

Managing Intellectual Property Rights in Digital Learning Materials:

A Development Pack For Institutional Repositories



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Background to the production of this pack

This institutional development pack is part of the outcomes of the work of the **TrustDR** project (**Trust** in **Digital Repositories**) funded by the JISC (Joint Information Systems Committee) the UK government body responsible for supporting education and research by promoting innovation in new technologies and by the central support of ICT (Information and Communication Technology) services.

The **TrustDR** project was a partnership between the University of Ulster and UHI Millennium Institute and operated between June 2005 and August 2007 as part of the JISC Digital Repositories Programme.

Project website:

<http://trustdr.ulster.ac.uk/>

Digital Repositories Programme website:

http://www.jisc.ac.uk/whatwedo/programmes/programme_digital_repositories.aspx

Acknowledgements

Images

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Image of IPR relationships courtesy of Wilma Mossink and the Surf foundation, Netherlands

Section Images of 'Copyright Figures' courtesy of the JISC/SURF 'Know Your Rights' Toolkit

Information and Help

Charles Oppenheim, Professor of Information Science at Loughborough University, for encouragement, feedback and the copyright risk equation.

Gordon Dunsire, Depute Director, Centre for Digital Library Research, University of Strathclyde, for feedback on the scoping exercise.

Paddy Maher, Vice Principal for Learning and Teaching at UHI Millennium Institute for permission to reproduce the Flexible Learning case study and workshop materials.

Conrad Taylor, Chair of the Electronic Publishing Specialist Group of the British Computer Society for permission to reproduce "Metadata's many meanings and uses".

Prof. Sol Picciotto Lancaster University Law School Lancaster for the Justice Laddie Quotation.

Alan Roy Edward, Document & Copyright Services Manager, London South Bank University, for the alert about government plans to update the damages provision in copyright law.

Bob Brandie Senior Video Conference Technician, Shetland for arranging the World Bank seminar videoconference with the Phillipines, India and Saudi Arabia.

Jamie Dinkelacker for permission to reproduce "Placing Our Stuff So We Can Find It Later: A Meta-Learning Essential".

Anoush Margaryan, Colin Milligan and Peter Douglas of the JISC CDLOR Project for the guidelines for repository start-ups; "Structured Guidelines for Setting up Learning Object Repositories".

Sue Manuel and Steve Loddington, project workers on the JISC Rights & Rewards project, for feedback and comment.

Fred Friend JISC Scholarly Communication Consultant, Honorary Director Scholarly Communication UCL, for a clear explanation of the role and importance of Policy in IPR management as an expression of relationships.

Gayle Calverley, Adviser, Distributed Learning, University of Manchester, for information about the eMM model.

Gary Campbell, Moray College, for information concerning the use of matrixes for performance analysis and measurement in the United Nations, incorporated into our 'continuums'.

JISC Legal for checking our texts.

Stephen Downes, National Research Council, Institute for Information Technology, Canada for useful criticism.

Phil Barker, Learning Technology Adviser, Herriot Watt University, for checking and advising on technical aspects of our texts and general comments.

Neil Jacobs, Digital Repository Programme Manager, JISC, for comment and feedback.

Lou McGill, Programme Manager, e-learning, JISC, for comment and feedback.

Catherine Kearney, Assistant Director, Scottish Library Information Council, for comment and feedback.

David Flanders, Repository Developer & JISC SOURCE project manager, Birkbeck College, University of London.

Ed Barker, Researcher and Grants Coordinator, Eduserv Foundation for comment and feedback

Charles Duncan & Peter Douglas of Intrallect Ltd., for comment and feedback.

Foreword

This development pack is the final output of the TrustDR Digital Repository Project funded by JISC from 2005 to 2007. The original brief for the project was to investigate and develop some practical solutions to managing IPR in digital learning materials held in institutional repositories. In 2005 the idea of an institutional repository of teaching and learning materials was still fairly new, but this has rapidly changed due to initiatives by JISC and the continued drive towards sharing and interoperability that characterises much of the current e-learning landscape.

From the outset we knew that to make progress we would have to adopt a systematic and holistic approach to the problem area and work on a broad front that included educational, legal and technical factors. We did not realise on just how wide a front we would be working or that spin-offs from our project would result in a guide to flexible learning published by the QAA or that we would be preparing a briefing paper for the World Bank.

There is little tradition of centrally managed collections of internally created teaching and learning materials in UK tertiary education outside of the distance-learning sector, as a result of we have had to 'build the road' to travel along, we hope our work will be of help to those who follow. We have sought to ground our analyses and proposals in the context of a changing tertiary education system where change at both the institutional and the individual and professional levels looks set to continue. The results of our work are, we think, insightful, sharp, inventive and above all useful.

I would like to express my thanks for the support and good common sense of the project director John Kennedy, Systems Librarian, University of Ulster, and Alan Masson, Deputy Director Institute of Lifelong Learning, University of Ulster. I would also like to thank Paddy Maher, Vice Principal (Teaching and Learning), UHI for encouragement with the QAA work. Finally, I would especially like to thank the two project workers, David Dripps and Jackie Proven, for their hard work, commitment and good humour in what has been a demanding and at times surprising project to work on.

John Casey, Project Manager for the TrustDR project

August 2007

1 Executive Introduction and Summary

1.1 TrustDR In Brief

What is this pack for?

- To help clarify and update IPR policy for the management and use of digital learning materials created within institutions and develop a sustainable infrastructure (human, technical, educational and organisational) for the effective use of e-learning particularly in support of delivering a more flexible curriculum.

Who is this pack aimed at?

- Senior management with responsibilities in this area and those supporting them, individuals and teams tasked with overhauling institutional IPR policy, managers and consultants etc who are interested in developing viable e-learning infrastructures, managers of e-learning projects and those involved in planning for projects, partnerships and collaborations, people with a general interest in this increasingly important aspect of e-learning.

Why is this pack useful?

- IPR issues are conceived of as presenting serious obstacles to the uptake and development of e-learning in our educational systems. This pack takes a practical, clear and straightforward approach to this problem and explicitly links it with the changes and developments the sector needs to undergo to make more effective use of e-learning. In the process it provides useful challenges and criticisms to some of the misconceptions that can obscure fundamental issues. Those involved with introducing flexible learning should find this pack particularly useful.

How does this pack tackle the problem?

- It takes a systematic approach to understanding how the tertiary sector is changing and how well the current use of e-learning fits with these changes. Appropriate solutions are ones that reflect and help clarify the underlying business models in such a way as to support and develop the effective use of e-learning. Practical solutions must articulate and develop the relationships between the key stakeholders and reflect the real underlying business processes. Fundamental to this strategy is the need to '*understand your business*' and know '*where the value is*'. The pack operates as a mix between an individual training manual and an organisational development tool and is intended to support individuals and teams working in this area.

1.2 Why IPR in E-learning is Important - Notes for Senior Management



“a much-needed opportunity for those senior management teams who want to put their IPR houses in good order for the digital future”

This institutional development pack for managing IPR (Intellectual Property Rights) in e-learning is intended to support those who wish to update and clarify their institutional policies and infrastructures to help get the best out of using technology to support teaching and learning. Confusion, lack of awareness, poor practice, contradictory policy and risk aversion currently dominate thinking about this subject at all levels – particularly amongst senior management. This is presenting a major obstacle to the effective uptake of e-learning in our tertiary education system. In this pack we explicitly link the task of overhauling the IPR regimes in our institutions to the organisational and professional ‘process change’ that is required to make effective use of e-learning – especially in relation to the introduction and extension of flexible learning delivery.

Teaching and learning activities generate the single largest source of institutional wealth in this sector yet the management of IPR and the organisation of technology to support these activities are often overlooked. This pack will provide step-by-step support for management teams and others to ask the questions needed to analyse their current and future organisation of e-learning activities and develop an IPR policy regime that will best support their needs. The implementation of an IPR policy and the institutionally effective use of e-learning are the responsibilities of senior management and without their involvement improvement is not possible. This development pack provides a much-needed opportunity for those senior management teams who want to put their IPR houses in good order for the digital future and to make the best use of e-learning technologies and methods to deliver a more flexible curriculum.

The tertiary education sector in the UK is being required to extend the supply of flexible learning opportunities for greater numbers of increasingly diverse students. The funding councils are expecting this process to happen within constrained budgets while maintaining and enhancing teaching quality. Technology has been vigorously promoted for over two decades as a key enabler for change in our educational systems. Yet, to date, that change has been evolutionary rather than revolutionary and this is likely to continue to be the case. This is not surprising given the complex nature of publicly funded national educational systems that are subject to strong political and cultural forces. Understanding how this process of change is playing out is obviously important for planning how to manage IPR. The diagram in Table 1 below provides a useful ‘e-learning change continuum’ that is linked to examples of different business models. Our intention is that people can benefit from the material in this pack wherever they are on the change continuum and can align their IPR policy to the teaching business model that is in place.

Despite the increasingly powerful technological tools at our disposal and the advances in educational research, educational institutions have remained remarkably resistant to technology-induced change. Efforts to use e-learning to transform education have, to date, not been fully effective because traditional patterns of teaching and administration have been projected onto the actual use of the technology. This tension between the inherent organisational forms associated with the technology

and existing traditional institutional structures and pedagogic cultures is one that needs to be understood in order to propose realistic IPR solutions.

<p>1. Traditional</p> <ul style="list-style-type: none"> • Individual – teach ‘my’ module • Embedded deeply in context • None or little sharing or reuse • Design alone • Decentralised • Frequent changes • ‘Silo’ model projected onto VLE space • Materials managed individually 	<p>•2. Sharing</p> <ul style="list-style-type: none"> • More emphasis on sharing • Individual model still dominates • Still embedded in context • Still design alone • Not transferable • Decentralised • Some sharing & reuse • Frequent changes • ‘Silo’ model projected onto VLE space • Materials managed individually 	<p>3. Collaborating</p> <ul style="list-style-type: none"> • Emphasis on collaborating • Individual but more coordinated with others • More sharing & reuse • Module/curriculum design more coordinated • Less decentralised • Less Frequent changes • Partial access to others’ VLE space • Materials managed individually and some ad hoc local management 	<p>4. Organising</p> <ul style="list-style-type: none"> • Clear aims/objectives for working together • Clearer group identity & coordination & roles & accountability • Group design procedures • Sharing and reuse common • More centralised • Changes are negotiated • Common access to the Groups’ courses in the VLE • More organised local materials management procedures 	<p>5. Managing</p> <ul style="list-style-type: none"> • Courses are designed, developed and delivered by multidisciplinary teams working within clearly defined roles and procedures • Centralised • No changes except through procedure or maintenance • Reuse Common • Materials managed centrally
	TEAM TEACHING			
LOW	FORMAL MANAGEMENT / OWNERSHIP OF MATERIALS BY INSTITUTION			HIGH
LOW				HIGH

Table 1 Teaching Business Models Continuum

Table 1 Narrative: Elements of all these models may actually coexist in one institution and at all levels. A large generalisation would identify 1 & 2 as most current undergraduate teaching (the great bulk of most institutional activity) and 3 for some blended/ distance Masters courses (a growing and lucrative market segment), 4 would be much of the current medical teaching for doctors and 5 would be ‘classical’ distance learning institutions and courses

Fundamentally, the problem posed in transforming our public educational systems is not a technical one. As a guide to implementing flexible learning published by the QAA (Quality Assurance Agency) observes; if quality and efficiency are the priorities then the most direct solution is the redesign of the curriculum combined with changes in working practices [1]. As in earlier periods of industrial and social transformation, technology can only be used effectively if its introduction is accompanied by a reorganisation of work. Understanding and engaging with this inherent ‘political economy’ of e-learning is at the centre of the effective use of technology to support teaching and learning to meet the educational needs of our society. Closely related to this are questions concerning the ownership, control and use of IPR in e-learning – these go straight to the

heart of difficult questions concerning power, control, status and management in the academic workplace.

“towards a team-teaching model”

For these reasons both IPR and academic reorganisation have largely been ignored both by institutional managers and, until recently, national organisations. As a result, the underlying business model for e-learning in our institutions is neither articulated nor well understood, which makes further progress difficult. A clear signifier of this underlying confusion and lack of direction is the fact that institutional policies concerning IPR in e-learning are often non-existent, unfair, contradictory and legally dubious. The current confusion and fear associated with IPR issues can best be resolved by having a clear vision of what it is we are trying to achieve with e-learning and by taking steps to express that clearly in institutional policy and developing an appropriate infrastructure to support it. It is no accident that the distance-learning sector has a relatively well-developed and mature IPR regime that is clearly intended to support their underlying business models.

In this pack we propose that the development of realistic solutions to managing IPR in e-learning has to be linked to a sound understanding of the underlying processes and ethos of the educational sector and its needs – in fact this is the approach that is needed to deliver IPR solutions in any field of activity.

‘turn the IPR problem around’

Our approach is to ‘turn the IPR problem around’ and view solving it also as an enabler for the organisational changes that are required to allow e-learning to attain its full potential when combined with well thought out educational techniques. The primary change that we have identified and targeted in our work is the move from the current pedagogic and organisational model that is dominated by individuals, teaching in relative isolation from each other, towards a team-teaching model. This change to the way teaching is conducted is required both to make the best use of technology and to manage IPR in e-learning in our tertiary institutions. This change is already in the process of happening for sound pedagogic and economic reasons and it is important not to see IPR policy and technology as obstructing it. As we have already indicated this change is likely to play out differently and at different speeds in different places (even within the same institution).

The introduction of institutional digital repositories represents another fundamental change with the increased centralised information management responsibilities that this involves. Historically, our tertiary institutions have had little or no tradition of managing teaching and learning materials generated by staff – traditionally this has been left to individual lecturers and this practice has been transferred to the digital realm of Virtual Learning Environments (VLEs) with their ‘silo’ models.

An institutional repository represents a significant change that is nicely summed up by this quote:

"[A] university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or

distribution... An institutional repository is not simply a fixed set of software and hardware." (Lynch 2003)¹, cited in Heery and Powell (2006) [2]

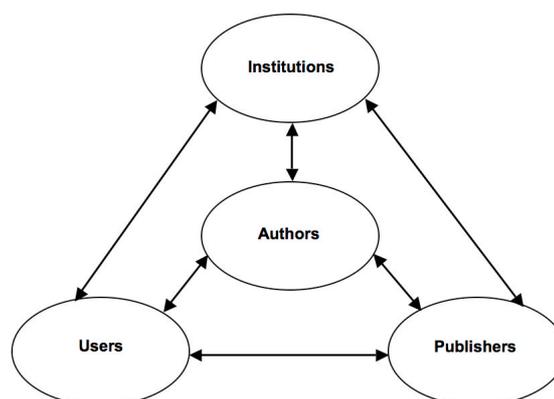
In most cases the best and obvious location for a repository will be with the institutional library service and this needs to be adequately resourced.

In terms of legal responsibility it is best to view implementing an effective institutional IPR policy as another stage in the journey of the UK tertiary education sector towards greater public accountability alongside the likes of SENDA, FOI, DP² etc, and as such also needs a concerted institutional response. Once this process has been engaged with then the currently high levels of risk aversion amongst senior management should start to subside as management teams begin to understand the real levels of risk and learn to take the appropriate measures – primarily by developing workable IPR policies.

The task for senior management teams in implementing sustainable e-learning infrastructures and the effective flexible delivery of the curriculum is a substantial one and demands a far more holistic and systematic managerial approach. As we have already observed, these activities also need an effective IPR policy – the development of which can be an important enabler for e-learning and flexible delivery. We strongly recommend that senior management teams use the JISC Infonet CAMEL³ guide to support them in these activities by partnering with other institutional management teams to share experiences.

Before we go to the main points in the executive summary it is useful for us to introduce a visual model of the IPR 'problem space' in digital learning materials and institutional repositories. The diagram below in figure 1 nicely illustrates the interconnected nature of the problem and suggests that the solution is essentially about getting the balance right between the

Fig. 1 IPR Framework
The relationships within an IPR framework



different players. This is where policy is most important – it effectively expresses what the underlying relationships are between the different groups in the diagram. As in other sectors of the economy where IPR is

¹ Lynch, C., ARL Bimonthly Report 226 <<http://www.arl.org/newsltr/226/ir.htm>>

² The legal obligations imposed by the Special Educational Needs and Disability Act 2001, Freedom of Information Act 2000, Data Protection Act 1998.

³ Available at: <http://www.jiscinfonet.ac.uk/camel>

important, policy works best if it reflects the real underlying business processes and can satisfy the different players' needs.

1.3 Main Points

“IPR issues act as a very efficient ‘lightning conductor’ in institutions”

1. Now that e-learning has arrived individual academics and institutions have become de-facto digital publishers of learning materials – enjoying both the legal rights and the responsibilities this brings. The questions that arise include: Who owns it? Why might it matter? How do we manage it?

2. Workable solutions to IPR in e-learning need the involvement of senior managers to provide top-down direction and leadership. This requires a more systematic understanding of educational processes and a mature attitude towards risk management. Solutions should be thought of in terms of organisational support, commitment and responsibility.

3. Institutional IPR regimes and policies should reflect the underlying business model and what is considered valuable. We need a better understanding of the ‘business of e-learning’ in order to move forwards both educationally and legally. This is the best basis for policy development.

4. Policy is important because it acts as an expression of relationships, cultures and values in a community, getting this right can help to build and maintain an appropriate ethos. A clear policy means we can effectively instruct both lawyers and IT departments what to do to support the aims of the policy.

5. The current institutional IPR policy picture is confused and represents pre-digital and traditional working methods. To move forwards we need to critically analyse the status quo with all its contradictions and paradoxes and be clearer about where we want to go.

6. Policy development and change in this area needs to be an active and dynamic process that reflects real underlying needs. There is a lot we can do within the current legal regime to make life easier for ourselves – but we have to engage with it, know what we want, and this requires clear leadership.

7. To manage IPR in e-learning we require effective information and records management procedures, most of what is needed can be achieved by simple policy formulation and administrative procedures. IPR legal compliance in the creation of learning materials needs to be viewed as an essential part of academic integrity and institutional quality control.

8. IPR issues act as a very efficient ‘lightning conductor’ in institutions that brings to the surface underlying and difficult issues concerning ownership, control, authority, power and status. Handled with care this can be used for positive change. In this connection we should stop regarding the law as a problem and start using it as an enabler to overhaul our organisational structures.

2 Introduction

2.1 About this Pack and who it's for



“practical and realistic solutions”

Welcome to *Managing IPR in Digital Learning Materials: a development pack for Institutional Repositories*. The aim of this pack is to provide practical guidance and support to help UK tertiary education institutions manage the IPR (Intellectual Property Rights) in their digital collections of teaching and learning materials. It deals with materials stored and used as learning objects in institutional digital repositories but by necessity also deals with the general topic of IPR in teaching and learning materials. It is aimed at senior management with an interest or responsibility in this area and those tasked with overhauling institutional IPR policies in relation to teaching and learning materials.

The pack will also be of use to those with a general interest in this increasingly important aspect of e-learning, those managing e-learning projects and those involved in planning for projects, partnerships and collaborations. To provide a realistic foundation for our analysis and suggestions in managing IPR in e-learning we have linked our work to the practical context of developing greater flexible learning provision.

The pack is intended to help provide practical solutions for institutional managers in further and higher education in the UK who want to create an effective IP framework in which to manage their digital learning materials. This pack builds on previous research and work in the field sponsored by JISC [3, 4] and guidance to senior management issued by HEFCE in 2006 [5]. We aim to provide practical and realistic solutions to those who want to improve their IPR policy and practice in this area.

NB the examples of real-life IPR problems provided in this pack, the discussions and the readings have been made anonymous to protect the sources.

2.2 Aims

In this pack we aim to provide enough guidance and information to help institutional managers to devise workable solutions to managing the IPR in their teaching and learning materials. In the process we shall help you to clarify what is important and valuable in your educational activities and show how clarifying IPR policy can help you achieve your institutional objectives rather than hinder them.

Sorting out the IPR policy for teaching and learning materials cannot be done in isolation from the activity to which it relates, and in doing so we seek to leverage our efforts into putting e-learning onto a more coherent and sustainable basis in our institutions. The fact that the sector is beginning to engage with these legal issues is a sign that e-learning is maturing as an institutional activity and beginning to move away from its ‘bottom-up’ innovation phase. The process of dealing with IPR acts as a

very efficient ‘lightning conductor’ for potentially difficult issues concerning ownership, control, authority and power in our institutions. Handled with care this can be a way to move educational practice in a positive direction, regarding the law as an enabler rather than an obstacle.

If you, the reader, are expecting this pack to be a rather dry discourse on obscure legal and technical issues we hope you are going to be pleasantly surprised! We shall be providing some challenging and creative analysis of the status quo in both education and e-learning in order to suggest some practical solutions. This pack is as much about process change in our institutions as it is about managing IPR and we see the two as intimately linked.

2.3 Scope

This pack is primarily concerned with digital content generated *within* our institutions for teaching and learning purposes and how we can manage the IPR contained in that content. The IPR in material originating from outside our institutions (whether commercial or other public sector organisations) and your potential uses of it is already covered by UK IPR law - which you have to comply with. The main issue in dealing with such third-party materials, as they are often called, is the low levels of awareness about IPR matters in the context of e-learning, the first 2 readings in this pack should help to remedy this for the reader.

In our educational institutions we do have considerable choice over how we want to manage and control the IPR in the materials we generate. How we choose to do this can have important ramifications on both the operation of our e-learning activities and on relationships between the institution and its employees. We shall be suggesting some practical and, we think, positive ways of doing this; along the way we shall be countering some preconceptions and delusions that often cloud the issue. To make our suggestions as practical and useful as possible we are situating them in a context of ‘process change’ in our institutions in connection with the demands for a more flexible curriculum supported by e-learning methods – a very common scenario that raises many IPR issues.

Of course, our institutions do not exist in a vacuum; they are situated in a national and international context of social, educational, commercial and political concerns. We argue that there is a need for leadership in this area at all levels, and national bodies like the funding councils, government agencies and JISC should collaborate to help provide direction here. To this end we provide a short list of very practical policy options for discussion in the Appendix in Reading 11.

2.4 User Notes

Senior institutional managers should read the executive introduction and summary. It is important that they engage with this subject as it affects the

“regarding the law as an enabler rather than an obstacle”

single biggest source of institutional income in their organisation – teaching and learning.

“the issue of trust is central”

For those tasked with overhauling or creating an effective institutional IPR policy framework for teaching and learning materials we intend that this pack is to be used as both an individual training manual and an organisational development tool. The task is best approached as a team exercise to draw on multiple skills, for example there will need to be someone who is, or can become, comfortable reading the legal texts of licences and consortium agreements etc. As people will need to cover a lot of ground in a number of different disciplines, our approach is aimed at building up knowledge and awareness in an iterative and manageable fashion – gradually. To do this we recommend the following approach:

- **Step 1:** Read the main body of this pack from start to finish but do not read the “Discussions and Readings etc” that are referred to in the text (they are located in the Appendix)
- **Step 2:** Go to the Appendix and read the *Discussion 1* document this has been put together to give you a rapid orientation to some of the main legal, educational and technical issues.
- **Step 3:** Go through the pack again and pause to read the “Readings and Tools etc” as they are referred to in the text, we think it is best to read these documents in the order that they appear in the pack.
- **Step 4:** Use the TrustDR Checklist featured in the Conclusion of the pack. This is simply a set of structured questions to make sure you cover the main issues. This, together with the rest of the pack and the steps already taken, should provide enough information and guidance to help the reader tackle the job of developing an IPR framework for e-learning materials.
- **Step 5:** Finally, take legal advice on whether what you are developing is viable and correct legally. It is important that you are comfortable at giving clear *instructions* to lawyers as to what you want; this pack should help you to be able to do that.

Further readings and references are provided in the Appendix for completeness and to support individuals who want to explore particular topics and for those who want to see some of the background reasoning and rationale for the approach that we have taken in this project. Each reading is listed together with a description and a hyperlink to its location, or a reference.

2.5 TrustDR Position Statement

Intellectual Property Rights are currently perceived as presenting considerable difficulties to the development and uptake of both digital repositories and learning objects. The real challenge we face is how the educational sector can take advantage of the new digital media and technologies without having to pay a huge cost in terms of administration, legal fees and insurance. In this, the issue of trust is central. How can the education sector conduct its business within this environment in such a

IPR legal compliance becomes both a measure of academic integrity and institutional quality

way that the various creators, publishers and consumers of intellectual property retain their trust? A social or economic system that has low levels of trust tends to have much higher running costs. In a low-trust system, expensive lawyers, contracts and insurance are used as a substitute for behavioural constraint. So, if trust reduces transaction costs in an economy how can we build and maintain it in the context of digital repositories? As the JISC sponsored RoMEO⁴ project has pointed out some of the main barriers to the success of such repositories are not technical or legal but cultural.

The TrustDR project builds on recent work sponsored by JISC in order to explore the cultural, legal and technical issues that must be attended to in order to create social and legal agreements that can provide a viable basis for the management of digital repositories of learning objects. An important part of our approach to this task is to view educational institutions as classic examples of ‘systems’ and that the problems posed by both the effective use of e-learning technology and the management of the IPR in digital content are closely related and need to be dealt with in a systematic manner. We think it would be unrealistic to deal with IPR issues in digital learning materials without examining the type of e-learning activity that is occurring and to what extent it is integrated into our institutions.

In this connection, as e-learning develops and supports a move to more flexible learning delivery and the team teaching model needed to support it, then IPR legal compliance becomes both a measure of academic integrity and institutional quality.

2.6 Beginning the Debate

Throughout this pack we propose that IPR solutions in this area will be the result of the evident good sense of understanding our business and knowing where the value lies in our educational systems. This is recognised in an important guidance document to senior institutional managers issued by HEFCE in 2006:

“A higher education institution’s IPR management strategy will depend on the business model it uses in its e-learning programme”

HEFCE, 2006, [5]

Our project work has entailed background studies into the interrelations between the areas of law, education, and technology in order to make our guidance as clear, concise and user-friendly as possible. In the first discussion document below we set out our main observations and conclusions mapped onto these three areas of activity. This is useful for a quick orientation to the project subject matter and our approach to it. These discussions are also useful for your advocacy activities as a ‘pick

⁴ <http://www.lboro.ac.uk/departments/ls/disresearch/romeo/>

and mix' collection of observations and arguments to suit a number of purposes and situations.

Discussion 1: The Main Legal, Educational and Technical Issues
(John Casey, David Dripps, Jackie Proven)
[Terms of use, Creative Commons BY Licence ⁵]

⁵ BY = The Creative Commons Attribution Licence, for more info consult <http://creativecommons.org/licenses/by/2.5/scotland/>

3 Preparations

3.1 Understanding the Context



“individual academics and institutions have become de-facto digital publishers of learning materials – enjoying both the legal rights and the responsibilities this brings”

Now that digital media and e-learning has arrived in education individual academics and institutions have become de-facto digital publishers of learning materials – enjoying both the legal rights and the responsibilities this brings. The questions that arise include: Who owns it? Why might it matter? How do we manage it? We should recognise that in mainstream educational institutions the value lies primarily in the ‘process’ - that is teaching, support and ephemeral qualities such as culture – not so much in the ‘things’ or materials. This can have some challenging implications and opportunities.

We are fully in favour of obtaining a more liberal legal regime for educational activities. However, the notion that a society based upon the concept of private property is going to suspend the application of property law to the education sector just because we find it inconvenient is, to put it mildly, naïve. In other areas of professional work an involvement with and working knowledge of IPR law is fairly routine, such as music, journalism, TV, software, writing, acting and so on. In fact there is a great deal we can do to help ourselves, even within the increasingly aggressive commercial environment in which we have to operate.

To move forwards on IPR in e-learning we are clear that the following is required:

- Engage with the subject of IPR – we cannot ignore it anymore and it is not as difficult as many people think
- Accept and promote the concept of IPR legal compliance in our work and link it to the requirements of academic integrity
- Be prepared to rethink fundamental conceptions
- Teaching related activities generate the greatest single source of institutional income – this should be treated as the core business activity and managed accordingly
- Clear leadership and involvement is required at national and institutional levels
- Managers at all levels need to adopt a more mature attitude to risk management

In many ways we have found that the law is not as big an obstacle as we thought at the outset to the effective implementation of e-learning in our institutions. In fact, as Thomas Kuhn [6] observed in a classic text on the progress of knowledge, the biggest obstacles are tradition, vested interests and dominant groups – both in educational and e-learning circles. This realisation has encouraged us to adopt a pragmatic and ‘lo-tech / no-tech’ approach as far as possible.

“In many ways we have found that the law is not as big an obstacle as we thought at the outset to the effective implementation of e-learning”

3.2 Terminologies and Style

This pack covers the tricky area at the intersection of the law, technology and education. Terminology and language are bound to be an issue in such a ‘boundary’ zone. In our background studies and in this pack we have tried to adopt a clear and direct style of writing and to explain concepts, jargon and acronyms as we go along – rather along the style of traditional distance learning materials.

The project team has certainly found this a challenge as our understandings of different terms such as ‘vocabulary’, ‘metadata’ and ‘schema’ have different nuances and emphases according to our backgrounds (library, computer science, education). For this reason we recommend any institutional teams involved in these kinds of activity undergo a period of discussions about what they mean by the terms they are using and come to some working agreements. In fact we think this is so important that we have included a reading about this in the Appendix: *Reading 12: Metadata’s Many Meanings and Uses*, which should be compulsory reading for the librarians and computer specialists in any repository project. Abbreviations and acronyms fairly litter this area. We have tried to expand our first use of them and if necessary explain our interpretation for clarity. Square brackets [] display the legal conditions of use of reading and resources that we introduce in the pack. Works licensed under Creative Commons (CC) are identified by a short-hand of their conditions, i.e. ‘BY’ for Attribution, ‘BY-NC-SA’ for Attribution, Non-commercial, ShareAlike. See the CC website and the actual licences for a full explanation (<http://creativecommons.org/about/licenses/>).

Digital Rights Management (DRM) is a term that, understandably, leads many to think it must be all about technology as it is often described in terms of the way rights are controlled digitally in relation to Technical Protection Measures (TPMs) that are intended to try and stop the illegal copying of music and films. But the term is also used in a wider more general sense to denote the management of ‘traditional’ Intellectual Property Rights (IPRs) such as copyright that is now in the digital domain. This is the sense that we are going to use the term in this pack; the simple diagram below shows our emphasis in the use of the term DRM:

Fig. 2 The components and relationships of a DRM system.

Digital (Technology & Use)
Rights(Legal & Social)
Management(Policy & Culture)

As you can see, looked at in this way, the main components of DRM can be relatively lo-tech. Later in the pack we shall be presenting some useful conceptual tools to help us in understanding the different types of DRM that might be possible in different IPR situations.

In relation to DRM in e-learning it would be very easy to spend a lot of money on technical measures and developments but this would miss the point that well thought out policies and basic administrative procedures are likely to be most effective in this area – essential for enabling IPR legal compliance in the first place. It is important not to be misled by the

current techno-centric view of e-learning when looking for practical solutions.

3.3 Models and visualisation tools

In this pack we are making quite a lot of use of visual diagrams to act as conceptual tools and models to succinctly illustrate our ideas and the relations between them. But we should also provide a health warning about these models and indeed all representations of complex organisations – they are necessary simplifications and should not be mistaken for reality (a common mistake in the use of project management tools for instance). But they are useful if they allow us to get closer and understand the reality of what we are examining and act as a means to support discussion.

The multi-disciplinary nature of our approach means that communication is absolutely key for success and these tools aim to support this process. We also recognise that individuals will have different mental ‘mappings’ of their organisation and e-learning activity within it; the models aim to be able to present alternative perspectives. This whole process of managing IPR represents not just problem solving but a development in the human capital of an institution, with a by-product being improved relationships across domains and enhancement of important skills such as negotiation.

“the biggest obstacles are tradition, vested interests and dominant groups”

4 Things To Know: Some Fundamentals

4.1 IPR

This section is intended to give you a rapid grounding in relevant IPR law. This is needed in order to understand some of the activities we will be recommending in the ‘Things To Do’ section. What we are aiming at here is a basic working knowledge of the law that can support you in your analysis and decision making activities.



IPR law can seem at first like a very abstract and odd area. The readings below provide a clear and friendly way into this area.

Reading 1: Intellectual Property Rights (IPR) in Networked e-Learning: A Beginners Guide for Content Developers
(John Casey)

[Terms of use, © <http://www.jisclegal.ac.uk/copyrightstatement.htm>]

Reading 2: Recent Changes to Copyright Law and the Implications for FE and HE
(Professor Charles Oppenheim)

[Terms of use, © <http://www.jisclegal.ac.uk/copyrightstatement.htm>]

After these readings you should be able to understand the following:

- The difference between a licence and a copyright assignment
- The difference between an exclusive licence and a non-exclusive licence
- What is likely to be viewed as commercial use
- What the moral rights of authors are and how they might affect reuse

The next reading introduces a useful graphical model of a generic IPR and DRM system with a brief explanation.

Reading 3: The TrustDR Framework: a useful conceptual model of IPR and DRM

(John Casey, Jackie Proven & David Dripps)

[Terms of use, BY]

4.1.1 Some Quick IPR Points

- The IPR in employee-created work is usually owned by the employer, however in higher education academics have traditionally been allowed to give away the copyright in research outputs to publishers. This leaves the legal status of teaching materials authored by academics in some doubt. We suggest a

pragmatic ‘take only what you need’ attitude is adopted by employers – we shall explain this in the sections on policy below.

- Students do not constitute employees and therefore the legality and enforceability of some copyright and patents clauses in student contracts is dubious – and also unfair. We shall present some alternatives⁶.
- It is important that the tertiary education sector and those that work and study within it make full use of the existing copyright exceptions that are available to them. As institutions and individuals become de facto digital publishers this is becoming essential.

4.2 Change and E-learning

Our educational institutions are changing at an increasingly rapid rate and e-learning is only one of the drivers for such change. Often the change is reactive to external factors. It is important to provide ways of representing and understanding this change in order to make more informed choices. One particularly pressing need is for the different administrative, service and academic units to be able to communicate effectively with each other. All too often a short-term ‘silo’ mentality prevails, often reinforced by existing budgetary models, which can result in poor communication. This prevents the kind of systematic and holistic approaches that are required both to integrate e-learning methods effectively into an institution and to develop a workable IPR policy framework. To help remedy this situation we present some simple representational models that can support the kinds of communication, analysis, decisions and evaluation that are required.

The models presented here are intended as a useful starting point – they may have to be adapted and ‘tweaked’ to the specifics of a local situation. The purpose of these diagrams is to support communication between different groups as well as analysis and auditing activities. An important point to make here is that we use the concept of a ‘continuum’ of change as a useful metaphor that conveys the sense that different aspects of our institutions may be at different points of development in relation to an e-learning change continuum, as shown in Table 2 below. This is followed by a useful Reading that introduces the main factors of flexible learning.

Reading 4: The E-Learning Change Continuum - Typical Scenarios and Business Models
(John Casey, Jackie Proven & David Dripps)
[Terms of use, BY]

Reading 5: A Practical Guide to Providing Flexible Learning

“The legality and enforceability of some copyright and patents clauses in student contracts is dubious – and also unfair”

⁶ JISC Legal has just completed an investigation into the subject of IPR in student work and takes a similar view to that expressed in this pack, the report can be found at http://www.jisclegal.ac.uk/publications/studentipr.htm#_Toc164156924

in Further and Higher Education (published by the QAA)
 (John Casey & Pam Wilson)
 We would recommend that you read the Introduction and the 'Quick Start' section that follows it – a total of 10 pages
 [Terms of use, © QAA]

4.2.1 The E-Learning Change Continuum - Typical Scenarios and Business Models

<p>1. Traditional</p> <ul style="list-style-type: none"> • Individual – teach 'my' module • Embedded deeply in context • None or little sharing or reuse • Design alone • Decentralised • Frequent changes • 'Silo' model projected onto VLE space • Materials managed individually 	<p>•2. Sharing</p> <ul style="list-style-type: none"> • More emphasis on sharing • Individual model still dominates • Still embedded in context • Still design alone • Not transferable • Decentralised • Some sharing & reuse • Frequent changes • 'Silo' model projected onto VLE space • Materials managed individually 	<p>3. Collaborating</p> <ul style="list-style-type: none"> • Emphasis on collaborating • Individual but more coordinated with others • More sharing & reuse • Module/curriculum design more coordinated • Less decentralised • Less Frequent changes • Partial access to others' VLE space • Materials managed individually and some ad hoc local management 	<p>4. Organising</p> <ul style="list-style-type: none"> • Clear aims/objectives for working together • Clearer group identity & coordination & roles & accountability • Group design procedures • Sharing and reuse common • More centralised • Changes are negotiated • Common access to the Groups' courses in the VLE • More organised local materials management procedures 	<p>5. Managing</p> <ul style="list-style-type: none"> • Courses are designed, developed and delivered by multidisciplinary teams working within clearly defined roles and procedures • Centralised • No changes except through procedure or maintenance • Reuse Common • Materials managed centrally
LOW	TEAM TEACHING			HIGH
LOW	FORMAL MANAGEMENT / OWNERSHIP OF MATERIALS BY INSTITUTION			HIGH

Table 2 Teaching Business Models Continuum

Table 2 Narrative: Elements of all these models may actually coexist in one institution and at all levels. A large generalisation would identify 1 & 2 as most current undergraduate teaching (the great bulk of most institutional activity) and 3 for some blended/ distance Masters courses (a growing and lucrative market segment), 4 would be much of the current medical teaching for doctors and 5 would be 'classical' distance learning institutions and courses

4.2.2 Organisational Change

Often our view of the educational organisations we work within is only partial with little understanding of the rest of the component parts of the same institution. Many of our tertiary institutions are loosely structured and organised around fairly informal communication channels and decision-making processes that allow for high degrees of local autonomy. It would also be fair to describe these working environments as somewhat introverted. The arrival of IT for use in management and e-learning methods tends to have a disruptive and destabilising effect on these traditional patterns of organisation, communication and behaviours. A very readable account of research carried out into some of these factors, sponsored by the Economic and Social Research Council (ESRC), has been produced and is available on the web and constitutes our next reading; it is followed by a paper introducing a useful organisational model.

Reading 6: Theory and Practice of the Virtual University
(Neil Pollock & James Cornford)
[Terms of use, © Ariadne/Authors
<http://www.ariadne.ac.uk/about/copyright.html>]

Reading 7: Using An Organisational Model
(John Casey, Jackie Proven & David Dripps)
[Terms of use, BY]

4.3 What Does Your E-Learning System Look Like?

“technology alone is not enough”

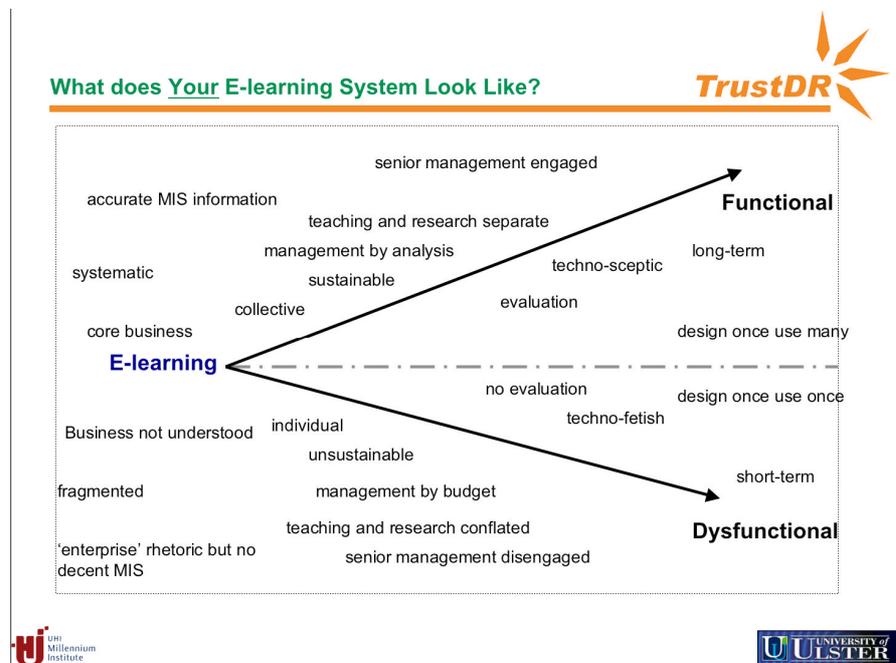
Like many researchers and practitioners we think that for e-learning to work best it needs to be approached in a systematic way, otherwise it remains as a ‘bolt-on’ to existing structures and is incapable of delivering the kind of results that are needed [7]. E-learning may be an essential ingredient for the delivery of a more flexible curriculum but without the organisational and cultural changes that are needed, and the top-down management drive, technology alone is not enough [7, 8, 9, 10]. To get you thinking about these issues and prepare you for the next chapter, which is activity-orientated, we present an image below that presents two diametrically opposed views of how e-learning is conducted at the moment. Have a look at the image below (for undergraduate teaching) and consider how your institutional e-learning system compares.

Fig. 3 E-learning mirror image

Key:

MIS (Management Information System).

teaching and research separate – means research references and components of a course are no longer determined and linked to those of the teacher of the course i.e. not just to their personal research interests.





5 Things To Do: Getting Practical with IPR

This section is where we start to draw things together to help you produce a workable IPR policy for an institution or a repository; upon this basis a workable DRM system can be built. Note, it is quite common to go round the process described here a few times before you clarify what your policy is going to be. The main thing to aim for here is clarity, simplicity and a realistic understanding of the risks involved. Everything you do here should be geared to supporting your key business activity of teaching and learning and not obstructing it. If you do this, chances are that if anything does go wrong you will have at least enough policy in place to sort it out quickly and simply. As institutions get more experience with this they will become both more effective and relaxed about the IPR issues.

5.1 Analyse Your Situation

You need to understand where your institution is now in terms of the uptake of e-learning and flexible delivery and where you want it to be in a couple of years' time. This is important as the IPR framework that you are going to be developing needs to be able to fit current needs and adapt to the future. You should start by collecting existing institutional policy documents on teaching and learning and any statements, policy or strategies for implementing e-learning or flexible learning. You should pay particular attention to what provisions are in place to monitor and evaluate the progress of these policies and strategies. Remember that in the executive introduction and summary of this pack we made the point that e-learning and flexible delivery are often only loosely integrated into institutional systems. To help you figure out where your institution is in this respect we provide some useful benchmarking tools below. The first two tools are probably going to be most useful and easy to use for a 'snapshot' analysis for the purpose of this pack. For those that are seriously into process change management the third tool (eMM) is likely to be very useful indeed.

“The main thing to aim for here is clarity, simplicity and a realistic understanding of the risks involved”

Tool 1: Analysing Your Situation

- a. A Managed Learning Environment Integration Matrix - from the Scottish Funding Council E-Learning Implementation Guide (SFC & Glennafric) [Terms of use, BY-NC-SA⁷]
- b. An institutional e-learning benchmarking tool and discussion paper (Professor Paul Bacsich) [Terms of use, BY-SA⁸]

⁷ BY-NC-SA = The Creative Commons Attribution, Non-Commercial, Share Alike Licence, for more info consult: <http://creativecommons.org/licenses/by-nc-sa/2.5/>

c. eMM – The E-Learning Maturity Model
(Stephen Marshall)
[Terms of use, BY-SA⁹]

You should also consult the e-learning continuum described in *Reading 4* (Table 2 in this document) to help you describe / understand where your institution is. Table 3 below represents a typical analysis process, recording relevant enquiries.

⁸ BY-SA = The Creative Commons Attribution, Share Alike Licence. For more info consult: <http://creativecommons.org/licenses/by-sa/2.0/uk/>

⁹ <http://creativecommons.org/licenses/by-sa/2.5/>

PEOPLE	INFORMATION
Gather Information	
Vice principals, Secretary, Curriculum managers, Deans, HR department, Library/Information Services, Research office, e-learning managers	Policy documents, employment contracts, insurance documents, staff inductions, training procedures, current working practices, communication channels
Analyse and evaluate	
Do roles and responsibilities seem appropriate? Do people have the necessary understanding of IPR? Are there conflicting policies or conflicting practices? Who is liable for actions of staff?	Do policies and other documents cover the full range of activity in the institution? How are policies communicated to staff? Is training and support available?
Risk assessment	
What is the awareness of liability? Do you have resources to continue analysis and carry out actions? Are senior managers 'engaged' in order to influence outcomes? What happens if key staff leave?	Would protected spaces and/or 'take-down' procedures address risky activity while moving towards ideal IPR management? Could record-keeping and audit trail enable assessment of risks?
Action	
Report back to relevant stakeholders. Hold further discussions, ensure communication. Assign, share or change responsibilities as necessary. Train, outsource or recruit for missing competencies	Use Development Pack tools to identify e-learning 'business model', identify all stakeholders and address policy creation or policy development. Devise methods of increasing visibility and understanding of policy.
Evaluation	
Could roles, responsibilities and competencies be improved? Is current practice appropriate?	Does existing infrastructure fully support the needs of your educational objectives?
Future Planning	
How do your plans and actions fit with local and national plans for the future? What are the implication of external plans and strategies? Do you have a procedure for monitoring developments and needs in the area?	Strategic planning documents, national committees, funding councils strategies, government initiatives, demographic projections, government legislation e-learning and educational organizations (e.g. ALT, JISC, CETIS, HEA, LSC, BECTA)

Table 3 IPR Analysis and Decision chart: for recording the investigations and highlighting the need for ongoing questions

At the end of this process you should have a working description of where you are and where you want to go as an institution in relation to e-learning (or perhaps as one part of an institution – such as a continuing education unit, medical school, or distance learning unit).

5.2 Getting Organised – Using the Organisational Model in a Case Study

To help keep your investigations and analysis ‘real’ you need to assemble a group of people to act as an advisory body to test out your findings, ideas or suggestions. If you possibly can you need to get one each of the following types of people involved in the round-table style discussions that are described in *Reading 7* above.

- Institutional Management (IM – Deputy Principal)
- Operational Management (OM – Dean, Head of Department)
- Teaching and Learning Management (TLM) –
 - Lecturer
 - Administrator (with policy responsibilities)
 - ICT Services (with deployment responsibilities)
 - Library (copyright advice and cataloguing or metadata experience)

“A higher education institution’s IPR management strategy will depend on the business model it uses in its e-learning programme”

HEFCE, 2006, [5]

If you can’t get all these people involved it is still very useful to get people to role-play these parts in order to provide feedback.

As a warm-up exercise get this group to work through the very short case study we have provided below about introducing a new flexible learning course at the fictional ‘University of Peatland’ (this should take about 45 minutes). This concentrates on the practical aspects of such a development not the IPR issues – although they can be included as well. The aim of this exercise is to get people thinking in the kind of connected systematic manner that is needed both to introduce flexible learning and manage the IPR in e-learning. We shall be using several simple tools based on the organisational model later in the pack.

Reading 8: Case Study Exercise using the Organisational Model (Paddy Maher & John Casey)
[Terms of use, BY]

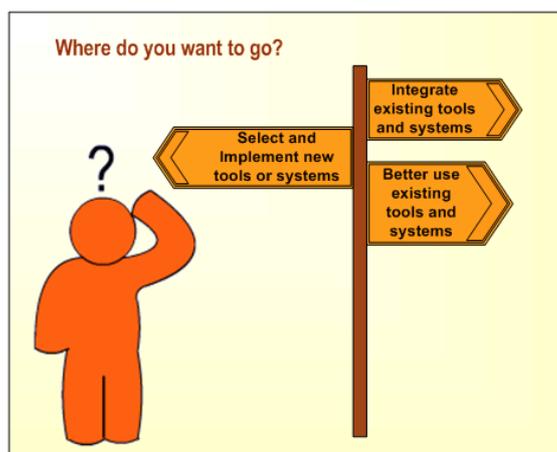
5.3 So...what is your business?

You should be coming closer to understanding what the drivers and priorities are for your institution’s use of e-learning and how this impacts on managing the IPR in your teaching and learning materials. It is essential to reach clarity about this before proceeding to develop policy, otherwise you may find yourself under the influence of over-active lawyers, nervous managers, enthusiastic technical specialists, or academics highly focussed on their research. You need to remain in charge! We suggest revisiting our key points in Section 3.1 *Understanding the Context*, and reading *Discussions 1* in the appendix while in this ‘analysis mode’.

Your policy should reflect the underlying needs of your business and your institutional mission, while recognising diversity. How to express this in simple terms is the next challenge, so that all your stakeholders have the opportunity to respond and work towards common goals. To be clear about what you want to do, we recommend creating a Statement of Principle as an interim stage. The next section looks at how such a statement is formulated, with examples drawn from real life situations we have encountered.

Fig. 4 Figuring Out Your E-Learning System

It can be tricky figuring out where your e-learning activity is going



5.4 Producing a Statement of Principle

The idea behind this section is simple and crucially important – it is to give you a clear foundation about what it is you are trying to do with the repository, whether you already have one or are still in the planning stage. It will help to draw out whose cooperation is necessary and what is really valuable and important, as well as a reminder of what you want to achieve. Producing a statement of principle acts as a halfway house to developing a formal policy, don't worry if your statement seems too short or simple or even naïve. Having this kind of reference point to come back to can be invaluable and of course you can refine it as you go along. In the process of getting agreement on your statement, you will be negotiating and building relationships with key people in the institution, especially the creators of the IPR. It will also act as the basis for your advocacy strategy, which will be key for the success of the repository.

“The main thing is to be as clear as you can”

5.4.1 Clarifying the Purpose of a Repository Implementation

If it is your intention to implement a repository to manage your teaching and learning materials, there should be a justification of the benefits it can bring, not just in your own mind, but also in a way that can be expressed to everyone affected by it. The JISC-funded ESPIDA project has been tackling this problem and produced some useful tools to help teachers and others argue their case more effectively with management. It can be used for producing convincing and clear arguments in ‘management speak’.

More information and guidance packs can be found at the project website at www.gla.ac.uk/espida/.

It is at this point that most technology projects in e-learning and the wider field of software engineering can go adrift. To get you started we suggest you ask yourself the following questions:

“If a learning object repository is the solution – what is the problem?”

- If a learning object repository is the solution – what is the problem?
- Use the questions of journalistic enquiry to flesh this out – Who? What? Why? How? When?
- Who is driving this? If it is short term funding or the work of enthusiasts, what are the long-term prospects of continuation internally – and is there a real need there?

We suggest you use the short structured guidelines for setting up a learning object repository produced by the JISC CDLOR¹⁰ project that examined the community dimensions of such repositories – this constitutes the next reading (No. 9), which you can find below in *Section 5.11 Getting the Policy Basics Right*. If you have already set up a repository we suggest you ask yourself these questions anyway – they will help you clarify your policy development. Your aims might be quite aspirational; that’s fine, it might even take the form of a manifesto for change or a new service. The main thing is to be as clear as you can.

5.5 Introducing Three Scenarios for Producing a Statement of Principle

Below are three very different scenarios based on real-life projects. We give some short contextual analysis followed by a discussion of policy development options that can be carried forward to the policy creation stage. We suggest for each scenario a possible Statement of Principle that can lead to a policy solution. The third scenario is the most detailed and is explicitly connected to the process changes involved in introducing a more flexible curriculum. In the third scenario you will notice that we are deliberately using policy to simplify the legal and technical aspects of the repository – we suggest you look closely at this for things you can use, as it is likely to be a very common scenario.

5.6 Scenario One: An International Medical Teaching Materials Consortium

5.6.1 Scenario

The repository is an international partnership between schools of medicine and exists to share high quality digital teaching and learning materials

¹⁰ <http://academy.gcal.ac.uk/cd-lor/>

between the partners in order to minimize costs and share knowledge. The infrastructure is supported by subscriptions from each partner. Access is through a password-protected portal. Issues about ownership and copyright are secondary to concerns of medical accuracy and data-protection about patients. Currently the partnership works largely on trust with little in the way of written agreements – it is vital to sustain this element of trust and not have it undermined by overactive lawyers or nervous institutional managers! The materials are often adapted for local use – increasing the value of content - and the authors do not see commercial exploitation as a priority, although they would be upset if not consulted about such use and would welcome options for reward. Attribution for authorship is considered important by all.

5.6.2 Discussion and Formulation

Ownership and IPR: Academic authors of materials from the USA generally own the copyright in their own work, the situation affecting the UK authors is not as clear. Develop a simple consortium agreement that reflects and clarifies the priorities between the partners, and allows for different legal frameworks – for the UK partners make it clear that they are allowing their employees to deposit. The HEFCE good practice guide to senior managers [5] contains some useful model contracts to use.

Sharing and Reuse: Recognise the value and flexibility in allowing derivative works. To support this develop simple deposit licenses that give the repository and its users a non-exclusive licence to use the materials for educational purposes, providing a contact address and a process for those interested in developing commercial uses.

Risk Management: Develop suitable user agreements that are clearly visible and incorporate a sensibly worded liability disclaimer with advice to users (you cannot escape liability for what you publish – despite what some of the more hyperbolic disclaimers say). In the consortium agreement have a section that describes a procedure for dealing with complaints from third-party rights holders. The partnership could invest in some degree of indemnity insurance to cover the activities of the repository in relation to rights holders. Each institutional partner should already have indemnity cover for the activities of its employees in relation to medical matters and professional judgment. That might well be enough. If concerns about liability are very strong, then another option is to have the repository operate as a limited liability company.

5.6.3 Statement of Principle for Scenario 1

“We recognize the value in sharing knowledge in a trusted environment, and that this is best supported and sustained by the professional and academic integrity of the individuals and institutions involved. The repository exists to provide opportunities to enhance medical teaching in the partnership and aims to recognize the contributions of all partners and contributors involved.”

5.7 Scenario Two: A Continuing Education Unit

5.7.1 Scenario

The continuing education unit of an ‘ancient’ university operates a wide range of continuing education courses and study skills services for its students and for the local community. The unit has a very strong access and inclusion ethos as part of the university strategy for community engagement. It wants to set up a repository of teaching and learning materials for its tutors to use externally in industry and the community. It aims to be openly accessible over the web with minimal restrictions on use to allow maximum access and benefits. The university lawyers are extremely concerned and want to impose lots of restrictive conditions that the unit thinks will make the repository unworkable in practice.

5.7.2 Discussion and Formulation

Ownership and IPR: Rights ownership of the materials deposited in the repository is granted to individuals employed by the university (might be already de facto practice). Authors must be clear that they are responsible for the authorship of all of the contents (i.e. there is no third-party content), highlighted as a matter of ‘academic integrity’. If it is essential to include third-party content, it must be cleared unambiguously. Each author will be provided with an IPR checklist for submitting materials.

Risk Management: The repository needs to have a clear deposit arrangement. A librarian will be involved in the management of the repository and will check the content of the submissions first and be involved in user training. Risk is considerably reduced by restricting the content to that which the authors can vouch for (although the university does not escape liability by this move). The repository will have a clear notice and take-down procedure that will respond to third-party complaints. Potential exposure is large by being open to the web, although in practice the actual risk in this kind of managed repository is fairly small and should be covered under existing institutional indemnity insurance policies.

Sharing and Reuse: Authors should explicitly grant a non-exclusive licence to the repository to publish their work on the web for others to use (the final user licence might be a Creative Commons Licence – as it is a well known system). They will be guaranteed attribution and wide publicity - a good inducement to them. The intention is that the collection will grow over time.

The benefits to the unit and university in terms of reputation and meeting mission targets are potentially large, useful supporting examples for this

“The benefits to the unit and university in terms of reputation and meeting mission targets are potentially large”

are the open courseware initiative by MIT¹¹ and the OpenLearn collection at the OU¹², both these developments have very large institutional benefits.

One of the problems here (and in many institutions) is that the teachers and managers do not speak a common language to discuss and plan their activities. As mentioned above, the model that the JISC Espida project has developed can help make business cases for proposals that may not necessarily offer immediate financial benefit to an organisation, but rather bring benefit in more intangible ways.

5.7.3 Statement of Principle for Scenario Two

“As an integral part of our university mission we believe in the benefits to society of widening access and community engagement. Our repository aims to showcase the opportunities in continuing education provided by this institution to all who might benefit from this provision.”

5.8 Scenario Three: A Repository to Support Flexible Learning Delivery

5.8.1 Scenario

A college of HE has a formal strategy to adopt a more flexible delivery of its curriculum. It is a key strategic priority and the managers know that this must involve the sharing and reuse of materials on a much wider scale than happens now. The pedagogic model needs to move from individual materials development and delivery to one where more time is spent in the design phase - to ‘design in’ pedagogic strategy, teaching processes and the activities of the students who will use the materials. Another aim is to run the same course several times with no changes other than for maintenance purposes, allowing teaching staff be more involved in learner support than materials creation and delivery – an important cultural shift. This is essential for the more diverse student population that flexible delivery brings, and provides benefits to the college of efficiencies and a more consistent quality regime. This is going to be a big change in working culture and would equate with a move to stages 3/4 on the e-learning continuum introduced earlier.

A systematic process change is needed to move from the current use of a Learning Management System (LMS), which conforms to the traditional ‘silo’ pattern of individual teaching with content under the control of individuals. Based on realistic advice, the commercial development manager recommends a two stage approach:

¹¹ <http://ocw.mit.edu/index.html>

¹² <http://www.open.ac.uk/openlearn/home.php>

Stage1 - Promoting the informal sharing of materials between academics by providing some easily used groupware where they can freely share with whom they like. This will support a new culture where academics can create their own online space, work on projects and share content together.

Stage 2 – Create a ‘formal’ institutional repository to allow content to be migrated from the LMS and groupware spaces in a managed process for future reuse. This is intended to provide a sustainable knowledge management service and ‘institutional memory’ for the teaching and learning materials of the college. This is recognised as being a long-term commitment as part of a change of working culture that is needed for financial survival (over 97% of the college income is derived directly from teaching).

5.8.2 Discussion and Formulation

Stage One

Sharing and Reuse: The first stage of the proposal is essentially a ‘drop and go’ repository with little or no supervision or control – the aim being to provide a tool to support sharing and collaboration that has a low threshold for all involved.

Ownership and IPR: Sharing should not be hampered by heavy-handed IPR procedures. The way to approach this is to make clear the ‘rules of engagement’ for the academics, this could be done by adding to an Acceptable Use Policy (AUP) about respecting the rights of third parties and providing proper attributions of other people’s materials – the latter being an important point of ‘academic integrity’ and professionalism and well worth making in this context. A copyright / IPR checklist should be provided for all academics in relation to use of the system as well as training sessions (preferably mandatory, short and to the point) and online training materials available for reference.

Risk Management: The College needs to check it has professional indemnity insurance (which it should have). As the ‘drop and go’ repository is not on the open web and is only for the staff and is behind a password controlled access system, risk is reduced, (although this does not remove immunity for any illegal/infringing activity).

Stage Two

The second development of a formal managed repository will be a more managed affair with an IPR deposit checklist and a librarian / cataloguer maintaining the collection. After some discussion, argument and consultation the college has agreed to adopt a rather liberal ‘take only what you need approach’ in return for getting the cooperation of their academics. In effect they have chosen to strike a ‘social contract’ with the academic authors in return for depositing materials in the repository, which describes the benefits and obligations on each party in the form of a licence along the following lines:

The authors will get

“In effect they have chosen to strike a ‘social contract’ with the academic authors in return for depositing materials in the repository”

“support a new culture”

- a guarantee that the original object they have contributed to will be preserved in a collection of ‘virgin originals’ (archive).
- access to the system in order to generate a list of objects that they have been involved in authoring (possibly a syndicated news feed format) in order to use the information (metadata only) for purposes such as job applications and promotion. This will constitute part of their professional record of achievement at work and a publications listing.
- a non-exclusive licence to use their own materials (if the college claims ownership) worldwide in perpetuity for any educational non-commercial purpose.

The authors will give up

- claims on the moral rights in the materials they have produced when they are taken from the ‘virgin original object’ and incorporated into other objects. It is recognised that the materials will gradually enter the ‘educational DNA’ of the institution and attribution and moral rights are guaranteed only for the original. This is a common practice in distance learning institutions to avoid an otherwise impossible bureaucratic task.

The authors will provide

- a completed IPR checklist form (a short one!) that also doubles up as a basic metadata collection tool

The institution will get

- a growing collection of managed, quality controlled, permanent teaching and learning materials that it can reuse and freely adapt in the future to support a more sustainable business model for flexible delivery. A significant spin-off from such a formal repository with quality review processes is that it provides an ideal showcase to direct a QAA team to as evidence of embedded quality enhancement and audit procedures.
- systematic records; for example by using a unique identifier for each object and including it in the system, it will then become possible to monitor patterns of reuse for long-term analysis. Similarly, the inclusion of course codes in the metadata will provide useful opportunities for analysis.

5.8.3 Statement of Principle for Scenario Three

This statement both supports stage one and prepares the ground for stage two.

“The college regards creation, sharing and reuse of learning resources as critical to successfully delivering a flexible and relevant curriculum. The creation of intellectual property (IP) by college staff is an integral part of this process, and the Intellectual Property Rights (IPR) need to be managed to support this core objective and make it sustainable. The college seeks to create the best possible environment for the practical use of the IP in teaching and learning material by encouraging the continuing

development of team work in designing and developing the teaching and learning materials required to deliver a high quality student experience within a supportive, professional working environment. In return the college aims to recognize the contribution of staff by providing an effective means of attribution for their work and liberal terms for the use of their work elsewhere in the future.”

“take only
what you
need”

5.9 Creating a Policy

5.9.1 Support for senior management

As well as the internal discussions and negotiations taking place, it is useful to look outside the institution for support, and we recommend the CAMEL model. CAMEL¹³ (Collaborative Approaches to the Management of E-Learning) was a project funded by the HEFCE Leadership, Governance and Management programme. It set out to explore how institutions who were making good use of e-learning and who were collaborating in regional lifelong learning partnerships might be able to learn from each other in a ‘Community of Practice’ based around study visits to each of the partners’ institutions. As a result of the CAMEL project the JISC Infonet has produced an excellent guide to support teams from different institutions working together and learning from each other in this area. We think that the same approach and model can be used to support management teams from different institutions developing effective IPR policies. Those charged with managing e-learning should also find the JISC Infokit series very useful, particularly the Implementing E-Learning¹⁴ kit produced by the Scottish Funding Council.

5.10 Things to consider for developing a policy

Try to adopt an attitude of ‘take only what you need’ from staff and partners – be as generous as you can in order to keep good working relationships – try to stress the positive aspect to support cooperation. It is especially important to keep your staff on board and such an approach can help ease the natural resistance to change, help overcome suspicion about management motives and offer a good foundation to build upon. Outright exclusive ownership of copyright in the digital realm is not always necessary; instead consider concentrating on conditions of use and relationships – expressed as licences - for institutional use. Also try to be realistic about what to expect. The policy should do the following:

- be clear about what it is you are trying to do, why and for what purpose, and with whom and how
- reflect and reference the institutional mission and culture

¹³ Available at: <http://www.jiscinfonet.ac.uk/camel>

¹⁴ Available at: <http://www.jiscinfonet.ac.uk/InfoKits/implementing-elearning>

- try to hook into Learning and Teaching Strategy and any other policy documents
- offer a means of attribution for authorship

For teaching materials authored by your staff you have 2 broad options, to govern long-term use of materials, including deposit in an institutional repository. Which option to choose will depend on local culture and values, below is a discussion of the two options:

Option 1: assert your institutional ownership

This first option might be best in FE and post 1992 HE institutions (the rationale for this being that their working cultures are more corporate and centralized); if you go down that path you should consider the following clauses:

- Grant back to staff the automatic right to use materials they have authored in the future elsewhere for non-commercial purposes.
- Use outside institutional control should be subject to a non-endorsement condition (i.e. the institutional branding and logos are removed so that future use does not imply that your institution is endorsing the quality of the materials or the context of application) thereby reducing risk of liability and damage to reputation.

Option 2: request staff to provide you with a licence to use the materials

If you pursue this second option all you need from the staff is a non-exclusive licence in perpetuity that also allows you to adapt the content as needed. This would also be a suitable policy for material submitted by students, licensing the institution to preserve, provide access and distribute as necessary without attempting to acquire IP from non-employees. In the case of students it should be a voluntary option, and separate from any requirements to license rights in theses, for example.

The other main components of your IPR policy will include:

- Institutional and Repository Policy statements
- Employment contracts
- Consortium agreements and memoranda of understanding with partners and associates etc
- Acceptable Use Policies for IT systems
- Licence agreements with staff, students and others (such as contractors)

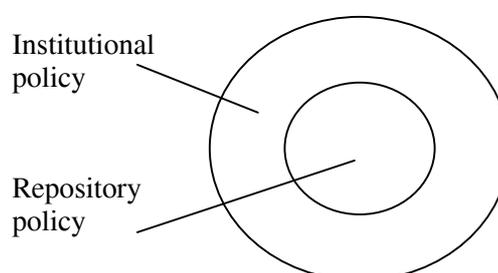
5.11 Getting The Policy Basics Right

We are talking about two distinct but overlapping areas of policy development here, for the implementation of a digital repository to support the management of teaching and learning materials:

1. Institutional policy for the management of IPR in teaching and learning materials (sets the overall ‘rules of engagement’)
2. An IPR policy for the management of an institutional repository of digital learning materials (plays within the overall rules)

Fig. 5 The IPR Policy Donut Diagram for Repositories

Shows the relationship between the repository policy and the institutional policy

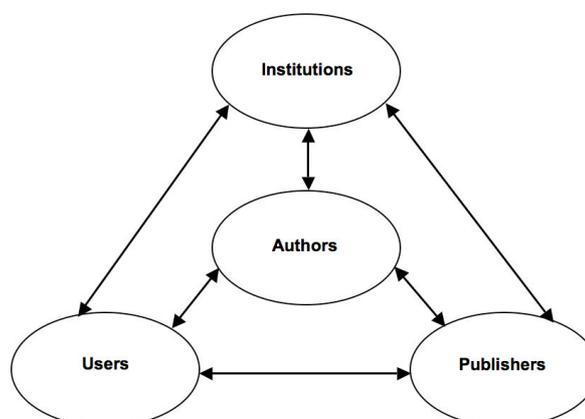


Policy¹⁵ is crucially important in this area, as it is essentially an expression of underlying relationships and values. A well thought out policy can strengthen existing relationships and lead to further development. A poorly thought-out policy can do the reverse. The secret in this area is to treat the law as your friend rather than an enemy to be kept at a distance, in any case institutional repositories cannot escape the law! The repository should also be viewed as an important component and ‘physical manifestation’ of the underlying IPR policy framework of the institution – which is why the different levels of policy need to fit together. Repositories need to have legal relationships with every stakeholder: the institution, each depositing author, third-party content owners, and users of content. Get the policies right and the legal framework will fall into place as shown in the diagram below in Figure 6. This approach is very much the kind of systematic and holistic one that we would advise – both for repository development and e-learning integration into our institutions. The next three paragraphs set the policy scene for you by asking some good questions and offering clear advice.

¹⁵ We would like to gratefully acknowledge ideas and content in this section from Fred Friend JISC Scholarly Communication Consultant, Honorary Director Scholarly Communication UCL.

Fig. 6 IPR framework

Relationships are key to an effective policy framework



“Policy is crucially important in this area, as it is essentially an expression of underlying relationships and values.”

Where does the repository sit within the university structure? Does it sit within the library or is it a freestanding service? Is there a clear management structure so that decisions can be “owned” (and not disowned) by the university? Is the repository covered by the university insurance policy against claims, e.g. a claim by a publisher for infringement of copyright? Does the repository have a business plan, including contingency planning if funding is withdrawn? None of these points need present a problem if they are clear from the start and the repository is embedded into university structures and policies.

If there is a university policy encouraging repository deposit of learning materials this lifts some of the responsibility from the repository manager. Each repository should have its own “conditions of deposit” document covering issues such as copyright on third-party content (N.B. this should be worded carefully so as not to scare authors off from depositing). As this is a two-way relationship repository managers also have a responsibility to authors – e.g. to provide a proper means of attribution, download/access statistics on demand and a reliable service. A sound legal relationship with authors depends on sound policies set by the university and by the repository.

Sensible caution is advisable but there is no need to be over-cautious. A good defence, and a measured response to risk, is to be able to say that copyright policies and procedures (e.g. take-down arrangements) are in place. Having policies in place can take some of the hassle out of copyright management.

Alongside this approach it is essential to ask some fundamental questions about the purpose of the repository. Another project in the JISC digital repository programme has done just that and has produced a very useful set of guidelines for setting up a learning object repository. This is our next reading:

Reading 9: Structured Guidelines for Setting Up and Evaluating Learning Object Repositories
 (Anoush Margaryan, Colin Milligan and Peter Douglas)
 [Terms of use, BY-NC-SA]

The type of learning object repository and the purposes it may serve are likely to vary enormously between (and even within) institutions. You will find it useful at this point to refer back to the continuum of e-learning that we introduced earlier in *Reading 4* (Table 1 in this pack) and consider what kind of e-learning operation you are supporting. If you are operating at the beginning of the change process and your priority is to encourage people to share and collaborate then you might want to operate a minimally managed repository with low barriers to users. We have characterised this as a ‘drop and go’ type of repository, which could be provided by a number of tools including groupware such as ELGG¹⁶ (open source) and Microsoft Sharepoint¹⁷. In such a situation risk management is likely to be an IPR priority. But as we move across the e-learning change continuum our need for a more organised and managed approach increases. The next diagram below in Figure 7 illustrates the typical characteristics of an IPR management system as it follows the change process.

CHARACTERISTIC PRACTICE OF IPR MANAGEMENT REGIME ON A CHANGE CONTINUUM

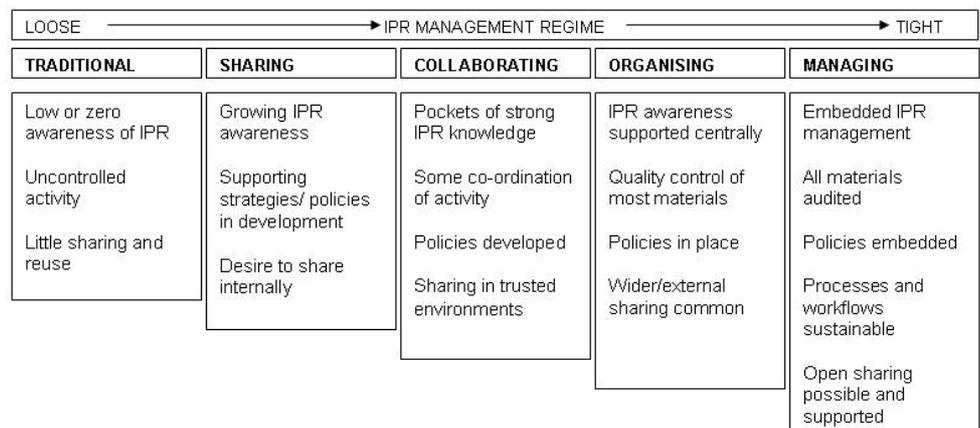


Fig. 7 IPR Management Regimes Mapped onto the E-Learning Change Continuum

 As the repository becomes more ‘formal’ the IPR management aspect increases

This continuum forms part of the basis of an ‘audit tool’ that we have included in Tool 2 in the appendix, along with other ‘awareness and readiness’ tools that can be used to analyse and communicate the characteristics of your current position and potential for change.

¹⁶ <http://elgg.org/about.php>

¹⁷ <http://www.microsoft.com/sharepoint/default.mspx>

Tool 2: Evaluating Awareness & Readiness

[Terms of use, BY]

- a. IPR Management Regimes Mapped onto the E-Learning Change Continuum
(Jackie Proven, John Casey & David Dripps)
- b. Analysis and Audit Tool for Rights Management in Learning Object Repositories
(Jackie Proven, John Casey & David Dripps)
- c. Functional and Dysfunctional DRM Frameworks for Teaching and Learning Materials
(Jackie Proven, John Casey & David Dripps)
- d. Activity and Competency Grids to Support Implementation of a DRM Framework
(Jackie Proven, John Casey & David Dripps)

One thing you should be aware of is that anything more than a ‘drop and go’ repository represents a significant information management challenge for most institutions. For this reason we strongly recommend that a repository should be based in an institutional library and that the appropriate human and technical resources are made available to support it – particularly in terms of cataloguing / metadata creation and management. An institutional repository should be viewed in the same way as a library in that it is permanent, managed and quality controlled. We take a very sceptical view of claims that are made by some researchers for the ability to do away completely with human labour in regard to metadata creation and management – an essential ingredient for long-term repository sustainability. Such claims for automatic metadata creation actually hinge on more prosaic questions as to what the researchers really mean by ‘metadata’ and what they count as ‘automatic’. The future management of repositories (and e-learning for that matter) will be by a mix of humans and technical agents, of that we are sure.

Before we leave this section about getting the basics right it is worth reproducing two crucial pieces of advice from our background studies.

“Some basic arguments need to be made about the value of learning objects and the potential values of sharing, as well as the services that a repository can offer. A learning object repository should be recognised as a support mechanism for quality teaching rather than the means – it needs to be part of a holistic teaching & learning strategy.”

Proven et al 2006

Existing Sources of Legal Guidance and Gap Analysis (TrustDR WP1-1)

“The technology, specifications and standards and methods relating to this area are still in their early stages of development and originate in very different organisational and work contexts to those of mainstream public education. We should be cautious about accepting all the claims being made for these technologies and where possible adopt a simple approach that is more likely to be sustainable. This is especially applicable to the field of metadata, repositories and DRM (Digital Rights Management).”

Dripps et al, 2006

Doing the Right Thing: sources of guidance for good practice with metadata and repositories (TrustDR WP2-1)

You will find the TrustDR project workpackage WP1-4 *After the Deluge: navigating IPR policy in teaching and learning materials* a useful resource that integrates many of the educational, legal and technical factors we have examined in the project. We recommend that you read it before deciding on your final policy (it is referenced in the Appendix).

5.12 Creating Institutional Policies

You should now have a fairly clear idea of what you are trying to achieve after working through the earlier sections (but don't be worried about having another trip around the circuit after reading this section). We have earlier used the phrase 'take only what you need'; by this we mean that you should try to be as generous as you can in order to build relationships with the various stakeholders. Remember we are particularly concerned with material authored *within* our institutions. As regards academics providing materials to publishers we would certainly agree with the trend to change some existing models, such as the move by the research community towards a 'licence to publish' rather than copyright transfer agreements. Institutions can show a lead by incorporating direction and guidance for external use in policy. For more information on the balance of rights for authors and publishers, see the JISC/SURF Copyright Toolbox¹⁸

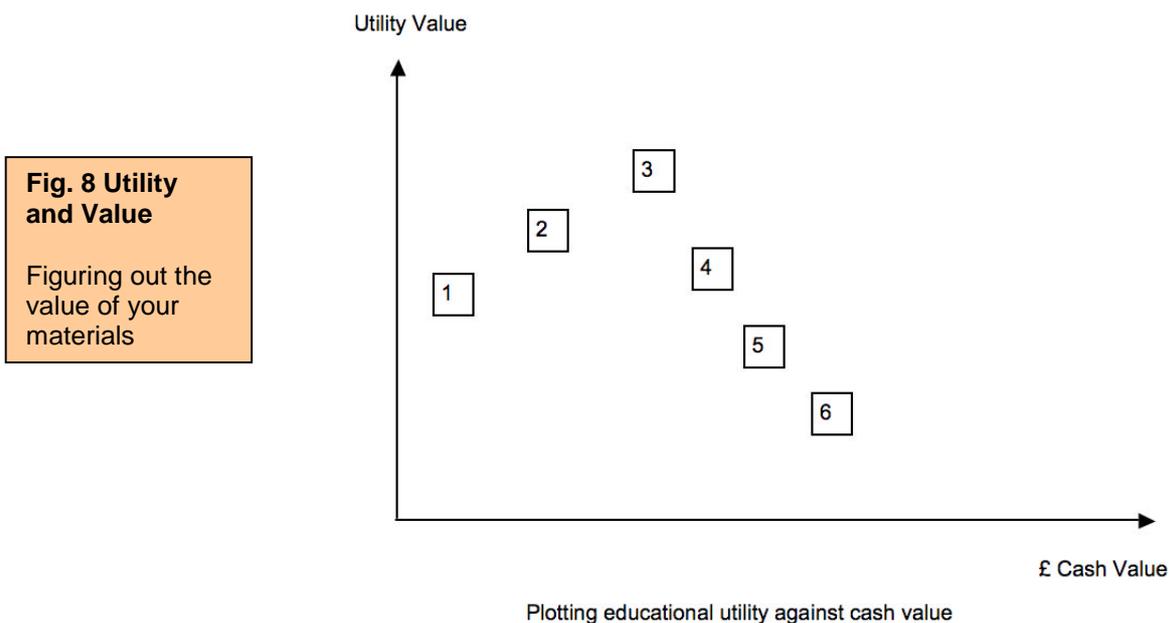
Decisions taken here will set the tone for future relationships in an academic community and we would advise you to think carefully about what your priorities are, the nature of your e-learning business model and

¹⁸ Guidance for authors and publishers based on the Zwolle principles and Romeo research <http://copyrighttoolbox.surf.nl/copyrighttoolbox/>

how you want to develop it. It is also, fundamentally, about deciding where the value is - the process, the staff or the materials. We would suggest that in most situations it is the former two (staff and process) and that you want to use policy to support the process changes you need as an institution. Most of our internally generated materials might not have much commercial value, it might not sell on Ebay for instance, but it might have considerable utility value. If this is the case then you are probably best advised to concentrate on the ways you can maximise the processes in which the materials are used and see the task as mainly one of institutional information management.

5.12.1 Deciding What Materials are Valuable

Here we restrict ourselves to some simple conceptions for assigning value by comparing notions of educational utility to cash value (these are very approximate to get you to think about your own situation). We present a simple graphical representation of this below, followed by a key:



Value of different types of materials (bullet point numbers refer to the numbered boxes on the graph)

1. Materials created in-house that are used intensively (often by large numbers of students) that therefore have a high utility value but may not be worth much financially. Paradoxically loss of such materials could be disruptive and expensive – a bit like a lecturer losing all their teaching notes in a fire. This would be a common category in most institutions
2. Similar materials to those described above but with high media design and production values – more common in distance learning institutions.

“a member of senior management with appropriate administrative support should take on the task”

3. Materials that are used a lot with high media production values and a clear shareable pedagogic strategy associated with them (perhaps in the form of tutor packs and marking guides) – these are probably the most educationally valuable types of content especially if they are editable and you have permission to do so. Unusual outside distance learning
4. Descending from the utility peak we might have content with high production values but little pedagogic strategy (multimedia materials might be a good example – commercial or publicly funded). They are probably not editable and you may not have permission to do so, they may or may not be used a lot
5. Next down this side of the utility value slope might be materials that are not used a lot (for whatever reason) that were expensive to create or purchase – materials generated by some large UK or European public projects might be examples
6. Any materials with restrictive licence conditions (especially charging regimes) – makes their widespread use less likely regardless of content – but expensive in terms of access costs and potential risks.

Exam materials and resources like multiple choice questions are likely to be seen as valuable resources that will need some kind of protection, they will also need to be looked after and maintained. In general, as an institution or department moves across the e-learning change continuum (see Table 1) the value of the learning materials increases – as indicated in the list above in relation to Figure 8. From our point of view (yours might well be different) the materials described in box 3 of Figure 8 would be the most useful and valuable. This discussion on value has been drawn from our project workpackage WP1-2 *Educational Perspectives: Understanding the Business of E-Learning: before applying any DRM*. If you are interested in this area you should consult that workpackage – see the Appendix.

5.12.2 Policy in the Context of Flexible Delivery

We have decided to focus on the move to more flexible delivery to ground our recommendations. Your situation may be very different; you can still use our recommendations and ‘react against them’ in order to frame your own requirements more effectively – for instance you may have a very good reason to assert your ownership of the materials created by your employees and prevent them using it in the future elsewhere.

One thing that is likely to be a problem in any institution is finding someone or some administrative unit willing to take ownership of the issue and drive it through to a conclusion. This is why we recommend that a member of senior management with appropriate administrative support should take on the task. We shall return to this topic below in the context of organising a ‘policy campaign’.

Reading 10: Good Practice Guidance for Senior Managers:

Intellectual property rights in e-learning programmes (HEFCE)

[Terms of use, © HEFCE Non-commercial use, see <http://195.194.167.100/copy.htm>]

5.12.3 Policy Tips

A menu of handy ‘tips’ are provided here, informed by the HEFCE guidance above in Reading 10 and distilled from our own work and experience:

1. You have two broad options for dealing with ownership. Option one is to accept that staff own their self-created teaching materials and to ask for a licence to use them – best to use a standard licence for this. Remember a well drawn up licence will give you as much as you need without actually owning the copyright. This option might play out well with an academic workforce that is disgruntled with their conditions and suspicious of the motives of management – a situation that exists in some institutions. Option two is to explicitly assert ownership and copyright in the teaching and learning materials as outlined in the model contract clause in the HEFCE guide and incorporate this into all new employment contracts. Explicitly state the rationale for this and any positive ‘trade-offs’ - such as licensed use for authors and guaranteed attribution.
2. Use the other model documents from the HEFCE guide as suited to projects, partnerships or collaborative working.
3. Do not try to claim ownership of student materials via a contract as a condition of study – this is unfair and, while lacking case law precedent, generally regarded by the legal community as unenforceable – use the voluntary agreement in the HEFCE guide [5, p37].
4. Check for any mention about IPR in teaching and learning materials in existing employment contracts or any other policy documents. Carry out a policy audit to check on all aspects of IPR in order to avoid internal contradictions.
5. The policy position regarding the ownership and uses of teaching and learning materials needs to be made very clear in plain English and communicated to the whole academic community (starting with a statement of principles). This needs to reflect institutional missions and strategic needs. Do not use pseudo-legal language (such as those annoying disclaimers appended to emails).
6. There needs to be clear institutional ownership and direction of the policy in this area and means of resolving disputes – someone has to be clearly identified to have overall responsibility for this.
7. Go back to the *Reading 3: The TrustDR Framework for IPR and DRM*. Your policy should have something to say about how it is going to fulfil the requirements of the first 3 stages of the framework (including the technical means to do so).

8. Training and support materials need to be part of the policy.
9. The policy needs to be monitored and regularly reviewed.
10. Policy in this area (for universities especially) should not be solely driven by the commercialisation/research office; it is not the right IPR regime for this purpose as it is dominated by the understandable imperatives of external acquisition and risk reduction. It is not best suited for the facilitation of internal processes, which is required in this area.
11. We recommend that a deputy principal should drive the policy in this area for teaching (informed by institutional strategy) with the support of the library, which generally has a much better understanding of copyright and is more focussed on facilitation of internal teaching and learning activities and providing a service.
12. The policy needs to be effectively communicated to be valid so make sure it is widely distributed (including in employee packs) and have agreements and licences at appropriate places in online and physical environments.
13. The ICT AUP (Acceptable Use Policy) can be a good place to inject policy into the body politic of an institution – but it needs to be publicised to be valid.
14. Ensure your institution has appropriate indemnity insurance – this is a matter of good governance practice.

5.13 Repository Policies

This section examines the types of IPR policies needed for the management of an institutional repository of digital learning materials. Anything developed at this level should fit and complement the institutional policy and vice versa (see Figure 4 above). It is important that all policies involving IPR are managed and coordinated centrally by institutions. Here we are talking about learning object repositories, which have quite a different business model to a repository of research papers and consequently different IPR characteristics.

The life cycle of learning objects is also very different to the digital assets found in research repositories. Research papers exist to be read and cited by academics – they are relatively static. Learning objects exist to be shared, reused, adapted, broken up, reassembled from other objects and otherwise modified. The management of the rights in a learning object repository are potentially very complex; we have come to the conclusions that there are no technical panaceas to this. We think that the best approach is to use policy and basic administrative procedures to simplify the ‘problem space’ of managing IPR in learning object repositories. You can see a practical example of this in the development process in the third of our scenarios described above in Section 5.8.

If you like, a repository policy forms a second line of protection and management in the overall IPR mix of an institution. In the repository the institution is taking much more explicit formal control and responsibility for the content, which is why it needs to be managed. This is best done with a deposit agreement in the form of a licence and associated

“a repository policy forms a second line of protection and management in the overall IPR mix of an institution”

administration procedures, and a user agreement in the form of a licence, both of which need to be highly visible. Important points to consider for policy formulation are in the next reading:

Reading 11: Policy Options and Discussions
(John Casey, Jackie Proven & David Dripps)
[Terms of use, BY]

“Advocacy should build on a well-developed policy - IP Policy needs to anticipate academic practice and use, such as transfers between employers”

5.14 Organising A Policy ‘Campaign’

Of course once the policy has been created, it is essential to ensure it becomes an accepted part of institutional culture. This will require clear leadership and recognition that politics and relationships are involved. You would be well advised to organise a policy ‘campaign’ which is tailored towards key people – both to develop and agree a policy and then to drive it through into action. This needs to be timed to take advantage of cultural shifts and you must be prepared to spend time on negotiations. Advocacy forms the cornerstone of this policy campaign.

It makes good sense to take lessons from the research community, which is dealing with similar institutional issues and is closer to the practical aspects of promoting policies for repositories and Open Access (OA). Although, again to be clear, we are not prioritising open access to learning materials – that is likely to be only applicable to a minority of institutions. OA for research is a strong movement with clear benefits, particularly access for developing nations, but it is still received with caution by some academics. The OA / repository message is often transmitted by the library, and can appear as a lone voice without ‘champions’ at senior management level.

Key benefits of a research repository include personalised publication lists, tracking opportunities, improved visibility, a showcase for institutions and individuals and public accountability. Ensuring sustainability is vital to build trust and avoid loss of confidence. (You can use the previous sections on understanding your business to find and communicate the key benefits of your LO repository).

The Sherpa¹⁹ service has done excellent work in helping institutions develop an advocacy strategy for OA, and their message forms the basis of the main action points summarised below. Much of this applies equally to repositories of learning materials.

- Advocacy is key to success; policies are ineffective unless combined with strategy to embed them. One example shows a

¹⁹ Advocacy resources available from Sherpa website
<http://www.sherpa.ac.uk/guidance/advocacy.html>

university having a repository and policy but no advocacy, resulting in only 11 papers after 3 years.

- Underlying institutional culture must change.
- Consider the right level of engagement – core message and ethos should be delivered to senior management, implementation details to Information Services support, intellectual and emotional engagement with academics.
- Ensure the involvement of key people across domains and disciplines in order to recognise varied needs and pitch repository services appropriately
- Take every opportunity to communicate clearly by having information to hand and answers to common misconceptions - don't take opposition personally!
- Be prepared with infrastructure and support to meet expectations and keep barriers to participation low
- Use exemplars, best practice and comparators to press for resources
- Take advantage of drivers such as the need for preservation or desire for attribution
- Expect challenges but remember you are not alone

Advocacy should build on a well-developed policy - IP Policy needs to anticipate academic practice and use, such as transfers between employers. For example one University recommends that the only reason for 'take-down' should be copyright infringement and not subject to the transience of authors; their policy provides an ongoing licence for papers to be kept in the repository 'forever'. A Repository must have its own (collection) policy that builds on institutional IP policy.

Our policy recommendations include the need to set up formal arrangements to look after IPR in teaching & learning material and resource them adequately. The following points could form part of a useful advocacy 'package' to use to present to institutional management, addressing known problems and concerns with a systematic approach. Benefits should be made clear.

The rationale for IPR job roles / support unit would include:

- can only be good for sharing and reuse and efficiency gains
- tangible part of a cultural shift from individual to more sustainable team working
- powerful signifier for change
- signals the institution taking formal responsibility for its assets
- Vocational training in this area would enhance academic staff skills

An internal IPR support unit should be based in an institutional library because it:

- already liaises with academics
- has experience in making best use of resources
- has skills in collection management, metadata creation, access to digital material, supporting systems etc.
- supports underlying principles of ‘fair use’ etc
- has copyright and licence expertise

A guiding principle for this unit should be a commitment to institutional curation of material for sustainability, while not withholding the rights of academics to use their own material.

Advocacy can also take place in terms of using ‘negative impact’ examples, for example using Case studies of situations arising when an academic leaves employment or of previous failures when IPR management has not been addressed.

Another negative impact would be under-use of the repository by staff so that the benefits to e-learning are not realised. Your Statement of Principle and resulting policy ought to clarify the purpose of a repository, and you want this to be born out by practice. Some steps to continue advocacy and limit the risk of under-use can include:

- **Sustainability:** Adequately resource and plan the repository for *permanence* and *reliability*
- **Functionality:** Ensure the service is *useful* not just *usable*
- **Awareness:** Raise awareness through seminars, inclusion in induction information, high visibility of guides to the service, mentions in as many varied settings as possible (meetings etc)
- **Quality:** Ensure the repository is fit for purpose by performing quality checks. Fill with externally sourced material if necessary to provide a base level of relevant resources. Survey staff to identify needs.
- **Metadata:** Good metadata aids visibility of resources available and can be used to effectively market the service [11]
- **Targeted promotion of resources:** Technologies such as RSS can be set up to notify users of new relevant content, ensuring users are given current information and a reason to revisit the repository.

5.15 Practical Aspects of Repository Management

Here we briefly discuss the impact of technical, economic and cultural factors on repository management in relation to IPR.

5.15.1 Technical aspects

Sometimes discussions about the type and amount of metadata to be associated with a learning object and the size of the object seem a little disconnected from mainstream educational practice. In reality, resources

to support such approaches may not be as plentiful as assumed or the practice of teaching staff does not coincide with some predetermined models. In theory at least, a learning object should be small (granular) in order to be more reusable, free of context and have adequate metadata. So, what might be the results when some of the assumptions and ‘orthodoxies’ connected to learning objects encounter the realities of mainstream education?

Real-world users operating in complex systems like universities tend to take existing resources and tools and use them in unexpected ways in order to meet the exigencies of real and immediate problems. For example, one novel use of learning objects that flies in the face of existing learning object ‘doctrine’ concerning size and decontextualisation is to have very large objects (e.g. a whole semester course) with fairly detailed and good metadata at the top level of the structure. This cuts down drastically on the cost of the metadata/cataloguing creation and all the content of the object ‘inherits’ the same semantic relation – this is a librarian’s or archivist’s trick for managing large complex collections. We have tools such as metadata harvesting and federated searching²⁰; in addition if the content of the objects is made searchable by tools such as Google, individual teachers can perform their own searches of the objects. Add to the mix a social tagging tool then we might begin to see a realistic combination of traditional information management techniques and web 2.0 approaches that on the one hand support the longer-term needs of the institution and on the other empower teachers to make more sense of the ‘data-deluge’ they face in their working lives. An example of this approach (at least with the use of Google Search in addition to traditional metadata) is the research repository of the Open University of the Netherlands available at the following link <http://dspace.ou.nl/handle/1820/501/browse-date> or the unusual approach to cataloguing by an Australian project using Google Maps at <http://dspace-dev.anu.edu.au/dspace-xmlui/handle/1030.58/19507>

Other useful things to consider are:

- Use some kind of unique identifier system in your repository for each learning object, an essential requirement – this can also support a number of useful information management activities.
- Include relevant course codes where the object has been used in the metadata – this can be the basis for future useful tracking and analysis information and also connects to a wealth of other institutional data that might be very useful.
- Create a ‘registry’ of course descriptions and codes for future reference – codes have a habit of changing, this is also a useful exercise in institutional knowledge management
- Encouraging the use of a simple descriptive naming convention and file structure in learning objects (and other collections) can have a dramatic effect on information management, search-ability

²⁰ See a discussion of these at <http://eprints.rclis.org/archive/00006394/>

“the importance of metadata is often overlooked as well as the information management aspects of the task of operating a repository”

and reuse. This is much more important than you think! – see Tool 4 below for an excellent guide to this subject.

- Remember anything more than a ‘drop and go’ repository for informal sharing is going to need some kind of metadata profile to be agreed and used to make it a viable collection in the long term.

The amount and type of metadata to be used in a learning object repository will depend on a number of factors including purpose of the repository, content, use, and resources available. The importance of metadata is often overlooked as well as the information management aspects of the task of operating a repository of learning and teaching materials, especially if enthusiasts are driving the project. To be fair, institutions have little in the way of a track record in the area of centrally managed collections of teaching and learning materials generated by staff. Either way, whatever human resources have been devoted to the information management aspects of the repository, it is likely that they are not going to be enough. This is partly a result of the techno-centric nature of discourse surrounding e-learning and the attendant difficulty in understanding the human and systems aspect of mainstream education. You can find some useful discussions of all these and other factors in the *Repositories and Practical Issues - Recommended Readings* section in the Appendix where we have included a special selection of further readings that address these very practical issues. We think you will find this selection very useful, they include some of our background study workpackages, which are written to be especially user-friendly.

This still leaves us with the problem of what we do about the metadata. In many mainstream scenarios it is a contradictory problem best summed up by the phrase “*As Much as Necessary and as Little as Possible*”. For the UHI we have decided to use the IPR compliance aspect of the repository as a force to shape and drive a metadata profile that is manageable and useful; it is presented below in Tool 3 – it might form a useful basis from which you can adapt your own solutions.

Tool 3: UHI Workflow and Metadata Application Profile
(Jackie Proven, John Casey, David Dripps)
[Terms of use, BY]

Tool 4: Placing Our Stuff So We Can Find It Later: A Meta-Learning Essential
(Jamie Dinkelacker)
[Terms of use, © Jamie Dinkelacker – Reproduced by Permission]

Reading 12: Metadata’s Many Meanings and Uses
(Conrad Taylor)
[Terms of use, © Conrad Taylor]

Repositories and Practical Issues –Recommended Readings
(Various)
[Terms of use, Various]

**“The Library
should be seen
as the home of
the repository”**

5.15.2 Choosing the Right Home for a Repository and the Right IPR Regime

The Library should be seen as the home of the repository for two very important reasons.

1. We have noted the information management challenge that a managed repository represents, and we need to acknowledge this reality and draw on traditional skills such as collection development, cataloguing, access management, information skills training, copyright knowledge, subject liaison etc. that librarians can offer. The CEO of HEFCE, David Eastwood has also pointed out the ‘Google danger’²¹ which threatens to reduce all information to equal status – we need the structure, quality control and long-term continuity that a library can provide. There are serious quality issues when our information needs are filtered by a non-accountable commercial entity.

2. Managing the IPR to support teaching and learning requires a commitment to the aims we have described in our policy sections. The underlying mission represented by the library (access and services in support of teaching and research) can be described as facilitative and service orientated, which is more suited to this role than the institutional research and commercialisation units. These commercialisation units have, over the last decade or so, come to increasingly influence the management of IP in teaching and learning materials – partly as a result of the institutional policy vacuum in this area. These units tend to be, understandably, acquisitive and outward-facing, and are mainly interested in science, technology and patents; this is not a suitable IPR regime for supporting (or understanding) the internal processes of the institution in regard to teaching and learning. Indeed, these units only exist because of a series of political decisions enforced by top slicing²² aimed at making institutions generate extra income by exploiting their IP ‘portfolios’. It is

²¹ JISC Inform interview

http://www.jisc.ac.uk/news/stories/2007/01/news_inform.aspx

²² For example £22m of Higher Education Reach Out to Business and Community (HEROBC) funding was announced in 1999 to create a permanent third stream of funding to ‘encourage organisational and structural arrangements’. Suggested activities included staff training and development, the creation of units or centres of expertise, development of business processes etc. (HEFCE circular 99_40)

worth while noting that political discourse in this area is now changing to talk about the need of IP *transfer* rather than exploitation on the grounds that IP created by universities with public funding should be available to the wider community²³.

National funding bodies should drive the ‘sharing and reuse’ agenda in teaching and learning in a similar way to that of commercialisation by mandating the relatively small funding for the infrastructure needed to manage the IP in teaching and learning materials (including repositories) effectively. The commercialisation office can still be involved in an advisory role, in this way content could still be ‘screened’ for commercial potential and exploitation carried out only when proven by analysis and within the terms of institutional policy. You can find a list of our suggestions for institutional and national policy development in the Appendix (Reading 11). One last point concerning repositories and libraries – the library service has to be in a fit state to accommodate a repository. Over recent years institutional library services have tended to be cut back, they need to be resourced appropriately to host a repository.

5.15.3 Cultural Aspects and the Importance of Principles

We have stated our case about the importance of first understanding your business, then creating a statement of principle that clarifies a mindset, embodies your mission, communicates your strategy and drives cultural change. In this regard there are once again useful lessons to be learned from the research community and the Open Access movement, where we can see such statements being used to drive a cultural shift, bringing the Open Access groundswell into mainstream practice. The expectations stated by bodies such as The Wellcome Trust and other research funders have played a role in creating new business models and new IPR regimes for research outputs. An example here serves as a useful reminder of the impact of a simple statement on a community:

“in many cases the law as it stands is sufficient. Works are protected by ‘full-strength’ copyright by default”

“NERC is committed to the principles articulated in the RCUK statement on access to research outputs and to ensuring that the ideas and knowledge derived from its research, survey and monitoring activities are made available as widely, rapidly and effectively as practicable”.

(National Environment Research Council (NERC) Position statement October 2006

<http://www.nerc.ac.uk/about/access/>)

NERC is showing its commitment by creating an e-print research paper repository as well as undertaking negotiations with publishers – ‘walking the talk’ you could say.

²³ Keynote presentations by Sir Ron Cooke (JISC Chairman) and David Eastman (CEO of HFCE) at the JISC conference 2007.
http://www.jisc.ac.uk/events/2007/03/event_conf_0307/commentary_eastwood.aspx

It is important to remember that for learning object repositories the business model is quite different to that of research repositories, where exposure, access, authenticity and citations rule. The business model we are advancing for teaching and learning materials in repositories is one of sharing, reuse and alteration. Wide exposure is not a priority for most of the contents of institutional collections of teaching and learning materials, except for special reasons. It is worth noting that when teaching materials are exposed to the world, such as by the MIT in the United States and the OU in the UK they have to be checked and ‘scrubbed’ for any third-party content (at considerable expense in the case of MIT). We shall return to this topic shortly in relation to the use of Creative Commons Licences.

The main point we want to make here is that the experience of the research repository community does show how powerful it is to have a clear rationale for use as a driver for changing an IPR regime to make it more suitable for the digital realm. The next reading presents a varied collection of declarations of principle from the research, open source and open content movements that may be useful to you.

Reading 13: The Role of Principles in Driving Cultural Shift
(Jackie Proven, John Casey, David Dripps)
[Terms of use, BY]

5.15.4 Choosing the Right Licences to Use

Before going on to discuss licensing, it should be stressed that in many cases the law as it stands is sufficient. Works are protected by ‘full-strength’ copyright by default so if you are concerned with protecting your own content it is essentially already covered. A lecturer could create teaching materials and distribute it to students in the knowledge that the work is protected from further distribution. However, much confusion exists over ownership, whether the lecturer or their employer is the copyright holder depends on institutional policy (or the lack of it).

What is not covered by traditional copyright, are the uses you would actually be happy for users to make and any relevant conditions or the potential benefits of attribution you could gain from explicit permissions – which is where an off-the-shelf licence scheme can be handy. In summary, don’t forget about copyright – use it to your advantage and remember that it is the basis for licences. Analysing and assessing the purpose of the repository, the type of content and the needs and characteristics of the users determines the licences we choose to use.

Creative Commons features in many discussions about IPR as a potential licensing solution for a learning object repository, partly because of the clarity of its licences and supporting architecture. The Creative Commons movement itself has gathered momentum and is influencing attitudes to content creation and dissemination – notably Eduserv sees Creative

Commons as ‘giving us the ability to focus on sharing’²⁴. The effects of cultural shifts cannot be ignored – what we need is complementary support, guidance and training so that licences such as Creative Commons can be used knowledgeably and appropriately to enhance our e-learning business. Here we make some important points about the use of Creative Commons Licences:

1. They are only suitable for materials that you want to expose to the whole world for ever (they cannot easily be recalled). You need to be very sure that the materials released under these licences do not contain any third-party materials that you do not have permission to use. Because of this the MIT OpenCourseWare initiative initially had to spend thousands of dollars ‘scrubbing’ third-party content²⁵ from their internal teaching materials in order to release it on the web under a Creative Commons Licence. MIT’s careful and considered use of the licence is particularly noteworthy and readers would be well advised to visit the webpage listed in this footnote²⁶.
2. The Creative Commons licence system is a very useful, clear and interoperable way of managing the IPR in materials that need to be widely distributed.
3. Creative Commons is not anti-copyright – it is an explicit use of existing copyright law to manage the widespread release of your materials and you are not giving up ownership in using them.
4. Slapping a Creative Commons licence on your materials does not absolve you from your legal obligations - like clearing the use of third-party materials. If you do make a mistake in this respect the risk of detection is greatly increased because Creative Commons licences release materials worldwide in perpetuity, i.e. for ever. Like life in general, there is no ‘undo button’ on a Creative Commons licence.
5. **For those that know what they are doing** the use of Creative Commons licences significantly reduce the burden of IPR management. **For those that don’t know what they are doing** they are exposing themselves and their institutions to much wider risk – but that would apply to any licensing regime and just the Creative Commons.
6. Most institutional repositories of teaching and learning materials will want to restrict access to their content to some degree for the following reasons:
 - a. Reduce risk

²⁴ Announcement by **Eduserv** about donating \$10,000 to Creative Commons - http://efoundations.typepad.com/efoundations/2007/02/donations_to_cr.html

²⁵ A very useful description of the MIT OCW workflow and the important role that IPR plays in it can be found at: <http://ocw.mit.edu/OcwWeb/Global/AboutOCW/publication.htm>

²⁶ <http://ocw.mit.edu/OcwWeb/Global/terms-of-use.htm>

- b. The materials will often not make much sense to the outside world
 - c. Reputation management
7. It is possible to use the existing Creative Commons Licences as the basis for derivative licences, thereby cutting down on the time and cost of developing new licences. To do this, clarity of purpose is essential and you must get the resulting derivative licence checked over by a legal expert. In the current jargon of the Web 2.0 trend this approach might be described as legal ‘remixes’ or ‘mashups’. However, techno-fashion aside, under the terms of use of the Creative Commons Licence scheme you *are* allowed to do this. But note that as a condition of this you are *not* allowed to use Creative Commons logos or branding on your derivative licences. A good example of this approach in practice is BC Commons in Canada, where the public education system of the state of British Columbia have adapted the Creative Commons Licences to their own regional needs:
<http://www.bccampus.ca/EducatorServices/CourseDevelopment/BCCommons.htm>

Discussion 2: Pros and Cons for using CC (Creative Commons) Licences in Digital Teaching and Learning Materials.
(John Casey, Jackie Proven, David Dripps)
[Terms of use, BY]

Reading 14: Understanding Licences: An Analysis and Evaluation of Creative Commons
(Jackie Proven, John Casey, David Dripps)
[Terms of use, BY]

5.15.5 Expressing rights

As the section above shows, choosing a standard licence can help simplify the way rights are expressed in your learning materials, not least because their architecture provides a simple way to embed and reference the licence. There are standards and specifications in use that enable rights to be recorded, such as free text fields of the IEEE LOM metadata standard, and possible use of ODRL, an open source rights language – we have explored some of the options and issues such as interoperability in background studies (see workpackages WP2-1 *Technical Factors* and WP2-3 *Reviewing ODRL* in the Appendix). As many specifications are still in development and competing standards are still emerging, there are problems with including rights information in learning materials in such a way that they are transferred to all platforms and made visible where the materials will be used.

Our essential message here is to follow the mantra about collecting sufficient metadata in the first place – this will make your job relatively easy when it comes to expressing rights in the most appropriate way. We suggest you look at the excellent *Rights Guide* produced by the Jorum team, which gives some practical suggestions for expressing rights and indicating licence terms in Learning Objects. It can be found at this web address <http://www.jorum.ac.uk/support/legal.html>

6 Risk Management

The law is there for us to use when we *want* to and when we *have* to – remember Copyright is a right that the rights holder can *choose* to assert to protect their rights. They don't always have to; few people would for instance want to protect the copyright in their shopping lists. There is a lot of sense in this quotation about copyright [12]:



Make sure rights, obligations, benefits and risks are balanced

“the fact that our system of communication, teaching and entertainment does not grind to a standstill is in large part due to the fact that in most cases infringement of copyright has, historically, been ignored”

Mr Justice Laddie, 1996

This section is really about getting to grips with developing some realistic perspectives on the types and levels of risk involved and some practical ways of making them manageable. We shall also be connecting this to the need for culture change and the support and development that is needed for senior management. For the avoidance of any doubt (as lawyers sometime say), we do not advocate using risk management techniques to obviate (to escape) the need for IPR legal compliance in teaching and learning materials. It stands as eminent good sense that proper IPR record keeping, clearance and management procedures provide the best foundation for risk management – both the first and last readings in this pack are equally clear on this subject. Neither should irrational risk aversion stand in the way of making the best use of technology in the service of education. This part of the pack introduces some basic aspects of risk management that can help you work out how to deal with this tricky area.

To beginners, the adoption of a digital repository is seen only as a risky business: ‘What about IPR? Third party material? Can I put students’ thesis online? What about already published work by our academics? The list of questions seems endless.

Universities are often perceived to be risk averse; such an attitude can result in missed opportunities and loss of potential sources of new funds, a situation often termed ‘opportunity costs’ – the risks and costs of *not* doing something. Equally a reckless approach can result in costly legal battles, loss of reputation and fines. Risk management straddles the two areas of risk and benefit and aims to identify, quantify, treat and evaluate methods to reduce risk. This is essentially where risk management becomes a vital tool in identifying, assessing, treating and monitoring the risk of setting up and running a digital repository.

“Managing risk is not the same as removing it and risk management is undoubtedly easier in the right type of supporting culture” [13]

A sensible culture for risk management is one where there is recognition that risk is part of everyday life; where risk is actively identified, assessed, treated and monitored; where risk management is embedded into the decision making process of the institution.

Our next reading consists of a discussion of the cultural aspects of risk management, strategies for embedding it in institutions and some perspectives on legal risk:

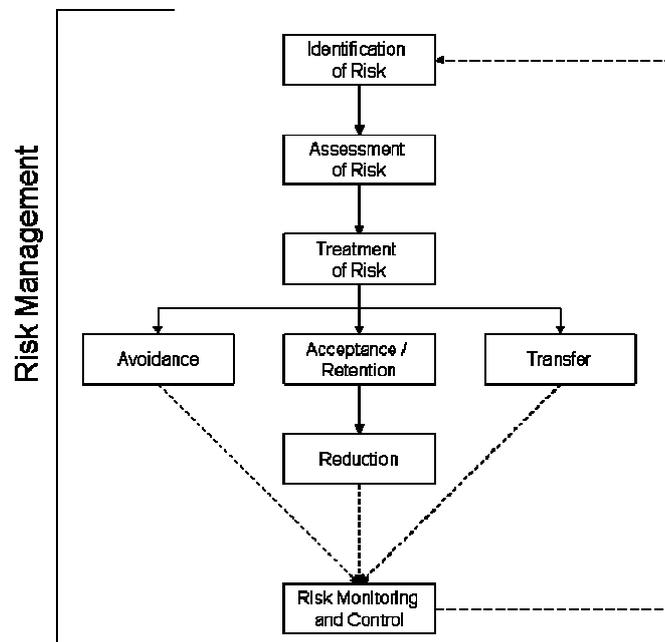
Reading 15: Getting to grips with Risk Management
(David Dripps, John Casey, Jackie Proven)
[Terms of use, BY]

6.1 A Framework for Risk Management

We introduce here a framework for managing risk that breaks it down into stages and elements. These are shown in the diagram below in Figure 9. Risk management is often perceived as time consuming and complex. The aim here is to give practical and appropriate advice for risk management for IPR in e-learning and digital repositories. Risk management is a process that encompasses these four stages

1. Identification
2. Assessment
3. Treatment (Response and Reduction)
4. Monitoring and control

Fig. 9
A Risk Management Framework



The complete tool included in the appendix analyses each stage and details the types of risk that could be identified, and strategies for risk reduction as well as a template risk register.

Tool 5: IPR Risk Management Framework and Tools
(David Dripps, John Casey, Jackie Proven)

[Terms of use, BY]

6.1.1 Identification and assessment of risk

The assessment of risk revolves around the impact that it will have and probability it will occur. To illustrate:

$$\text{Impact} * \text{Probability} = \text{Risk}$$

Table 4 Risk Assessment Formula

Impact is composed of the effects of time, cost, quality, risk and proximity of when the item will impact in relation to other risks (e.g. data loss and the disruption of examinations).

The probability of an event occurring can be difficult to quantitatively define however a qualitative assessment may suffice.

To give an example, a useful conceptual ‘formula’²⁷ for identifying and assessing the risk (i.e. stages 1 & 2 in the risk management framework) in connection with copyright is given below:

$$\begin{aligned} &\text{Probability (of infringement) * Probability (of getting caught) *} \\ &\text{Probability (Rights holder sues) * Costs awarded} = \text{Risk} \end{aligned}$$

Table 5 The Components of Copyright Risk

Note: This formula describes the components of copyright risk and their relationships; it is not intended to be used as a ‘real’ formula with numerical values etc.

If the cost of the risk is estimated to be more than a certain amount (say, £1000) then perhaps that should serve as a ‘trigger’ for some remedial action. The formula is useful in that it also provides a handy way of representing the relevant risk components in an understandable manner. It is stating the obvious to say if access is restricted (say by institutional password) the Probability is greatly reduced, while Probability is greatly increased if access is provided openly on the web.

“It would be more likely they would go for an out of court settlement by sending in the ‘attack’ lawyers”

Reading 15

²⁷ Thanks to Professor Charles Oppenheim, for the idea for this formula

Assessing actual risk is often difficult; therefore an important tool that can be used is a risk profile or matrix, such as the one illustrated below in Fig. 10. It uses a three-point scale of low, medium and high and is shown in use in Tool 5.

Fig. 11
Illustration of a Risk Profile

Likelihood	High	High / Low	High / Medium	High / High
	Medium	Medium / Low	Medium / Medium	Medium / High
	Low	Low / Low	Low / Medium	Low / High
		Low	Medium	High

Impact

6.1.2 The Treatment of Risk

Treatment of risk is essentially the steps taken to reduce its effect. A helpful analogy is to see the risk placed on the institution as gross risk and when this is treated the result is net risk, as shown below:

$$\text{Gross Risk} - \text{Reduction Treatment} = \text{Net Risk}$$

Table 6 Net Risk Formula

For example the use of ‘orphaned’ works (where we do not know who the author or rights holder is) in a repository may have medium likelihood /medium impact that some may turn out to be covered by copyright and legal proceedings are initiated (Medium/Medium Gross Risk). Applying a comprehensive notice and take down policy may result in the net risk being reduced to Medium/Low.

Reduction treatment can be sub-divided into three categories:

- Transfer
- Avoidance
- Acceptance

These strategies are described in detail in Tool 5, with some key points highlighted here:

Transfer is where the risk of a loss is moved elsewhere. An important type of transfer is an indemnity clause in a contract or licence between

organisations that are exchanging or sharing materials that are subject to IPR. At its simplest it is a promise by one organisation to another that if any of the IP content (such as text or pictures) they are passing over to the other contains materials that infringes a third party's rights then they will undertake to make good any damages claimed by that third party. This holds, obviously, even if the infringement is of an accidental or unknowing secondary nature. In this way the indemnity clauses act as 'legal firewalls'.

Some academic management teams and their legal advisors have tended to take fright when presented with such clauses in the context of allowing deposit by their academics in other organisations' repositories. This is curious as these same management teams are regularly signing multi-million pound contracts for new buildings, service contracts and partnerships that have equivalent penalty clauses. Below is an extract from a typical IPR licence indemnity clause:

"The Licensor agrees that the Licensee shall have no liability and the Licensor will indemnify, defend and hold the Licensee harmless against any and all damages, liabilities, claims, causes of action, legal fees and costs incurred by the Licensee or Authorised Users"

The Licensor is the organisation passing on the materials to the user or the Licensee, in this case the repository. The language might sound scary to the uninitiated but this is the same principle as that in many other contracts to supply goods and services where the limits of liability are described.

Avoidance is where the risk is not taken, for example not taking on a project based on its net risk assessment. Institutions where this trait is dominant are often seen to be risk averse, however this is only true if the aversion to risk is not the result of a process of decision-making that includes risk management.

Acceptance is where the institution either takes no measures to control the risk and accepts its consequences (for example the probability of a UK university being destroyed by an asteroid) or accepts the risk but takes measures to *reduce* its impact or likelihood. It is the belief of the TrustDR project that in the vast majority of circumstances this reduction action is sufficient in the treatment of risk associated with digital repositories to bring it within acceptable limits.

6.1.3 Risk Control and Monitoring

Risk Management should be, and in many disciplines is, an embedded *process* in decision making. Following the stages outlined above in the Risk Management Framework, the process is completed with a monitoring component that creates a ‘feedback loop’ Monitoring risk includes regular reviews to take account of internal and external factors such as: new technologies, user behaviour, financial factors, institutional priorities. For example perhaps the cost of insurance has plummeted or escalated and there are now more efficient ways of controlling a given risk.

6.2 Practical measures for reducing legal risk

For a fuller discussion of risk please consult Reading 15 *Getting to grips with Risk Management* and Tool 5 *IPR Risk Management Framework and Tools* in this development pack.

Some relatively simple and inexpensive measures an institution can take to reduce the risk of running digital repository are:

Clear and Consistent Institutional and Repository IPR policies: this provides the foundation for sound risk management

The active management: of the repository content and monitoring of its use. This includes some element of quality control including IPR and metadata generation, and is best managed by the institutional library.

IPR Awareness Training: By providing staff with access to information resources, for example holding short seminars on copyright. Ideally training would be mandatory for staff and students to be effective, and we recommend phrasing advice as being consistent with ‘academic integrity’, i.e. giving proper attribution for use of other peoples’ content.

Guidance on asserting rights: information provided (and highly visible) for contributors on how to express rights in their content (use the excellent Jorum Rights guide, available at: <http://www.jorum.ac.uk/support/legal.html>)

Acceptable Use Policy: An agreement that is physically or digitally signed or accepted to acknowledge the user is aware of the institutions stance on copyright infringement and will exercise due diligence and care when making contributions not to breach this policy.

Use and Observation of Licences: A statement or link to the licence for the use of the works within the repository.

Access Restricted by Password – operating a ‘closed’ repository reduces probability of detection. (If a more open repository is desired, a more rigorous risk management strategy would be employed)

Indemnity clause: for use in agreements and licences for materials deposited by external organisations

Non-endorsement clause: where content is used outside the institution this clause does not allow use of institutional logos or trademarks or the linking of the name of the institution with the context of use

Notice and Take Down Policy: A policy ideally linked to every page that has contributor content highlighting the institution's stance on copyright infringement and specifying the conditions for removing content. It must have a formal procedure that is triggered when someone gives 'notice' of a complaint regarding possible infringement – on receiving notice the institution the 'takes down' content from the repository while the complaint is checked out. It must provide a contact mechanism such as an email address, to report suspected breaches, under the terms of the Electronic Commerce (EC Directive) Regulations 2002, 6(1)²⁸. Liability can be reduced by showing 'due diligence' in the form of prompt action. Note: this needs to be viewed as a 'last ditch' protection measure that works best when all the other elements in this list are in place and not as a legal panacea.

6.3 Non-legal Risks for a Repository

It is important to remember that there are other arguably more serious risks than those of an IPR nature. While there is no such thing as a 'one size fits all' risk management strategy, our Tool 5 in the appendix provides a generic risk register for an institution to begin discussion of the risks involved in setting up a digital repository. It incorporates the TrustDR Organisational Model and is followed by a discussion of the key elements. A blank template is also provided in Tool 5.

Below are examples of risks other than legal ones – together with suggested reduction measures:

Technological: Corruption or loss of data – server maintenance would reduce likelihood, standard back-up procedures would minimise impact.

Organisational: Lack of resources to support repository – recognise the human capital investment needed to provide an operational service and reduce risk of disenchantment amongst users

Pedagogical: Under-use of repository – a lack of awareness by staff will risk the service having no educational impact. This is perhaps the greatest risk of all facing a repository.

²⁸ Further guidance on the grounds for secondary infringement from the Electronic Commerce (EC Directive) Regulations 2002, available <http://www.opsi.gov.uk/si/si2002/20022013.htm>

Strategic: Low external visibility – the repository can act as a showcase for institutional resources if mechanisms such as federated searching or metadata harvesting are planned.

6.4 A Reality Check on Accountability and Liability

as a general rule lawyers will always tend to ‘go for the money’ i.e. liability will be laid onto the institution rather than the academic or ‘independent’ institute

Under the Defamation Act Section 1(3) (e), a service provider will not be considered to be the author if the service provider "is only involved as the operator of or provider of access to a communication system by means of which the statement is transmitted, or made available, by a person over whom he has no effective control". This may give some protection in regard to the activities of students but less so for those of employees. However once an institution is made aware of potentially defamatory material it does become liable – which is where a notice and take down policy comes into its own as a valuable instrument for risk management. This leads us onto a short discussion on accountability and liability.

Many large organisations such as universities maintain a certain amount of internal self-delusion which ‘oils the wheels’ of work. It is only in moments of crisis that the real underlying structures and power relations may become evident; this is something that matters of technology combined with legal liability excel in!

‘Academic Freedom’ is often cited as a reason or defence for an activity that some people may strongly disagree with, in reality it is a convenient fiction that is used to justify the amount of autonomy traditionally allowed to academics. Neither does it exist in law: academics and their managers and their institutions (like anyone) are fully accountable to the law. Nor is it a defence against negligence – as one large university found to its cost in a Data Protection scandal,²⁹ that led to a police investigation and a very large increase of its annual indemnity insurance premium overnight. Academics in the vast majority are direct employees, despite the tendency of a minority to behave as if they are freelance consultants. Universities often set up ‘independent institutes’ particularly in the research field, often with the express aim of establishing a profile in that field. The majority of these institutes are not independent financially or legally from the parent organisation, unless they are a limited company.

The lesson here is not to mistake these internal fictions for external reality; this can be a difficult, given the introverted nature of some of these institutional working cultures. To help simplify this: – as a general rule lawyers will always tend to ‘go for the money’ i.e. liability will be laid onto the institution rather than the academic or ‘independent’ institute.

Clear guidelines about defamation and libel here for staff and students are your best bet, it could be combined with useful guidance about online standards of behaviour that are expected – sometimes called ‘netiquette’.

²⁹ <http://news.bbc.co.uk/1/hi/uk/1519889.stm>

For academics the ability to evidence and support a controversial view is an important one as is the ability to justify a statement or opinion about any individual. The case of Irving, the revisionist historian might be good example of this.³⁰ Perhaps most important for academics would be clear guidelines about what activities might constitute communicating on behalf of the institution and what is construed as ‘personal’.

6.5 Linking Business Model Development to Risk Management

Due to the rise of digital media change is the order of the day in commercial publishing and education, and indeed all sectors where IP is important. The following readings examine how this change is being experienced and what new strategies and business models are emerging in response to it and the role risk management can play in helping this. A continuing theme here, we would argue, is the need to ‘understand your business’ and ‘know where the value is’ and this comes through in these readings. Of course, you might say, these are basic managerial and business skills. Just so, but they are still a very common cause of failure in the worlds of business and education. In the context of a rapidly developing technical infrastructure, changing demographics and political agendas for education, these basic skills have become essential both for survival and success. In this respect it is crucially important that management teams in mainstream education understand that their main business is teaching and learning and that the value lies in the processes connected with that and not especially the materials or things that are ‘consumed’ in those processes. The risk of not understanding this is perhaps the biggest risk we face in the context of e-learning rather than IPR concerns. In this context it is worth quoting this extract from the preface to the 2002 edition of *Rethinking University Teaching* by Diana Laurillard [8]:

“As before this edition finishes with a blueprint for a university infrastructure that is not sidetracked by the uncertain notion of an ‘e-university’, or an ‘online university’. The integrity of academic institutions is paramount. Throughout the book there remains the fundamental assumption that a university is defined by the quality of its academic conversations, not by the technology that serves them.”

Reading 16: Provides a very readable and useful overview and synthesis of the important aspects of IPR and copyright in the context of the digital realm. It also explains clearly and persuasively the rationale for business models that operate in the ‘intellectual commons’ and use the Creative Commons Licences to do so, and the way that a good understanding of risk is essential to the process. Here you can see the underlying business rationale for offering learning materials for free as MIT does through the OpenCourseWare initiative: as an excellent source of positive publicity and good will and positive public relations that also will generate future

³⁰ <http://www.guardian.co.uk/irving/>

customers in the form of students and researchers. The granting of an MIT degree still requires registration, study, examination and certification – and several thousand dollars in fees. The MIT business model is not undermined by OpenCourseWare, there are important lessons here for the rest of the education sector about where the value lies in their business.

Reading 17: Is a useful discussion about risk management and the central role of information professionals. It makes the important link to knowledge management in organisations. In the context of e-learning this is a crucial function that has often been overlooked until recently. The arrival of the digital repository movement makes this an even more urgent issue in finding effective ways to manage teaching and learning materials. At a time when many institutions have been cutting back on libraries and information professionals this article provides a useful antidote to some of the short-termism and commercial populism that has tended to dominate the debate in academia.

Reading 18: Is a wide-ranging briefing paper and discussion document for the interactive digital media industry that the TrustDR project produced for the World Bank. It explores the issues of digital media, changing business models, risk and, typically for TrustDR, the importance of understanding the business and knowing where the value is. It sets this discussion within a broad overarching historical, economic, social and technical landscape that provides a useful overview that can give our concerns in an educational context a valuable perspective.

Reading 19: Is a recently published online risk management report and toolkit that, importantly from our perspective, links risk management to knowledge management. It provides clear explanation and guidance and offers some useful tools.

Reading 20: Our final reading in the pack is a report from another JISC Digital Repository project (MIDESS). This gives a concise and clear guide to the IPR issues affecting the management of repositories with a useful section on good practice in IPR legal compliance procedures and record keeping.

Reading 16: Managing Risk and Opportunity in Creative Commons Enterprises

(Andrew Rens)

[Terms of use, BY-NC]

Reading 17: Risk Management - a Key Role for Information Professionals

(Lesley Robinson)

[Terms of use, © CILIP]

Reading 18: The Interactive Media Industry, Intellectual Property Rights, the Internet and Copyright: Some Lessons from the TrustDR

Project
(John Casey, Jackie Proven & David Dripps)
[Terms of use, BY]

Reading 19: Risk Management Report and Tool Kit
(Jela Webb)
[Terms of use, © Free Pint Limited]

Reading 20: Intellectual property issues in institutional and cross-
institutional multimedia repositories.
(Mary Cordiner)
© MIDESS Project Consortium

6.6 The Outlook for IPR Risk Management in Education

Most of the problems here are to do with a lack of knowledge and experience, an unclear underlying business model, the negative and at times overly cautious discourse around IPR matters and a general lack of leadership at all levels. It is not as though these institutions and their managers are unfamiliar with risk in other areas such as building projects, foreign franchises, and financial errors. Indeed in the last decade or so these other types of risks have resulted in considerable cost to the sector, whereas costs due to IPR risks have largely been minimal.

“costs due to IPR risks have been minimal”

So, to move forward we need to engage with this subject and get a sense of proportion about the risks involved and weigh them up against the potential benefits, which we would argue are considerable. Simple and coherent policy formulation is needed first and foremost together with the articulation of a clear underlying business case (for us this would be connected with the extension of flexible learning opportunities). If we want to look at an example of what can be done when these elements are present we can ‘look over the fence’ into the research sector and the Open Archives movement and the progress that is being made there in sorting out an IPR regime that is suitable for the digital domain and reflects the changing relationships between authors, publishers, users and institutions. A similar process is happening in the field of teaching and learning materials, the path it follows will be rather different but the drivers are much the same – especially a growing clarity of understanding of ‘where the value lies’ in an educational system.

7 Conclusions

We have covered a lot of ground in a number of diverse but related disciplines to get to this point. To help you to tie things together and keep a focus on developing practical measures to manage the IPR in an institutional repository the checklist below should be a great help. The checklist provides a list of structured questions and prompts, finding the answers to these questions and recording them here should provide the foundations of a working solution that fits your situation.



Remember, the clearer you are about what it is you are trying to achieve when setting up a repository and sorting out an IPR policy for teaching and learning materials the easier things will be for you.

Tool 6: The TrustDR Repository Checklist
(Jackie Proven, John Casey & David Dripps)
[Terms of use, BY]

8 References

- [1] Casey, J. and Wilson. P. (2006) *A practical guide to providing flexible learning in further and higher education*. Quality Assurance Agency for Higher Education, Glasgow. ISBN 1 84482 577 9. Also available from Linney Direct, Adamsway, Mansfield, NG18 4FN. Email: qaa@linneydirect.com. A publicly available copy in word/pdf/web format is also freely available for download from the TrustDR project website at: http://trustdr.ulster.ac.uk/outputs/Flex_Delivery_Guide.doc Also available from the QAA website in word format only: <http://www.enhancementthemes.ac.uk/themes/FlexibleDelivery/publications.asp>
[© QAA]
- [2] Heery, R. and Powell, A. (2006) *Digital Repositories Roadmap: looking forward*. UKOLN and Eduserv. Available from <http://www.ukoln.ac.uk/repositories/publications/roadmap-200604/>
- [3] Duncan, C., Barker, E., Douglas, P., Morrey, M. and Waelde, C. (2005) *Digital Rights Management: final report*. Intrallect Ltd. Available online <http://www.intrallect.com/drm-study/DRMFinalReportv2.pdf>
- [4] The RoMEO project, funded by JISC to investigate the rights issues surrounding the 'self-archiving' of research in the UK academic community under the Open Archive Initiative's Protocol for Metadata Harvesting. <http://www.lboro.ac.uk/departments/ls/disresearch/romeo/>
- [5] HEFCE (2006) *Good practice Guidance for senior managers: Intellectual property rights in e-learning programmes*. HEFCE http://195.194.167.100/pubs/hefce/2006/06_20/
- [6] Kuhn, T. (1996) *The structure of Scientific Revolutions*. University of Chicago Press
- [7] Twigg, C. (2005) Keynote Summary: Improving Learning and Reducing Costs - New Models for Online Learning in the ALT-C 2005 conference, ALT-C, Manchester, available at <http://www.alt.ac.uk/altc2005/keynotes.html#carol>
- [8] Laurillard, D. (2002) *Rethinking University Teaching*. London: Routledge.
- [9] Jochems, W., van Merriënboer, J., and Koper, R. (2004) Introduction in: *Integrated E-Learning: implications for pedagogy, technology and organisation*. Routledge & Falmer, London.
- [10] Collis B and Moonen J (2004) *Flexible Learning in a Digital World* (2nd edition). Abingdon: Routledge and Falmer

[11] Moffat, M. (2006) *Marketing with Metadata – How Metadata Can Increase Exposure and Visibility of Online Content* PerX. Available from <http://www.icbl.hw.ac.uk/perx/advocacy/exposingmetadata.htm>

[12] Laddie, Mr Justice (1996) Copyright: Over-strength, Over-regulated, Over-rated? *European Intellectual Property Review* (5):253-260

[13] JISC (2005) *Risk Management*. JISC InfoNet. Available from <http://tinyurl.com/s8re2>

9 Appendix

The materials in this appendix are mostly on the TrustDR project website and can be found in the *Outputs* section or the *Work in Progress* section. Some other materials are available on other web sites.

9.1 Discussions

Discussion One: The Main Legal, Educational and Technical Issues

[Terms of use, BY] [[Word](#)]

Description: Our project work has entailed extensive background studies into the interrelations between the three areas of law, education and technical aspects in order to make our guidance as clear, concise and user-friendly as possible. In this section we set out our main observations and conclusions mapped onto these three areas of activity. This is useful for a quick orientation to the project subject matter and our approach to it. These discussions are also useful for your advocacy activities as a ‘pick and mix’ collection of observations and arguments to suit a number of purposes and situations. Authors, John Casey, Jackie Proven & David Dripps.

Discussion Two: The Pros and Cons for using Creative Commons (CC) Licences in Digital Teaching and Learning Materials

[Terms of use, BY] [[Word](#)]

Description: This short document continues the discussion about the Creative Commons Licences and provides some useful summaries of the arguments for and against them. Authors, John Casey, Jackie Proven & David Dripps.

9.2 Readings

Reading 1: Intellectual Property Rights (IPR) in Networked e-Learning: A Beginners Guide for Content Developers

Casey, J. (2004). *Intellectual Property Rights (IPR) in networked e-learning: a beginners guide for content developers*. JISC Legal Information. Available online at

<http://www.jisclegal.ac.uk/pdfs/johncasey.pdf>

[Terms of use, see <http://www.jisclegal.ac.uk/copyrightstatement.htm>]

Description: This guide aims to provide a user-friendly introduction to intellectual property rights (IPR) issues for e-learning content developers and managers. It is intended to act as a point of entry to the field of IPR in e-learning that will provide a good foundation for building expertise in the

e-learning developer community. It deals with the basic aspects of IPR, especially copyright, in e-learning content development, with an emphasis on reusing third party materials to create new resources. The guide has been written by an e-learning content developer who has had to deal with these issues in practice. The style of the guide is practical and approachable with many useful tips and observations but it also provides a sketch of the wider issues. Author, John Casey.

Reading 2: Recent Changes to Copyright Law and the Implications for FE and HE

Oppenheim, C. (2004) *Recent changes to copyright law and the implications for FE and HE*. JISC Legal Information. Available online at <http://www.jisclegal.ac.uk/publications/copyrightcopenhagen.htm> [Terms of use, see <http://www.jisclegal.ac.uk/copyrightstatement.htm>]

Description: This is useful short guide to changes in UK copyright law brought about by European legislation and provides an update to the Beginners Guide. It also contains a very useful discussion about what might constitute ‘commercial’ use. It also gives an overview of the general nature of UK copyright law that complements the approach taken in reading 1. Author: Professor Charles Oppenheim.

Reading 3: The TrustDR Framework: a useful conceptual model of IPR and DRM

[Terms of use, BY] [[Word](#)]

Description: This short 2-page document introduces a useful graphical conceptual model for managing IPR in e-learning. It does this by describing a generic model of a DRM system that can provide a common basis for discussion between different groups. The model supports our assertions that the solutions are primarily ‘lo-tech’ and concern policy creation. We recommend institutions initially aim for a target of stage 3 in the 6-stage framework, with appropriate licensing reflecting developed policy. Authors, John Casey, Jackie Proven & David Dripps.

Reading 4: The E-Learning Change Continuum - Typical Scenarios and Business Models

[Terms of use, BY] [[Word](#)]

Description: This short 1 page diagram is shown in Table 1 of the pack and in the Appendix, it introduces the useful notion of a continuum of different ways of organising e-learning activities in relation to the underlying business model. The rationale for this approach is that the adoption of e-learning methods in institutions has not, and is not, going to be a revolutionary ‘big bang’ but more of a gradual evolutionary process. You can use this continuum to help analyse and place your institutions’ e-

learning activities. This aspect of institutional change is discussed further in the QAA guide to implementing flexible learning. Authors, Jackie Proven, John Casey & David Dripps.

Reading 5: A practical guide to providing flexible learning in further and higher education (Published by the QAA)

Casey, J. and Wilson, P. (2006) *A practical guide to providing flexible learning in further and higher education*. Quality Assurance Agency for Scotland. Published on the web at:
<http://www.enhancementthemes.ac.uk/themes/FlexibleDelivery/publications.asp>. [Terms of use, © QAA]. Also available from
http://trustdr.ulster.ac.uk/outputs.php#flex_del_guide

Description: This is a readable and user-friendly guide to planning for and implementing flexible learning, published by the QAA, that also discusses the types of organisational and professional changes that are required to support this type of teaching and learning.

Reading 6: Theory and Practice of the Virtual University

Pollock, N. and Cornford, J. (2000) Theory and practice of the virtual University. *Ariadne* Issue 24. Available online at
<http://www.ariadne.ac.uk/issue24/virtual-universities/>
[Terms of use, Research or private study, see
<http://www.ariadne.ac.uk/about/copyright.html>]

Description: A really useful research project sponsored by the ESRC that analysed the impact of technology on the academic workplace – still highly relevant. The article looks at the tension between traditional organisational structures and cultures and those connected to technology and efforts at standardisation in education.

Reading 7: Using an Organisational Model

[Terms of use, BY] [[Word](#)]

Description: For those who want to work more effectively and understand their own organisation it can be useful to have a shared ‘mental model’ to support communication and understanding. This is especially useful in complex organisations like educational institutions. We have developed just such a model based on recent research (this reading is based on a paper presented at the IEEE Advanced Learning Technology conference, Holland, in 2006). The model has also been trialled at several QAA workshops with encouraging results. The main purpose of this model is to support ‘round-table’ discussions with people drawn from different parts and levels of an institution. Such an approach is extremely useful for rapid information gathering and analysis, this is especially useful when planning for a new mode of delivery such as flexible learning and for helping

understand the ramifications of a new initiative – like creating an IPR policy for e-learning materials. Authors, John Casey, Jackie Proven and David Dripps.

Reading 8: Case Study Exercise using the Organisational Model

[Terms of use, BY] [[Word](#)]

Description: This is a case study and exercise based on the fictional ‘University of Peatland’ that want to offer a masters degree by flexible learning. There are three sections:

1. Roles and Instructions: the facilitator should distribute the documents to the group and ask the participants to choose one of the role profiles.
2. Peatland Case Study: the participants should read this and carry out the task described and record their brief conclusions on the grid in the third document (see below)
3. Organisational Model: this has a visual representation of the organisational model (as a prompt) underlying the case study with a grid to record conclusions

Authors, Paddy Maher and John Casey.

Reading 9: Structured Guidelines for setting up and evaluating Learning Object Repositories

Margaryan, A., Milligan, C. and Douglas, P. (2007) *Structured guidelines for setting up and evaluating Learning Object Repositories*. CDLOR project deliverable. Draft available online at <http://academy.gcal.ac.uk/cd-lor/>

[Terms of use, BY-NC-SA]

Description: This very useful and thought-provoking short guide will be helpful in helping you plan for the scope and use of a repository of learning objects. Authors, Anoush Margaryan, Colin Milligan & Peter Douglas.

Reading 10: Good practice Guidance for Senior Managers: Intellectual property rights in e-learning programmes

HEFCE (2006) *Good practice Guidance for senior managers: Intellectual property rights in e-learning programmes*. HEFCE Available online at http://195.194.167.100/pubs/hefce/2006/06_20/

[Terms of use, Non-commercial use, see <http://195.194.167.100/copy.htm>]

Description: HEFCE has issued this very useful publication, produced by a set of leading IPR experts that gives clear advice to institutions about how to manage IPR generated by students and staff. It contains a number of model contracts and licences and consortium agreements that can be used and adapted. It is also a very good source of information and advice

in general. Read the Executive Summary and the Introduction – pay particular attention to the discussion of business models being the basis for the IPR regime chosen. You will find the rest of the document useful as you develop your policy, especially guidance on contracts etc.

Reading 11: Policy Options and Discussions

[Terms of use, BY] [[Word](#)]

Description: This collects and presents a number of suggestions and observations for policy development at institutional and national level into one short document for easy reference. Authors, John Casey, Jackie Proven & David Dripps.

Reading 12: Metadata's Many Meanings and Uses

Taylor, C. (2006) Metadata's Many Meanings and Uses, Ideography, Available at:

http://www.ideography.co.uk/briefings/pdf/PB_metadata.pdf

[Terms of use, © Conrad Taylor]

Description: An extremely useful and readable discussion of what metadata is, its origins and uses, and how it means different things to different people. The author (Conrad Taylor of the British Computer Society) explicitly sets out to provide common ground for the different professional communities that use metadata. Author, Conrad Taylor.

Reading 13: The Role of Principles in Driving Cultural Shift

[Terms of use, BY] [[Word](#)]

Description: A useful set of examples that show the important role benefit that producing a statement of principle can play in driving cultural change; you might find phrases and ideas in these examples that are useful for advocacy and discussion. Authors, Jackie Proven, John Casey & David Dripps.

Reading 14: Understanding Licences: An Analysis and Evaluation of Creative Commons

[Terms of use, BY] [[Word](#)]

Description: This paper introduces the basic concepts involved in licences in general and illustrates them with a description of the Creative Commons scheme. It discusses some common concerns and questions regarding the use of these licences and provides a useful explanatory 'walkthrough' of an actual Creative Commons licence to help the reader get to grips with reading licences. Authors, Jackie Proven, John Casey, David Dripps.

Reading 15: Getting to grips with Risk Management

[Terms of use, BY] [[Word](#)]

Description: This reading consists of a discussion of the cultural aspects of risk management, strategies for embedding it in institutions and some critical perspectives on legal risk. Authors, David Dripps, John Casey, Jackie Proven.

Reading 16: Managing Risk and Opportunity in Creative Commons Enterprises

Rens, A. (2006) Managing Risk and Opportunity in Creative Commons Enterprises. First Monday, volume 11, number 6 (June 2006). Available at:

http://www.firstmonday.org/issues/issue11_6/rens/index.html

[Terms of use, BY-NC]

Description: Provides a very readable and useful overview and synthesis of the important aspects of IPR and copyright in the context of the digital realm. It also explains clearly and persuasively the rationale for business models that operate in the 'intellectual commons' and use the Creative Commons Licences to do so and the way that a good understanding of risk is essential to the process. Author, Andrew Rens.

Reading 17: Risk Management - a Key Role for Information Professionals

Robinson, L. (2006) Risk Management - a Key Role for Information Professionals, CILIP, London

<http://www.cilip.org.uk/publications/updatemagazine/archive/archive2006/october/robinson.htm>

[Terms of use, © CILIP]

Description: A useful discussion about risk management and the central role of information professionals. It makes the important link to knowledge management in organisations. In the context of e-learning this is a crucial function that has often been overlooked until recently. The arrival of the digital repository movement makes this an even more urgent issue in finding effective ways to manage teaching and learning materials. Author, Lesley Robinson.

Reading 18: The Interactive Media Industry, Intellectual Property Rights, the Internet and Copyright: Some Lessons from the TrustDR Project

[Terms of use, BY] [[Word](#)]

Description: A wide-ranging briefing paper and discussion document for the interactive digital media industry that the TrustDR project produced for the World Bank. It explores the issues of digital media, changing business models, risk and, typically for TrustDR, the importance of understanding the business and knowing where the value is. It sets this discussion within a broad overarching historical, economic, social and technical landscape that provides a useful overview that can give our concerns in an educational context a valuable perspective. Authors, John Casey, Jackie Proven & David Dripps.

Reading 19: Risk Management Report and Tool Kit

Webb, J. (2006) *Risk Management Report and Tool Kit*. Freepint, Ashford. Available at:

<http://web.freepint.com/go/shop/report/riskmanagement/>

[Terms of use, © Free Pint Limited, purchase required]

Description: A recently published online risk management report and toolkit that, importantly from our perspective, links risk management to knowledge management. It provides clear explanation and guidance and offers some useful tools. Author, Jela Webb.

Reading 20: Intellectual Property Issues in Institutional and Cross-Institutional Multimedia Repositories.

Cordiner, M. Available at:

http://www.leeds.ac.uk/library/midess/IPRreport_finalversion.pdf

Project website at <http://www.leeds.ac.uk/library/midess/about.html>

[Terms of use, © MIDESS Project Consortium]

Description: This gives a concise and clear guide to the IPR issues affecting the management of repositories with a useful section on good practice in IPR legal compliance procedures and record keeping

9.3 Tools

Tool 1: Analysing your situation

a. A Managed Learning Environment Integration Matrix

Description: from the Scottish Funding Council E-Learning Implementation Guide

Available at:

<http://www.jiscinfonet.ac.uk/InfoKits/implementing-elearning/where-do-you-want-to-go>. Authors SFC & Glennafric.

[BY-NC-SA]

- b. **An Institutional E-learning Benchmarking Tool and Discussion Paper.** Description: from the QAA guide to flexible learning. Author Professor Paul Bacsich. [BY-SA]
- c. **eMM - The E-Learning Maturity Model**
Description: Available from the project homepage: <http://www.utdc.vuw.ac.nz/research/emm/> Author Stephen Marshall. [BY-SA]

Tool 2: Evaluating Awareness & Readiness

- a. **IPR Management Regimes Mapped onto the E-Learning Change Continuum.** [Word] Fig. 7 in this Pack. Description: This diagram illustrates typical characteristics of IPR management as it follows the change process. [Terms of use, BY]. Authors, Jackie Proven, John Casey & David Dripps.
- b. **Analysis and Audit Tool for Rights Management in Learning Object Repositories.** [Word] Description: This tool builds on the IPR continuum to analyse characteristics of detailed aspects of IPR management. Breaks down the system into 'elements' to aid conceptualisation and communication and provides audit charts to help analyse your own situation. [Terms of use, BY]. Authors, Jackie Proven, John Casey & David Dripps.
- c. **Functional and Dysfunctional DRM Frameworks for Teaching and Learning Materials.** [Word] Description: A presentation tool providing opportunities for discussion. The mirror image shows opposing statements representing functional/dysfunctional DRM frameworks, with notes expanding the statements and suggesting relevant issues. [Terms of use, BY]. Authors, Jackie Proven, John Casey & David Dripps.
- d. **Activity and Competency Grids to support implementation of a DRM framework.** [Word] Description: Combines the TrustDR framework and Organisational model to produce a matrix of 'actor responsibilities' from multiple perspectives. The tool represents your opportunities for proactive involvement in the DRM process and allows you to assess your and your institution's 'Awareness and Readiness'. [Terms of use, BY]. Authors, Jackie Proven, John Casey & David Dripps.

Tool 3: UHI Workflow and Metadata Application Profile [Word]

Description: This form serves the dual purpose of collecting information to ensure adequate metadata can be created for retrieval and management purposes, and completing an IPR checklist. The metadata profile

illustrates a minimalist approach that anticipates the lack of human resources that are likely to be devoted to this activity.
[Terms of use, BY]. Authors, Jackie Proven, John Casey & David Dripps.

Tool 4: Placing Our Stuff So We Can Find It Later: A Meta-Learning Essential [\[Word\]](#)

Description: This is essential reading for anyone involved in information management in e-learning. Learning from our previous work is often inhibited by difficulties in finding relevant materials after a period of time and, when found, making sense of them. Presented here are several practical approaches for alleviating this difficulty. The suggestions are (1) craft meaningful, contextual file names; (2) place things where they can be easily found; and, (3) relentlessly discard useless items. This article by Jamie Dinkelacker originally appeared in the IEEE Learning Technology Newsletter October 2003, available online at, http://ltf.ieee.org/learn_tech/issues/october2003/.
[Terms of use, © Jamie Dinkelacker – Reproduced by Permission].
Author, Jamie Dinkelacker.

Tool 5: IPR Risk Management Framework and Tools [\[Word\]](#)

Description: The tool analyses each stage and details the types of risk that could be identified, and strategies for risk reduction as well as a very useful template risk register.
[Terms of use, BY]. Authors David Dripps, John Casey, Jackie Proven.

Tool 6: The TrustDR Repository Checklist [\[Word\]](#)

Description: This is a structured list of questions that are designed to make sure you cover the main areas needed to set up an institutional IPR management system for digital teaching and learning materials. It is also designed to help in the practical aspects of setting up a repository.
[Terms of use, BY]. Authors, John Casey, Jackie Proven & David Dripps.

9.4 Repositories and Practical Issues – Recommended Readings

The following readings are mostly selected from the TrustDR project workpackage reports – they are all aimed at beginners and should be very useful. Downloadable versions of each reading can be found in the following ‘work in progress’ section of the TrustDR website.
http://trustdr.ulster.ac.uk/work_in_progress.php

WP1-4 Targets for Policy Creation

- After The Deluge: Navigating IPR policy in teaching and learning materials [\[Word\]](#)

WP1-6 Assessing Different Licence Regimes

- Assessing the Creative Commons Licences [[Word](#)]

WP2-1 Technical Factors: current Practice, sources of guidance and developments

- Doing the right thing: sources of guidance for good practice with metadata in repositories [[Word](#)]
- The three As: Authorisation, Authentication and Access – information and guidance [[Word](#)]
- The technical landscape of digital repositories [[Word](#)]

WP2-3 Reviewing ODRL

- Expressing and encoding digital rights information: reviewing ODRL in practice [[Word](#)]
- Forever is a long time in e-learning: the need for permanent identifiers in digital object management [[Word](#)]

Supporting Studies & Background Reports

- Talking to the techies #3: an introduction to metadata standards [[Word](#)]

External Reading on Using Licences

The final reading for this section deals with fine tuning your knowledge of licences.

Licensing Digital Resources: how to avoid the legal pitfalls

Giavarra, E. (2000) Licensing Digital Resources: how to avoid the legal pitfalls, *Serials: The Journal for the Serials Community*, Volume 13, Number 2 / July 01, 2000, Pages: 111 – 119. Available at <http://uksg.metapress.com/link.asp?id=rn9rm35ldq938au6>

Description: A useful guide in both understanding licences and identifying what to avoid when negotiating licences. As licences are so important in IPR this is essential reading, this document nicely complements Reading 14 *Understanding Licences*. Author, Emanuella Giavarra. [Terms of use, see the document)

9.5 Collected TrustDR Workpackages and Background Studies

All these documents have been written and compiled with the needs of users in mind, particularly those new to what is a wide and multi-disciplinary field. As such they represent a very useful source of

information and guidance - they are all issued under a Creative Commons attribution licence [BY] which means they are free to use for anyone (both non-commercial and commercial uses) and are adaptable to users needs.

For downloadable versions of these publications please visit:
http://trustdr.ulster.ac.uk/work_in_progress.php

9.5.1 Start-up Packages

WP SP-1 The TrustDR Project: a plain-english description for project partners [\[Word\]](#)

Description: As part of the start-up process of the project we decided it would be very useful to revisit our original project application and background research to produce a project description that was not in 'project speak'.

WP SP-2 Scoping Exercise for the Outputs of TrustDR in Terms of the Target Groups [\[Word\]](#)

Description: The purpose of this workpackage is to provide a scoping exercise to inform the project outputs. This work actually lasted well into the project and took advantage of emerging conclusions. The contents of this document fall into two main sections:

- Results of the situational analysis and scoping exercise
- Development of the TrustDR organisational model

The document provides a sharply argued overview of the main areas and factors that the project intends to cover.

WP SP-3 Testing the Waters: responses to initial questionnaire about current IPR policy and use of repositories [\[Word\]](#)

Description: This WP reports on a consultation exercise amongst participants in the TrustDR project in order to gain an initial understanding of current attitudes and arrangements to support reuse of learning materials. It illustrates representative views and activity relating to policies, procedures, responsibilities and awareness within institutions, and gives a useful 'snapshot' of the conditions under which sharing and re-use occurs. The report provides evidence of typical mainstream educational practice in relation to IPR, and implications for work needed. The findings, and conclusions drawn from them, give opportunities to compare your own situation with typical practice during the process of analysing your place on the e-learning continuum.

9.5.2 DRM Policy Creation Strand (Legal and Cultural)

WP1-1 Reviewing relevant work, mapping the legal issues and finding sources of guidance (several documents)

TrustDR Workpackage 1-1, Reviews and Background for Legal Issues: overview of reports [\[Word\]](#)

Description: As a result of project activity under Workpackage 1-1, sources of information have been collated, classified and analysed. This report summarises that work and illustrates some of the methods used to explore a complex area, such as annotated resource lists, mind-mapping and graphical representation. The report primarily informs the work of the TrustDR project, but may also be useful for the education community as a whole as one of many routes to explore legal and cultural issues in operating or using learning object repositories.

Review and Analysis of Relevant Work into IPR and Digital Collections: full summary reports and narrative [\[Word\]](#)

Description: Essentially an annotated resource list, this document provides an overview of issues found in the literature with an emphasis on information, recommendations and outcomes relevant to the aims of the TrustDR project. Many articles point to ‘future research needs’, ‘areas for development’ or ‘gap analysis’ which provide the rationale for our work. Documents are categorised so that the reader can explore information on a particular topic, and each section carries short narratives to relate sections together and provide an overall picture of the factors affecting the use of digital repositories in teaching and learning.

[\[Short version\]](#) also available]

Existing Sources of Legal Guidance and Gap Analysis [\[Word\]](#)

Description: This document collates useful sources of information, as well as showing the relationship between what often appear as disparate subjects, combining cultural and educational issues with technology and the law. It is intended to bring readers quickly ‘up to speed’ in order to understand the problem area in a systematic way. It also points to specific gaps or questions that need to be addressed, providing an indication of possible approaches to solving problems such as lack of IPR awareness, how to embed policy, how to apply appropriate licences etc.

The Legal Terrain Affecting Digital Repositories [\[Word\]](#)

Description: This document is aimed at a general reader requiring an overview of basic concepts in order to get a ‘mindset’ of the legal environment we are dealing with. It provides sources of guidance and a visual representation of this environment, illustrating the relationship between areas such as copyright law, institutional policies and licences. This gives the reader an instant overview into the many factors that need to be considered when implementing a digital repository, and can also be used to raise points for discussion amongst stakeholders.

Stakeholder Perspectives on the Legal Terrain of Digital Repositories

[\[Word\]](#)

Description: This workpackage builds on an overview of the many aspects of the legal environment of digital repositories, and describes them from specific points of view, in order to show relevant issues for individuals and roles in an institution. For example, academic staff are prompted to ask about how their rights are asserted, curriculum leaders need to know about effective sharing of resources, library staff want to have appropriate knowledge and information to provide support, and managers would be interested in a framework that manages risk. Again, the reader will gain an insight into the relationship between a wide range of factors.

Useful Links [\[html\]](#)

Description: A quick reference point to sources of information and organisations referred to in project documents.

WP1-2 Educational Perspectives

Understanding the Business of E-Learning: before applying any DRM

[\[Word\]](#)

Description: This report examines the case for adopting the technologies associated with learning objects, Learning Design, and repositories by relating them to some widely accepted models of teaching and learning. We also look critically at the existing practice of e-learning and draw out lessons for the proposed adoption of learning objects etc. In order to make practical and workable suggestions for implementing DRM, as this project aims to do, we need to have a firm understanding of the business it is being applied to and not content ourselves with an abstract legal or technical study or accept all the 'spin' that is sometimes put on e-learning activity to satisfy commercial and political agendas and funding opportunities. This 'systems' approach would be normal in any commercial project and we think it is especially applicable to the area of e-learning.

WP1-3 Typologies

Typologies of Content and Repository in Relation to IPR and DRM

[\[Word\]](#)

Description: For speed and economy for this document we have in mind a user that is already IPR literate i.e. someone who has read the earlier outputs of this project. We concentrate mostly on typologies of content and repository function from an IPR/DRM management point of view. These discussions inform later workpackages.

WP1-4 Targets for Policy Creation

After The Deluge: Navigating IPR policy in teaching and learning materials [\[Word\]](#)

Description: This workpackage ties together the technical, legal and educational factors covered by the project in an accessible manner, and discusses how practical progress can be made in the area. Here you can see the reasoning that has led to the final outputs of the project.

WP1-6 Assessing Different Licence Regimes

Assessing the Creative Commons Licences [\[Word\]](#)

Description: This report considers the potential benefits of mapping an existing set of licences to the intended policy of an institution. It makes the point, however, that authors and copyright holders must be very clear about the terms of a licence before they release content – licences cannot replace an understanding of the law. It begins, therefore, with preliminary details based on the TrustDR framework, and a very brief introduction to the concept of licences to orientate the reader. This is followed by a discussion of the concepts and principles behind Creative Commons and other model licences suitable for sharing learning materials such as AEShareNet, and a description of their ‘architecture’ that facilitates easy use.

The report addresses concerns that readers may have as to the suitability of Creative Commons (CC) licences, before moving on to a detailed commentary of a licence. The commentary covers the formats used to express licences (human, machine and lawyer-readable versions) and a detailed look at the implications of clauses in a specific example, relating them to actual use. Some final comments are made on different licences that represent alternative cultures.

Clearing Content for Distribution and Sharing with Creative Commons Licences [\[Word\]](#)

Description: This case study records the steps that were taken when a piece of work was prepared for distribution under the terms of a Creative Commons licence. It illustrates the factors that have to be considered before choosing a licence, including type of content, proposed use and audience. Readers may find it useful to see the steps that had to be taken before a non-revocable licence could be applied represented in simple flow diagrams.

9.5.3 DRM Policy Projection Strand (Technical Issues)

WP2-1 Technical Factors: current Practice, sources of guidance and developments

Doing the right thing: sources of guidance for good practice with metadata in repositories [\[Word\]](#)

As well as providing a brief technical overview of metadata, this document discusses the ‘human’ issues associated with metadata creation - the skills required, decisions to be made, risks of poor quality etc. It

provides arguments for good metadata acting as an enabler for improved use and management of learning materials, and rehearses the idea of balance between factors such as flexibility, accuracy, simplicity, interoperability and resource availability. The reader will also find references to background articles that expand on these issues – useful ‘ammunition’ when developing a metadata strategy and negotiating for resources.

The three As: Authorisation, Authentication and Access – information and guidance [\[Word\]](#)

Description: A brief introduction to access management: why it is needed and how it works in practice from a user’s perspective. This document goes on to describe developments such as ‘devolved authentication’ and Shibboleth, and discusses the implications for institutional systems, policy and management. While reflecting a ‘snapshot’ of middleware services in 2006, this is a useful reminder of the issues, particularly the administrative burden, in managing access to resources.

The technical landscape of digital repositories [\[Word\]](#)

Description: This paper provides a high level view of technologies affecting repositories, with a visual representation of their relationships. It acts as a beginners guide to the area by introducing aspects such as IMS standards, Access management, Identifiers and metadata in one place, with references to further sources of information.

WP2-3 Reviewing ODRL

Expressing and encoding digital rights information: reviewing ODRL in practice [\[Word\]](#)

Description: This report aims to give a detailed understanding of ODRL (Open Digital Rights Language) and how it is used to express and manage the rights in digital material, including its functionality and semantics. Readers may also bypass the technical analysis and concentrate on the discussion in the final section of the issues faced by adopting ODRL as a solution to rights management.

Forever is a long time in e-learning: the need for permanent identifiers in digital object management [\[Word\]](#)

Description: A description of Permanent Uniform Resource Locators (PURL) is used as the basis for a discussion of the lifespan of digital resources, and the need to keep metadata and learning objects permanently linked. The paper introduces unique identifier systems such as DOI and raises some issues about the applicability of identifiers to learning objects in mainstream education.

9.5.4 Supporting Studies & Background Reports

Feeding the knowledge economy: using RSS feeds to tell the world about your repository [\[Word\]](#)

Description: An introduction to RSS/ATOM feeds and their potential uses in repositories. In particular we suggest their role in meeting the needs of academics for attribution by delivering filtered, targeted search results.

Freedom of expression? Digital Rights Expression Languages and Patents [\[Word\]](#)

Description: A brief discussion of the background to and implications of patent claims by ContentGuard, indicating the potential threat of commercial enterprise over adoption of open standards for education.

Opening up the gates of knowledge: a beginners guide to OAI-PMH [\[Word\]](#)

Description: A useful introduction to one of the technologies devised to support services provided by repositories to share and search metadata records.

Talking to the techies #3: an introduction to metadata standards [\[Word\]](#)

Description: This document aims to place metadata in a practical context, and also to provide some basic background and reference information about the underlying technologies and philosophies that accompany ongoing developments in this field.

9.6 TrustDR Publications

Available <http://trustdr.ulster.ac.uk/outputs.php>

Prospects for Using Learning Objects and Learning Design as Staff Development Tools in Higher Education.

Description: Published in the Proceedings of the CELDA 2005 conference (Cognition and Exploratory Learning in the Digital Age, 2005), reproduced here by kind permission of the International Association for Development of the Information Society (IADIS). This presents a critical analysis of the barriers and enablers to using learning objects from both educational and organizational perspectives. Particular stress is laid on the need to understand the implicit business models inherent in the use of learning objects and related technologies. This includes outputs from WP 1-2. This paper might be best described as trying to understand the 'business of e-learning' - both the myth and the reality, in order to develop realistic solutions for digital rights management.

Practical Guide to Providing Flexible Learning in Further and Higher Education

Description: Published by the Quality Assurance Agency for Higher Education in the UK in 2006. This is a wide ranging guide covering many of the important educational and organisational factors involved in instituting a more flexible curriculum. This includes outputs from WP 1-2 and SP-2, and deals with the educational and business case for e-learning to support a flexible curriculum. Large parts of the educational analysis in

WP 1-2 have been used in this publication, and explicit use is made of the TrustDR organisational modelling framework and tools.

Modelling Organisational Frameworks for Integrated E-learning: the experience of the TrustDR project

Description: Published in the proceedings of the ICALT 2006 conference published by the IEEE Computer Society Press in 2006. This extended draft version of the article introduces a general-purpose organisational model for supporting the introduction of e-learning in terms of analysis, implementation and auditing.

Getting Practical With IPR in E-Learning

Description: Published in the proceedings of the IPR in E-Learning Conference 2006, published by Middlesex University Press. This article introduces the TrustDR project and traces its genesis from the experience of the JISC X4L programme and the problems this highlighted for those involved in creating learning objects. It then introduces the rationale of the TrustDR conceptual framework and the importance of addressing the socio-cultural issues needed to base a workable DRM system upon. This article is copyright of Middlesex University and is for educational purposes only. The full proceedings (ISBN: 1 859242 67 7) are available from the Middlesex University Press at <http://mupress.co.uk/>. The conference summary is available at http://www.cs.mdx.ac.uk/news/ipr_news06.html

The Interactive Media Industry, Intellectual Property Rights, the Internet and Copyright: Some Lessons from the TrustDR Project. A Briefing and Discussion Document for the World Bank AIM-WB Development Resource Centre Forum, Manila, 2nd May 2006, INTELLECTUAL PROPERTY RIGHTS FOR THE INTERACTIVE MEDIA INDUSTRY: TRENDS AND PRACTICES.

Description: The aim of the briefing document and presentation is to:

- Introduce and outline the basics of IPR (Intellectual Property Rights) law relating to the Internet.
- Share some lessons from the education sector that might be transferable to the interactive media industry
- Discuss ways of managing the IPR in our work distributed via the internet

9.7 TrustDR Use Cases

For full texts please see the project web site work in progress page at http://trustdr.ulster.ac.uk/work_in_progress.php)

TrustDR Scenarios

1. Reflective practice with Learning Object repositories
2. Easy integration with VLE
3. Sharing between VLE systems
4. Effective use of resources
5. Public attribution facility

6. Attaching licences to Learning Objects in a Digital Repository (DRM01)
7. Auditing licences attached to Learning Objects in a Digital Repository (DRMo2)

TrustDR Uses Cases

- Reflective practice with Learning Object repositories (Use Case 1)
- Public Attribution Facility (Use Case 5)
- Repository information / newsfeed (Use Case 6)
- Web based public search of repository (Use Case 7)
- Controlled web based public search of repository (Use Case 8)
- Attaching licences to Learning Objects in a Digital Repository (Use Case DRM01)