Addressing Regulatory Issues Arising Within Cross-national, Collaborative eLearning Development Programmes

Caroline Windrum and Charles Crook

University of Nottingham

caroline.windrum@nottingham.ac.uk, charles.crook@nottingham.ac.uk

ABSTRACT

It is now widely accepted that all sectors of education will operate in increasingly regulated environments. The growth of eLearning provision in higher education presents an interesting challenge to the established frameworks and practices surrounding two of these areas: Quality Assurance and Intellectual Property Rights. Taken together, they present diverse demands upon those who wish to embark upon eLearning developments, particularly in cross-national, collaborative arenas. Using the example of the HEFCE funded *eChina~UK* programme, we examine how regulatory issues were experienced by the designers, and consider the varieties of solution that they discovered for dealing with them. We also suggest an approach for thinking more creatively about the opportunities for usefully deploying regulatory considerations to aid the educational materials design process.

Keywords

eLearning, educational design, regulation, Quality Assurance, Intellectual Property

INTRODUCTION

Internationally, there is an 'emergent cultural value… which is creating a new social phenomenon… devoted to quality' (Strathern, 1997, 305). The colonisation by new personnel charged with formalising systems and mechanisms of audit and control permeates all sectors of education. Although procedures may vary cross-nationally (Middlehurst, 2003), a fundamental premise for quality is bound up with assuring others, particularly learners, that institutions have realised their educational undertakings with respect to system and programme design, programme delivery, support services etc. Thus, quality assurance (QA) procedures have been traditionally applied as (a) outcome assurance - whereby the knowledge and skills associated with qualifications are specified; or as (b) process assurance - involving consideration of the pedagogic practices that underpin some course of study.

The exercise of regulation around intellectual property (IP) in education fulfils a different function. It concerns the rights issues arising from authorship and ownership of materials, and the access to and use of those materials by others. The principal driver behind IP considerations relates to society's requirement to recognise and reward individuals for creating and disseminating new knowledge through their works. The cross-national, collaborative eLearning course design process therefore demands the cross-border circulation of media materials. These transfers may be subject to increased monitoring and control at local, institutional and national levels.

The growth of eLearning provision presents an interesting challenge to the established regulatory frameworks within education. This challenge involves at least the following components: (1) eLearning involves an infrastructure of presentation and a set of learning expectations that are different from those arising within conventional face-to-face teaching. Consequently the QA procedures well established in that context will need to be modified. Equally, eLearning often involves multi-media forms of presentation which have associated rights issues which need to be resolved and resourced to protect the integrity of the programme. (2) eLearning developers may be relatively mobile and freelance. Where developers are less closely attached to the institution for which they are working, then they are less able to influence quality and rights issues associated with the subsequent maintenance and delivery of their course material. (3) eLearning may readily be developed within collaborative and cross-national teams – particularly where this arrangement attracts the advantages of distributed expertise (e.g., in relation to disciplinary domains of language and culture). This may be expected to occur more frequently as the products of development are increasingly regarded as mobile and modular. Similarly, there will be a demand to make visible the QA and IPR systems that are associated with the different

national contexts and legal jurisdictions within the materials might be used in order for parties to assess the nature of alignment between their collaborative contexts (Mok, 2003).

CONTEXT

The HEFCE-sponsored *eChina~UK* programme provides a useful case study within which to explore these issues. The primary aim of the programme was to support cross-national teams in the collaborative creation of innovative materials for use in Chinese online courses, with the ultimate purpose of improving student learning. To place this development in its wider context, the Ministry of Education in China issued licences to 68 institutions to develop eLearning/ networked learning activities in 1998. The four materials development projects involved 3 of those 68 Chinese universities:

1. Tsinghua University and Cambridge University/ Open University

2. Beijing Normal University and WUN (Manchester, Sheffield, Bristol, Southampton Universities)

3. Beijing Normal University and University of Nottingham

4. Beijing Foreign Studies University and University of Nottingham

The development teams varied in size and constituency. On the British side, academics were drawn from subject disciplines in the main, but were supported to varying extents by technical design personnel who were often linked to central support units within the universities. On the Chinese side, staff were drawn from the online/ networked institutes or schools (project directors, tutors, technical staff and developers) together with a combination of academics 'recruited' from the nominated subject areas across the universities. The programme involved a heterogeneous group of eLearning projects addressing content areas in English for Academic Practice, General Pedagogy, Educational Psychology, Educational Technology, and English language learning.

The designers from the respective partnering institutions met for the first time in 2002. The initial pilot phase ran for three years. Inevitably, it took time to develop working relationships with each other. As is common within eLearning development, not all team members on the British, and to a lesser extent on the Chinese side, regarded themselves as having a sustained connection to the materials which they were helping to develop.

APPROACH

We report here our analysis of the collective experience of these projects with respect to managing the demands of regulatory issues. The current research was conducted as part of an associated project research, also funded by HEFCE, and conducted in collaboration with Beijing Foreign Studies University. A series of interviews with various team members across all of the projects took place in both Britain and China during the course of the development. The aim of this strand of the research work was to consider the role of the regulatory environment in terms of how it impinged upon or factored into the design considerations of the respective teams.

FINDINGS

In this section we reflect upon the design teams' understanding of, and the strategies they adopted, in relation to the twin regulatory issues. The interplay between the three levels of policy dimensions, institutional practices and design team experiences provide a useful vehicle for characterising the enterprise. We argue that this approach is a useful one given that each ultimately constrains the ways in which the materials were conceived, designed, developed, evaluated, and how they will ultimately be used.

Quality Assurance

Chinese academics involved in the programme were sensitive to the role of campus-based quality regulations as a vehicle for reform within higher education since the late 1990s (for overview, see, OCED, 2003, pp.19-27). However, fewer were readily conversant with the national policy dimensions in relation to eLearning in China, although this was less the case for the institutional senior managers. Key members were involved at both institutional and national levels in contributing to the on-going debates around regulatory policy and implementation. Nonetheless, there was a general appreciation that policy tends to follow practice, especially in areas of innovation. This is a reasonable point given that innovations are required to prove their effectiveness and worthiness before being adopted more widely. Hence it was pointed out that the MoE policy directions for eLearning had necessarily to react to problems that were identified during the national eLearning institute review cycles. This is borne out in an examination of the key QA policy documents issued by the MOE (MoE, 2001, 2002) whose aim is to deliver the national educational reform plan (State Council, 1999).

Yet, policy frameworks are interpreted and implemented within local institutional contexts: the review cycle provides the mechanism of quality control – and central oversight - of this process (Huang, 2004). Hence, arrangements for online programmes have been continually redefined and increasingly codified in light of the experiences of the 68 online institutes in China. The identification and extension of rules and regulations in light of practice was in turn, however, felt to thwart some designers' ambitions for their programmes: "*[eLearning] Curriculum design… does not enjoy much flexibility since it is obliged to follow tertiary level curriculum design principles issued by the MoE.*" (Chinese view). Indeed, there was at least one occasion where a significant amount of drafted material by members of one of the British teams had to be withdrawn as the anticipated time required to complete the tasks was felt to exceed the permitted numbers of hours learners were to spend on the particular unit. The requisite time specification as with many other aspects of programme development was laid down at State rather than institutional level.

A more vital issue surrounded the status and recognition attached to the materials from an institutional and designer perspective. The *eChina~UK* programme is viewed as high-profile, and therefore the potential for enhancing the external validity of the proposed programmes into which the new materials would be incorporated was apparent. As highlighted by one Chinese colleague "*Public scepticism about web-based education*" had resulted in a strong need to demonstrate the "*external*" value of what was on offer to learners. The nature of the cross-national collaboration was therefore judged to add to this evidence base for quality. Materials were anticipated as credibly aligning the foundation for desirable knowledge and skills acquisition by learners to new, valued pedagogical models and experiences. This is not to suggest that ideas around design or pedagogy were not hotly contested or frustrations felt within certain Sino-UK teams at various points in time, but that the success of the whole programme owed much to the depth and rigour of this debate.

In terms of the routine practices around the design process, the teams were less concerned with formally embracing institutional design guidance into their activities, even if such was available. The teams seemed to evolve an internal consensus of what constituted 'good' within their particular project though use was varyingly made of the pilot evaluations and feedback, internal review and critique and even an editorial board. In terms of the ultimate value and impact of the materials, however, external validation will likely outweigh these forms of internal validation. How learners come to 'trust' the promise of the material's quality threshold was considered the final arbiter.

Intellectual Property Rights

Designers could more readily identify with the quality assurance agenda as it had a sense of immediacy and impact upon teaching and learning. IPR is a little more remote and was perceived as being bound up with institutional reputations and operations in the main. Given that most designers freely admitted to having a limited understanding of IPR it is not surprising that it was viewed as the more complex regulatory issue and one that was ponderous for designers on both Chinese and British sides.

The IPR national policy environment in China is undergoing major transformation. Recent national policies in relation to higher education have set explicit ambitions to establish mechanisms and systems to offer IP guidance and advice to universities along international lines, for the purpose of aiding economic development and innovation (MoE, 2004). The growth in regulation obviously has significant resource implications in developing these forms of function in higher education and will take time to evolve. Under the Chinese legal code, academics own their own IP (SIPO, 2001), whereas for the British teams, generally speaking, the institution owns the IPR created in the course of their employment (OPSI, 2001). How was this regarded in practice? Proprietorial attitudes seemed to be deeply engrained in Chinese academic practices, particularly in regard to published works where there was a strong belief in ownership. It was not dissimilar to UK views, where under customary practices, universities traditionally waive their rights of ownership in the field of academic publication as an incentive to staff.

Within the institutional contexts, IPR issues were found deeply perplexing particularly at the start of the programme when there were heightened sensitivities around the need to establish collaborative project agreements. In some instances, issues around formal institutional agreements were not resolved effectively, and draft documents fell into abeyance. However, the teams uniformly did not to let cross-institutional IP issues hinder innovation and development. Designers preferred to rely upon informal, academic codes of practice to underpin developments in a spirit of mutual trust and co-operation.

Few designers on either side expressed a direct interest in IPR, but moreover, hardly any made the explicit link between issues of IPR in the materials and their ultimate exploitation by learners. IPR was viewed more with a production-led mindset of who owned what. Yet it was evident through discussions that various explicit choices had been made with reference to IPR considerations, though the designers did not articulate it in this manner. A

number of informants cited instances where third party works were avoided due to concerns over copyright, and in another instance, the option of CD-Rom publication for some materials was rejected for fear of piracy. Thus decisions involving the selection of materials to be incorporated into multi-media formats, the forms of media that were preferred for specific purposes, and the use of technical measures to limit access to materials were identified across each of the projects.

Summary

As teams reflected on their experience of cross-national, collaborative eLearning development, two impressions were clearly conveyed. (1) The collaborations had been characterised by much enthusiasm and a deep commitment to their shared ambitions. Although some concerns were expressed about the pace of development displayed by partners, these seem to have been tolerated admirably. (2) The regulatory formalities of QA and IPR proved frustrating elements within the process of development – though the timing, visibility and engagements around these issues varied markedly across the programme. We infer the following relationship between these two observations. The teams saw themselves as innovators. Indeed, the ethos of the *eChina~UK* programme had very much framed these projects as needing to explore modes of eLearning development at an uncertain cultural boundary. Accordingly there was a feeling of incompatibility between orienting towards regulatory constraints and the aspiration to explore and innovate.

In resolving a tension here, we suggest that it is important to conceptualise both IPR and QA formulations as "technologies" – in the important sense that technologies always serve to transform implicit practices into explicit procedures (sometimes with the ambition of ultimate mechanisation of those practices as "a" technology). Teams tended to voice reservations about the ease with which what they were doing could be rendered in the various formalisms of these regulatory technologies.

IMPLICATIONS

We develop the view here that there is an inevitable ambivalence towards the demands of such regulation. But, in the end, regulatory formalisms must be seen as *both* constraint and affordance. We suggest it is important to concentrate on identifying the ways in which "rendering practices explicit" can be a helpful support for the innovations of collaborative eLearning development.

We advance the following taxonomies in relation to both QA and IPR based upon our reflections of the team developers' reported experiences.

Quality Assurance

At the heart of the materials development enterprise there must be a bounded object: an integrated set of resources (Frydenberg, 2002). Admittedly, a range of other prompts, goals and scaffolds which are defined and managed from elsewhere ultimately mediate the students' engagement with such materials. In short, course materials are in some sense "delivered", even if the discourse of "autonomy" can distract us from noticing the designs that are needed for this to take place. Nonetheless, what we propose here is a taxonomy for developers that avoids reference to "quality" formulations but which, nevertheless, concentrates on the demands of making accessible principles underlying developers' teaching and learning designs.

First, there is a need for explicitness in regard to "prescribing the users". This identifies a recurring problem for some of our *eChina~UK* developers whereby one party in the cross-national development was unable to make secure assumptions about what the students who would use their materials already knew. That is, there was a difficulty of specifying the knowledge and skills that were associated with particular qualifications for course entry, with particular academic histories. This applied to the content of student's knowledge as well as to uncertainties about the styles of learning that their academic histories had equipped them with.

Second, there is a need for explicitness in "prescribing the context". This is close to conventional meanings of process QA. Developers were often uncertain about existing demands on teaching and learning experiences that were made by institutions receiving the materials to be developed. Too often the framework of auditing applied to the institutional context was not requested and/ or available for reference.

Third, there is a need for explicitness in "prescribing the trajectory". This refers to the manner in which a course design can make explicit the details of its maintenance and delivery. eLearning development is often "front loaded" in the sense that the main creative work can be easily seen as completed when the materials are written and mounted. Yet *eChina~UK* teams were typically conscious of the extent to which their materials depended on certain conditions of delivery and support – later in their delivery. There needs to be a framework to support the making explicit of this trajectory.

Intellectual Property Rights

The creation of course content sits alongside a range of other resources within the final teaching and learning enterprise. However, designers typically emphasised the notion of completeness of materials. This form of "stability" in design is understandable given the substantial up-front costs required to undertake a process of materials development and given that the original designers may not be committed to these materials on an ongoing basis.

Given this aspect of design, it is arguable, that the IP use and legacy dimensions of educational materials are best served by accompanying records or traces of copyright elements in order to avoid rights infringement and to ensure proper acknowledgement of authors etc. (McCracken, 1995). However, the process of rights management can be a cumbersome process in terms of the time and resource required, particularly if viewed as an end in itself. What we propose here, by contrast, is a framework that uses the principles of copyright law as an aid to the design process. Its potential as a planning template within the development process has already been commented positively upon by a number of the teams' members.

First, there is a need for explicitness in regard to "prescribing the components" by which we mean the copyright format that developers wish to incorporate into a discrete activity within the materials. The categories are listed in Table 1. For instance, a particular educational online activity might include exemplar materials in video-format, with associated annotations (text), and accompanying Flash animation (image). By foregrounding the range of representational options available to design teams, design consideration and selection processes might be better enabled.

Second, there is a need for explicitness in "prescribing the media." Components as previously referenced may be made available via one or more forms of media channel. Once again, Table 1 lists the relevant formats. As was witnessed in the *eChina~UK* programme, getting designers to be more explicit about their design decisions is a useful rubric for uncovering deeper issues around ownership and reward. Equally it may prove useful in surfacing and sharing concerns around the nature of risks perceived by designers e.g. propensity for others to infringe copyright through copying, distribution, modification or lending etc.

Third, there is a need for explicitness in "prescribing the rights." By adopting the foregoing approach, designers have a basis for articulating more fully the likely implications for resource development. Thinking through various scenarios, designers can quickly assess the likely rights management issues of using new or pre-existing materials within an integrative framework.

Aspects	Examples
Component	Literary, dramatic, musical, artistic, sound recordings, published editions, films, video, broadcasts, database
Media	Print (published/ unpublished), CD Rom, online/ digital, satellite, video, audio
Rights	Own, licence (free/ royalty payment), permission, waiver, open source, shareware.

Table 1: The constituent elements for a planning template.

CONCLUSION

We have sought to offer a number of insights into the ways in which the academic community, as represented in the collaborative *eChina~UK* programme, addressed the issues of regulation within their joint programme of educational materials innovation and design. Interestingly, academic attitudes, approaches and regard for regulatory aspects were not that dissimilar across the cultural divide. There was more to agree than disagree upon even though the meanings, sense-making and expectations around both QA and IPR issues were continually evolving through increased exposure and discussions held around these topics.

With the continued globalisation of education, the demands, infrastructures and procedures around regulation are set to grow. In light of this regulatory expansion internationally, we have sought to identify possible frameworks for supporting the local design process for educational materials. The adoption and utility of these frameworks remains the subject of further research.

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