



## **Discussion 1: The Main Legal, Educational and Technical Issues**

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### **Background**

This is part of the TrustDR IPR Institutional Development Pack and is part of the outcomes of the work of the **TrustDR** project (**Trust** in **D**igital **R**epositories) 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](http://www.jisc.ac.uk/whatwedo/programmes/programme_digital_repositories.aspx)





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# 1 Discussion One: The Main Legal, Educational and Technical Issues

Our project work has entailed extensive background studies into the interrelations between the three areas of law, education and technical issues 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. The shorter points have been given numbers for ease of reference between team members.

## 1.1 *Legal Perspectives – reflections of a changing community*

1. In educational institutions there is widespread poor awareness of IPR law and a significant amount of confused, contradictory and even legally dubious policy.
2. It is very important that we understand the ‘business of e-learning’ in institutions in order to be able to create useful policy. In other parts of the ‘knowledge economy’ where the management of IP is important such as pharmaceuticals, software and the media, there are established IPR frameworks in place. As e-learning is not such an established activity, the policy for managing the IPR involved is not yet well developed – reflecting the still early stage of development of the underlying business models.
3. We have identified a range of simple policy and infrastructure initiatives that are needed at national government and funding organisation levels to show positive leadership in this area. The main concern is that a lack of engagement, leadership and resources in this area (see the policy options and discussions reading in the Appendix) is producing a climate of extreme risk aversion, which is hampering the use of technology for educational purposes.
4. Despite the difficulties, we think that there is much that individuals and institutions can do to help themselves manage their own IPR and minimise the risk that they are exposed to. In this pack we advocate linking the development of an institutional IPR framework for teaching and learning materials to the improvement of the use of e-learning technologies to support teaching and learning in terms of sustainability, quality, and efficiency.
5. Despite being employees academics have often by ‘custom and practice’ been able to retain copyright in their own work, this has then allowed them to give away the copyright in their research to publishers in the pursuit of research ratings and career advancement etc. In return institutions have been forced to buy back their own research work from publishers in the form of journal subscription, at considerable expense, in order to provide access to it for their

students. While institutions give away, arguably, the most valuable IP in research managers fret about the IPR in teaching and learning materials and worry about how to manage it. In some respects institutional IPR policy currently resembles a ‘house of cards’; if we tinker with one part the fear is that whole edifice might come apart, it is no wonder some managers decide the best course of action is to do nothing.

6. Yet things are changing, the continued development of e-learning methods has made institutions (and those who work within them) de facto digital publishers – making them subject to the rights and obligations imposed by law. This technology exposes to a more public view activities and attitudes regarding the use of learning resources that have hitherto been invisible (and sometimes illegal) in traditional face-to-face teaching, but which are all subject to the law of copyright and other IPR laws.
7. To make realistic proposals for dealing with the IPR in teaching and learning materials we need to situate them in a context of change and consider how the TrustDR proposals may fit into such an environment in a useful way.
8. A few real examples<sup>1</sup> of IPR mistakes will help to show the existing confusion and some of the associated risks (the risks in italics in the brackets) and the need for change to a more organised approach:
  - a. An institution claims ownership in all student work by requiring students to sign a contract on registration. In most cases this is not likely to be legally enforceable and as such would constitute an unfair contract, and could be overturned by a student. (*Reputation Damage, Opportunity Cost, Legal Fees, Damages*)
  - b. An institution assigns the copyright in teaching and learning materials back to the academics – in the mistaken belief that it exonerates the university from any responsibility and risk that might be connected to the contents of the materials. (*Reputation Damage, Opportunity Cost, Legal Fees, Damages*)
  - c. An institution repeatedly ignored notices from a licensing agency that their students and staff were copying works administered by the agency and hence they were required to take out an institutional subscription. Even after being presented with the evidence collected by an undercover agent the institution refused to join the licence scheme. The institution was prosecuted with the principal being brought to court. (*Reputation Damage, Legal Costs, Fines*)
  - d. Several UK institutions illegally used images taken from some major commercial image companies. The image companies sent letters with invoices demanding payment to the institutions – they paid.
  - e. Several large projects (i.e. over £500K) to create publicly shareable learning materials have been unable to deliver due to mistakes in their

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<sup>1</sup> Based on real instances – anonymised to protect the sources.

IPR management (*Reputation Cost, Opportunity Costs, Breaking Funding Contract Term – possible clawback*)

- f. An institution was hosting a quality inspection from a government agency that required access to verify the quality of online learning resources. On trying to access the online journals of an academic publisher the screen produced a message that the service to the university had been suspended due to a breach of the agreed licence (*Reputation Cost, Disruption, Opportunity Cost*)

## **1.2 Educational Perspectives – understanding the ‘business’ of e-learning**

1. The mainstream education system is moving to use technologies (Learning Objects, Learning Design and Digital Repositories) more slowly than those sectors that have already exploited them most intensively (industrial training, distance learning, the military). An important point to bear in mind when considering any cost-benefit analysis is that the ‘product’ of mainstream education is primarily certified learning that occurs through a process of face to face and, increasingly, ‘blended’ learning. To date in-house learning materials have not had the high media production values and intensive pedagogic design work embedded in them that these early adopters traditionally have in their materials. As we explain below the ‘value-added’ in institutions does not come primarily from the content but from the academic processes.
2. An important change in the last two decades has been the rapid increase in student numbers (with little in extra funding), from far more diverse academic and social backgrounds, who need more flexible ways of learning that can be made adaptable to their needs. This largely unfunded increase in student numbers has removed any spare capacity in the system (a process that can not be realistically repeated). Not surprisingly managers, educationalists and politicians are looking to technology to help in dealing with this problem.
3. In most HE and FE institutions income derived from teaching-related activities provides the largest single source of institutional income, so it is reasonable to expect that improvements in this area could produce benefits in terms of efficiency, quality and sustainability. Teaching needs to be seen as the core business activity in these institutions and treated accordingly, this has clear implications in relation to the management of teaching and learning materials (which historically have not been managed centrally at an institutional level).
4. The TrustDR approach in providing practical solutions to managing the IPR in learning materials has been to adopt a holistic ‘systems’ approach to understand how educational institutions currently use their materials and how they might use them in the future – as institutions slowly swing away from traditional approaches to delivering teaching

5. The TrustDR analysis of current educational practice and the need for change has been incorporated into a QAA publication that provides guidance on adopting flexible delivery methods, a major target for the use of e-learning technologies – this is available in the Appendix of this pack. A key outcome of our analysis was that the ‘value’ in our educational systems is in the processes involved in teaching and learning in institutions – not in the content or ‘stuff’.
6. Obviously, information resources and content in our institutions are important but without good process it is useless and this has important ramifications for how we manage, value, and use that content. In addition, we suggest it is important to manage content in such a way that it acknowledges and supports process change in institutions.
7. The emergence of the technologies that this project has been considering (Learning Objects, Learning Design and Digital Repositories) has proved to highlight important aspects of current practice that also indicate directions for change:
  - a. There is little evidence to show the academics share or reuse each others teaching materials
  - b. They find sharing and reuse difficult because their pedagogic strategy is closely wrapped up in their own materials
  - c. Abstracting and sharing pedagogic strategy is not usual or easy for academics
  - d. There is no tradition of institutionally managed shared collections of teaching materials
8. These technologies have, effectively, made visible those aspects of traditional pedagogic practice in institutions that have tended to be ignored in the discourse surrounding the implementation of e-learning. The majority of much teaching practice in the mainstream might be characterised as individualised and isolated.
9. Two influential writers on the subject of improving tertiary teaching quality, Ramsden (1992) and Laurillard (2002), are clear about the direction of future change – the move from teaching as an individual to team teaching. This is the fundamental shift that needs to occur to make the most of e-learning technology. To date, the strength of tradition accounts for the lack of progress that has been made by e-learning in institutions – as a result the traditional organisation of academic work has been projected onto the technologies.
10. These technologies will work best when the academic workplace is reorganised to make use of them. Yet such a change in the academic workplace poses a real challenge not only for academics but also for their managers.
11. So what is the managerial class in the tertiary sector to do? Well, we could all do a lot worse than read the guidance offered by Ramsden and Laurillard to understanding, improving and managing teaching which is based essentially

on a 'systems' approach. They should definitely use the CAMEL project tools that have been introduced earlier in this pack and take a collaborative approach to the problem with managers from other institutions – a great source of support and assistance in our opinion. As regards managing the IPR in teaching and learning materials, managers need to be aware that it acts as a very efficient 'lightening conductor' that bring to the surface issues concerning ownership, power, control and status in their institutions. Approached sensibly it can be a useful enabler for change.

12. The reality of e-learning is that institutions have remained remarkably resistant to technology induced change – instead they have imposed their traditional organisation of work onto the uses of the technologies. Change is likely to continue to be evolutionary in this respect, rather than revolutionary, although more rapid development is happening at the 'edges' of institutions and in more specialised subjects that can see a real and rapid 'payback'.
13. As a conceptual tool to help devise realistic IPR policy in a context of change we provide a continuum of 'process change' that describes e-learning practice changing from the individual teaching model at one end along through increasingly explicit institutional ownership and management towards that of a typical distance learning provider at the other. On to this continuum we have mapped a number of IPR policy regimes that reflect the underlying business models.
14. Those tasked with shifting mainstream educational practice and creating a supporting IPR framework face a well-known problem that is faced by all those who are working towards a paradigm shift. As Thomas Kuhn (1996) observed in connection with the history of the development of science, tradition, dominant groups and vested interests can delay and obstruct the adoption and dissemination of new knowledge.
15. Practical solutions need a basic understanding of IPR law in the digital realm, a good understanding of your e-learning 'business' and perhaps most importantly, the ability to negotiate with your stakeholders.

### **1.3 Information & Resource Management Perspectives**

1. The best way of making sense of and managing IPR in e-learning materials is really to view it as a subset of an institutional information management strategy.
2. In this context institutions are still coming to terms with managing the large amount of digital data that they are producing. Traditionally the creation and management of teaching and learning materials in institutions has not been centrally controlled or supported – it has been left to individual academics and departments. This pattern has been projected onto online learning where materials are stored in course 'silos' and not shared across an institution.

3. The creation of an institutional repository signals a change in the model of pedagogy that involves a greater institutional role in the management of learning materials. This in turn strongly implies a move away from the dominant individual model of teaching to a team teaching approach.
4. An institutional digital repository of learning materials might usefully be considered as a form of digital library; if so, then it should share these characteristics with a traditional library:
  - a. permanent
  - b. managed
  - c. quality controlled
5. A collection of learning objects and learning materials represents a similar information management task to that of collection management in a library, a museum or an archive: to function it requires human input and skills.
6. Metadata plays an important role in repositories. As in traditional library cataloguing and indexing activities the right choice of metadata terms to describe a resource can support effective and efficient browsing, searching and retrieval activities in a collection of digital learning materials.
7. To be effective for technical and human interoperability the metadata created must relate to a shared and predefined standard. The careful choice of the terms to include in metadata can add value to a collection, for instance the inclusion of course codes makes cross-indexing and searching possible across different bodies of information held by an institution. Metadata quality can have a dramatic impact on the performance and viability of institutional repositories.
8. Leaving the creation of metadata solely to busy academics has been shown to be an unviable option, to be sustainable it needs the input of skilled and trained cataloguers.
9. Metadata is also important in making it possible to describe and transmit legal information connected to learning objects in both human and machine-readable formats. Much of the 'basic' metadata needed for a repository to function effectively is also needed manage the legal rights in the learning materials – thus legal considerations should be a useful driver to ensure that sufficient and accurate metadata is created, this is crucial not just for basic resource management but for effective DRM.
10. There is no technical panacea to entirely replace humans in the metadata workflow, although the appropriate use of technology can certainly help reduce the burden. The future will be a mixture of human and technical agents operating and maintaining a repository. To achieve this there needs to be a combined approach that involves collaboration between information science, computer science and librarians.

11. IPR and DRM in learning materials are often identified with the use of technology. The reality is rather different. Simple lo-tech and no-tech approaches might be best. If you can't prove your rights or ownership then no amount of technology will help – clear policy formulation, effective procedures and simple record keeping and administration, are the basic foundation for successful DRM in any sphere. Linked to a clear expression of your rights in the materials this might be enough. Accurate & sufficient metadata is a key way to support this in the digital realm.
  
12. We should see the introduction of institutional digital repositories of learning materials as part of a wider and more systematic 'retooling' of educational systems in order to cope with new demands for educational provision that are being made in our society. As in previous eras of industrial and social change some jobs change or disappear while others expand and new ones are created. It should not be a surprise that there is an increase in people concerned with information management and metadata as educational institutions swing (albeit slowly) towards a different pedagogic model that emphasises team work and materials sharing.

#### **1.4 The Current State of E-Learning**

The major challenge our institutions and educational systems are facing is in being required to teach greater numbers of students from increasingly diverse backgrounds, in more flexible ways within fixed resources, while being increasingly called to account for quality of service. The introduction of e-learning technologies has not solved this problem. But it has served to highlight the tenacity of traditional ways of delivering education - where existing structures and patterns of behaviour have been projected onto the new technologies, thus preventing their fullest utilisation.

The arrival of technologies associated with Learning Objects and the IMS Learning Design specification, together with their related concepts and methods, pose a timely opportunity to those seeking to find practical solutions to this challenge. They also represent a different educational philosophy – where organised design activities and reuse of content components plays a central role in supporting large-scale sustainable delivery of flexible learning opportunities. This requires a move away from the current dominant model of teaching, that of the individual subject specialist, to a team teaching model, which is slowly beginning to happen. This simple, but profound, change in how teaching is conducted and organised is really the critical enabling factor in using progressive teaching methods and technology to meet our educational challenges. It represents a different division of labour, with the involvement of a multidisciplinary team. In this process, traditional orthodoxies about the structure and organisation of our institutions and the professional cultures of those working in them are being challenged. In return, some of the conventions and doctrines from the worlds of learning technologies and educational research are also being called in to question.

To date the impact of networked e-learning in our educational systems has not lived up to expectations. A key reason for this has been the equation of e-learning with ‘things’ (such as virtual learning environments) and ‘stuff’ (learning materials). What has been notably absent until recently has been a discussion about ‘process’, Diana Laurillard is clear about the importance of this, and in her influential book *Rethinking University Teaching* states:

“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”.

The collapse of the UK’s first government-backed virtual university (the UK e-U) in 2004 helped to highlight some of the simplistic assumptions that have, and to an extent continue, to dominate thinking in this area; notably an unrealistic and elitist model of learning and learners. We do not think that an effective approach to networked e-learning is one that simply advocates the use of technologies and methods imported from the industrial and military training sectors. Nor do we think that the experience of the early adopters in the distance learning sectors can be projected onto the mainstream educational institutions. The reason is simple, mainstream education does not function in the same way as these sectors, the structure of the institutions and the cultures of those working in them are quite different and their missions are poles apart. Teaching and learning in the mainstream is a far more ‘messy’, less controlled and contingent enterprise than in industry, the military and distance learning. And the mainstream is far more affected by changing social and political agendas, as Prof Terry Mayes (1995) pointed out over 10 years ago out in a thought-provoking article called *Learning Technology and Groundhog Day*:

“Thus, there are good reasons for supposing that today's learning technology will this time lead to radical change in education. Yet doubts remain. For one thing education is a social and political system, and the checks and balances that keep the system working may not be shifted by any technology. Secondly, current learning technology may not be well-matched to real user needs. Here we ask, not how powerful is the technology, but where is the learning need?”

The reality of e-learning to date is that our mainstream institutions have remained remarkably resistant to technology induced change. As Norm Friesian (2006) in Canada has observed the domains of education and learning can be understood as being especially local, heterogeneous and contextual in ways that few other organized activities are. As a result of a failure to understand this local and situated nature of education the various proponents of learning technology have been ineffective in generating change and are likely to continue to be so until they actually engage with these issues.

## 1.5 Taking a Systematic Approach to E-learning and IPR

If we want to use technology in our ‘business’ of education then we need to understand what it is we are trying to achieve and this is not primarily a technical problem. To date, e-learning developments have been dominated by individual bottom-up initiatives that are *innovations* and reflect the ad hoc, informal and loosely coupled structure of our institutions. This has prevented e-learning ‘breaking through’ to make real changes that are sustainable *transformations*, primarily because senior management have not been engaged in this process. Similarly, senior management have not engaged with the problem area of IPR in e-learning. For there to be progress on both fronts senior management need to be involved which we argue makes IPR a fundamental component in moving e-learning to a more coherent and sustainable basis in our institutions from its current position.

### 1.5.1 Team Teaching and IPR

The analysis and suggestions made by two very influential writers, Diana Laurillard in *Rethinking University Teaching* and Paul Ramsden in *Learning to Teach in Higher Education*, provide a more organised and systematic vision of teaching and learning upon which to base a realistic use of learning technology. These writers provide much sound and challenging advice for institutional managers, administrators and teachers. But their most important message is the need to move away from a mode of teaching that sees teachers continuing to operate in comparative isolation from each other towards a team teaching model. This simple, but fundamental, change in the academic workplace is the one that is also needed not just to make best use of technology but to also deliver improvements in quality, efficiency and sustainability – it is also the most sensitive change to introduce. The change is already happening. This is where we think that the development of institutional IPR policy can facilitate positive development. It forces us to consider what the underlying business model is, what are the important relationships we want to strengthen and how we can express this through policy.

The change from individual teaching to team teaching not only makes the use of these technologies more viable but also makes it possible to begin to manage the IPR in the learning materials. The current model of teaching in e-learning means that courses in VLEs (Virtual learning Environments) are currently materials ‘silos’ where no one apart from the individual teacher knows what is in there. It is impossible to manage the IPR in teaching and learning materials without having such basic administrative information as who is using what materials and whom they are using them with, where they come from and what they contain. Indeed, without such basic information it is impossible to find the materials in order to reuse and share them. So, we have a useful synergy here –the same model of teaching is needed to make best use of the technology and also to allow access to the administrative information that is needed to manage the IPR. The degree of organised coherence in the team teaching activities is also closely related to our ability to manage the IPR in the teaching and learning materials. For these reasons it makes sense to us to deliberately link our IPR development activities to changes in the model of teaching in our institutions in order to get the most benefit.

In producing this pack we have deliberately located our discussions for managing IPR in this context of ‘process change’ and sought to find ways that our solutions can support this. We are also quite clear that realistic IPR solutions in e-learning can only be arrived at through the involvement and leadership of senior management in our institutions. This is going to need support from national bodies like funding councils and JISC.

## **1.6 E-Learning, Money and Efficiency**

As Carol Twigg (2005) in the USA has observed e-learning has tended to remain as a ‘bolt-on’ to existing institutional structures and processes and is therefore unable to realise its full potential. Many researchers and practitioners are coming to the conclusion that the real challenge in successfully implementing e-learning is changing the structures and cultures of our institutions so that they can effectively implement e-learning and flexible learning (Collis & Moonen, 2004) (van der Klink & Jochems, 2004). This entails taking a systematic approach to the problem of incorporating technology usefully into our educational institutions, such an approach is relatively new in mainstream education but by necessity has long been the norm in specialised open learning and vocational training providers. In an influential book entitled *Integrated E-Learning: implications for pedagogy, technology and organisation*, (Jochems, van Merriënboer, and Koper, 2004) the authors make the case for regarding the introduction of e-learning as not merely an addition to the existing system of instruction but as something that requires a fundamental redesign of the educational system. They envisage that this redesign has to address the pedagogical, organisational and technological aspects in order to solve the educational problem of providing high quality education, to a greater number of students from more diverse backgrounds, in more flexible ways with limited resources.

The real, and seldom articulated, value proposition in adopting e-learning technologies to support educational developments (such as flexible learning) is that it requires much more time and effort to be spent in the analysis and design phase<sup>2</sup> to be cost effective. This is a distinctive break with existing practice and custom, which continues to project traditional methods and customs of course development and delivery onto the technologies – thereby preventing their effective use. As in all mass production systems this is the underlying organisation of work that makes the efficient use of the technology – it is the kind of approach adopted by distance learning institutions. To some degree this is the kind of approach that is also needed to support a mass tertiary education system. Some may be uncomfortable with the industrial metaphors here but we see the likely positive outcome being a synthesis of traditional approaches and progressive educational methods supported by technology. We do not subscribe to the notion of a lost ‘golden age in’ tertiary education nor do we accept the vociferous and often thinly evidenced claims of the e-learning industry lobby either. But to move forward we do need to break the current impasse. Progress will be made by those institutions (or their component parts) and other organisations that are

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<sup>2</sup> A common and useful model of course development in industrial training and open learning is ADDIE (Analysis, Design, Development, Implementation, Evaluation)

able to overcome the problem of reorganising the academic workplace. We already have more than enough technology to support this.

## **1.7 A Critique of Learning Objects, Learning Design and Digital Repositories**

These technologies, which are central to this project and IPR in e-learning materials, can be subjected to these simple but fundamental critiques:

**Learning Objects** – predicated on lecturers sharing and reusing each other's learning materials and in a separation of context from pedagogic design. Uses a model that derives strongly from the aviation and military training sectors and the methods of object oriented programming

**Critique:** There is little tradition of lecturers doing this, they tend to learn to teach their subjects in the act of creating their own materials (their 'stuff'), they do not articulate their pedagogic designs in an abstract manner or share them. Thus, they are deeply attached to their own 'stuff' and their pedagogy is deeply embedded in that and hence not very transferable. This is not surprising, the existing academic workforce simply do not have these types of instructional design skills. To clarify; academics don't need or acquire these skills because they teach in a face-to-face mode; their teaching is literally 'embedded' in the bricks and mortar of the institution (Koper, 2003). To use a medical analogy they are the overworked 'general practitioners' of teaching – combining a host of other duties and responsibilities. In contrast the profession of instructional design for distance learning and industrial training is relatively narrow, but deeper, and to continue the medical analogy they are more like consultant specialists.

**Learning Design** – predicated on being able to abstract and share pedagogic designs in such a way that others can reuse them. An area of research and development that has been particularly advanced by the open learning sector.

**Critique:** Assumes lecturers already can do this – the reality is rather different. Many teachers do not possess a vocabulary for articulating and sharing their pedagogic strategies and designs with others, particularly beyond their cognate discipline areas (Beetham 2004).

**Institutional Repositories of Digital Learning Materials** – predicated on the evident good sense of providing an institutional home for learning materials in order to support sharing and reuse.

**Critique:** There is no tradition of the institutional management of teaching and learning materials in this manner. Instead each lecturer tends to keep their own materials in their own way, sharing and reuse is ad hoc and sporadic across the institution.

Our critique of the proposed uses of these technologies is based on a sound understanding of existing patterns of organisational structures and academic work in our institutions and the barriers they present to the effective uses of technology in the service of education. The current situation might best be described as a kind of 'stasis' – where change cannot happen because of opposing forces cancelling each other out.

This also manifests itself in current institutional policy for IPR in teaching and learning materials, it is often non-existent, incorrect and contradictory – reflecting the lack of a clear underlying business model.

To date e-learning developments have been dominated by individual bottom-up initiatives that reflect the ad hoc, informal and loosely coupled structure of our institutions. This has prevented e-learning ‘breaking through’ to make real changes that are sustainable, primarily because senior management have not been engaged in this process. Similarly, senior management have not engaged with the problem area of IPR in e-learning. For there to be progress on both fronts senior management need to be involved which we argue makes IPR a fundamental component in moving e-learning to a more coherent and sustainable basis in our institutions from its current position.

## **1.8 A Practical Approach**

Our approach to this area is one that is intended to be practical, critical and creative, and is informed by a systematic and holistic view of how our institutions deliver education, now and in the future. We also aim to take a realistic and educationally sound understanding of the role of learning materials within this process.

This area is subject to all the laws covering IPR in our society and, potentially, other laws including those of data protection and defamation. But in this pack we shall be concentrating most of our attention on the laws covering copyright, the moral rights of authors, the European database right, and contract law involved in the use of any licences.

As a result of traditional academic culture, the managers of educational institutions in the UK are often ill informed, over cautious and risk averse in this area, they also preside over some very confused IPR regimes. For instance, universities have by ‘custom and practice’ allowed academics to retain the copyright in their work and give the copyright in research that they have produced to learned journal publishers. 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? Employment and copyright law are not especially the problem here, they both allow for alternative agreements to be reached between the authors and employers and even publishers (see the JISC/SURF Licence To Publish<sup>3</sup>). What is an issue, however, is whether the parties can work out what they want to do.

The answers to these thorny questions, we suggest, lie in understanding the ‘business’ as in any other field of activity where IPR is important. From this we can deduce what

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<sup>3</sup> <http://copyrighttoolbox.surf.nl/copyrighttoolbox/authors/licence/>



is important and what is valuable and, perhaps most importantly, what might constitute a risk. Although in this pack we are primarily concerned with teaching materials if we ‘look over the fence’ into the research domain we may observe that the rise of open access institutional research repositories and their accompanying IPR regimes and management methods are a good example of what ‘understanding the business’ can achieve. We don’t advocate the exact same approach for teaching materials – they are driven by a very different business model and have very different IPR requirements, the need for open access to our materials is not a major requirement. The business model for teaching materials is in the process of evolving from the traditional individual use of materials to a more team based model of shared teaching materials. Whereas teaching resources generated by staff were hardly ever managed by institutions now the introduction into mainstream education of repositories and ideas for reuse and shared learning designs and learning materials are driving a move towards institutional management. This is set to increase, as repositories are increasingly integrated into VLEs (Virtual Learning Environments) a digital resource may appear in many online courses but actually reside in a central repository.

This is all part of a move to a different style of pedagogy that also implies different working practices and relations between employees and employers. This change, the ‘political economy of e-learning’, is still in its very early days and has hardly been discussed, how the legal aspects of this change are handled relating to the ownership and management of learning materials is likely to be crucial. In this respect, we shall be advocating to institutional managers a philosophy of ‘only take what you need’ in relation to the ownership and control of learning materials created by their staff. We shall be suggesting that staff are automatically licensed back the right to use their own materials elsewhere for any purpose, unless they are subject to any special agreements – which should be kept to a bare minimum. To understand the rationale for this we need to consider where the real value is in our institutional educational systems – it is not especially in the learning materials – it lies within the ‘process’ of education. Our institutions are not ‘teach yourself’ publishers - the value for the student (and society) is the experience and the certification of the learning achieved. Staff should also be able to get public attribution for any materials they have contributed to a repository, something well within the current abilities of the technologies.

Where learning materials are held to be valuable (there is a useful discussion of value in the main body of the development pack) then it is possible to apply a suitable IPR regime to them, as is increasingly the case for those parts of institutions engaged in wholly distance learning. Notions of value are also related to the development of the underlying institutional e-learning business models - however, these are not currently clearly understood or articulated (HEFCE, 2006). A useful description of changing business models is available in Table 1 in the main development pack.

DRM for institutional repositories of learning materials should be characterised by a ‘systems’ approach, for us it is not primarily a technical problem, the system components break down as shown below:

Digital ..... (Technology & Use)  
Rights .....(Legal & Social)



## Management .....(Policy & Culture)

To support a systematic approach that we advocate we shall be suggesting ways to help you to do the following:

- Understand and analyse your own situation
- Develop clear policies for IPR in learning materials to fit your needs
- Make use of standard policies and licences where possible to contain costs and make admin easier
- Ensure the management of IPR in learning materials is coordinated by the library service
- Use the *TrustDR Framework* and associated tools for understanding and managing the IPR in e-learning
- Use the *TrustDR Organisational Model* and associated tools to understand your institutional e-learning environment
- Adapt and use advocacy materials for change
- Use and develop training and guidance materials together with links to sources of further information
- Adapt and use analysis and audit tools

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