily life.

¹ Hyperconnectivity and the Approaching Zettabyte Era: A Cisco Systems White Paper, June 2, 2010, online at: www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/VNI_Hyperconnectivity_WP.pdf. For detail, see Peter B. Kaufman and Mary Albon, *Funding Media, Strengthening Democracy: Grantmaking for the 21st Century* (Baltimore: Grantmakers in Film + Electronic Media, 2010), available at: <http://gfem.org/node/873>. YouTube alone receives 24 to 35 hours of video every minute (YouTube's corporate fact sheet is available online at: www.youtube.com/t/fact_sheet). See also: Pelle Snickars, *The YouTube Reader* (Stockholm: National Library of Sweden, 2009); and Mary Meeker, *Ten Questions Internet Execs Should Ask and Answer* (New York: Morgan Stanley, November 16, 2010), online at: www.scribd.com/doc/42793400/Internet-Trends-Presentation.

That education consumer is now online all the time – almost eight hours a day. In a 2010 report, the Kaiser Family Foundation notes that students are multitasking such that they manage to “pack”, as their study puts it, a total of ten hours and 45 minutes’ worth of media content into those daily eight hours.² Traditional metrics that once were used for measuring media penetration and saturation – how many hours people spend reading books, watching television, going to movies, listening to radio – have given way to entirely new ways of quantifying media consumption, or what the commercial architects of our communications infrastructure track as our new hyperconnectivity: “the persistence of many simultaneous connections over time: connections from people to people, people to machines, and from machines to machines.”³ It turns out that our students are communicating online with each other and with the world for more hours than actually exist in real time.

This new media literacy, online behaviour, and the prevalence of new technologies of communication present challenges for funders, producers, and practitioners of education in the 2010s. The engines of our screen culture – film, television, and radio – were the dominant media of the 20th century, and many of the most important and most memorable messages of the 20th and 21st centuries have been expressed in moving images and sound. Yet education has far to go still to incorporate them systematically in teaching and learning.

...despite the leading investments of JISC and others worldwide, only 5% of our audiovisual history is digitised and available to educators and the public online.

This disconnect – perhaps we could call it an ‘A/V gap’ – is largely a function of attitudes and behaviours within teaching, production, and publishing. It is also an outcome of the paucity of quality audiovisual work now available for educators. As we note in our 2010 Film & Sound Think Tank film, *Knowledge Is...*, despite the leading investments of JISC and others worldwide, only 5% of our audiovisual history is digitised and available to educators and the public online. The BBC Archive has digitised and put online less than 5% of its holdings, for example. ITN Source has processed less than 1% of its news and documentary resources (over a million hours). Likewise, the British Film Institute has moved less than 1% of its authoritative films catalogue online. And this is to say nothing of the analogue collections at the Library of Congress, the US National Archives, or the programme libraries and movie catalogues from the leading television networks and film studios around the globe.⁴

² Victoria Rideout et al., *Generation M2: Media in the Lives of 8- to 18-Year-Olds* (Menlo Park: Kaiser Foundation, January 2010), online at: www.kff.org/entmedia/hr012010video.cfm, and Amanda Lenhart et al., *Social Media & Mobile Internet Use Among Teens and Young Adults* (a Pew Internet & American Life Project report, February 2010), online at: www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults

³ *Hyperconnectivity and the Approaching Zettabyte Era*. See also Kristin Purcell, *The State of Online Video* (Washington: Pew Research Center, June 2010), online at: <http://pewinternet.org/Reports/2010/State-of-Online-Video>

⁴ See also Peter B. Kaufman, *Video on Wikipedia and the Open Web: A Guide to Best Practices for Cultural and Educational Institutions* (New York: Intelligent Television, 2010), online at <http://outreach.wikimedia.org/wiki/Bookshelf>



Knowledge Is... A JISC Film & Sound Think Tank production (2010)

www.youtube.com/watch?v=qMLf5mpifNc

Indeed, there is a deep disconnect between the ambitions of establishing a ‘Digital Britain’ and today’s new government priorities, particularly the changes in higher education funding.⁵ The higher education sector, which has innovated so much in the last decade, has been required to rethink its entire investment strategy.⁶ Yet the promise of new access to resources and new methods of learning increases as technology develops and each day passes. As Lynne Brindley of the British Library has put it, “We are sitting on a goldmine of content which should be within a coherent UK national digital strategy. To support Digital Britain we need to deliver a critical mass of digital content. Access... ought to be the right of every citizen, every household, every child, every school and public library, universities and business. That’s a vision worth delivering on.” Now, more than ever, we need to be smart about the new educational technologies and how they can deliver efficiencies across teaching and learning.⁷

This report draws on two years of work by some 50 professionals in the higher and further education, media, and museums, libraries and archives sectors. We describe the current status of moving image and sound material in further and higher education today. We believe that there is a real danger that classroom and distance learning/further education – as well as scholarly research and publication processes and cultural heritage experiences – will lose relevance for students, teachers, and scholars if they remain walled off from the wider world of moving images and recorded sound. In that light, this report advances ten concrete recommendations that, if recognised and acted upon, will make the prospect of that irrelevance disappear. We also set out opportunities for JISC research and activity in 2011 and beyond.

⁵ <http://nds.coi.gov.uk/content/detail.aspx?NewsAreaId=2&ReleaseID=416343&SubjectId=2>

⁶ www.hepi.ac.uk/455-1875/The-government's-proposals-for-higher-education-funding-and-student-finance-%E2%80%93-an-analysis.html

⁷ www.jisc.ac.uk/media/documents/programmes/digitisation/12pagefinaldocumentbenefitssynthesis.pdf

II. Our New Educational Imperative

As we have noted in our JISC report, *Fluency in Film and Sound: A New Cultural Imperative*, scholarship and self-expression have revolved around text for centuries, but the challenge today for educators and their funders is to produce students who can express themselves, make their arguments, and support their hypotheses in the dominant media of our time. “Providing facilities for students to become more adept” at using these kinds of audiovisual media, as content, and as media platforms, we wrote, “is in many ways our new cultural imperative”.⁸

A. The Technology of Disruption is Ubiquitous

The acceleration of digital technologies and especially technologies of disruption are advancing our abilities to think through these opportunities. In book and journal publishing, traditionally the backbone of academic learning, research, and publication, digital technology such as the ‘book ripper’ device and the demand for online resources for students on desktops and laptops are propelling the digitisation of text and images for education. In music, film, and television, technologies designed to rip audiovisual files from physical, static media such as DVDs are now ubiquitous, and again coupled with usage habits as noted above, they have propelled these industries to move faster online, changing day and date strategies and creating new platforms – Hulu, the iPlayer, YouView – for film and sound to reach their consumers. Technologies that capture streaming audio and video as downloads mark the beginning of the end of streaming-only sound and video. This in turn is forcing studios, networks, curators, and librarians alike to think through what to do about file sharing and the peer-to-peer transmission of digital media.



⁸ http://sca.jiscinvolve.org/wp/files/2010/07/SCA_DCQuarterly_03_FSTT_Supp-interactive.pdf a special supplement for the Strategic Content Alliance Digital Content Quarterly Issue 3, summer 2010.

B. The Digital Public Space and the Learning Commons

As all of these media lurch and grope their way toward becoming digital, surely if slowly, scholars and educators – as well as media creators, investors, and other stakeholders – will need to become accustomed to an educational environment, and eventually a public environment, where the copying and recopying of media becomes normal behaviour.⁹ Many of the financial, legal, and practical considerations involved in such a world will need to be sorted out by the stakeholders, including in ways we address below.

These developments are taking place against a wider landscape in which the major cultural collections funded and maintained at public expense are at last opening up a form of access. The idea of a Digital Public Space,¹⁰ conceived initially by the BBC as a way in which public collections of film, video, sound and other digitised objects can collectively overcome rights and access barriers, is a welcome recognition that this new marketplace has first to be organised and established. JISC has always understood the wider social benefit of its collections strategy and the licensing of access to as wide an educational sector as possible. The Digital Public Space is building on the work of JISC and the Strategic Content Alliance, and the latter will no doubt continue to play a leadership role in helping to define the Digital Public Space.

Funders and other stakeholders are pushing educational and cultural institutions... to release more of their courseware...

As these conversations take place, some also see an advantage in establishing more Open Educational Resources (OER) – a call for a new kind of learning ‘commons’.¹¹ Funders and other stakeholders are pushing educational and cultural institutions – universities, public television stations, publishers, producers – to release more of their courseware, programming, books, and pedagogic materials as “teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property licence that permits their free use or re-purposing by others.”¹² The work involved in producing this material includes further clearing of all of its component parts – beyond just prepping these materials to go online – so that “free use or re-purposing” is in line with the creators’ and owners’ intent. It also includes (if executed properly) organising the material so that it is more readily accessible and findable by human and machine intelligence.

OER has grown to feature many significant investments. JISC and the UK Higher Education Funding Council have endowed major multiyear initiatives to fund OER, and are discovering benefits beyond the appearance and publication of new open content.¹³ More than \$150m in foundation and government funding has gone toward its support.¹⁴ Scanning the web to see the range of openly licensed assets on the web—materials carrying an explicit Creative Commons (CC) licence alone number close to 300 million – and Wikipedia entry items (which also qualify), one can see close to half a billion items online that can meet OER requirements and explicitly facilitate educational use and re-use.¹⁵

The recommendations in this report and indeed the work of the Film & Sound Think Tank are designed to support and strengthen JISC’s role in accelerating the integration of moving image and sound media in further and higher education.

⁹ Marcus Boon, *In Praise of Copying* (Cambridge: Harvard University Press, 2010).

¹⁰ www.guardian.co.uk/media/2010/nov/01/tony-ageh-interview-bbc-archive

¹¹ James Boyle, *The Public Domain: Enclosing the Commons of the Mind* (New Haven: Yale University Press, 2008).

¹² Daniel E. Atkins, John Seeley Brown, and Allen Hammond, *A Review of the Open Educational Resources Movement: Achievements, Challenges, and New Opportunities: A Report to the William and Flora Hewlett Foundation* (Palo Alto: Hewlett Foundation, February 2007).

¹³ “Universities have found solutions to complex intellectual property issues. In order to open up their educational resources, they have had to clarify their processes for creating, managing, approving and accrediting academic materials, and as a consequence have made their systems more efficient.” See: www.jisc.ac.uk/publications/briefingpapers/2010/bpopeneducationalresources [emphasis added].

¹⁴ Katie Hafner, An Open Mind, in *The New York Times*, April 18, 2010, online at: www.nytimes.com/2010/04/18/education/edlife/18open-t.html?ref=edlife

¹⁵ On the mainstreaming of OER, see L. Johnston et al., *The Horizon Report 2010 Edition* (Austin: New Media Consortium and Educause, 2010), online at: www.nmc.org/pdf/2010-Horizon-Report.pdf, and Steven A. Merrill and Anne-Marie Mazza, *Managing University Intellectual Property in the Public Interest* (Washington: National Academy of Sciences, 2010).

III. JISC Film & Sound Think Tank Activities, 2008–2010

JISC established the Film & Sound Think Tank (F&STT, online at: www.jisc.ac.uk/whatwedo/programmes/filmandsound) in 2008 to consider the strategic issues around this burgeoning area of e-learning and e-research. It was designed to draw on the expertise of individuals, partner organisations and the sector itself, as well as ensuring that the JISC user community had adequate influence over its development.

This is only the latest chapter in the sector's engagement with film and recording that goes back to the middle of the last century. The British Universities Film Council (forerunner of the British Universities Film & Video Council (BUFVC)) was established in 1948. Shortly after the creation of JISC in 1993, its first five-year strategy identified the importance of multi-media communication, and by 1998 the JISC Collections Policy prioritised moving images. In 1999 the first Moving Pictures and Sound Working Group was established, and the following year the Film & Sound Online service launched at EDINA. Over the last ten years, significant moving image and sound collections have been digitised through support from JISC and licensed for use in further and higher education.

It is an opportunity to promote best practice, innovative ideas and new initiatives, and to comprehend the new technology landscape and the implications for rights and licensing issues.

By 2008, JISC was already involved in licensing content, rights clearance, digitisation programmes, and advice on how to use moving image and sound files and resource discovery. The Film & Sound Think Tank represents an opportunity to take stock of these achievements and activities, and to consider the broader developments as JISC moves forward. It is an opportunity to promote best practice, innovative ideas and new initiatives, and to comprehend the new technology landscape and the implications for rights and licensing issues. Further, the Think Tank offers a forum to advance thinking on the key issues surrounding educational and public access to film and sound collections. Above all, we work consciously to position moving images and sound as valid media for research, teaching and learning.

In its first two years, the JISC Film & Sound Think Tank designed a programme of work which focused on three questions: What's out there? How can I find it? What can I do with it?

Members of the Think Tank were invited to see themselves as contributors, and over the course of the six meetings they brought to the programme experience from the BBC, JANET, BFI, the British Library, Bournemouth Media School, BUFVC, Edina, National Media Museum, Wellcome Foundation, ITN Source, Open University, Illumina Digital, MCPS-PRS Alliance, Strategic Content Alliance, JISC Collections, JISC Digital Media, and JISC e-Content.

The six meetings of the Think Tank brought together the different strands of Think Tank activities, including the commissioning of new audio and video productions, and reviewed developments across archives and the use of moving images. The first meeting discussed and ratified the programme of work, and set out plans for communication and promotion. The second meeting focused on a vision and framework for higher education media, via a mock commissioning process for a 'higher education broadcasting' channel and platform. The third meeting reviewed existing JISC collections, the demand for content and case studies of media use in higher education. The fourth meeting examined intellectual property issues, with presentations from the BBC, Wellcome Film, and the Strategic Content Alliance. The fifth meeting reviewed the use of sound in research, education and

learning and explored the relevance of primary documentary resources. The final, sixth meeting of the Think Tank in this first phase considered the significance of the growth of video in Wikipedia and discussed the key recommendations arising from the Think Tank's work.

Speakers included Andrew Law (OU), Mike Flood Page (Illumina Digital), Andrew Bethell (Teachers TV), Peter Robinson (Oxford University), Luis Carrasqueiro (BUFVC), Alastair Dunning (JISC e-Content), Keith Parry (University of Bournemouth), Ben Green (BBC), Angela Saward (Wellcome Trust), Naomi Korn (Strategic Content Alliance), Richard Ranft (British Library), Michael Berkowitz (UCL), Brian Lapping (Brook Lapping Productions), Liam Wyatt (Wikipedia), and Rick Loup (EDINA).



Commissioning new audio and moving image products was a key activity of the Think Tank. Audio reports on the third, fourth, fifth and sixth meetings were produced as short podcasts and published on the Film & Sound Think Tank website.¹⁶ These focused on the presentations and discussions around podcasting (the JISC Steeple project), using video in sports education, the BBC's copyright clearance strategy for its archives, primary visual resources, the British Sound Library and video for Wikipedia.

The Film & Sound Think Tank commissioned a set of videos to explore issues in the educational use of moving images and sound. These were used to stimulate discussion at Think Tank meetings and to provide the wider network with new presentational content.

Video one, *Building Film and Sound Resources for Education* (7'47''), reviews the sound and audiovisual materials which have been made available by JISC through its digitisation and licensing programme. Interviewees include Catherine Grout and Alastair Dunning of JISC e-Content, Luis Carrasqueiro of BUFVC and Richard Paterson of the BFI.

Video two, *Using Audio in Higher Education* (5'50''), examines a project at Royal Holloway College, University of London, which captures seminars and lectures for wider distribution. Interviewees include Rene Woolf and Professor Justin Champion.

Video three, *Opening Documentaries for Teaching and Learning: The Brook Lapping Case Study* (11'29''), explores the research and academic value of documentary 'primary material', particularly extended interviews. Brook Lapping is the independent production company responsible for such high quality documentaries as *The Death of Yugoslavia*. Interviewees include Norma Percy, Brian Lapping and Professor Sir Lawrence Freedman, King's College London.

Video four, *Copyright and Moving Images in Education: The Open University Case Study* (7'29"), shows how one major education body is grappling with the intellectual property issues which can restrict the wider use of film and television in learning. Interviewees include Andrew Law and Rodney Harrison.

Video five, *Unlocking Artists' Rights* (10'37"), confronts the problem of talent rights and explores new approaches to releasing the work of musicians and actors. Interviewees include Andrew Yeates, legal consultant for Equity, and Mike Collins, composer and musician.

All of the videos have been produced under a liberal Creative Commons licence (with the exception of video three, which, due to third-party rights restrictions on footage, is available only for educational purposes) and the full interview footage, b-roll, and other audiovisual components will be available to JISC and, by request, to the higher education community. All the videos, except from video three, are available on the online version of this report.

The Film & Sound Think Tank also video-recorded the 'pitches' that were made in the mock commissioning meeting for higher education broadcasting. Videos of these three 'visions' of potential higher education broadcasting are available on the Think Tank website.

Knowledge Is... will stimulate ideas and debate for all learners and educators, and for others in arts, culture, journalism and communications.



Our most ambitious production has been *Knowledge Is...*, a new film which sets out the cultural imperative of access to our moving image and sound collections.¹⁷ Launched at the start of 2010 Open Access Week,¹⁸ *Knowledge Is...* will stimulate ideas and debate for all

learners and educators, and for others in arts, culture, journalism and communications. Key components of the film are licensed under a Creative Commons Attribution-ShareAlike (CC-BY-SA). Links to the full assets on Vimeo are available on the online version of this report so that the films can be downloaded and be re-worked according to the rights that we were granted.

JISC - Knowledge Is assets - Students at Westminster Kingsway College

JISC - Knowledge Is assets - Integration Report 1 (1960)

JISC - Knowledge Is assets - STS 119 HD Flyaround Sped Up

JISC - Knowledge Is assets - HD Earth Views

JISC - Knowledge Is assets - MILLING THE MILITANTS: A COMICAL ABSURDITY (1913)

JISC - Knowledge Is assets - HAPPY REVOLUTION (EDUCATION)

JISC - Knowledge Is assets - IN THE SHADOW OF BIG BEN TOPICAL BUDGET 967-2

JISC - Knowledge Is assets - shown by request TNA

Finally, the co-chairs of the Film & Sound Think Tank were invited to edit a special supplement for the Strategic Content Alliance *Digital Content Quarterly* in the summer of 2010, *Fluency in Film and Sound: A New Cultural Imperative*. An online edition can be found here.¹⁹

¹⁷ www.youtube.com/watch?v=qMLf5mpifNc

¹⁸ www.openaccessweek.org

¹⁹ <http://sca.jiscinvolve.org/wp/2010/07/22/out-now-digital-content-quarterly-issue-3>

IV. Strategic Recommendations

The following ten recommendations are intended for the field of higher and further education generally, but they are put forward especially to stimulate critical thinking across JISC and the 49 JISC-funded services that deliver higher and further education assets and tools. Of particular relevance in this regard are projects and programmes that address themselves to furthering the use of film and sound in education – among them the British Film Institute, the British Universities Film & Video Council, JISC Collections, JISC Digital Media (formerly TASI), JISC Digitisation, JISC Mail, and the Media Hub at EDINA.

1. Extend Awareness

JISC's investments in film and sound collections in the last decade have been significant:



NewsFilm Online, a selection of news stories and programme scripts from the ITN/Reuters archives – some 3,000 hours of footage and about 60,000 stories.²⁰

BFI InView, a selection of moving images exploring issues and themes in the public sphere. Users are able to access over 600 hours of full-length film and video material.²¹

Archival Sound Recordings, 21,000 selected recordings of music, spoken word, and human and natural environments from the British Library.²²

Film & Sound Online, with several hundred hours of high-quality film, video and sound material from various sources.²³

²⁰ www.nfo.ac.uk

²¹ www.bfi.org.uk/inview

²² <http://sounds.bl.uk>

²³ www.filmandsound.ac.uk

The **LBC/IRN Audio Archive**, the most noteworthy content from the London Broadcasting Company/Independent Radio News audio archive; a collection that runs from 1973 to the mid-1990s – approximately 3,000 hours of recordings relating to news and current affairs.²⁴

JISC's leadership activities in the provision and maintenance of these assets together constitute a signal achievement; much of this content is unavailable elsewhere. But JISC now has a real opportunity to develop a deeper awareness across further and higher education of how these resources can be used (an exception being NewsFilm Online, which was the subject of an investigation into learning designs by the University of Hull²⁵). Libraries and information departments have been key to 'enabling' access, but there is also a case for more direct promotion to enable separate disciplines and departments to grasp the value of audiovisual content – even (perhaps especially) if it does not literally or directly illustrate the subject. The various collections assembled through JISC investment may be on the horizons of media studies centres, but modern history and political science departments – to say nothing of other disciplines in the humanities, sciences, and professional and vocation fields – will be aware that such resources exist only if faculty and administrators are encouraged to step outside their own comfort zones in resource discovery.

The aim would be to promote use, not just awareness of audiovisual material.

Thus, investment in packaging 'transformative' case studies (for example, interviews with inspiring scientists teaching and conducting research with moving images) could provide an important first step for reluctant teachers across many subject areas. The aim would be to promote *use*, not just awareness of audiovisual material. Step-by-step tutorials in the use of time-based content also could be provided in person or virtually.

Reviewing in a strategic sense the relationships and effectiveness of JISC's delivery institutions was not part of the early remit of the Film & Sound Think Tank. However, as we discuss marketing strategies, and indeed the implementation of these ten recommendations, it is appropriate to propose that the different roles of, for example, JISC Digital Media, the BUFVC, JISC Collections, and EDINA become sufficiently clarified and rationalised for the sake of the further and higher education community. They have each been established and funded at separate times to meet evolving needs in access to and use of digital media. But the importance of clarity and cost-effectiveness would suggest the need for a review of any overlapping responsibilities.

RECOMMENDATION:

Develop marketing strategies for JISC audiovisual collections and investments, including user case studies and tutorials about collections across disciplines and departments. Review the effectiveness and help streamline and coordinate the roles of JISC and JISC-funded institutions delivering film and sound resources.

2. Enable Resource Discovery

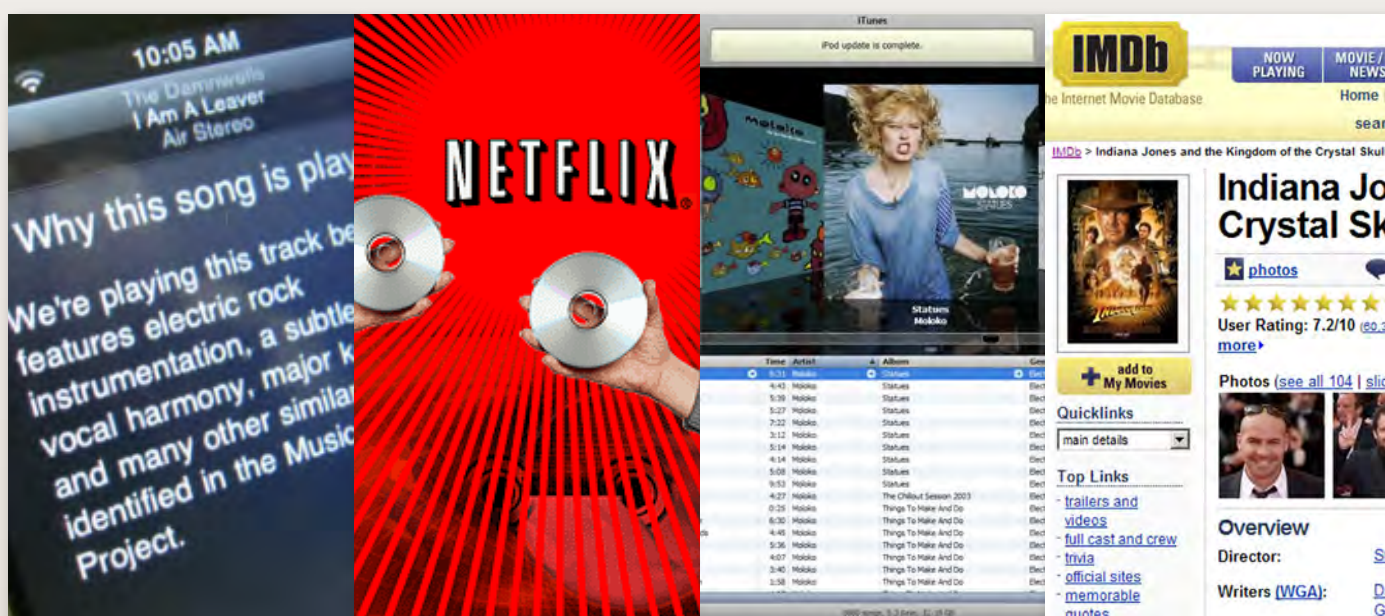
While extending awareness of audiovisual resources is a marketing challenge, enabling resource discovery requires more technical and procedural attention. This is especially true for describing rich media assets and applying/enabling the application of relevant metadata, and then supporting users in purposefully and serendipitously searching through and across these collections. In the rare cases when users are, in fact, aware

²⁴ <http://radio.bufvc.ac.uk/lbc>

²⁵ http://hull.academia.edu/KevinBurden/Papers/77103/Beyond_Content_Developing_Transferable_Learning_Designs_with_Digital_Video_Archives

of relevant audiovisual resource collections, they find a range of interfaces and styles of presentation which make it difficult for them to find sought-after assets within and across archives – JISC and non-JISC. This applies to a range of assets – JISC and non-JISC-funded – including the TV and Radio Index for Learning and Teaching (TRILT), the Moving Image Gateway, and Box of Broadcasts (BoB), among others.

While the educational sector noodles over the potential challenge involved in making its rich media assets searchable, the commercial sector is actively exploiting the growth potential for such advanced products and services. Pandora, Netflix, iTunes, and IMDb (the Internet Movie Database), among others, enable customers to experience moving images, sounds, texts and images, and they provide thriving recommendation engines. Pandora's automated Music Genome Project, for example, the patent application for which is available online, assembles and searches through 400 separate characteristics of each song and music file to determine relationships between that file and the rest of the sound corpus.



Given our interest in use and re-use, it is important to note that advanced search today can also be conducted by licence type. Google and Google Images now have the ability to search images automatically by the rights metadata that creators and stakeholders apply – when they tag their photos, for example, with Creative Commons licences that enable anyone to make non-commercial or even commercial use of their images. Indeed, Wikipedia now has the ability to crawl and ingest Flickr images that are CC-licensed, automatically (the program is called Flickrripper), which results in the largest educational commons on the web being enriched by thousands of images whose rights-holders encourage their free use in education.²⁶ The day is not far off when advanced search will similarly enable the discovery of like-licensed audiovisual files. To illustrate this point, our film *Knowledge Is...* closes with credits that are listed not as in a traditional film by their order of appearance in the movie, but instead in order of their licence types, from the freest and most reusable content to the most closed.

²⁶ <http://blogs.uct.ac.za/blog/oer-uct/2010/12/02/finding-using-and-referencing-creative-commons-images>



As we assemble audiovisual assets and digitise, we need to apply ourselves to making our content richer and smarter. We want to see that the moving image and recorded sound files that we produce and curate are processed in ways that we want by two sites – Google and Wikipedia – so that moving images can be searched, crawled, and harvested in many ways, including by licence. This will have the effect of making audiovisual resources more broadly discoverable. Off-air recording also plays an important role in many educational institutions. JISC organised a roundtable discussion in January 2011 to explore how the key organisational providers (BUFVC, BBC, National Sound Archive, National Film and TV Archives, etc) can work together more closely to meet the education sector's needs. Where archives are working with educational institutions to provide off-air recording and back-up services, we need to ensure that full listings details also are available for search across the providers.

At the same time, educational institutions have begun to collaborate in creating common areas – or commons – for educational and cultural institutions, the online equivalent of public media, especially for material that has been liberally licensed for re-use. Such sites include the OER Commons, the Open Courseware Consortium, the Smithsonian Commons, and Creative Commons' own Discover ED. Where aggregation becomes a necessity, a multimedia version of JSTOR and ARTstor, offering a high quality video and audio repository for teaching and learning and support services for scholarship and research, emerges as a key requirement.²⁷



²⁷ JSTOR ("trusted archives for scholarship"), online at: www.jstor.org ARTstor is a "nonprofit digital library of more than one million images in the arts, architecture, humanities, and social sciences with a suite of software tools to view, present, and manage images for research and pedagogical purposes". See: www.artstor.org

RECOMMENDATION:

Make audiovisual content investments searchable by applying robust, detailed, and machine-readable metadata. Build a public-private working group to collect and extend the tools, practices, and business models of companies – Netflix, for example – that focus on resource discovery methods that may be adaptable for education. Consider establishing an audiovisual extension of JSTOR and ARTstor for moving images and recorded sound, ensuring that it can provide access to a range of other media as well. In addition, establish more efficient and complete catalogues to index and annotate film and sound holdings including off-air recordings and broadcast listings across institutions such as BUFVC, BFI, and EDINA.

3. Clear Rights, Facilitate Use

The world's first copyright law was passed 300 years ago by Parliament as "An Act for the Encouragement of Learning". Today, the academic community is more likely to characterise copyright and intellectual property – particularly as applied to television and cinema – as a minefield keeping them from using these materials and their students from employing them for learning.

Educators and educational funders need to fully appreciate how complex and tortured the rights ecosystem for audiovisual material really is. As one of the Film & Sound Think Tank Videos points out in detail, guilds and unions, stock footage vendors and other suppliers and contract parties, even the creators themselves, have concluded and insist on staying in business deals that often restrict educational access and use.

Rights-holders and other stakeholders in the success of television and online video content can include producers, directors, cinematographers, cameramen, film and video editors, writers of scripts, writers of songs, writers of music, actors, singers, musicians, dancers, choreographers, narrators, and animators, as well as whole worlds of content similar in complexity from music and book publishing and the film business who may have sold or otherwise licensed rights to the production – to say nothing of the dozens and sometimes hundreds of artists, designers, engineers, consultants, and staff who are often rewarded when they help productions to complete the journey from idea to finished work.

As the demand for online audiovisual information in both formal and informal educational settings grows, producers, studios, networks, publishers and others in the business are consumed with the task of contacting these stakeholders, often through their agents, lawyers, guilds, and unions, for permission to make this work available online. Licensing this media for websites and other forms of distribution such as games, mobile devices, and textbooks involves satisfying the interests of many of these stakeholders. Preliminary studies of the time required to clear such materials formally and according to copyright and contract law suggest just how unworkable and primitive the clearance system of today truly is – especially when that material was produced before the advent of the internet. Between 2005 and 2007, for example, the BBC invested 6,500 person-hours to clear a total of 524 hours of BBC footage for its experimental online Open Archive. Extrapolating from these figures, it has been estimated that to clear the entire BBC Archive for online use

Preliminary studies of the time required to clear such materials formally and according to copyright and contract law suggest just how unworkable and primitive the clearance system of today truly is...

would take 685 years.²⁸ While there is no single figure for the number of hours of legacy media that would be useful for education, it is fair to say that there are thousands of hours of quality audiovisual work waiting to be made available digitally online.

That said, many people and institutions are incentivised already to put their material online and to make it more openly available for use and re-use. Rights-holders are concerned with clear definitions, clear rules of the road, ways for people who invest to be compensated, and no surprises. The British Library and other cultural and educational institutions have issued clear statements about the need to address copyright issues for education and research. JISC itself has inaugurated a sophisticated and extensible toolkit for intellectual property education.²⁹ But these initiatives could be more substantive when it comes to the full-on audiovisual challenge. More detail, analysis, and advocacy are needed.³⁰ In many ways, systematically setting out the obstacles to making educational material more accessible – illustrating a roadmap of the obstacles to putting audiovisual content online – should be job number one for advocates and funders in the days ahead.³¹ Such a roadmap might include a set of richly annotated production contracts and agreements, for example, where the language representing barriers to making material more openly available could be identified and highlighted as such.³²

There may be new approaches to take to these issues. What if, for example, when we put material online, we did so not in instant opposition to licensors but in partnership with them – if we promoted these rights-holders (in this interim rights period) and made every clip vibrant with attributions and linkable pathways through to their material and their collective identities as stock footage businesses, guilds, and creative unions? We would not be challenging our former and current licensors; we would be promoting them!

Systematic clearance procedures for media new and old should be developed, based on a candid recognition of the challenges that the complex anatomy of media – and video especially – presents. If manually clearing older, legacy materials will take years to accomplish, systems will need to be designed to automatically or semi-automatically clear such footage. Indeed, designing systems that can process clearances by machine intelligence would be an appropriate subject for a future study and working group. Otherwise, we will remain without the right to quote the visual equivalent of iconic passages – Dickens, Wilde – in our audiovisual history without having to seek permission from and pay someone.

²⁸ Ben Green, *Delivering the BBC Archive: The Rights Challenge*, a presentation to the JISC Film & Sound Think Tank, October 29, 2009, online at: www.jisc.ac.uk/whatwedo/programmes/filmandsound. Extrapolating from a more recent test case, an alternative estimate is that it would take the BBC 800 people three years of full-time work, "assuming that all rights owners could be found and that everyone was prepared to [promptly] grant the rights". Stephen Edwards, 'A Simple Change in the Law Could Open Up Online Access to the BBC's Archives', *The Guardian*, November 25, 2010, online at: www.guardian.co.uk/law/2010/nov/25/bbc-archive-online-access-law

²⁹ www.jisc.ac.uk/publications/programmerelated/2009/scaiprtoolkitseniormgt

³⁰ <http://pressandpolicy.bl.uk/imagelibrary/downloadMedia.ashx?MediaDetailsID=563>

³¹ This work should build on this report and on recent guides including *Otherwise Open: Managing Incompatible Content within Open Educational Resources* (Version 1.0, September 1, 2009) [San Francisco: Creative Commons, 2009], online at: <http://learn.creativecommons.org/productions>

³² Law professor James Grimmelman launched a model effort to annotate the Google Book Search agreement, online at: <http://thepublicindex.org>

RECOMMENDATION:

Complete an inventory of the elemental anatomy of a video and audio clip requiring rights and licensing attention. Compile a body of legal documents that can provide the basis for articulating new, more liberal language for production, curation, and clearance agreements. Build prototypes of promotional links from online clips to rights-holder sites. Explore public-private working groups, digitisation-on-demand partnerships, and public sector activity around collaborations such as the Digital Public Space (originated by the BBC) to determine how to manage the cumbersome audiovisual clearance process for education and long-term public access and re-use.

4. Build a Citation System

In the 560 years since the appearance of Gutenberg's printing press, the language of reading has understandably come to dominate how we describe our own access to knowledge.³³ This is true even in our screen-based and online behaviour. The web has 'pages'; we send one another 'mail'; we even 'scroll' through sites online. We have been developing, during these centuries, an entire scholarly apparatus for quoting, citing, excerpting, and crediting books, journals, newspapers, and other printed sources, but the equivalent conventions of attribution – footnotes, endnotes, bibliographies – remain challenging for moving images and recorded sound.

As digital publishing explodes on desktop, laptop, and mobile screens, and historical and archival texts and artifacts are appearing online, traditional publishers of books, journals, magazines, and newspapers are seeking new ways of integrating rich media in their presentation. No authoritative guidebook exists to provide best practices for doing so. The longstanding style and usage manuals in the field – *The Chicago Manual of Style* (online at: www.chicagomanualofstyle.org); the Associated Press's *AP Stylebook* (www.apstylebook.com); and the Modern Language Association *MLA Handbook* (www.mlahandbook.org) – originated years ago; updates accrete in successive editions, but without truly addressing all the core publishing issues for moving images and sound.

As the work of the Think Tank has explored, there is not yet a uniform set of citation standards in education for quoting and referencing either moving images or recorded sound. For academics to gain greater confidence in the use of moving image and sound content in research and publication, they will require the standardisation of citation and the assurance that collections will hold material and sustain collections on the same basis as print material. This need to guarantee permanence in scholarly access to our national film, television and sound resources also increasingly aligns the further and higher education community with the wider public movement for cultural access to public collections.

Educators would do well to support a project that the authors of this report are now producing. *Film and Sound in Scholarly Publishing: A Guide to Best Practices* will provide the education sector with a much-needed 'missing manual' for integrating film and sound resources in print and online. The guide, in print and online, will discuss experiences of print publishers, educators, and cultural professionals with the citation of rich media to date. It will feature information on producing and deploying video and sound for publication, finding and using archival video and sound, rights and permissions issues, distribution

³³ www.voxeu.org/index.php?q=node/6092

opportunities, citation and documentation best practices, and preservation and storage questions – across a broad spectrum of publications and subject areas and disciplines. The best practices guide will provide materials that:

- Explain the properties of moving images and sound in straightforward ways for publishers
- Explain the process of video production, including production and post-production technologies, procedures, and equipment
- Explain complex issues in clearances, licensing, and fair use
- Explain best practices for working with YouTube, Apple iTunes, and other platforms
- Make it easy for man and machine to find, cite, and index rich media assets
- Describe the film and sound resources required for storage and preservation
- Review key system integration issues: library systems, university course management systems, and vendor and distributor platforms

Additional work needs to be done in development and training for the use of rich media in academic research.

Such guidelines will help provide citation systems for time-based media. Additional work needs to be done in development and training for the use of rich media in academic research. The Film & Sound Think Tank discussed and reviewed various new technologies and processes being developed in the academy and by commercial sources for clipping, annotating, and tagging video and audio. These new tools and skills also are required to embed moving images and sound in teaching and learning.

RECOMMENDATION:

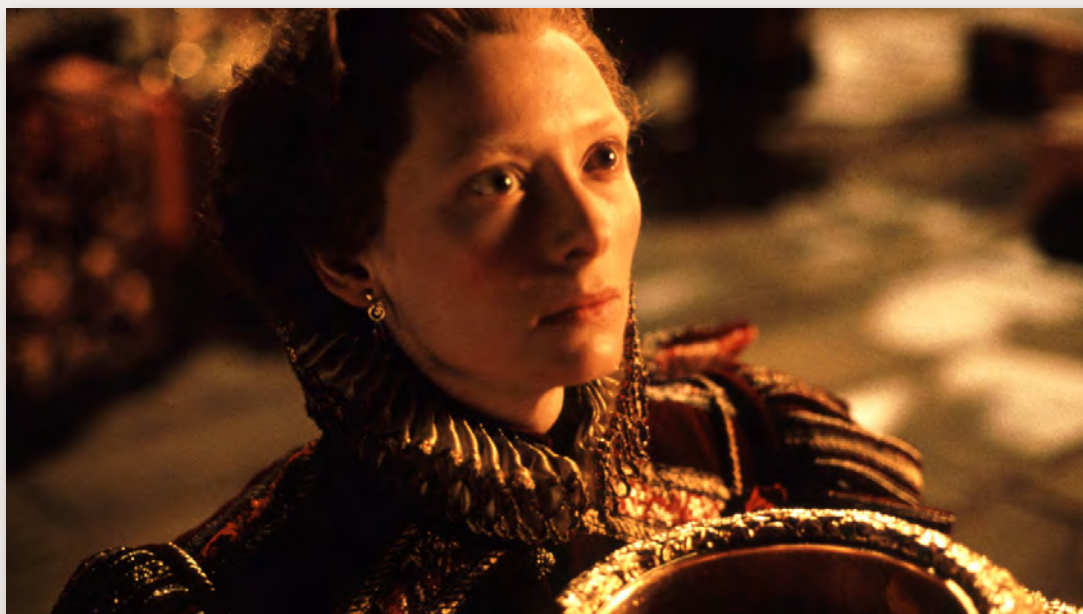
Develop robust guidelines for the use of video and audio in academic writing and publishing, on the scale of the guidelines that have been developed over centuries for the citation and annotation of text.

5. Work with Primary Sources

Most of the thinking about audiovisual archives focuses on access to the finished work, whether it is film, television or radio. But the broadcast programme, just like the published book, is frequently a secondary rather than a primary source. Films, television and radio programmes have value because they represent the expectations of producers, directors, commissioning editors and – often – the popular audience. But with a production ratio of, at minimum, ten hours of footage to every hour that appears on screen, every documentary film represents the tip of a potentially valuable iceberg of content. This is especially the case where the documentary includes interviews with significant historical figures.

This is a difficult and contentious area because it is rarely in the interests of production companies or broadcasters to market this material. No one wants the extra responsibility of storing or indexing this content, and no director is likely to admit that valuable content was discarded in a final cut. However, a small group of farsighted documentary and other film makers have started to recognise that the interests of a broadcast audience may not necessarily always coincide with the needs of academic researchers.

Brian Lapping, the distinguished documentary producer from Brook Lapping Productions (maker of *The Death of Yugoslavia*), has created a partnership with Kings College London to store – and make accessible to researchers – the unused footage from their highly regarded documentary films.³⁴ This is a simple model, linking up a single independent production company with a single higher education institution. But it does not take advantage of networked services and connect with the research and teaching of academics across the UK. Outside of the documentary sector, the film maker Sally Potter has created a living archive, opening up her production files and shot lists to reveal how her creativity has developed.³⁵



Given the difficulties in making their own collections accessible it would be unreasonable to look to the major broadcast archives at the BBC and ITN to store and index documentary footage, especially where the material has been shot by externally commissioned production companies. However they have achieved something similar with news content, keeping the unedited rolls for potential internal use. Their value as a source of reference and 'historical' visual material is demonstrated by their frequent use to tell the backstory of a domestic or foreign news item.

Higher education has a central role to play in creating a new business model for audiovisual production because it can organise both the demand and the addition of value to uncut factual material. The opportunity lies in fully digitised recent and current production. Producers often do not want the responsibility and costs of managing a raw footage digital library, but they do want occasional access and – where possible – commercial exploitation. This uncut documentary content, with no music tracks, will be relatively easy to clear from underlying rights – and very easy to clear if it is planned in advance. Academics and researchers will benefit from priority access to this material, in return for tagging and curating it for wider groups of users. The ongoing service could be subscription based, providing a small but guaranteed return to producers and production companies.

³⁴ www.kcl.ac.uk/lhcma/summary/xf30-001.shtml

³⁵ www.sp-ark.org

There is a strong case for a pilot. Key production companies, for instance those with a track record in social history or the history of science, could be connected with networks of academics and researchers. It would be possible to test the added value, the ability to retrieve the content, the opportunity to validate academic research into primary audiovisual resources, and the benefits to production companies. If successful, it may also be possible to extend the relationship to in-house production at the BBC and elsewhere.

The wider implication of a successful model will be the transformation of documentary production – to shift it from an ephemeral television or radio event to the creation of long-life digital resources. Both existing audiences and future users will benefit.

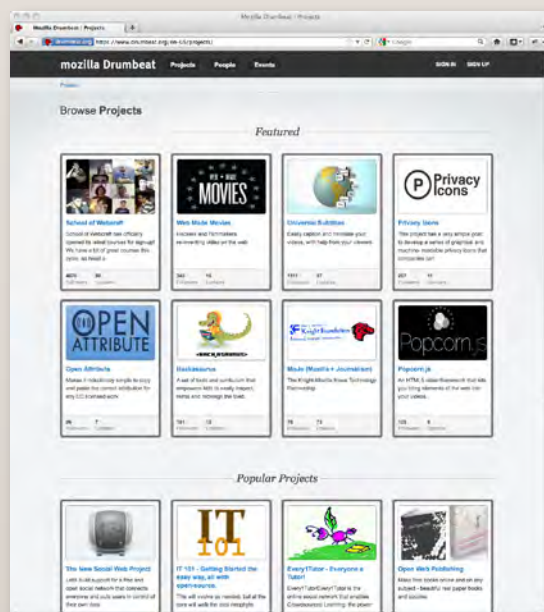
RECOMMENDATION:

Work with and fund selected production companies and relevant academic networks to conduct one or more test pilots, building towards a sustainable business model for the storage, curation, and distribution of uncut footage.

6. Build Digital Literacy

A further need will be to support the growth of the clipping, annotation, tagging and other tools and skills required to embed moving images and sound in teaching and learning. Much has already been achieved in this area, particularly by JISC. But more can be done – discipline by discipline – through the power of case study and its dissemination through social media and academic workshops. Social media tools are also available to allow communities of scholars to share and add value to content they are able to identify and assemble. Initiatives like Digipedia³⁶ are involving scholars in mapping the digital life cycle.

As Brian Goldfarb has described, we are in the midst of a “transition from voice and writing to media” and to a new “visual logic of knowledge production.”³⁷ Such a development will require a review of pedagogy and the inclusion of new skills for analysis, teaching, production and sharing.



³⁶ <http://beta.digipedia.org.uk>

³⁷ Brian Goldfarb, *Visual Pedagogy: Media Cultures in and beyond the Classroom* (Raleigh: Duke University Press, 2002).

The younger generation of users is for the most part already fluent in technical aspects of the new media; the challenge is to develop this basic literacy into advanced applications. For instance, students who have grown up surrounded by audiovisual media have a sense of the importance of narrative which may need to be incorporated in academic discourse. Furthermore, for teachers and researchers, there is a distinct anxiety about the ubiquity of visual knowledge and its contrast with the primacy of text journals as the currency of academic life. As Columbia University technologist Jonah Bossewitch has put it, “For thousands of years critical and scholarly discourse around text has revolved around citation and reference. What might this kind of discourse look like around multimedia—html text, images, audio, and video?”³⁸

The re-working of our heritage of audiovisual materials by the academic community will in turn create substantial educational value.

Archives and collection owners, who have traditionally curated their content on behalf of an elite group of researchers, producers and broadcast regulators, are being forced to recognise the wider application of their materials. As audiovisual material becomes more available in teaching, learning and research, new public value will be created – quite outside the experience of existing archive usage. Already, creative artists and investigative journalists are using television and radio archives to reveal new insights into our culture and society.³⁹ The re-working of our heritage of audiovisual materials by the academic community will in turn create substantial educational value.

The challenge for educators will be to support this developing pedagogy and to nurture the tools and case studies which can help to build it. The goal will be to create self-sustaining communities of users that also have the will and opportunity to share practice across the boundaries of disciplines and subjects. When we reach that goal, we will have embedded a new skillset which will deliver transformative and contemporary educational services to society as a whole.

RECOMMENDATION:

Encourage the development of simple and sophisticated tools for the use of audiovisual materials in academic environments – from classroom to assignment to publication. To that end, assemble working groups and infrastructure teams that include developers and technologists from the public and private sectors.

7. Open National Collections

The existence of collections of national and international significance at the BBC, the BFI National Film and Television Archive, the British Library, and, in the US, at the Library of Congress and at TV stations across the country is evidence that the corpus of public broadcasting has long been recognised for its social, cultural and historical value. Traditionally, its wider availability has been constrained by the technology of distribution and the complexity of rights clearance. Today, the only significant barrier is the clearance of historic material.

³⁸ Jonah Bossewitch, “Annotating Conversations,” online at: http://ccnmtl.columbia.edu/compiled/projects/annotating_conversations.html

³⁹ See Ken Russell’s review of *Mnemosyne*, John Akomfrah’s film drawing on BBC archives. http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/film/article6988236.ece



However, with the partial exception of France, progress across Europe and North America has been slow. The BBC, for example, has had a policy commitment to open up its archives since 2003, and has tested a number of projects including the Creative Archive⁴⁰ and the Open Archive.⁴¹ But it has yet to secure regulatory permission to release its full collection into the market, and it remains unclear whether its archive strategy will be public service or income-generating.

The evidence suggests that we cannot rely on the major archives alone to implement a full and open public access strategy. They may need to harness or link up more closely with important social indicators of demand for broadcast archives, whether this demand stems from entrepreneurship in new media or educational need at all learning levels. A 'pull-through' process may be more effective than the 'push' policies half-heartedly developed by the major institutions.

The evidence of how small-scale projects can successfully add value to these major broadcast collections is clear for all to see. Where people can explore freely, marvels have been produced. On his BBC blog the idiosyncratic documentary maker Adam Curtis has used long-forgotten moving images to reveal contemporary stories.⁴² The Arts Council has collaborated with the BBC to allow artists to explore the archives and develop unique artworks. Chris Dorley-Brown revealed and updated remarkable stories about Whitechapel in London's East End.⁴³ Vicki Bennett used imagery from the 1950s onwards to portray retrospective visions of the future.⁴⁴ And most recently John Akomfrah has made visual poetry by re-contextualising recent history from television and other archives.⁴⁵

⁴⁰ www.bbc.co.uk/creativearchive

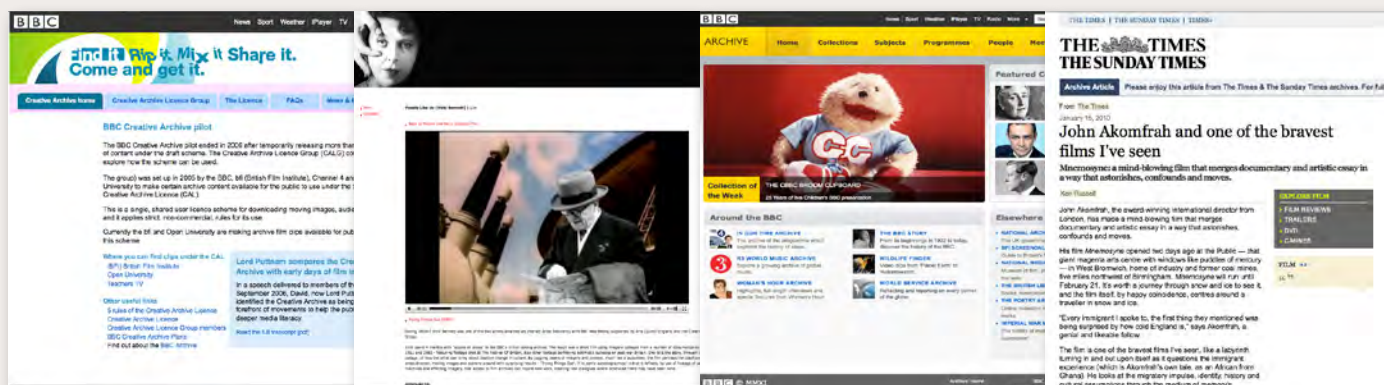
⁴¹ www.bbc.co.uk/archive/index.shtml

⁴² www.bbc.co.uk/blogs/adamcurtis

⁴³ www.modrex.com/chris/bbc%20archive/chris/bbc%20in%20the%20east%20end.html

⁴⁴ www.ubu.com/film/plu_trying.html

⁴⁵ http://entertainment.timesonline.co.uk/tol/arts_and_entertainment/film/article6988236.ece



This suggests that further and higher education institutions can benefit from specific projects which add value to public broadcasting archives. In a mutually beneficial relationship academics can add new layers of meaning to collections for broadcasters who still curate and manage this material within traditional television and radio genres. Establishing increasingly widespread and deep educational relationships with these archives is a necessary step on the road to full public and creative access. The collaboration with BBC Northern Ireland to create a history of the Troubles is a valuable early model.⁴⁶

This opportunity has been further enhanced with the development of the concept of a Digital Public Space. Instead of acting alone to overcome intellectual property issues, and to encourage standardisation across the public sector and maximum technical interoperability, the BBC is deploying its public value partnerships (with the British Library, the Arts Council and others to secure added benefits from public investment) to promote the concept of the Digital Public Space. In principle this may be a 'neutral' part of the web where collections from the BBC, the British Library, the National Archives, the British Film Institute, Arts Council England and many others can be exposed to public search and discovery. However, any use of the material outside of this defined territory would require the appropriate permission and licensing regimes.

Successful implementation of the Digital Public Space will enable the BBC and the other institutions to jointly manage the rights issues inherent in all heritage collections, and to establish a range of business models which ensure that stakeholders benefit from an income stream. Such a development will need strong backing and involvement from the further and higher education community.

RECOMMENDATION:

Develop specific subject partnerships with broadcasters and other audiovisual collections to search, annotate, and develop usage around multiple topics and in various disciplines. Encourage and support new forms of access to national collections for historians, journalists, artists and others through residencies, placements, blogs, and other schemes.

8. Fund New Productions

Teaching and learning with moving image and sound content has already stimulated the creation and production of new audiovisual material. But there is no requirement for academic-based production to automatically mirror the restricted methodology which has characterised traditional broadcast-based production. The higher education community has the opportunity to implement *open production* methods which bring shared learning values into the process of creating moving images.

As funders of higher education interact with producers of educational television and other professionals creating audiovisual materials, the conversation needs to deepen about new models of production that have students, teaching, and learning in mind. Indeed, we should be thinking about reconfiguring, entirely, the way we produce public media today and going forward, to base it on new protocols through and through. From here on it would behave producers to record or produce content as though it were intended for the most liberally licensed commons. This includes clearing interviews for that purpose explicitly, shooting b-roll in that way, and recording music and sounds in that way; and in the post-production/edit stage, drawing only upon images, moving images, and sound that carry such explicit licenses. If other sources are needed, a concerted effort should be made – perhaps even required by funders – to clear them in such fashion as well with our partners: the net result being, in effect, open access audiovisual publishing.

In the sphere of scientific and medical research and publication, where lives are saved by changes in policy, this type of commitment has already taken firm root. New policies have been put into place mandating that the results of publicly funded projects be made available – the finished research articles, as well as the underlying data and data sets – to the public without conditions. Progress is helped along by new conventions and normative standards that have been negotiated among scientists, as well. The release of such important information – information too important to keep closed – also has an incidental objective, which is to show how, in a networked world, the freest content may just be the strongest.

We would do well to establish a working group that interrogates these models and invigorates an open debate about their applicability for our world in public media. In the process of exploring opportunities and demand for the re-use of audiovisual material, we may be reminded of the early years of cinema, when media consumers multitasked endlessly, interacting with the screen, lecturers, musicians, and other audience members throughout the playing time of a picture, and directors and projectionists and theatre owners reworked each other's products mercilessly.⁴⁷

RECOMMENDATION:

Fund video production within academic institutions and public media with explicit requirements for the audiovisual product to be freely licensable. Activate new productions and academic production partnerships. When documenting them, build a guide to best production practices for higher and further education.

⁴⁷ "[D. W.] Griffith's incessant adding and subtracting of footage implies that he saw these films essentially as *open texts*, capable of showing one face to Boston and another to New York.... By the late silent period, exhibitors could choose alternate endings for a number of major films. Some audiences, viewing Garbo as Anna Karenina in Clarence Brown's LOVE (1927), saw Anna throw herself under a train. Other theaters showed Anna happily reunited with Count Vronsky. King Vidor shot seven endings for THE CROWD and apparently issued it with two...." Richard Koszarski, *An Evening's Entertainment: The Age of the Silent Feature Picture, 1915–1928* (Berkeley: University of California Press, 1990), p. 137 (emphasis added). See also: Eileen Bowser, *The Transformation of American Cinema 1907–1915* (Berkeley: University of California Press, 1990).

9. Establish an Integrated Media Service for Higher Education

In a world characterised by these trends, the education sector has an opportunity to lead not follow and for JISC to exert – with a cost-effective strategic intervention – a game-changing role, comparable to the media innovation that established the Open University in 1971.

We propose that JISC initiates a conversation among key players in the field to define the relationship between the Digital Public Space and an exclusively educational media service, and to explore the following:

- a. A high-impact distribution platform for integrated media service. YouView,⁴⁸ the next generation digital platform led by BBC technology, promises to deliver to public sector providers a combination of the excitement and potential efficiencies of a television-model 'channel' and the opportunities for pedagogy, discovery, distribution, and creation presented by the web. A rich education service will need to be developed for YouView, and JISC, through the Film & Sound Think Tank or a similar body, is well placed to lead it.
- b. The integration of media expertise. JISC already has experience in leveraging the media resources and skills that have been developed with public funds – including production expertise, archival/curation talents, distribution know-how, rights clearance strategies, and marketing and search optimisation skills.
- c. The blending of original and re-usable production. How a sustainable media service can feature original broadcast-quality productions alongside the web's potential for re-versioning and redistributing existing and legacy content.
- d. A commitment to open production methods. How high-quality narrative video and audio work can be enriched by accompanying new productions emanating from partners, including university media centres and user-generated content from educators, students, and the public.
- e. The securing of academic community involvement. The stimulation of academic communities who can mine data, share and re-version content, release contextual material, and regulate brands – satisfying the demands of students, faculty, researchers, and other stakeholders for content useful to teaching and learning.
- f. The development of a new kind of enabling structure. Evolving an institution that would be part provider- and institution-controlled, part user-controlled and on-demand, with momentum for control heading in the direction of the end-user.

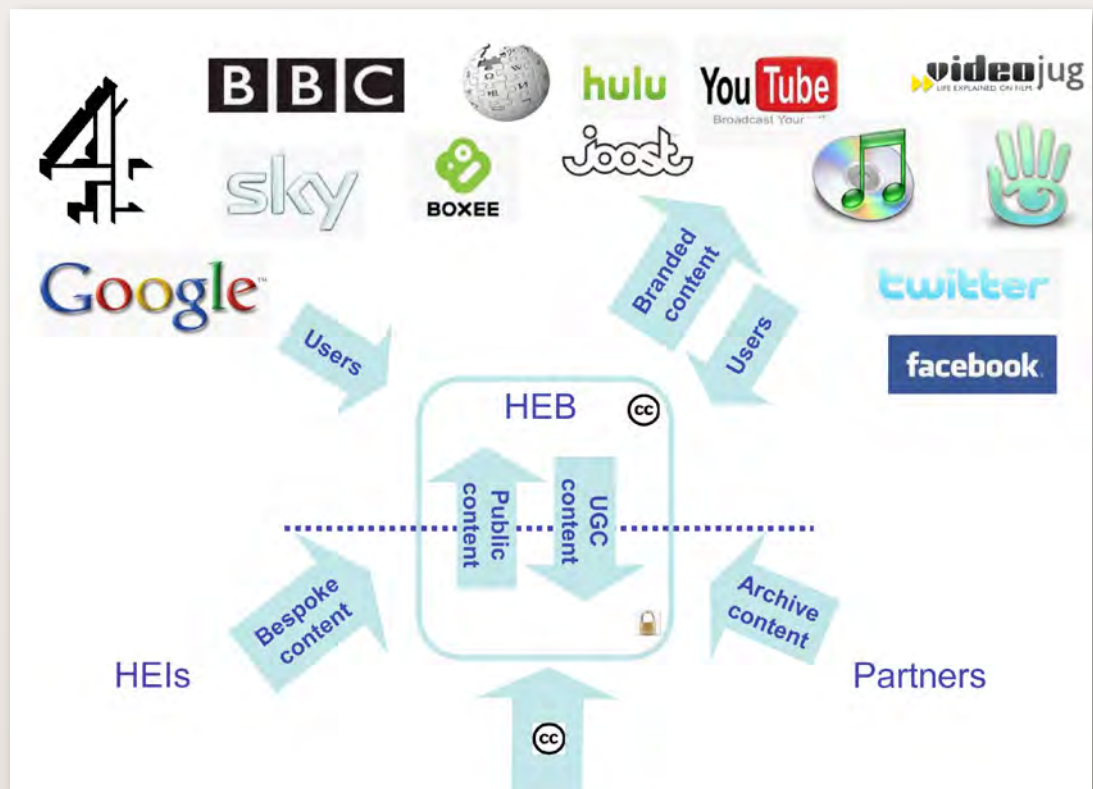
An integrated media service for higher education offers important benefits for the sector and for its public role. It could:

- Widen both formal and informal participation in higher education
- Accelerate the use of media in education
- Improve the quality of teaching and learning
- Distribute the public benefits of cutting edge research in higher education

At the March 2009 Think Tank meeting (for a video record, see: www.jisc.ac.uk/whatwedo/programmes/filmandsound/videos), we explored a set of ideas for how an integrated media service could spearhead progress in the sector in various specific ways. It could collect, curate, sponsor and provide content *across subject interests* with various tools designed to service 'communities of practice' – Twitter-style tools for historians,

GoogleDocs-type platforms for scientists – across media, all authenticated by experts, and where members of the education community were able to rate, rank, discuss and comment upon it.

An integrated media service could be partly open to the public, partly closed for educators only – with momentum pushing content from education to the public, and public and social media into education, as illustrated below:



(HEB here refers to higher education broadcasting/integrated media service)

The funding for an integrated media service for higher education could draw on both public and commercial sources. Its business plan would incorporate sponsorship, advertising, contributions in kind, and involve public-private, Google-style partnerships as well.

It could be argued that an integrated media service for higher education is happening anyway out of energies from university podcasting, YouTube, iTunes, and a “virtual Legoland of plug & play tools,” as one of our Think Tank contributors noted. The demand for these materials is demonstrated by audiences in the hundreds of thousands seeking Open University content and Oxford University podcasts, and audiences of millions more for educational media. The question we have addressed is: what kind of media intervention could be designed to embrace these dispersed initiatives and provide a framework to best serve the higher education community and its wider public? Given the many JISC services, projects, and programmes that are stakeholders in the future of audiovisual resources, we encourage comprehensive discussions of the benefits of this type of system-wide intervention.

RECOMMENDATION:

Develop a feasibility plan for an integrated media service for higher education delivered through YouView and other platforms.

10. Call Together a Summit on Video and Education

Finally, as we have noted, moving images and sound govern the ways many of us process information in our daily lives – they are primary media of the digital age. Yet the screens and speakers in many schools and colleges nationwide remain blind and silent to their potential. Furthermore, as new online courses are built for education, the cost-effectiveness of video for open courseware and distance learning will grow all the more important. What can be done to assemble audiovisual resources for teaching and learning, and to do so while bringing all the key stakeholders to the table?

We propose to structure an investigation and summit for the main public and private stakeholders in the future of video for higher and distance education. The investigation would commission white papers on the following and present the results at a structured day-long summit in London or Washington:

- What audiovisual resources are currently available for teaching and learning?
- What additional audiovisual resources are needed and where can they be sourced?
- What public and private funding and investment structures, new partnerships, and new economies of scale can help to deliver them?

The Video for Education Summit would involve agencies and departments from the government including the Department of Business, Innovation and Skills, the Department of Education, the National Endowment for the Humanities, the National Science Foundation, the BBC, the Corporation for Public Broadcasting, the British Library, the Library of Congress, the National Archives, and the Federal Communications Commission, among others. It would also include other key production units and archives and commercial companies focused on video including Adobe, Apple, Cisco, Google, and Intel. It could be an influential platform to demonstrate the relevance of the UK's Digital Public Space.

The Video for Education Summit will conclude with a series of practical recommendations for JISC and its other sponsors.

RECOMMENDATION:

Organise a joint UK/US Video for Education Summit in London or Washington. This could help facilitate a new kind of laboratory to experiment with public-private and more international partnerships to support digitisation and education.

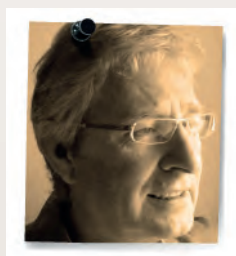
V. Summary of Recommendations

1. Develop marketing strategies for JISC audiovisual collections and investments, including user case studies and tutorials about collections across disciplines and departments. Review the effectiveness and help streamline and coordinate the roles of JISC and JISC-funded institutions delivering film and sound resources.
2. Make audiovisual content investments searchable by applying robust, detailed, and machine-readable metadata. Build a public-private working group to collect and extend the tools, practices, and business models of companies – Netflix, for example – that focus on resource discovery methods that may be adaptable for education. Consider establishing an audiovisual extension of JSTOR and ARTstor for moving images and recorded sound, ensuring that it can provide access to a range of other media as well. In addition, establish more efficient and complete catalogues to index and annotate film and sound holdings including off-air recordings and broadcast listings across institutions including BUFVC, BFI, and EDINA.
3. Complete an inventory of the elemental anatomy of a video and audio clip requiring rights and licensing attention. Compile a body of legal documents that can provide the basis for articulating new, more liberal language for production, curation, and clearance agreements. Build prototypes of promotional links from online clips to rights-holder sites. Explore public-private working groups, digitisation-on-demand partnerships, and public sector activity around collaborations such as the Digital Public Space (originated by the BBC) to determine how to manage the cumbersome audiovisual clearance process for education and long-term public access and re-use.
4. Develop robust guidelines for the use of video and audio in academic writing and publishing, on the scale of the guidelines that have been developed over centuries for the citation and annotation of text.
5. Work with and fund selected production companies and relevant academic networks to conduct one or more test pilots, building towards a sustainable business model for the storage and distribution of uncut footage.
6. Encourage the development of simple and sophisticated tools for the use of audiovisual materials in academic environments – from classroom to assignment to publication. To that end, assemble working groups and infrastructure teams that include developers and technologists from the public and private sectors.
7. Develop specific subject partnerships with broadcasters and other audiovisual collections to search, annotate and develop usage around multiple topics and in various disciplines. Encourage and support new forms of access to national collections for historians, journalists, artists and others through residencies, placements, blogs and other schemes.
8. Fund video production within academic institutions and public media with explicit requirements for the audiovisual product to be freely licensable. Activate new productions and academic production partnerships. When documenting them, build a guide to best production practices for higher and further education.
9. Develop a feasibility plan for an integrated media service for higher education delivered through YouView and other platforms.
10. Organise a joint UK/US Video for Education Summit in London or Washington. This could help facilitate a new kind of laboratory to experiment with public-private and more international partnerships to support digitisation and education.

Acknowledgments

We would like to thank the full roster of **contributors** to the Film & Sound Think Tank; JISC Director of e-Content, Catherine Grout, and her colleagues; and also Tony Ageh, Michael Dale, Eric Faden, Ben Moskowitz, Johan Oomen, Hal Plotkin, Jeff Ubois, and Harry Verwayen for sharpening our thinking on many of these issues.

About the Authors



Paul Gerhardt runs independent consultancy Archives for Creativity (www.archivesforcreativity.com), working with arts, cultural organisations and public broadcasters to stimulate the educational and creative use of film, television and sound archives.



Peter B. Kaufman is President and Executive Producer of Intelligent Television (www.intelligenttelevision.com). Intelligent Television produces films, television, and video in close association with universities, museums, libraries, and archives and with the world's leading producers, directors, and cinematographers.

Film and Sound in Higher and Further Education

A progress report with ten strategic
recommendations

Paul Gerhardt and Peter B Kaufman

Version 1.1, June 2011



© HEFCE 2011. The Higher Education Funding Council for England (HEFCE), on behalf of JISC, permits reuse of this publication and its contents under the terms of the Creative Commons Attribution-Non-Commercial-No Derivative Works 2.0 UK: England & Wales Licence. All reproductions require an acknowledgement of the source and the author of the work and must comply with the terms of the Licence. Reuse of any third party content is subject to prior written permission from third party rights holders as appropriate.

