Abstract
Governments across the world are increasing the openness and transparency of their services, a move also taking place in the education sector in some countries, signifying commitment to openness and ensuring that adequate attention and funding is paid to open educational resources (OER). This chapter assesses the extent to which policies are being developed and/or modified to support effective use of open educational resources. However, despite the growth of OER at many institutions, surprisingly few have developed and implemented formal OER policies. Those with policies have most commonly established them in a context of having implemented OER projects, thereafter recognising the need for policy to inform initiatives or to institutionalise OER formally. Others have developed OER policies as they began exploring the use of OER. Evidence suggests the vital role of leadership support and champions in encouraging and driving OER policies. Several institutions have developed practices or procedures that support OER and which contribute towards institutionalising OER, even though there may not be a formal policy. A review of available policies reveals that they do not typically cover all aspects related to OER creation and adaptation, with most institutions focusing primarily on managing intellectual property rights and releasing materials using a Creative Commons license. In some instances, policy has been created, but with little evidence of consistency between policy and practice, highlighting that policy fulfils a limited function and that issues such as sustainability and faculty buy-in and involvement are of equal importance. This chapter concludes with recommendations to accelerate the development and adoption of open licensing frameworks for governments, institutions and faculty.

Keywords: copyright, Creative Commons, intellectual property rights, OER policy, open policy, policy environment
Introduction

The presence of policies that are supportive of OER can be used as a gauge to determine levels of commitment to OER, at either a national or an institutional level. The literature indicates several policy issues that are useful to consider when examining commitment to OER development and use at higher education institutions. Most commonly, intellectual property rights (IPR) and copyright issues are regarded as impacting on OER. IPR is a broad term that relates to copyright, trademarks, patents and other claims for ownership of a resource. Copyright is a form of IPR which provides that people cannot reproduce, copy or transmit copyrighted material to the public without the permission of the copyright owner. In the higher education setting, such policies typically focus on issues relating to works created during the course of employment and how these may be shared with and used by others. Such policies might, for example, outline the respective rights of the institution and its employees, subcontractors and students regarding intellectual capital. Such policies might also need to spell out whether or not research and educational products will be treated any differently by the institution, justifying why if so.

There are also human resource policy guidelines for whether or not the creation of certain kinds of work (for example, learning resources) constitutes part of the job description for staff, and what the implications of such creation are for development, performance management, remuneration and promotion purposes. This also typically involves a reward system for creating or adapting OER, such as acknowledging time spent creating OER (Butcher, 2011). Wiley (2007) believes that the most salient policy question a higher education institution can ask is what can be done to provide incentives for faculty to participate in an OER initiative.

OER is also affected by information and communication technology (ICT) policy guidelines regarding access to and use of appropriate software, hardware, the Internet and technical support, as well as provision for version control and back-up of any storage systems for an institution’s educational resources. Additionally, it may be necessary to review materials development and quality assurance policy guidelines to ensure appropriate selection, development, quality assurance and copyright clearance of works that may be shared (Butcher, 2011). Another salient institutional policy question is: “What current institutional policies create obstacles for faculty who wish to open access to one or more of their courses?” Examples of such policies may include those that discourage faculty from engaging in online teaching activities before receiving tenure, and policies by which institutions control intellectual property developed by their faculty (Wiley, 2007).

It has been argued that policy can accelerate or impede the adoption and creation of OER (Plotkin, 2010), and will help institutions to manage and archive their material better, whilst stimulating internal improvement, innovation and reuse (Joyce, 2006). In addition, the issue of policy is usually part of discussions about ensuring sustainability of OER at institutions. However, growth of the “OER movement” and the “culture of contribution” has not necessarily yet led to the development of specific policies that address or support development, sharing, adaptation and use of OER, although there is mounting evidence that this work has now begun in many institutions and countries. This chapter provides an overview and analysis of progress being made in a selection of countries and
institutions, to assess the extent to which policies are being developed and/or modified to support effective use of OER.

Of course, whilst it is important to consider the relevance of such policies in higher education settings from an OER perspective, they are not the be-all-and-end-all, as policy fulfils a limited function. Other issues are likely of equal relevance, including faculty buy-in and involvement, enabling of technology environments, funding, sustainability, and motivation and reward systems to facilitate the active participation of stakeholders. In addition, universities have their own distinctive missions, histories and ethos, and varying organisational styles present different opportunities and constraints in terms of strategies for engaging policy with a view to making it supportive of OER development. Furthermore, although effective policy is an important starting point, the real issue becomes that of consistency between policy and practice.

**National Movements Towards Openness and Transparency**

Several governments around the world are taking steps to open their data and adopt policies for maximum transparency and citizen engagement, in growing recognition of the need for users to access and reuse data, taking cognisance that governments and public agencies are essentially involved in the provision of publicly funded work. For example, the President of the Republic of Korea has a website which provides information on national parliamentary bills and online communication, licensed with Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licenses (“Cheong Wa Dae,” n.d.). In the Netherlands, CC0 (CC no rights reserved) is the default copyright policy of the Dutch national government’s website (www.rijksoverheid.nl). The purpose of the website is to establish one central portal through which the public can access all government organisations and ministries (“Netherlands government,” n.d.). In Australia, the Australian Bureau of Statistics has made the census available to use under a CC license (Australian Bureau of Statistics, n.d.). In addition, AUSGOAL (www.ausgoal.gov.au) is the nationally endorsed Australian Governments Open Access and Licensing Framework, which recommends the suite of CC licenses for copyrighted material and the CC Public Domain Mark for non-copyrighted material (Park, 2011b). It provides support to government and other sectors to enable open access to publicly funded information (AusGOAL, 2011). In New Zealand, the New Zealand Government Open Access and Licensing Framework, NZGOAL (http://nzgoal.info) provides a guide which recommends adoption of a Creative Commons Attribution (BY) license as a default when releasing government-held content and data for reuse (AusGOAL, 2011).

In the USA, OER advocates have recently been successful in encouraging the use of open licenses for all publicly funded material. In January 2011, the U.S. Department of Labour announced the fiscal year 2011 grant competition for the Trade Adjustment Assistance Community College and Career Training Grant Program. The funding will enable eligible higher education institutions to expand their capacity to provide quality education and training services to Trade Adjustment Assistance for Workers Program participants as well as other individuals, to improve their knowledge and skills and enable them to obtain employment. The programme has an OER requirement on new course content developed — work that is developed by the grantee with grant funds is required
to be licensed under a Creative Commons Attribution 3.0 license (United States Department of Labour, 2011). These developments have been in part a result of the recognition that the public deserves free access to educational materials it funds. However, there is scope for contestation from key vested interest groups, such as publishers who fear that government support for OER would erode their profits and give the free programmes an unfair advantage. They argue that, if effective programmes are already for sale, extra money should not be spent to reinvent the wheel (Nelson, 2011). As OER policies gain traction around the world, there are likely to be similar challenges in other countries.

Moves towards such openness have also been noted in other U.S. national institutions. For example, in 2008, the National Institutes of Health (NIH) adopted a Public Access Policy, which requires all NIH-funded researchers to submit their final, peer-reviewed manuscripts to a publicly accessible digital archive (PubMed Central) so that anyone can access them. The idea is to increase public access to academic research that is funded by the federal government (National Institutes of Health Public Access, 2009).

These moves at a national level are also filtering down to an “intermediate” level (i.e., provincial and council levels), indicating commitment to transparency and accountability. In Australia, several local governments — for example, the Victorian and Queensland governments — have committed to using CC as a default licensing system for public sector information (“Queensland government,” n.d.). Examples of local authorities opening their data are the Piemonte Regional Government in Italy, which launched an open data portal under the CC0 public domain (“Piemonte regional government,” n.d.), and the Open Government Data Portal by the City of Vienna (Park, 2011a).

The above examples indicate burgeoning activity around increasing openness and transparency at the national level to promote citizen engagement and increase the transparency of government services and resources. However, this does not necessarily always translate to openness in education. One of the reasons for this, as Bossu (n.d.) suggests for the Australian context, is due to lack of a national framework to guide and assist educational institutions in the adoption, use and management of OER. Some believe that the lack of such frameworks limits and slows down the process of adoption or may even discourage institutions from pursuing OER undertakings. Given this, there has been recognition of the need for intergovernmental organisations such as UNESCO and COL to support governments by encouraging them to engage with OER, raising their awareness of the potential benefits and value proposition of OER, and supporting development of appropriate national policies and funding allocations (UNESCO & COL, 2010).

Creating an Enabling Policy Environment for OER at the National or State Level

As the above examples have illustrated, government efforts to mandate openness and transparency are gathering momentum in several countries. In some countries, this is also occurring specifically in education. As the case study on Brazil in Chapter 14 of this collection notes, that country has introduced legislation which requires government-funded educational resources to be made available to the public under an open license. The legislation clarifies that resources produced by public servants
in an official capacity should be OER or otherwise released under an open access framework (Vollmer, 2011). In addition, the municipality of São Paulo Department of Education has mandated that all of its educational and pedagogical content will be made available under the Creative Commons Attribution-NonCommercial-ShareAlike license (BY-NC-SA) (Vollmer, 2011).

In other cases, whilst there is no specific “policy”, there are definite moves to support the use of open resources in education. The Norwegian Ministry of Education and Research recognises that it needs a policy for OER, and this is not limited to higher education institutions. Its commitment and support for OER is noted in the Norwegian National Digital Learning Arena, which is an OER project and open source platform for sharing OER in secondary education. This is a joint initiative by different provinces in Norway that allocates a portion of state funds to ensure free access to textbooks for Norwegian students, and to develop digital resources (or purchase them from publishers or other producers) that are then released under a CC Attribution-ShareAlike license (“OER case studies,” n.d.).

This type of national initiative is also underway in the Dutch Ministry of Education, which launched an OER platform for teachers in 2008 (Wikiwijs) to cater for all levels of education, from primary to higher education. As the programme plan outlines:

> It is a tool with which to promote the development and use of open educational resources and, in doing so, to improve the quality of teaching. (Wikiwijs, 2011, p. 4)

The aims are to stimulate development and use of OER, improve access to both open and “closed” digital learning materials, support teachers in arranging their own learning materials, and increase teacher involvement in the development and use of OER. All content on Wikiwijs is available under a CC BY license (“Wikiwijs,” n.d.).

In other instances, local government policies drive OER at the institutional level. An example of this is the State Board for Community and Technical Colleges (SBCTC) in Washington, an organisation that provides leadership and co-ordination for Washington state’s public system of 34 community and technical colleges, with an enrolment of over 470,000 students. In 2008, SBCTC released its Strategic Technology Plan to provide clear policy direction around mobilising technology to increase student success. One of the guiding principles of the plan is to “cultivate the culture and practice of using and contributing to open educational resources” (Washington State Board for Community and Technical Colleges, 2008, p. 17). Following this, the first state-level open licensing policy was approved in 2010. It requires that all digital works created from competitive grants administered through SBCTC carry a Creative Commons Attribution only (CC BY) license (Caswell, 2011).

> All digital software, educational resources and knowledge produced through competitive grants, offered through and/or managed by the SBCTC, will carry a Creative Commons Attribution License ... [and this policy] applies to all funding sources (state, federal, foundation and/or other fund sources). (Washington State Board for Community and Technical Colleges, 2010, p. 1)

This license allows educational materials created by one college to be used or updated by another in the system, as well as by other education partners globally.
It is believed that allowing the free flow of all educational content produced by State Board competitive grant funds is an efficient way to engage in the OER movement, whilst maintaining a focus on the specific needs of Washington’s community and technical college students (Caswell, 2011).

Other states have also been looking into developing such policies. For example, the Southern Regional Education Board (SREB) recently published a policy document titled “An Expectation of Sharing: Guidelines for Effective Policies to Respect, Protect and Increase the Use of Digital Educational Resources”. It recommends openly licensing digital educational resources to maximise potential sharing both within and outside the SREB consortia of states (SCORE Working Group on Digital Content Rights, 2010). There is also significant work underway in California to provide K–12 open source textbooks, an initiative supported by the state’s Governor.

The fact that there are policies at national and intermediate levels driving OER at education institutions is significant and promising, as it displays commitment to openness and ensures that adequate funding and attention is paid to OER at the institutional level.

Policy Development at Higher Education Institutions

There are several instances of institutions taking the initiative to create OER policies. This is most commonly done in a context of having implemented OER projects, and thereafter recognising the need for policy to inform such initiatives or to formally institutionalise OER.

Policy Development Following OER Projects

In some instances, institutions have successfully developed policies following the implementation of OER activities. For example, at the University of Cape Town (UCT) in South Africa, OER was initially manifested through isolated publications, some teaching practices and a few repositories, which contributed to an environment supportive of OER. Its emergence appeared to be centred around a number of individual champions or groups of students and academics supporting the notion of increased openness in teaching and learning materials and/or processes. Examples included conference papers, competitions and the development of open access textbooks. These practices imply deliberation around OER, even though they may not have been formally identified as supporting a movement towards OER or an institutional vision of OER. These largely individual efforts were made more noticeable when UCT signed the Cape Town Open Education Declaration, which also provided some sense of strategic direction for the university (Hodgkinson-Williams, 2009).

UCT recently updated its intellectual property (IP) policy so that it now specifically covers issues relating to the creation of OER resources and to licensing processes that must be followed. Section 9.2 of the policy provides support for publication of materials under Creative Commons licenses:

- UCT supports the publication of materials under Creative Commons licences to promote the sharing of knowledge and the creation of Open Education Resources. UCT undertakes certain research projects
that seek to publish the research output in terms of a Creative Commons licence.

9.2.1 Author(s) of Copyright protected materials that are listed in clauses 8.2\(^1\) and 8.3\(^2\) is free to distribute their material under a Creative Commons licence.

9.2.2 Author(s) of Copyright materials that are listed in clause 8.1\(^3\) should seek permission from RCIPS, who on behalf of UCT, may grant permission for the material to be distributed under a Creative Commons licence. (University of Cape Town, 2011, p. 15–16)

In addition, the policy indicates that an IP advisory committee is to be established to manage processes relating to IP for UCT. The policy focuses on adoption of open licenses as a default for research and teaching related to software development at the university. Notable aspects of the updated policy also include IP related to the creation and licensing of films as teaching and learning media/tools (University of Cape Town, 2011).

Another example is that of the University of Bath in the United Kingdom, which is participating in the OSTRICH project (OER Sustainability through Teaching and Research Innovation: Cascading across Higher Education Institutions), funded by the Higher Education Academy and Joint Information Systems Committee (JISC) and led by the University of Leicester. The project has, as its themes, to:

- Explore legal and IP issues for people who want to create OER.
- Provide good practice advice and support for creators and users of OER.
- Foster active discussions in this area and explore opportunities and challenges. (“The OSTRICH open educational resources project,” 2011)

At the University of Bath, some of the key findings of the project indicate interest in releasing a variety of learning materials as OER. In addition, there appear to be different motivations for engaging with the creation of OER, ranging from personal beliefs about the openness of education and a culture of sharing to opportunities for offering “taster” or marketing materials for prospective students. Furthermore, the project has highlighted that concerns about copyright and other IP rights need to be resolved with adequate support and guidance. In light of this, the project created a variety of support resources in this area and has developed solutions to IP issues specific to OER at the University of Bath (Jenkins, 2011).

The university currently does not own the scholarly output of academic staff. One of the results of the project has been the creation of new IP documentation to allow the university to release material as OER. Thus, if academic staff would like to release OER, they can now license the university to do so by completing a Deed of License, which allows the institution to release under an open license content which is the IP of academic staff members. In addition, guidance documents related to the institution’s IP policy now include reference to this, as a direct result of the work of the OSTRICH project. Section 4.13 of the policy guidance states:

In other instances where the University wishes to permit others to use scholarly output it will formally request the author for a licence on this basis. For example if the University wishes to record a lecture and make it available as an open educational resource it will need a licence from the academic author permitting the University to make
the lecture available in this way. It is hoped and anticipated that staff will accede to this request on the basis of the public benefit of such initiatives. (University of Bath, 2011a, n.p.)

The guidelines do, however, note that this does not apply to distance learning materials, where it is part of the staff’s role to create material and thus these materials are the IP of the institution and can be released as OER without the need for an additional license. The guidelines also indicate that, when using external contractors or working with other institutions or funders, the contract should clarify the ownership of IP (University of Bath, 2011b).

For the OSTRICH repository, which houses materials created through the project, content developers are required to complete an OER Release Form in which authors permit materials to be released as OER and provide metadata for inclusion of material into the OER repository. This is to ensure that there is a record of the IP ownership of resources before materials are released as OER (University of Bath, 2011b). In addition, there is a “take-down” policy to ensure that material in the OER repository does not infringe third-party property rights or UK law. This allows users to report content that has breached copyright, moral rights, and/or laws governing unauthorised use of material (“OSTRICH OER repository,” 2011).

Policy Development in Tandem with OER Introduction

Other institutions developed OER policies as they began exploring the use of OER. A good example of this is the Otago Polytechnic in New Zealand (also documented in Chapter 15). The process of policy creation started when the Flexible Learning Development Department began to engage in content creation in late 2006. Part of this process involved building awareness of the potential in searching for CC licensed content and of techniques for accessing popular media sharing sites for reusable content. As faculty learned of available existing content, they became willing to consider reusing existing OER. This prompted recognition that the IP policy needed rewriting to allow reuse of OER and to encourage faculty participation and contributions, thereby helping to establish a stronger online presence for the Polytechnic (Blackall, 2007).

What is interesting about this institution is that those who wish to publish with restrictions beyond attribution are required to notify and motivate such action to the Polytechnic so that an appropriate restrictive statement can be added. This is a reversal from what is common in most other educational institutions, which typically offer online content under “all rights reserved” copyright and (although only in some cases) with an option to release content openly (Park, 2008).

It is also notable that Otago Polytechnic’s commitment to education for sustainability is embodied in its strategic plan. This is demonstrated by the Council’s decision to establish the OER Foundation as an independent entity rather than hosting yet another institution-based project (Vollmer, 2010).

Examples of other institutions that have developed policies as they were introduced to OER are two Ghanaian universities, the University of Ghana (UG) and the Kwame Nkrumah University of Science and Technology (KNUST), the experiences of which are described in Chapter 4. They were introduced to OER through a grant-funded health OER project, which began with the Colleges of Health Sciences in the two universities producing a significant number of
eLearning materials as health OER. However, they soon faced challenges such as faculty time commitments, technological and infrastructural constraints, shortage of technical expertise, lack of awareness beyond the early adopters, and non-existent systems for OER dissemination and use. These challenges revealed the need for institutional policy and integration to ensure effective implementation and sustainability of OER efforts (Tagoe et al., 2010).

At UG, the College of Health Sciences (CHS) initiated a process to update its policies to support OER, which started at around the same time that the institution was undergoing a cyclical revision of its statutes. The university has drafted an OER policy which covers a variety of issues, ranging from infrastructure and Internet access to organisational structure, copyright and quality assurance. At the time of writing, the policy was still in draft form and needed to go through the approval of various university boards at different levels of the university administration.

As with UG, establishing a policy framework conducive to the creation and use of OER in KNUST was identified as a critical step if the OER initiative was to succeed. In addition to the challenges mentioned above, such as lack of administrative, technical and infrastructural support for faculty, wider institutional awareness, interest and support were lacking due to the project being based in the College of Health Sciences. It therefore became apparent that an OER policy was needed to ensure the growth and sustainability of OER at the university (Donkor, 2011).

KNUST’s OER policy covers issues regarding copyright and licensing, human resource and budgetary allocation, infrastructure, collaborations, technical support, systems for production (authoring), delivery (sharing), review process and quality assurance, access, potential liability, motivation and academic rewards. For example, the policy affirms KNUST’s adoption of the Creative Commons licenses. It also tackles some of the challenges mentioned above and paves the way for institution-wide adoption of the OER initiative (Donkor, 2011). One of the remarkable outcomes of KNUST’s involvement in OER has been the influence it has had at a national level. KNUST, in partnership with the Association of African Universities (AAU) and with funding from Electronic Information for Libraries, has embarked on an advocacy campaign to raise awareness of open access with government officials and the research community. A meeting was held with the Ministry of Education to discuss an action plan to move the open access agenda forward. A notable outcome of this engagement was the KNUST institutional repository being designated as the national open access repository (Electronic Information for Libraries, 2011).

Finally, The Open University, in the UK (UKOU), has always sought to match strategic aims with the rigorous evaluation of innovative experimentation.4 The UKOU’s mission, to be “open as to people, places, methods and ideas” (The Open University, n.d., n.p.), has included free-to-air educational broadcasting with the BBC since 1971. The launch of a joint website with the BBC in 1999, called Open2.net (www.open2.net), supplemented this broadcasting by providing free-to-access online educational resources alongside free-to-contribute opportunities, both online and offline, through public engagement activities.

In 2005, senior management set up a strategic review to report on what the UKOU should do about the issue of open content, following the success of the
Massachusetts Institute of Technology (MIT) OpenCourseWare Initiative. This report recommended that the UKOU carry out a substantial open content pilot which would test the impact on the UKOU of making materials freely available on the Internet. The Open Content Initiative (OCI), as it was then titled, formally started in 2006 with funding support from The William and Flora Hewlett Foundation.

As OCI (renamed OpenLearn on launch of the platform, www.open.ac.uk/openlearn) was an institution-wide, action research initiative, its Director reported directly to the Pro Vice-Chancellor (Strategy, Planning and External Affairs) and had to provide regular written or oral reports and take further papers for approval to various UKOU committees. There was also a Steering Group which included four members of the Vice-Chancellor’s Executive, plus other senior staff.

At the end of the two-year pilot period, a major internal review outlined the value to the UKOU provided by the initiative up to that point, and recommended further internal investment to continue developments and evaluations. At the same time, elements of OER activity were in several places built into the UKOU’s strategic plan, which is reviewed annually. This has included its international social justice work, such as the Teacher Education in Sub-Saharan Africa programme (www.tessafrica.net) and that programme’s partnership, research and scholarship activities.

As well as releasing content through OpenLearn, the UKOU was also able to take advantage of proprietary channels for educational content, namely YouTube (www.youtube.com/oulearn) and iTunesU (http://open.edu/itunes). Having established separate ways of developing and publishing OER through these different channels, the UKOU then decided that all of these activities needed to be consolidated and embedded into existing systems and processes. The UKOU has now recast OpenLearn as the brand for its own open channels, transferring material from Open2.net into OpenLearn to sit alongside the content in OpenLearn’s LearningSpace (http://openlearn.open.ac.uk) and LabSpace (http://labspace.open.ac.uk), and also aggregating information on content put out through iTunesU and YouTube. It has also consolidated its use of technologies such as Moodle as a platform, and its internal eProduction systems and technologies for all forms of content. This means that now the UKOU has largely stopped openly publishing legacy content already developed for student use, and moved to the open publishing of newly developed or updated content from taught modules and programmes.

Prior to August 2011, most modules were selected by faculty to be released as OER according to what they saw best and which teams were most enthusiastic (with central guidance being simply to cover the breadth and depth of all programmes). However, this process only covered 40 per cent of all modules, being constrained by additional resources, by some modules not being suited to having part made open for a variety of reasons, and by costs associated with re-engineering content already developed. Thus, the new UKOU policy is that every new or revised module will have the open part pre-identified and planned so that it is a frictionless byproduct of standard module development at no extra cost, whilst there is also a small budget for doing bespoke OER for other reasons. These new developments include an Open Media Policy and greater integration between open activities around the Web (www8.open.ac.uk/community/main) and website
policies (www8.open.ac.uk/about/main/admin-and-governance/policies-and-statements). Lastly, both the Learning and Teaching and the Curriculum Strategies support the use and reuse of OER from other sources within new and adapted modules.

**Leadership Support in Driving OER Policies**

There are also institutional examples that indicate the vital role of administrative and leadership support in driving OER policies. A good example is that of Foothill-De Anza Community College District (FHDA), the first community college in the USA to develop an OER policy.

FHDA began actively pursuing a formal OER policy in 2004. The Board of Trustees indicated an interest in OER and organised “an inquiry-based research strategy”, which involved engaging with faculty on the subject by designing a “public domain survey”. This was distributed to gauge faculty interest in and knowledge about OER. The results of the survey indicated great interest in OER, with a large number of faculty already using or having developed OER. The findings of the survey were discussed widely, and this began a public conversation about how to create and use OER for students, as well as an investigation of ways to incorporate the discussion of OER into professional growth opportunities for faculty and staff. This approach helped to identify how the institution could support faculty in ways that would be welcomed. The goal was to identify and help champions, and support them as leads in their departments, divisions, campus-wide, and at the state and national levels. Thus, the first official step was to invite faculty and staff involvement in development of the policy, and to address concerns and stimulate discussion about the potential impact of OER (Plotkin, 2010).

The approach was to encourage faculty rather than coerce them, and it stressed that faculty determine what learning materials they wanted to use. Thus, a collaborative approach was taken. The combination of openness to new ideas and administrative willingness to resolve concerns as frequently and immediately as they arose led to a policy that was universally endorsed by faculty, staff and student groups prior to its approval by the board in late 2005 (Plotkin, 2010).

The Foothill-De Anza Community College District supports the creation, use, accessibility, and ongoing maintenance of public domain-based learning materials in accordance with established curriculum standards for educational purposes of the District, using the commonly accepted legal definition of public domain materials. The goals of this policy are to provide students with learning materials that reside in the public domain to augment and/or replace commercially available educational materials, including textbooks where appropriate, to create sustainable academic resources for students, faculty and staff, and to provide opportunities for professional growth of district employees involved in these activities. The Chancellor will provide periodic reports, not less than annually, to the Board that detail the progress made toward accomplishing the goals delineated by this policy. (Foothill-De Anza Community College District Board of Trustees, 2004, p. 6141)
The policy strongly encourages adoption of OER to increase access to education for all students, but does not mandate its use. Thus, participation is voluntary and faculty members are free to make whatever decisions they feel are in the best interests of their students. The policy instructs senior college administrators to look for ways to encourage faculty members to organise and use open content in place of commercial textbooks. The policy leaves the specifics about implementation strategies in the hands of academic administrators, but requires that annual progress reports be made to FHDA’s board (Plotkin, 2010).

Incentives and related programmes to accomplish the objectives of the policy continue to evolve, but already include: professional development time for faculty so that they can find, organise or prepare OER; awards; recognition for the best sets of open learning materials; and tutorials that help faculty members identify useful openly licensed resources in their fields (Plotkin, 2010).

Another example of leadership support is the case of UCT, where the signing of the Cape Town Open Education Declaration by the then Deputy Vice-Chancellor, Professor Martin Hall, represented “the most visible symbolic act cementing UCT’s institutional commitment to sharing teaching and learning materials to date” (Hodgkinson-Williams, 2009, p. 10). This served to explicitly support the notion of OER at the institutional level. There is other anecdotal evidence of leadership support in institutions (even though there may not be explicit policies that demonstrate this). For example, at the University of Michigan, the OER efforts have received significant senior leadership support, particularly from the Dean of the Medical School and the Dean of Libraries. This has also been the case at both UG and KNUST, where the Provosts of Health Sciences have been instrumental in institutionalising OER. They are not abstract OER champions simply driving policy development; they have credibility as OER creators who have also taken their insights and experiences to international professional and academic fora. Both have the strong support of senior academics, including those responsible for leading OER co-ordination and development (University of Michigan & OER Africa, 2011).

At Nottingham University, there is also no formal OER policy. However, at the senior level there is encouragement for OER. For example, under the “Social Responsibility” section in the university strategy, mention is made of promoting and supporting open education:

> Expand our U-NOW open courseware initiative, which provides an opportunity for sharing knowledge widely to increase learning opportunities for those who, for whatever reason, are unable to undertake formal qualifications. (The University of Nottingham, 2010, p. 44)

In addition, a U-NOW podcast on YouTube (www.youtube.com/watch?v=E9MBkJr3ba8) that features the Vice-Chancellor, the Pro-Vice-Chancellor for Internationalisation and the Director of Teaching and Learning at the University of Nottingham indicates support from senior management for U-NOW.

**The Importance of Champions**

In addition to leadership support for OER, the role of champions is also significant in OER policy development. In many institutions, involvement in OER efforts has evolved from the efforts of a “champion” who has taken interest in sharing OER.
As the desire to share grows from a few faculty to a larger group, the institution becomes involved with necessary policy and funding issues (Members of the IPT 692R class at BYU, 2009). For example, the emergence of OER at UCT appeared to centre around a number of individual champions or groups of students and academics supporting the notion of increased openness of teaching and learning materials and/or processes (Hodgkinson-Williams, 2009). The Centre for Educational Technology appears to be pivotal in providing intellectual leadership together with technical support (University of Michigan & OER Africa, 2011). Other institutions formally appointed a champion. For example, as indicated above, at KNUST a professor of internal medicine was appointed to co-ordinate OER activities in the college (Donkor, 2011). Other institutions have instituted structural changes to reflect the formal role of champions. For example, at Notre Dame University, open courseware (OCW) efforts are facilitated by a full-time OCW Project Coordinator, who works with students and interested faculty in developing the OCW courses. In addition, at the University of Michigan, staffing to accommodate OER efforts includes two full-time employees, a full-time publications and communications specialist, and a shared full-time software developer (Members of the IPT 692R class at BYU, 2009).

However, one of the difficulties regarding champions is that they come and go, and initiatives are vulnerable to the mobility of staff and new institutional appointments, especially in key decision-making posts (Donkor, 2011).

**Practices Supporting OER**

Several institutions have developed practices or procedures that support OER and that contribute towards institutionalising OER, even though there may not be a formal policy. For example, the University of Michigan does not have any official OER policy at the university level. However, it has developed OER production practices guidelines. In addition, Open.Michigan has been able to convince departments to allocate funds for OER through other techniques such as memos, committees and small projects, without having a policy. Michigan State University (MSU) also does not have a formal OER policy, but does have procedures in place for academics to release content as OER. It has created a handbook ("OER@MSU") to guide academics about OER, their benefits, licensing issues and publishing options. At MSU, academics wishing to release their presentations as OER are required to complete an “OER Presenter Release Form”, which serves as an agreement to make material available as OER using a CC BY license.

**Open Access Policies**

Whilst there are relatively few institutional OER policies, many institutions have adopted an open access policy with regards to research. As mentioned above, on a national level in the USA, the NIH announced a revision to its public access policy that made its application mandatory rather than voluntary (Pappalardo, 2008). In Australia, as part of the Open Access to Knowledge (OAK Law) project, Fitzgerald et al. (2006) have developed an action agenda and recommendations for the Australian Department of Education, Science, and Training, regarding a legal framework for copyright management of open access within the Australian academic and research sector. They recommend that each institution should
develop and publish its policy on open access, clearly declaring its objectives and interests in providing materials by this means. Many universities have also adopted open access policies — these include MIT, the University of Leicester and Athabasca University, amongst others.

**Key Issues**

**Lack of Institutional Policies**

Despite widespread growth in development, adaptation, sharing and use of OER at many institutions worldwide, very few institutions have yet adopted new, or adapted existing, policies to reflect their practices or to explicitly encourage and formally endorse such practices at institutions.

In the United Kingdom, according to the JISC/HE Academy OER Programme Synthesis and Evaluation Project Wiki, which describes the experiences of OER in UK higher education, one of the identified critical barriers is the lack of clear institutional policies on IPR, leaving staff feeling exposed. The evaluation study notes that several institutional practices need to change. For example, it found that obtaining rights clearance from institutions or departments may be an issue, especially where institutions are not very aware of OER. The study also found an apparent distinction between the willingness of individuals to clear rights and that of institutions. Where OER are being developed collaboratively across institutions, access permissions for material hosted on institutional servers may present a challenge that also affects management of the OER. Technical support needs to be in place for OER design and development, resolving server/hosting issues, and content management. In addition, institutions need to ensure that hosting services are adequate for OER requirements. However, the study also notes that individual OER projects have received institutional buy-in to OER release, particularly in instances where these support existing priorities and strategies, such as sustainability, lowering environmental impact, or marketing. Nevertheless, even where there are agreed institution-wide processes that enable OER release, projects have found that there is a long way to go before this becomes an explicit policy and an expected part of course creation, highlighting the need for institutional IPR policies to be more supportive of OER release (McGill, 2011).

During research for this chapter, online searches for OER-related policies yielded few explicit policies. Whilst the presence of a separate policy may denote an overt recognition of the importance and priority given to OER, it is also possible that OER practices are integrated into other policies. The latter may signify that an institution has incorporated OER into institutional processes. This has been noted at The Open University, in the UK, which has several policies relating to OER, such as an Open Media Policy, the Curriculum and Qualifications Strategy and the Learning and Teaching Strategy. Regardless of approach, the presence of policies will allow faculty to be aware that their inputs will be recognised by the statutes of the university and they will receive the appropriate credit for that activity.

Some institutions have begun the process of policy creation. For example, in 2010 the Faculty of Health at the University of Canberra in New Zealand took advantage of its university’s IP policy review period, and developed an IP policy proposal (“Open education practices,” n.d.). Open Universiteit in the Netherlands is in the
process of reshaping its policies. The University of Leicester in the UK does not have a finalised OER policy, but has a draft one that is still going through senior management processes for approval. It does have an open access policy, focussed on research output through the Leicester Research Archive, but this mandate does not cover teaching materials. Similarly, Athabasca University (AU) in Canada is in the process of developing an OER policy, but it had not yet reached the first draft stage at the time of writing. However, it also has an open access policy that was developed in 2006:

Publishing in an Open Access journal has always been a right at AU; however, making one’s research products available to the general public should be equally encouraged, especially in an “open” university. (Athabasca University, 2006, n.p.)

The policy notes that AU faculty, academics and professional staff members are encouraged to contact the copyright holder and request permission to publish the research concurrently in an open access format.

Universities are complex, autonomous institutions in which curriculum and operational changes are made only after deep and careful consideration — and after going through several institutional processes that are often time-consuming. Thus, it may be expected that there will be acceleration in the creation of supportive policy environments for OER as the breadth and depth of OER practices matures globally. In addition, initiatives such as the Open Education Quality Initiative’s (OPAL) Awards for quality and innovation through open educational practices, which recognise outstanding achievements in the fields of OER policy, promotion and use, are helpful, as they may spur institutions to develop policies (“Submissions invited to OPAL Awards,” 2011).

However, as highlighted in this chapter’s introduction, policy fulfils a limited function, and issues such as sustainability and faculty buy-in and involvement are of equal importance. This point can be illustrated in the example from the University of the Western Cape (UWC) in South Africa, which passed an ambitious “Free Content, Free/Open Courseware Policy” in 2005, aimed to remove institutional obstacles to the publication of OER (Keats, 2005). It initiated the Free Courseware project towards implementation of this strategy. However, if one views the UWC repository (http://freecourseware.uwc.ac.za), there are only nine courses available, offering little evidence that the policy has gained traction. This provides an example of a policy that has been created, but with little indication of consistency between policy and practice.

It appears that OER initiatives at most universities are still largely project-driven rather than being part of an institution-wide, integrated process. OER and OCW initiatives seem to be an add-on rather than an integral part of the institutions’ business. This lack of integration is also reflected in funding for OER.

**OER Funding and National Policies**

Although there has been significant diversification of sources of funding for OER initiatives in the past two years, many OER projects remain predominantly donor-funded (although there is some growth of institutional funding, particularly amongst early adopting institutions), with major funders including The William and Flora Hewlett Foundation, the Bill & Melinda Gates Foundation, The Andrew
W. Mellon Foundation, and the Shuttleworth Foundation. Whilst foundation funding has been an essential component of establishing the OER field, it has been argued that such funding cannot be relied on for ongoing development, operations and sustainability, with many OER initiatives struggling to establish and transition to a future independent of foundation funding (Stacey, 2010).

Funding issues are also important at the national level, depending on the funding structures of a country. Some institutions have received donor and government funding. For example, Utah State University OpenCourseWare (USU OCW) received multiple rounds of funding from The William and Flora Hewlett Foundation, as well as a one-off appropriation from the Utah state legislature as part of the Utah OpenCourseWare Alliance. However, despite having published over 84 USU courses over four years, the project offered no faculty incentives for participating and it is no longer operating, for lack of funding. It has been argued that this was due to OCW at USU not being integrated with university structures (Members of the IPT 692R class at BYU, 2009).

In contexts where universities are mainly funded by the government (such as the cases of UG and KNUST), funding in general is often a challenge. Friesen (2009) suggests that tangible benefits of OER should be linked to core institutional priorities, thus making a case for institutional funding. Harley (2011), in his review of the African Health OER project, notes that despite some progress in institutional policy conducive to OER, policies are as yet relatively silent regarding funding. KNUST stands out as being explicit in regard to resourcing for OER:

> Colleges, faculties and departments will be required to make budgetary allocations for the development of OER within their units. They will also be required to explore external sources of funding including grants and collaborations to roll out OER. (KNUST, 2011, p. 6)

Thus, in the African context at least, it is likely that such initiatives will need to be supplemented by alternate funding models in addition to institutional budget allocations.

Nevertheless, a key way to address funding issues is to acknowledge the benefits of integrating OER practices with any content/material development process (as has been done at The Open University, in the UK). Sourcing existing OER as part of the process of investing in high-quality learning resources that meet curriculum needs can save costs. In contexts of national support for OER, it is likely that funding will be channelled towards these efforts, such as the financial support seen in Norway and the Netherlands. Such approaches formally support and encourage institutions to create OER. Additionally, such support for OER provides an increased likelihood that such efforts are sustainable.

**Focus on IPR**

Review of available policies reveals that they do not typically cover all aspects related to OER creation and adaptation, with most institutions focusing primarily on managing IPR and releasing materials using a Creative Commons license. OER may be reviewed for copyright infringement, and there may also be “take-down” policies that provide users with an opportunity to report intellectual property licensing conflicts. Even fewer policies are explicit about issues such as the enabling technology, technical support, funding and staff motivation.
Institutions differ as to whether they provide incentives to faculty for participating in OER creation. For example, at KNUST and UG, the policy makes provision for incentives for OER creation and for research. However, few universities appear to provide incentives for faculty members to participate in OER initiatives (this includes UCT and USU OCW). In most institutions, OER appear to be funder-driven in the form of stand-alone “projects” (as opposed to integrated with institution-wide processes that reward faculty) which are likely to have driven OER at the institution. In the USA, faculty involvement in OER at most institutions is voluntary (Members of the IPT 692R class at BYU, 2009). In addition, only a few policies (such as at KNUST) make explicit mention of the notion of monitoring quality.

Lack of Leadership Support

It is also possible that lack of policies is due, in some instances, to lack of leadership support for OER. Plotkin (2010) hypothesises that the lack of higher education governance involvement in the OER movement is primarily a generational issue. He notes that the majority of higher education governance officials may have no exposure to OER or limited experience in assisting with or supporting the development and use of OER. They may not know what OER are, or may confuse OER with less useful materials, such as online textbooks or, more generally, “stuff you can find on the Internet”. Support at the national level can assist in overcoming institutional barriers to facilitate the adoption, use and management of OER.

Conclusion

Surprisingly few institutions around the world are developing and implementing formal OER and open access policies to increase the reach and impact of faculty’s, staff’s and students’ intellectual efforts. Some national and federal agencies are placing such mandates on their systems. But from a national or regional point of view, increased funding to encourage higher education institutions to work on OER projects is still unusual. However, as governments often play a key role in policy development and funding of higher education institutions, and as government policies on higher education funding also indicate key priorities, governments are ideally positioned to encourage or mandate institutions to release materials as OER and to license materials developed with public funding under an open license.

Possibly the most effective way to accelerate open licensing and sharing of higher education resources would be adoption/adaptation and approval of an appropriate national open licensing framework, with clearly defined options for use by all higher education stakeholders, ideally as part of an overarching policy framework on IPR and copyright in higher education that spans both research and teaching activities. Such a licensing framework may also cover the copyright and IPR status of educational materials produced by government departments and agencies.

Governments can also assist higher education stakeholders to understand issues surrounding IPR, as well as how these are challenged by the digitisation and online sharing of information. In addition, they may benefit from a review of national ICT/connectivity strategies for higher education, given the centrality
of ICT to accessing and sharing content online. Such reviews could focus on ensuring sustained provision in connectivity and staff/student access to ICT within higher education systems. Furthermore, government can collaborate with higher education providers to determine the most cost-effective ways to facilitate the organisation, electronic management and online sharing of OER. Options would include hosting content on institutional servers, establishing a shared repository for all higher education providers, or joining regional/global efforts to develop OER repositories and directories rather than replicating these investments (UNESCO & COL, 2011).

In cases where government may not be aware of the potential of OER, institutions may also have a role to play in sensitising government around OER (as has been done by KNUST).

Experience shows that, when an institution makes its courses/materials publicly available online (assuming they are of quality and relevance), this can attract new students, facilitate accountability (through its transparency), advance institutional recognition and reputation, and support the public service role of institutions. It may also further the dissemination of research results and thereby attract research funding (UNESCO & COL, 2011). However, the strategic advantages of having an OER policy are not yet articulated clearly in existing research.

It appears that where they exist, policies vary significantly across different institutional contexts, and each policy has its own logic, depending on the circumstances of the institution. Contextual differences across institutions present different levels of opportunity for policy engagement directed at an OER mode of operation. Most OER efforts appear to provide an optional and voluntary condition for faculty. It may therefore be worthwhile to provide incentives for faculty to participate in OER initiatives. This also entails ensuring that staff workload models allow for curriculum, course and materials design and development, as well as research activities. Furthermore, institutions will benefit from establishing and maintaining a rigorous internal process for validating the quality of educational materials prior to their publication as OER.

For institutions starting OER initiatives, awareness creation may be essential initially to drive institutional adoption of OER. This may include holding consultations and workshops with relevant stakeholders. At institutions that have successfully passed a policy that promotes OER, evidence indicates that there was consultation around policies to ensure buy-in. Early involvement of key individuals, and a clear communications structure, can be important for ensuring institutional take-up. Furthermore, it is important that such policies be aligned to the institutional mission and objectives to ensure buy-in. In addition, the examples demonstrate the vital role of champions at higher education institutions to drive policy.

Institutions will also benefit from periodic reviews of institutional OER policies and practices to determine their value. This could include reviewing the extent of use of openly licensed educational materials in higher education programmes and assessments, the effects of the use of OER on the quality of educational delivery, and its impact on the cost of developing/procuring high-quality teaching and learning materials for undergraduate and post-graduate programmes.
Finally, faculty and students would benefit from familiarising themselves with relevant national and institutional policies that might affect their rights, and the avenues for channelling any concerns about the nature of these policies.

**Notes**

1. UCT automatically assigns to the author(s) the copyright, unless UCT has assigned ownership to a third party in terms of a research contract, in:
   - Scholarly and literary publications.
   - Paintings, sculptures, drawings, graphics and photographs produced as an art form.
   - Recordings of musical performances and musical compositions.
   - Course materials, with the provision that UCT retains a perpetual, royalty-free, nonexclusive license to use, copy and adapt such materials within UCT for the purposes of teaching and/or research.
   - Film.

2. UCT assigns the copyright in a student’s thesis to the student author (or in the case of a work of art that is submitted for examination purposes, to the IP creator of the work of art), subject to UCT retaining a royalty-free right to publish a thesis in any form. Whilst the student has the right to enter into agreements with the publishers, who may wish to publish the thesis in whole or in part, the student shall ensure that UCT’s rights are acknowledged by the third party and maintained, and shall with the consent of their supervisor(s) ensure that such publication is not in conflict with any past or planned future assignment of rights to another publisher, e.g., of a journal article or other literary publication.

3. 8.1 UCT holds copyright in:
   - Banks of multiple-choice test and examination questions.
   - Syllabi and curricula.
   - Computer software developed at or commissioned by UCT to support academic or research administrative processes or the general operational management of UCT.
   - All UCT produced publications (e.g. but not limited to The Monday Paper, Varsity, Research Report, etc.) including electronic media and content on the UCT websites.
   - Photographs and digital images taken by employees for UCT media or publicity or specifically commissioned by UCT.
   - Specifically commissioned works and course materials that fall outside the scope of normal academic work.
   - Computer software developed as part of a research project, unless assigned by research agreement to another party.

4. Information on The Open University was kindly supplied by Andy Lane, director of the OpenLearn Initiative.
References


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