BEYOND THE CLASSROOM

Creative Commons, Education & Research

The message underpinning Creative Commons is fundamentally concerned with education – for creators, how best to manage their bundle of copyrights both online and offline; for users, how best to reuse and remix these materials in an appropriately permissioned environment, giving rise to a thriving learning experience. In recognition of this, in 2007 CC launched an international educational division, ccLearn (http://learn.creativecommons.org), which seeks to support the Cape Town Open Education Declaration (www.capetowndeclaration.org), to accelerate efforts to promote open resources, technology and teaching pedagogical practices.

In Australia and the region, CC is increasingly being implemented by educational organisations wishing to establish legal frameworks for collaboration both within and beyond the classroom. Following the lead of international initiatives such as Massachusetts Institute of Technology (MIT) OpenCourseWare (http://ocw.mit.edu) and Rice Connexions (http://cnx.org), the University of Southern Queensland (USQ) is the inaugural Australian participant in the OpenCourseWare Consortium, offering sample courses from each of the University's five faculties, together with materials from its Tertiary Preparation Program (www.usq.edu.au/ltsu/learnsupp/tpp/default.htm) under CC Noncommercial-Share Alike 2.5 Australia licence. Across the Tasman, New Zealand's Otago Polytechnic has gone one step further, promoting the CC Attribution licence as the default licence for all of its open access courses.

The Queensland University of Technology (QUT), home of Creative Commons Australia, is leading the investigation and dissemination of CC in Australia. From the *Creative Commons Clinic* (ccClinic), which aims to foster opportunities for the creative community to take advantage of the potential afforded by digital technologies, to

http://wiki.creativecommons.org/casestudies

KCB101: Communication in the New Economy undergraduate course, which employs CC to allow students to develop skills for collaboration and ethical reuse of content, QUT is increasingly incorporating the lessons of CC into its undergraduate and postgraduate teaching. QUT's Faculty of Law has taken the open access message beyond the classroom, creating and distributing two *Mayer & Bettle* animations (see 'filmmakers'), designed to introduce the concepts of CC to primary school children across rural and remote Queensland. A further Queensland tertiary institution, Griffith University's Conservatorium of Music utilises CC as a fundamental part of its IMERSD – Intermedia, Music Education & Research Design – programme, which points to productive engagement between the university and industry partners. Professor Paul Draper, IMERSD Project Director, advocates an appropriate framework for Australia's education and research institutions, ultimately emphasising the importance of access to key works with which to teach and from which to compose.

Educators working outside the tertiary sphere are equally exploring the potential of CC as an enabler of informal learning. For younger children, the Powerhouse Museum, Sydney offers its science and design *Play* materials as a CC-licensed take-home resource designed to include parents and carers in the instruction of up-to-ten-year-olds. In a similar vein, the Community Library aims to provide CC-licensed and other open materials in a 'take-home' form to those who do not have ready access to internet resources, reducing the barriers to accessing knowledge created by age, wealth and others divide. The Ipswich-based edgeX project, which seeks to investigate the potential of Web 2.0 to serve communities on a hyperlocal level, uses CC as a means of both managing its own copyright and educating teenagers on their copyright rights and responsibilities in the online environment. At the same time, CC empowers students and teachers alike to give their work and materials a life beyond the classroom.

Australian researchers are also prominent amongst their peers in releasing their world-leading investigative insights under CC licences. By publishing their research with the open access Public Library of Science (PLoS) journals, Australian scientists investigating topics as diverse as the genome of the Tasmanian tiger (Pask, Behringer, & Renfree, 2008), and the development of a simple blood test for African sleeping sickness (Njiru, Mikosza, Armstrong, Enyaru, Ndung'u, et al., 2008), are making their findings accessible to the world on a whole new level.

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The Cathedral of Learning, the centerpiece of the University of Pittsburgh's main campus in the Oakland, Pittsburgh. It is the tallest educational building in the western hemisphere.

Creative Commons Clinic

DESCRIPTION: The Creative Commons Clinic (ccClinic) at Queensland University of Technology in Brisbane is the primary centre for research into Creative Commons in Australia

WEBSITE: ccClinic: www.cci.edu.au/ccc and Creative Commons Australia: http://creativecommons.org.au

LICENCE USED: Creative Commons BY-NC-SA 2.5 Australia, http://creativecommons.org/licenses/by-nc-sa/2.5/au

MEDIA: Educational

LOCATION: Brisbane, Australia

Overview

Based at the Queensland University of Technology (QUT) Faculty of Law in Brisbane, and funded by the ARC Centre of Excellence for Creative Industries and Innovation (www.cci.edu.au), the ccClinic is the primary centre for Creative Commons research in Australia. Working closely with Creative Commons Australia (CCau) it aims to evaluate and promote the implementation of Creative Commons in Australia and to foster opportunities for the creative community to take advantage of the potential afforded by digital technologies.

The ccClinic is led by Professor Brian Fitzgerald (Professor of Intellectual Property and Innovation, QUT Faculty of Law) who also serves as the joint project lead of Creative Commons Australia with Professor Tom Cochrane, QUT's Deputy Vice Chancellor, Technology, Information and Learning Support.

The ccClinic operates across two main research streams:

1   An education and research program which serves as an information resource centre for students, teachers, individuals and organisations in Australia seeking to engage with the Creative Commons; and
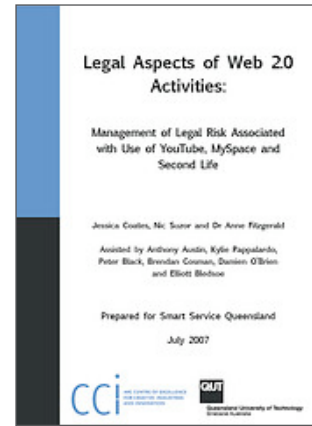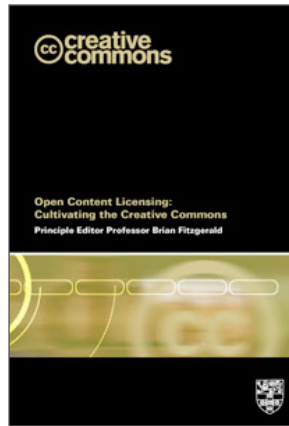
2   A more traditional research stream, which focuses on documenting and evaluating the progress of Creative Commons and other open content licensing models in Australia and internationally.

The project also undertakes industry and government advocacy and training and participates in the ongoing international review of the CC scheme and licences (www.cci.edu.au/ccr).

Major outputs by the ccClinic research team since its commencement in 2006 include developing and running a clinic-structured undergraduate unit based at QUT, which provides the opportunity for undergraduate students to interact with industry experts and to undertake in-depth research on a topic relating to OCL and the Creative Commons. Particular emphasis is placed on the practical implementation of the CC model, with students encouraged to conduct interviews and surveys with real-world participants in the movement.

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The ccClinic has also published a book of essays titled *Open Content Licensing: Cultivating the Creative Commons* (http://creativecommons.org.au/ocl). The volume provides a snapshot of the thoughts of over 30 Australian and international experts – including Professor Lawrence Lessig, futurist Richard Neville and the Honorable Justice Ronald Sackville – on topics surrounding the international Creative Commons initiative, to the landmark *Eldred v Ashcroft*. It is published through Sydney University Press and released online under a Creative Commons Attribution-Noncommercial-No Derivative Works 2.5 Australia Licence.

In August 2007 the ccClinic published *Unlocking the Potential through Creative Commons: an industry engagement and action agenda* (http://creativecommons.org.au/unlockingthepotential). This report evaluates and responds to outcomes of an industry engagement forum hosted by the Clinic in November 2006, and presents a strategy for continued research into Creative Commons in Australia. The report documents the understanding of and attitudes towards copyright, open content licensing and Creative Commons expressed by over 50 representatives of the Australian government, education and the creative industries. It is available under a Creative Commons Attribution 2.5 Australia licence.

More recently, the ccClinic produced the report *Legal Aspects of Web 2.0 Activities: Management of Legal Risk Associated with Use of YouTube,*

MySpace and Second Life (http://www.ip.qut.edu.au/files/Queensland%20Government%20Report%20-%20reformat.pdf) as a consultancy for the Queensland Government's Smart Services Initiative. It identifies the practical legal risks associated with activities conducted in online participatory spaces.

edgeX

DESCRIPTION: The edgeX project provides a site for Ipswich residents to upload creative content, building a community around collaboration via comments made on users' work, competitions, and the development of new skills, knowledge and attributes appropriate for the digital age.

WEBSITE: http://edgex.org.au

LICENCE USED: Option to choose from CC licences and full copyright

MEDIA: Multimedia

LOCATION: Ipswich, Australia

Overview

The Emergent Digital Grassroots eXpo (edgeX) project is a research and application initiative which aims to map grassroots and amateur content creation, focusing on community engagement with new media and strengthening local identity. Centred around Ipswich, Queensland (pop. 150,000), the site explores whether participants' sense of local, geographic community can be enhanced through the use of Internet technologies expressing local themes.

Coordinated by the Institute for Creative Industries and Innovation (www.ici.qut.edu.au) at the Queensland University of Technology (www.creativeindustries.qut.edu.au), edgeX is a partnership project with the University of Queensland (www.business.uq.edu.au) and the Ipswich City Council (www.ipswich.qld.gov.au). Launched in 2006, the project is funded for a three-year period through the Australian Research Council (ARC). The first stage of edgeX has involved the creation of a website which allows the uploading of multimedia content, combining the functionality of a YouTube-style video site, a Flickr-like photo site, and blogs and podcasts. The site provides functionality for commenting, rating, and tagging, allows the development of specific user groups which evolve their own self-moderation structures, and contains a competition and exhibition space as a central feature. Competitions are seen as an optimum way to generate both interest and content for the edgeX site whilst building further community connections.

Licence Usage

Offering Creative Commons licences alongside standard copyright and Public Domain dedications, edgeX
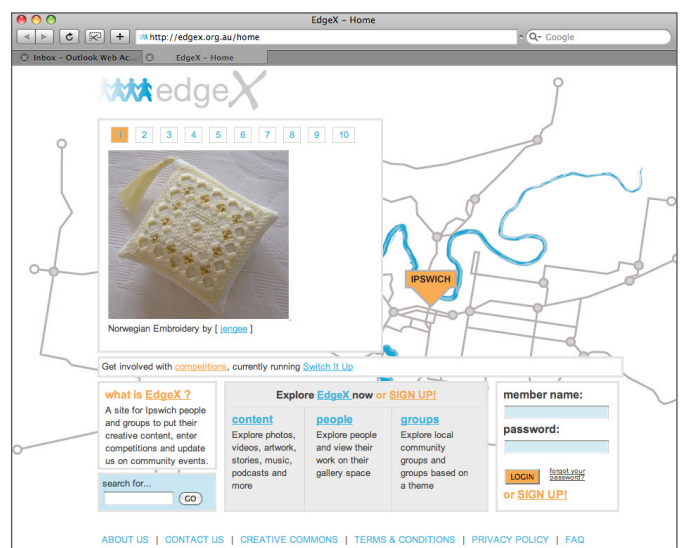
edgeX homepage, June 2008

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Intellectual Property laws on their own work and on the work of others as they encounter it. It highlights the fact that even for users who have no intention to commercialise their work, protecting their rights as authors remains important, while it is possible for them at the same time to enable others to share in and build on their creative work. It is hoped that the transparent, reliable, and accountable rights environment which Creative Commons licences establish will help generate strong communities of content creators, who can collaborate with one another without fear of seeing their intellectual property exploited by third parties without consent.

encourages users to modify and mash up each other's content where permissions allow. A notable feature of edgeX's multimedia content sharing system is its emphasis on interaction not only through text, but also via content uploaded to the site. By offering Creative Commons licences for original contributions, the site aims to create a 'continuous stream of content evolving over time in the hands of a varied community of participants' (http://snurb.info/files/talks2007/Playing%20on%20the%20Edge.pdf).

edgeX's Creative Commons framework is explained on the site's Copyright page (http://edgex.org.au/main.aspx?page=Creative%20Commons).

Motivations

Creative Commons provides a crucial basis for the intended content development, reuse, and remixing activities in which edgeX users are invited to participate. In utilising CC frameworks, edgeX also aims to play an important educative role, alerting users to the impact of applicable

IMERSD e-Learning Projects, Griffith University

DESCRIPTION: The IMERSD project employs new media technologies for e-research content design, production and publication within the music industry, emphasising the importance of access to key works with which to teach and from which to compose.

WEBSITE: www.griffith.edu.au/imersd and www29.griffith.edu.au/radioimersd

LICENCE USED: Creative Commons BY-NC-ND 2.5 Australia, http://creativecommons.org/licenses/by-nc-nd/2.5/au

MEDIA: Music

LOCATION: Brisbane, Australia

Overview

The IMERSD (Intermedia, Music Education & Research Design) Project was established at Griffith University's Conservatorium of Music (www.griffith.edu.au/music) in 2004. Offering facilities which span teaching, research and commercial environments surrounding multimedia and music production, IMERSD emphasises productive engagement between the university and industry partners. The project employs new media technologies for e-research content design, production and publication across three areas, as reflected in its name.

Intermedia involves three programs:

1   Collaborations with the Griffith Film School (GFS) (www.griffith.edu.au/faculty/qca/griffith_film_school) in the production of film, animation and music video projects with QCGU composers, performers and sound producers.

2   Supervision of Workplace Integrated Learning (WIL) opportunities in key areas including Radio/TV broadcast, film, recording and multimedia industries.

3   Engagement with Internet technologies and interactive media streaming formats for the development and promotion of e-Research and e-Learning.

The second area is Music Education which also encompasses three programs:

1   QCGU and Griffith Enterprise (www.griffith.edu.au/commercialisation) partnering in the production of music CDs and DVDs, development of Intellectual Property and music law considerations.

Radio IMERSD home page, June 2008

2 Working with record labels, independent artists and the Queensland music industry body Q Music (www.qmusic.com.au) to develop recording industry and support QCGU graduate and alumni career development.

3 Establishing and growing WIL links with external industry through the Music Technology Industry Affiliates Program (MTIAP).

The third area within IMERSD is Research Design. It also has three programs:

1 Partnering with the Queensland Conservatorium Research Centre (QCRC) (www.griffith.edu.au/music/queensland-conservatorium-research-centre) in the design and production of traditional and non-traditional research outputs.

2 Engaging with interdisciplinary projects in collaboration with Griffith research centres.

3 Promoting exemplars of activity, research growth and music-making in support of high quality Research Higher Degree (RHD) completions;

to provide enhanced research training in honours and undergraduate programs.

IMERSD emphasises immersion and engagement across diverse art forms. It offers recording studios, a multimedia post-production suite, and an audio research laboratory.   Music technology practitioners and researchers are therefore provided with specialised multimedia production tools and state-of-the-art audiovisual monitoring and reproduction systems and surrounds. IMERSD is designed to offer significant stand-alone projects or collaborative undertakings with industry professionals.

Radio IMERSD broadcasts the project's digital art outputs in an open access, multimedia format. These include Griffith University's public speeches and workshop presentations, musical compositions, performances and sound recordings, and commentary and review to prompt discussion. Radio IMERSD is a key output from the Digital Arts @ Griffith project.

Examining the role of public, cultural and educational institutions with respect to the implementation of broadband technologies is critical. Seeking to support the growth of the creative industries, the IMERSD programme contributes to the creative economy through the provision of:

- enhanced infrastructure;
- content production and commercialisation;
- up-skilling for current employees and businesses;
- community engagement and participation;
- production of skilled and creative employees and small businesses;
- research, research design and contribution to practice-led research.
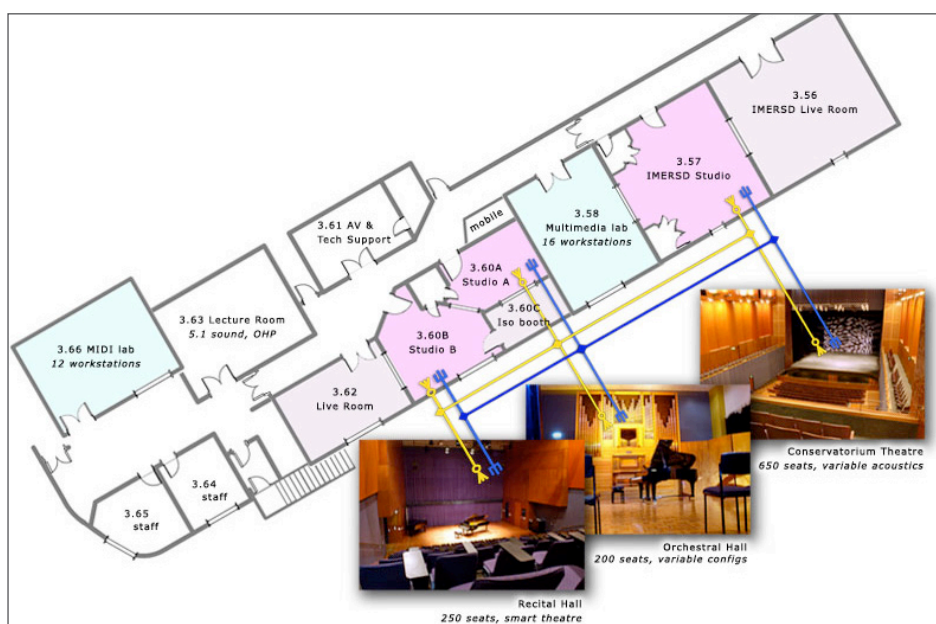
Floor plans of the multimedia production complex and the Conservatorium

Licence Usage

IMERSD and its associated music technology curricula aim to highlight aspects of teamwork, workflow, data management, Intellectual Property and other such contextual but oft-forgotten aspects of excellence in professional practice. For this reason, the project requires that all works on the IMERSD Stream be licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 2.5 Australia licence. Contributions to the project must be original works that have neither been previously published nor submitted to another publisher prior to submission. IMERSD invites digital music and sound contributions from academic staff, professional practitioners, visitors, alumni and students of Griffith University.

The IMERSD Contribution Guidelines (www29.griffith.edu.au/radioimersd/content/view/74/83) provide advice as to the adoption of the site's Creative Commons licence.

Whilst the current CC-licence adopted does not allow derivatives, it does allow for the posting of the creator's material on a personal server or website, or an institutional server, when a hyperlink is given to the material on the Radio IMERSD site.

Motivations

According to IMERSD project director and Head of Music Technology Professor Paul Draper, Creative Commons begins as a way to unpack Intellectual Property issues to better inform professional artistic decision making. Being exposed to the range of CC licensing helps students to understand the different kinds of licensing models and the different kinds of value-adding that might benefit their careers and personal endeavours. As discussed in an email interview with Rachel Cobcroft from Creative Commons Australia, Professor Draper

indicates that the primary motivation for IMERSD is to engage with original student and staff creative works, to disseminate these and engage with new public audiences in a parallel partnership with Apple iTunes (www.apple.com/itunes).

In this way, Creative Commons:

- Provides a streamlined and easy-to-understand pathway into basic principles of the rights of creators;
- Opens discussion and projects to ideas surrounding 'remix,' creativity, history and 'standing on the shoulders of giants'; and
- Helps establish wider concepts of matters relating to 'corruption' in some aspects of media practices, and allows students to then value their own rights and to think more deeply about how they wish to further engage in commercialisation and the entertainment business upon graduation.

Professor Draper argues that, at the very least, Australia needs appropriate music licensing dedicated to the purposes of teaching and research. This framework needs to be made available to the entire education sector. Many institutions regularly record seminar teaching and research works: key classical pieces from history, important jazz standards, new works, new interpretations. These need to be peer-reviewed, archived and disseminated as an important resource with which to teach, research and provide adequate resources for young musicians – especially in terms of cultural and historical context.

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KCB101: *Communication in the New Economy*

DESCRIPTION: *KCB101: Communication in the New Economy* is a unit offered by the Creative Industries Faculty at the Queensland University of Technology which uses Creative Commons to enable students to build an innovation commons, emphasising collaboration and ethical reuse of content as skills appropriate for media and communication professionals interacting in the new economy.

WEBSITE: http://creativetown.ci.qut.edu.au

LICENCE USED: Creative Commons BY-NC-ND 2.5 Australia, http://creativecommons.org/licenses/by-nc-nd/2.5/au

MEDIA: Educational: Text

LOCATION: Australia

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Overview

KCB101: Communication in the New Economy is an undergraduate unit offered by the Creative Industries Faculty at the Queensland University of Technology which encourages students to explore the possibilities opened up by content reuse and collaborative frameworks. The unit introduces students to contemporary theories of the new economy, examining salient issues and trends in media and communication disciplines, industries, and professional practice. It considers the emergent challenges of Intellectual Property, access and equity, and ethical professional conduct. Approximately 250 students take this unit each year.

Media and communication professions (including advertising, public relations, journalism, marketing communication, interaction design and media research) are situated as vital creative inputs into the wider creative economy. Class activities are designed to promote students' literacy, advocacy, and oral and written communication skills in a collaborative environment appropriate for the new, creative economy. Through an iterative and interactive assessment process, students create an 'innovation commons,' and submit written proposals for a creative industries project to be funded by the business or local council of the hypothetical Queensland town of 'Ipskay'.

'Media audiences are no longer merely active producers of meaning. They are now demonstrably interactive.'

KCB101 unit outline

The innovative element of KCB101 emerges through the structure of its assessment requirements. Students work in small groups of three to five, to prepare a project proposal which 'will help to extend the cultural, social and economic benefits of creative industries in Ipskay' (KBC101 Unit Outline).

Proposals may be for arts or public culture initiatives, for creative industries research and professional development programs, for establishing social or professional networks, or for 'soft' or 'hard' infrastructure or services which enhance the creative industries in the region. With student consent, these proposals are then released back to the class under a Creative Commons licence for use in the final assessment. The web page this which students access proposals from is called the *KCB101 Innovation Commons.*

As their final piece of assessment, students choose a project proposal from the *KCB101 Innovation Commons* (other than their own) to evaluate. They write a short analytical essay and make recommendations to the Ipskay funding bodies on whether the proposal should be supported. This assessment is undertaken individually. Students are once again invited to return these essays to the commons so that they can see which proposals have captured their peers' attention, and the range of student-identified strengths and weaknesses of proposals.

Even though open access to the student work maintained on the *KCB101 Innovation Commons* is restricted by the limits of the Blackboard system (that is, only QUT staff and students can gain access), this application of Creative Commons licensing provides open access to student work in ways that have previously been extremely difficult to achieve. Two additional major advantages arise from open access being provided to the assessment documents. The first is that peer-based transparency of student work encourages a design orientation to critique insofar as student effort is directed at identifying and contributing to improving good ideas. Second, it allows an archive of students' previous written project proposals and analytical essays to be maintained on the unit's Blackboard site, allowing students to build on the past whilst retaining the attribution of others' work.

Licence Usage

Students' work in KCB101 is made available to current and future class members under a Creative Commons Attribution-Noncommercial-No Derivatives 2.5 Australia licence. Written proposals are licensed under CC to ensure that students are acknowledged for their submissions and to enable the archiving of active documents. Students are informed that they are allowed to cite previous project proposals in their own work (as per normal academic referencing requirements) but cannot copy and/or paste from any works published on the site. This referencing and review process facilitates the creation of an innovation commons in the classroom.

Motivations

A primary objective of KCB101 is to provide an applied, practice-led understanding of the importance of free culture and open education in achieving rapid cycles of innovation. By asking students to engage in the review of previous intellectual endeavour in the form of past assignments, the unit demonstrates that creativity always builds on the past and that cultural assets should be made available to the community. In their application for funding, students are especially encouraged to submit pilot projects and feasibility studies which use the granted funds as leverage for further developments, which therefore also encourage the combination of incentive funding with other sources. In this way, the open, iterative process is underscored. This exercise also provides students with an opportunity to apply the ethics and norms of co-creative innovation in processes of interpersonal, organisational and mediated communication.

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Otago Polytechnic

DESCRIPTION:	Otago Polytechnic is a tertiary education provider in Dunedin, New Zealand, which offers a range of open access training courses.
WEBSITE:	www.otagopolytechnic.ac.nz or www.tekotago.ac.nz
LICENCE USED:	Creative Commons Attribution 3.0 New Zealand, http://creativecommons.org/licenses/by/3.0/nz
MEDIA:	Educational resources: Images, Video, Text
LOCATION:	New Zealand

Overview

Otago Polytechnic is a publicly-subsidised vocational education and training organisation located in Dunedin on the South Island of New Zealand. It provides a range of vocational courses, offering certificates, diplomas, degrees and postgraduate studies in Travel and Tourism, through Automotive Engineering to Midwifery.

Taking an open view of teaching, learning and research, Otago Polytechnic reconsidered their stance on access to educational resources, then

Otago Polytechnic homepage

governed by traditional views of ownership and Intellectual Property. Key stakeholders were consulted in the review, which occurred over the past two years, providing feedback that the institution needed to be more open to support creative thinking and the application of theory to practice. This culminated in the announcement in March 2008 that Otago Polytechnic was releasing their training materials under open access terms on Wikieducator.

Licence Usage

As stated in its current Intellectual Property Policy, (www.otagopolytechnic.ac.nz/index.php?id=281): 'Otago Polytechnic wishes to foster research and development that advances knowledge and scholarship; and to support projects where that leads to marketable products or services.

The Polytechnic:

- Has a preference for the open sharing of information, knowledge and resources;
- Recognises that intellectual property (IP) is owned by the creator, unless there are

CC Beyond the Classroom

specific agreements to the ownership of IP by others; and

- Wishes to foster the empowerment of individuals in their endeavours in a protective and/ or promotional framework for individual creators associated with Otago Polytechnic.'

'The recognition of Creative Commons with attribution as our default position has been widely accepted and feedback has been that it has been instrumental in building Otago Polytechnic's reputation as an educational provider.'

Otago Polytechnic now offers its open access courses under the Creative Commons Attribution licence, with the application 'Creative Commons Attribution (Author name) for Otago Polytechnic.'

Individual lecturers own their intellectual property. Encouragement and support is given by the institution to use CC BY for copyright statements. Where the Polytechnic is used to publish or promote work, a CC BY licence is applied wherever possible. Exceptions are made for works where third-party content is not or cannot be cleared. Other restrictions (if any) are time-based and explained.

Motivations

Encouraging open content licenses at Otago Polytechnic by way of its Intellectual Property Policy has assured employees and contractors that they are free to use and develop open content, and that they a free to participate in Open Educational Resource (OER) development initiatives. Many staff have now developed independent skills in publishing and managing their own content, as well as locating and reusing third-party open content, and collaborating in content development. The proliferation of open content and

Dr Robin Day
Deputy Chief Executive, Otago Polytechnic
http://sarah-stewart.blogspot.com/2008/03/
open-access-education-at-otago.html

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associated practices has helped to promote the Polytech as well as the expertise and services of the individuals in its employ. A more independent and participatory culture within the organisation is beginning to develop.

Free and Open Source Software first inspired thinking about free and open source educational content. The success of Wikimedia Foundation projects proved the idea viable. Support from many individuals and initiatives such as Wikieducator has made it possible.

Otago Polytechnic decided to adopt the Creative Commons Attribution licence so as to ensure a maximum amount of freedom and flexibility to itself and to people and organisations sampling its content. Restrictions like ShareAlike and Noncommercial were not an option as they would have compromised or complicated this position.

PLoS: African Sleeping Sickness Test

DESCRIPTION: Murdoch University scientists led by Zablon Njiru and Andrew Thompson have developed a simple blood test for African sleeping sickness (human African trypanosomiasis or 'HAT') which they've published in *PLoS Neglected Tropical Diseases* under a Creative Commons Attribution licence, making their findings accessible to the world.

WEBSITE: www.plosntds.org/article/info%3Adoi%2F10.1371%2Fjournal.pntd.0000147

LICENCE USED: Creative Commons Attribution 2.5 Generic licence
http://creativecommons.org/licenses/by/2.5

MEDIA: Scientific data; Text

LOCATION: Australia

Overview

In March 2008, a team of Australian researchers led by Zablon Njiru and Andrew Thompson announced the development of an elegantly simple, low-tech and low-cost blood test for identifying African sleeping sickness (human African trypanosomiasis, or 'HAT'). Observing the presence of infection via a colour change in reactive liquid from orange to green, the scientists have provided a way to test for this deadly disease in an endemic rural area using limited equipment. What differentiated their

discovery, apart from its ease-of-use and efficiency, is the fact that the findings were licensed under Creative Commons (http://creativecommons.org/weblog/entry/8112), allowing the world costless access to their research.

In their article titled *'Loop-Mediated Isothermal Amplification (LAMP) Method for Rapid Detection of Trypanosoma brucei rhodesiense,'* the Murdoch University team – comprising Zablon Njiru, Andrew Mikosza, Tanya Armstrong, John Enyaru, Joseph Ndung'u, and Andrew Thompson – published their findings relating to a rapid and robust diagnostic test for HAT. Significantly, they chose to publish in *PLoS Neglected Tropical Diseases* (www.plosntds.org/home.action), an open-access journal devoted to the pathology, epidemiology, treatment, control, and prevention of neglected tropical diseases (NTDs), such as elephantiasis, leprosy, schistosomiasis, river blindness, and African sleeping sickness, as well as public policy relevant to this group of diseases. This *Public Library of Science (PLoS)* (www.plos.org) journal seeks to promote the efforts of scientists, health practitioners, and public-health experts from endemic
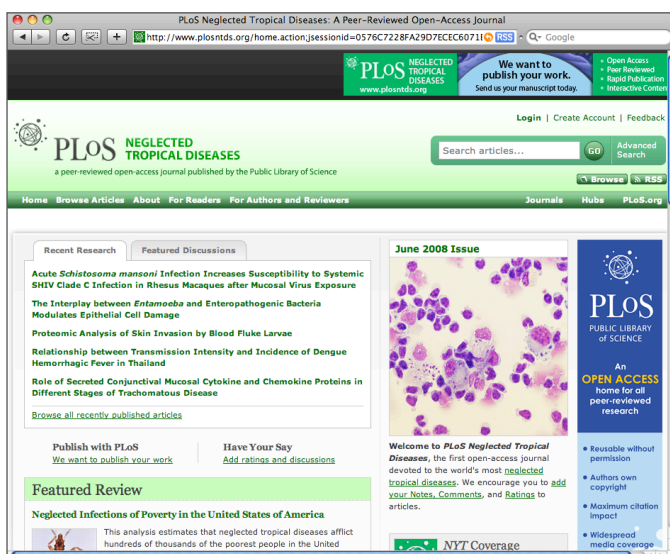
PLoS Neglected Tropical Diseases Journal homepage

countries, highlighting the global public health importance of NTDs whilst advocating the plight of the poor who suffer from these infectious diseases.

Licence Usage

Articles published in *PLoS Neglected Tropical Diseases* are made available under Creative Commons Attribution 2.5 Generic licence, which the Public Library of Science designates as 'CCAL'. Under CCAL, authors retain ownership of the copyright of their article, whilst allowing anyone to download, reuse, reprint, modify, distribute, and/or copy articles published in the PLoS journal, so long as the original authors and source are cited. No permissions are required from the authors or publishers to use the work in these terms. In this way, *PLoS Neglected Tropical Diseases* provides a forum for the NTDs community of scientific investigators, health practitioners, control experts, and advocates to publish their findings in an open-access format.

Michael Eisen, co-founder of the Public Library of Science, explained the rationale behind adopting CCAL:

> *'We chose the attribution license because it ensures the optimal accessibility and usability while preserving the one thing that scientists value the most: attribution for their work.'*
> http://creativecommons.org/weblog/entry/7038

To finance this framework, PLoS journals employ a business model in which expenses (for peer review, journal production, online hosting and

'Scientific works don't have an isolated meaning; they exist only in reference to the broader scientific community, and the whole reason you publish them is so that other people will read and use them.'

Michael Eisen
Co-Founder, Public Library of Science,
http://creativecommons.org/weblog/entry/7038

archiving) are recovered in part by charging a publication fee to the authors and research sponsors for each article they publish. For *PLoS Neglected Tropical Diseases* the publication fee is currently \$US2100. Authors affiliated with an institutional member are eligible for a discount. Moreover, authors who do not have sufficient funds to cover publication fees are offered complete or partial waivers. Inability to pay does not influence the decision to publish a paper (www.plos.org/about/faq.html#pubquest).

Motivations

Discussing the Murdoch University (http://www.murdoch.edu.au) researchers' decision to license their findings under Creative Commons, Margaret Ruwoldt from the University of Melbourne observed:

> *'In the Murdoch case, the "public good" factor is a clear winner in the debate over whether to provide open access to a university's research output: people in poor and developing*

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countries need low-cost medical and health care, particularly for endemic diseases that don't occur as widely in developed countries (trypanosomiasis is one; malaria is another).'

http://blogs.unimelb.edu.au/informationfutures/2008/03/creative-commons-licence-for-murdoch-uni-innovation

Glenn Otis Brown, the then Executive Director of Creative Commons, interviewed *Public Library of Science* co-founder Michael Eisen about the library's use of Creative Commons in 2005 (http://creativecommons.org/weblog/entry/7038). As a biologist at the Lawrence Berkeley National Lab and UC Berkeley, Eisen espoused open access (OA) to scientific research:

'Open access will… enable scientists to begin transforming scientific literature into something far more useful than the electronic equivalent of millions of individual articles in rows of journals on library shelves. The ability to search, in an instant, an entire scientific library for particular terms or concepts, for methods, data, and images – and instantly retrieve the results – is only the beginning.'

http://creativecommons.org/weblog/entry/7038

Eisen reflected on the early success of PLoS, noting that 30,000 people signed an open letter supporting the open-access organisation, and that acceptance of OA was steadily increasing. Asked why PLoS decided to employ Creative Commons licensing, he responded:

'Creative Commons and PLoS share the common goal of strengthening the science commons, and we want to take advantage of all the work Creative Commons and the growing number of Creative Commons license users are doing to create, defend, and internationalize licenses that define the commons.'

http://creativecommons.org/weblog/entry/7038

Citation: Njiru ZK, Mikosza ASJ, Armstrong T, Enyaru JC, Ndung'u JM, et al. (2008) Loop-Mediated Isothermal Amplification (LAMP) Method for Rapid Detection of Trypanosoma brucei rhodesiense. PLoS Negl Trop Dis 2(2): e147. doi:10.1371/journal.pntd.0000147

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The Community Library

DESCRIPTION:	The Community Library is a not-for-profit organisation based in Australia with a charter to provide distributed library services with Creative Commons material to support meaningful learning for offline and online users.
WEBSITE:	https://glsn.com/?view=community_library
LICENCE USED:	Various Creative Commons licences with special conditions as necessary
MEDIA:	Images, Text
LOCATION:	Australia

Overview

The Community Library is actively involved in the creation, deployment, and management of digital collections to remote Australian communities in support of meaningful and life-long learning. 'Remote' is defined by the project in terms of geography, culture, language, and access to telecommunications. The Community Library responds to the fact that many of the current models surrounding open content are not flexible enough to meet the demands of supporting meaningful learning in remote situations. This is particularly so when focus is placed on the considerable body of potential learners who do not have the telecommunications infrastructure to support reliable online access.

Cameron Esslemont, Director of the Community Library, acknowledges that there is no one-size-fits-all solution for the effective packaging and distribution of information to remote communities. A complex mix of issues related to content, connectivity, cost, culture, and copyright has to be considered, and the most appropriate option found for each community.

The Community Library employs a technology platform supplied by Global Library Services Network (GLSN)

(https://glsn.com) using open and managed source components that can be deployed at no charge to the individual's desktop. This is referred to as a Personal Learning Centre (PLC) and offers a range of functionality including support for offline and online learning with:

- An effective search engine to find items within the individual's knowledge base;
- The capability to manage citations ensuring learners actively manage context;
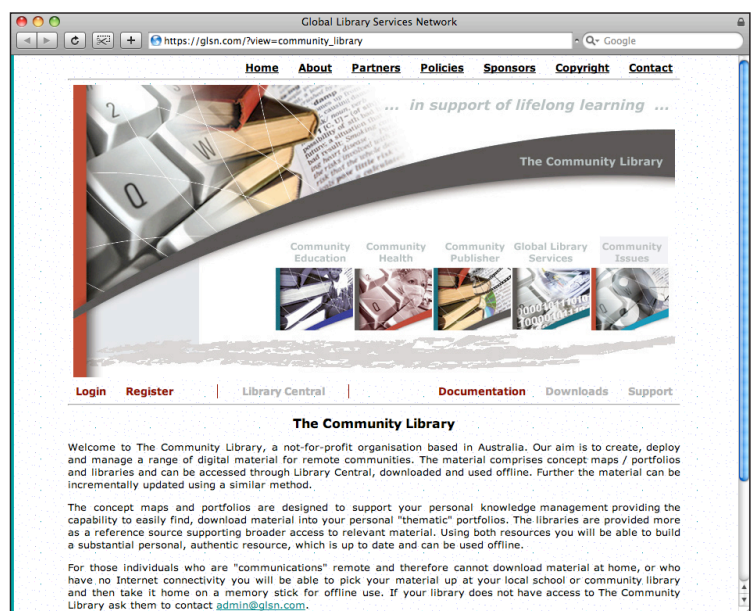
The Community Library homepage, June 2008.

- Support for multilingual thesaurus for learners who speak several languages;
- Support for copyright management ensuring:
  - Integration of concept mapping as a means of managing and navigating knowledge domains; and
  - Thematic portfolios as the overarching envelope with which learners can group learning assets.

In the pursuit of meaningful learning, the Community Library has chosen to use concept maps in support of its learner-centric model. These are used initially as a means of navigating the libraries, and are also offered under a range of copyright models, with embedded links to relevant thematic portfolios.

The Community Library supports the hosting of all media. All library material is catalogued to extended Dublin Core and packaged into libraries or collections for deployment to Electronic Resource Centres (ERCs).

The project is based in Australia, but intends a global deployment. The Community Library seeks to engage suitable partner communities across different subject areas for content preparation, establishing knowledge service providers in each country to assist with local deployment and support.

Licence Usage

The Community Library manages the transfer of copyright materials to the individual's desktop, seeking to coordinate the mix of Creative Commons and non-Creative Commons material integrated within its libraries. Learning materials are made available through The Community Publisher, with information catalogued at the page level, with each page carrying a unique Digital Object Identifier (DOI).

The Community Library generally adopts a Creative Commons Attribution-Noncommercial-NoDerivatives licence. When a user electronically extracts individual pages these are combined into a Personal Thematic Portfolio, which itself can be shared under a Creative Commons Attribution-Noncommercial-ShareAlike licence. The project intends to upgrade to support Creative Commons with special conditions as appropriate to context, actively promoting the managed translation of its material for local consumption.

Motivations

The Community Library selected the Creative Commons model as its supports the project's desire for extended deployment, in that material cached at an Electronic Resource Centre (ERC) can be reconstituted, repackaged and redeployed to more remote communities through in-country ERCs.

The project's core belief is that it is not enough for a publisher to merely supply Creative Commons material on their website; they need also to think how individuals may want to use that material and whether it ultimately supports meaningful learning. Finally, the project adheres to the belief that 'the last mile will always be manual': as most learning takes place offline, and many learners do not have suitable access to a computer, the information provided must be prepared in a manner that allows dynamic repackaging.

This is in line with the Community Library's broader project to be started in 2008 – *Textbooks Without Borders* – allowing for the preparation of educational material and its deployment to Electronic Resource Centres within each country, where individuals can review, select and prepare their own booklets/textbooks for electronic use or for local printing and broader distribution.

University of Southern Queensland OpenCourseWare

DESCRIPTION: The University of Southern Queensland OpenCourseWare (USQ OCW) provides access to free and open educational resources across several disciplines for students and teachers worldwide.

WEBSITE: http://ocw.usq.edu.au

LICENCE USED: Creative Commons Attribution-Noncommercial-ShareAlike 2.5 Australia
http://creativecommons.org/licenses/by-nc-sa/2.5/au

MEDIA: Text

LOCATION: Australia

Overview

The University of Southern Queensland's OpenCourseWare (USQ OCW) provides access to free and open educational resources (OER) for students, academics, and interested readers worldwide. USQ OCW contains sample courses from each of the University's five faculties, together with courses from its Tertiary Preparation Program (www.usq.edu.au/ltsu/learnsupp/tpp). Currently, the courses offered openly under Creative Commons licensing by USQ OCW range from *CSC2402: Object Oriented Programming in C++* to *TOU1003: Introduction to Tourism*.

USQ is the only Australian member of the OpenCourseWare Consortium (www.ocwconsortium.org), an international collaboration of in excess of 100 Higher Education institutions and associated organisations 'creating a broad and deep body of open educational content using a shared model' (www.ocwconsortium.org/index.php?option=com_content&task=view&id=15&Itemid=29).

As defined by the Consortium, OpenCourseWare is a 'free and open digital publication of high quality educational materials, organized as courses.' Institutions participating in OCW Consortium activities must be committed to publishing at least 10 courses in their name in a format that meets this definition.

The University of Southern Queensland (www.usq.edu.au) is a multi-campus institution, with the main campus located in Toowoomba (150km west of Brisbane), a further campus at Harvey Bay (300km north of Brisbane), and one at Springfield (30km south of Brisbane). As such, USQ is classified as a regional university. Its current enrolment sits at approximately 26,000 students (equivalent to 12,100 EFT). Three quarters of the student body learns through distance mode. Whilst providing access to a selection of its materials, USQ notes that it does not grant credits or degrees, and does not provide access to faculty members through the OpenCourseWare programme.
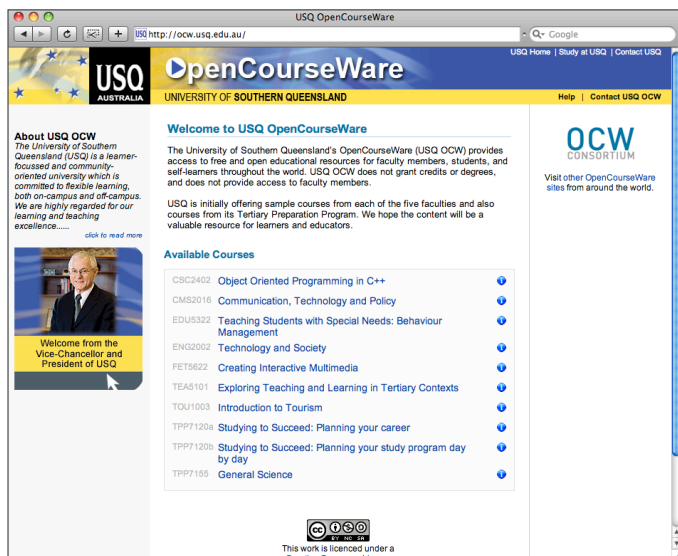
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Licence Usage

The USQ OpenCourseWare project employs the Creative Commons Attribution-Noncommercial-Share Alike 2.5 Australia licence. The licence is applied to ten courses made available as part of USQ's membership of the OpenCourseWare Consortium, able to be downloaded on the site.

Statistics

According to Professor Bill Lovegrove, statistics show that for the period from October 2007 to March 2008, there were over 26,000 visitors

University of Southern Queensland's directory of OpenCourseWare home page

professional contacts and a general knowledge of developments in the open educational resources (OER) sector. In an email interview with Steve Gething from Creative Commons Australia in April 2008, Professor Lovegrove wrote:

> *'Licensing under OCL allowed us to make available to anyone who might be interested in the parts of our courses for which USQ owns the intellectual property. The Attribution Non-Commercial Share Alike licence is used by most academic institutions which make resources available via a Creative Commons licence as our ownership is acknowledged and our resources are made accessible to anyone anywhere.'*

to the USQ OCW site. The most popular course was *Object Oriented Programming in C++* (http://ocw.usq.edu.au/course/view.php?id=13), with significant numbers of visitors going to *Creating Interactive Multimedia* (http://ocw.usq.edu.au/course/view.php?id=15) and *General Science* (http://ocw.usq.edu.au/course/view.php?id=10).

To date, there are no statistics on the reuse or distribution of the courses with appropriate acknowledgment or on whether visitors to the courses have enrolled as students at USQ as a result of access to courses on the OCW site.

Motivations

The University of Southern Queensland sees its membership of the OpenCourseWare Consortium as putting into practice their stated Mission: to 'develop, enrich and serve [their] regional and global communities' (http://ocw.usq.edu.au/mod/resource/view.php?id=113).

USQ Vice-Chancellor Professor Bill Lovegrove first heard about Creative Commons through colleagues,