

Developing Content with Developing Countries

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INTRODUCTION

We have been successful in obtaining a grant from the European Union Asia-Link Programme to work with four Asian Universities on the capacity development of their staff in the area of the design and support of distributed learning resources. A key instrument in this capacity-building training is the collaborative development of course content using Open Content and Open Source applications. The four countries are: the Maldives, Cambodia, Bhutan and Nepal, and all four of the universities in the partnership have distributed campuses. The three European partners in the project are all universities that are heavily involved in distance teaching: the British Open University (the lead partner), the University of the Highlands and Islands Millennium Institute (UHI) and Anadolu University in Turkey. The seven partner universities practice different forms and levels of distance or distributed education, and are at very different stages in the evolution of their design, delivery, and student support mechanisms. UHI is distributed in the sense that it is composed of fifteen academic partners – colleges and research centres spread over a very wide geographical area of northern Scotland. Various combinations of technologies are used to deliver courses to students so that they do not need to re-locate in order to access higher education. Furthermore, staff can provide tuition to learners beyond the confines of the ‘home’ campus. The British Open University can be called distributed in the sense that it too uses technology to deliver courses to students spread over the whole UK and beyond. Online and face-to-face tutorials are held to support students in their study of either print-based or web-based course materials. Anadolu is the largest distance teaching university in Turkey with over 1 million 200 undergraduates!

Blended learning is another term which is often used to refer to practices similar to distributed education. Blended learning usually implies a combination of online and face-to-face teaching. Distributed education usually implies a separation either in time or space between the teacher and the taught, and is normally regarded as utilising a range of different media resources for course delivery and communications between learners and tutorial staff. In any case, both concepts are addressing the need for greater flexibility and access to higher education than the traditional campus experience affords by providing resources and support for learners beyond the conventional fixed format of classroom attendance and face-to-face lectures.

After initial orientation meetings to plan the structure, responsibilities, and timetable for the project partners, the first staff development workshop was held in the Maldives to assess the current (base level) status of the pedagogical systems of each of the partners, and to agree the extra ‘value-added’ design skills to be acquired by each of the partner institutions. The Maldives are a collection of islands, or more correctly atolls, with small populations and little local access to higher education. Distance education is a priority for the Maldives College of Higher Education and their Strategic Plan involves the development of more flexible courses that can be offered at key centres throughout the islands. Both Bhutan and Nepal have a higher education system which could be called distributed, although they differ in the nature of the distributed components. In Bhutan there is a network of regional colleges throughout the country, each specialising in different subjects, but there is little experience of distance education or the use of new technology for supporting learners. Nepal has a highly centralised higher education structure (focussed on Tribhuvan University, but has recently experimented with the introduction of some forms of technology-supported distance learning and is currently discussing the establishment of an Open University for Nepal. Travel is very much more difficult in both countries due to the mountainous terrain and the lack of infrastructure. Access to secondary education, much less higher education, is a major problem and only a small percentage of the total populations attend university. Separate campuses in different parts of the countries define their structures and curricula. The same is

true for the Cambodian partner, a private university called Build Bright University that has a very young and energetic history of curriculum development. For all four partners, distributed education techniques (face-to-face, print, digital resources and internet technology) offer many benefits such as flexibility and new teaching resources. However, easy accessibility and equality of distribution continue to be problematic.

Online versus face-to-face teaching

Universities in countries with limited resources for e-learning face very difficult problems in trying to equip their students with the skills, experience and online opportunities which the country needs to develop as a knowledge-based economy. In Asia the proportion of the total population participating in the internet revolution is relatively small, but the rate of growth of mobile phone and internet technology is rapid. In countries where the infrastructure is reasonably well developed, pressure is growing to use e-learning, partly because of the growing number of foreign universities offering virtual courses, and partly as a perceived solution to offer access to mass education through the country. While in Europe online learning is growing in popularity and is increasingly accepted as a comparable alternative (or complement) to face-to-face education, in Asia it is still regarded with suspicion, and certainly not on a level of credibility with campus education. Blended learning, which combines on campus and online education, is a far more acceptable alternative in Asia (Dean et al, 2001). In Europe, blended learning is becoming the new norm, just as it is in North America, and distributed educational resources, such as online texts or images, are commonly regarded as important components of most campus-based and distance-learning courses alike.

EDUSHARE, THE EU-FUNDED PROJECT

The primary focus of this project stems from the need of the Asian partner institutions to improve the quality of their systems for teaching and academic administration and to do this in a more open and flexible format. In part these problems arise from lack of adequate finance for educational resources (e.g. up-to-date literature and new educational technologies) and in part due to the lack of maturity of the current educational systems. The project aims to overcome these through specific training in the joint development of resources and the input of expertise in technology and educational systems. Particular emphasis has been placed upon the use of (free or inexpensive) open source applications, open content materials, and other freeware whose use can be maintained by the developing nations after the close of this particular project.

Using wikis and other social software, we have structured a series of activities to support the partnership in contextualising existing content to fit their national curriculum. Wikis and a group-hub communications application have also been utilised to disseminate and co-ordinate the detailed structure of the month to month project activities. (www.edushare.wetpaint.com)

Using the model of a course module around which all the other partner activities, resources, and skills are structured, we are jointly developing higher education material on 'sustainable development and tourism in Asia' that can be re-purposed and subsequently delivered in some format in each of the partner Asian institutions. Each partner will produce three types of content:

1. re-purposed existing open content
2. re-purposed existing institutional resources
3. new, short, wrap-around text to contextualise the materials to the locality.

We are experimenting with the Open University's tools for distributed resource development and sharing e.g. Flash Meeting and content editing software. The open sharing of software and materials is crucially important for developing countries as access to educational infrastructure that is considered a norm in the West can frequently be critically limited or unavailable to the majority of learners (and faculty).

Partners in the project are receiving training in the use of a wide variety of media: video clips, photos, quizzes, audio clips in addition to text. The primary intention is to facilitate the staff development of key personnel who then are charged with cascading the techniques and the pedagogy to colleagues at their own institution. There is therefore a double necessity, not simply to train the staff member in the relevant educational technology, but to equip that

person to be able to pass this training on to their peers when they return to their normal duties. In addition, networked activities punctuate the project, and are designed to cascade experience between and within partners. A secondary aim is to develop a fuller understanding of the issues involved in adapting open content to local contexts, through practical tasks, evaluation exercises, and comparative analysis. A third aim is to develop flexible course materials that are to some extent customised and contextually relevant for these four very different distributed Asian university systems.

Key academic staff from all of the partners are participating in a series of practical workshops to share expertise and ideas. Each participant in every workshop will be involved in subsequent workshops and presentations in their own home regions in order to cascade the new ideas and good practice to a wider target group who have not previously been involved in workshop sessions. An appreciation of the importance of contextualising and re-purposing of the resources is regarded as being of equal importance to the acquisition of the technical skills related to the educational technology applications.

The main objectives of the project are to use extensive activities relating to the joint development of a set of course materials on sustainable development as the means for improving quality processes, understanding course design for distributed learning, and gaining practical and theoretical experience of new technologies. In short, the objective is to 'learn by doing', with resources, support and input from the European partners. Concepts of sustainable development are relevant to all of the partner universities and thus the resulting product will be usable and adaptable by all partners in their core curriculum. Each of the partners will pilot the materials they develop by 'teaching' other members of the project, as part of the staff development exercise. In addition, the European partners will develop a set of benchmarking tools for best practice in the design, support, and delivery of technology-based, distance learning. These will be used to improve administrative processes in the Asian universities. Furthermore, the Asian partners intend to develop an online support network with other Asian institutions interested in distributed learning for the purpose of exchanging information, tools and resources related to quality assurance processes in this area.

THE MALDIVES WORKSHOP

In 1998 the Maldives College of Higher Education (MCHE) was established to rationalize resources and to assure the quality of all the existing post-secondary government institutes. The College has a Centre for Open Learning which will be one of the main beneficiaries of the current project. Its strategic development priority is the production of more distance education courses, and the European partners are all specialists in different forms of distance education that can be re-appraised and applied to the context of the different Asian partners. The project encourages academic and practical exchange amongst all the partners, as well as stimulating discussion of the different models of distance education and the production of relevant educational materials. MCHE also seeks to develop college-wide systems for quality assurance, student support and staff appraisal. These processes have been developed and refined by the European partners and MCHE will be able to build on these processes.

The workshop at MCHE was held in February, 2008 with the aim of cascading the know-how from the workshops held in an earlier Asia-Link project to staff from MCHE and from the new Cambodian partner. It provided the Bhutanese partner with the opportunity to run an extended workshop with support from the European institutions. The main topics included course design, teaching skills, assessment procedures, learner support, and appropriate resources.

The Education Faculty of the Royal University of Bhutan had demonstrated a depth of understanding in all of these areas at workshops during a previous project. What they lack, due to the newness and small scale of the Royal University of Bhutan, is the opportunity to practice and develop these concepts in real-life situations. Running a workshop for two other universities was an ideal vehicle for them to put this knowledge into practice. Without this practice, their understanding remained theoretical and untested in real-world activities.. The aim of this workshop was to give the knowledge a practical basis – for the benefit of all the other Asian universities. The OU and UHI partners ran sessions in which all of these topic areas were applied to online learning, and to the design of distributed learning in a generic context - something which MCHE is particularly interested in pursuing.

OPEN EDUCATIONAL RESOURCES

The focus for the development of course content is the use of open educational resources (OER). OER are digitised materials offered freely for educators and students to use and reuse for teaching and learning. There are over 3000 open courseware course materials available currently, typically on the web as PDF files. The content is usually in text form, but may also involve images, sound or video in digital format. In most cases, a Creative Commons licence applies to the use of the material. However, a recent OECD report on OER notes the following:

There is a troublesome imbalance between the provision of OER and its utilisation. The vast majority of OER is in English and based on Western culture, and this limits their relevance and risks consigning less developed countries to playing the role of consumers. (OECD, 2007, p. 14)

This project aims to address the issue of developing countries merely being passive users by embedding the practice of each partner adapting, reusing and adding to the appropriate OER material. Furthermore, each partner is expected to do this in the context of their own culture and institutional context. All of the partner universities teach in English, so the adaptation will not be a translation, but a cultural refit, in order that the level and type of material is in keeping with the existing institutional curriculum. The OECD report also raises the issue of developing countries becoming dependent on externally generated content, rather than using OER content to produce locally relevant material (p. 105). EduShare addresses this issue by focusing on three staff development processes in the use of OER: adapting existing OER materials, adapting existing material from the partner's own university and creating some new material to integrate them into a whole. In short, there will be considerable practice in material development that is both locally relevant and realistic in resource demands.

The project begins with the use of the OU's OpenLearn content and tools as a practical exercise in adapting teaching processes to Asian contexts, and to raise awareness of the potential of freely available content online.

Following the technology training workshop run by UHI, all partners will be expected to go through a drafting process in relation to the materials they submit to the course on sustainable development. This process consists of three stages with peer commenting in-between and refinements of materials based on the suggestions for improvement.

Each partner is submitting drafts of their contributions to the joint course and is commenting on the submissions of the other partners. The OU will manage this process and support each partner in refining their submissions. This process has been well developed in the OU and is generally acknowledged to account for the outstanding quality of OU teaching material. Carrying out this activity will provide partners with a practical exercise in relevant quality assurance processes.

PREVIOUS EXPERIENCE

The authors have had previous experience with a project involving the use of Open Source tools for community development (Mason & Rennie, 2007). This involved training in the community use of educational technology, the development of non-formal educational resources, and the detailed evaluation of the process to ensure transferability to other community education initiatives.

CONCLUSION

The problems faced by the Asian partner universities are mainly: the lack of detailed quality standards, geographical and resource challenges in extending higher education to remote students, the need to provide educational opportunities in sustainable development to remote students, and the lack of know-how in effective course design for internet-based teaching. Their strengths are in their relatively low-level 'clean-sheet' infrastructure that is

unencumbered by previous technological baggage, good pedagogical skills and strong self-development motivation, the ability to 'leapfrog' over the trial-and-error stages that have dogged western early-adopters allowing them to make rapid advances rather than simply emulating western development paths, and the rapid growth of new generation mobile and internet technologies..

This EU-funded project addresses these needs in the following ways: by providing practical, learning-by-doing activities in course design for distributed learners, by benchmarking templates in quality assurance processes, facilitating training in the use of technologies for distributed colleges and remote students, and by the generation of a collaboratively produced (and hence culturally relevant) set of course resources to enable the teaching of sustainable development academic issues using state-of-the-art distance teaching technologies.

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